This New York State Education Department bulletin provides guidelines and information on determining state building aid for public school construction pursuant to New York State Education Law: section 3602(6)(1) & (2). Guidelines address state building aid's purpose, eligibility, and formula for aid estimation. Included are guidelines on minimum classroom sizes for K-12 schools; aid requirements for elementary school additions; rating capacity for K-12, special schools, and their additions; and determination of allowable expenses for building aid and eligible reconstruction projects. (GR)
TO: District Superintendents
   Superintendents of Schools

FROM: Carl T. Thurnau
      Acting Supervisor

SUBJECT: STATE BUILDING AID FOR PUBLIC SCHOOL DISTRICTS AND BOCES

The attached bulletin provides guidelines and information on school construction, pursuant to Section 3602 of the Education Law. This Section reads in part:

"Apportionment for capital outlays and debt service for school building purposes shall be based upon the rated capacity of a building or addition as determined by the Commissioner based upon space standards and other requirements specified by the Commissioner."

The methods for determining rated capacity and the minimum size for new rooms of various types are included in this publication.

Contact the Office of Facilities Planning early in the planning process and whenever there is a question concerning building construction. It is our desire to assist school districts with the planning of facilities to house their educational programs as efficiently as possible, while at the same time maximizing building aid.

April 1999
STATE BUILDING AID
FOR PUBLIC SCHOOL DISTRICTS AND BOCES

BUILDING AID

Building aid is available for certain approved capital outlays and debt service for school buildings housing elementary and/or secondary students, and for school bus garages. A project is not eligible unless a) the construction costs of the project is equal to or exceeds $10,000, excluding incidental costs; and b) the district received Commissioner’s approval and a Building Permit from the Office of Facilities Planning prior to advertisement for bids, award of contracts and actual construction. Consistent with Section 3602, subdivision 6 of the Education Law, construction may include new buildings, additions, alterations and reconstruction of existing facilities.

There have been recent changes in Education Law which have enhanced the availability of building aid for capital construction projects. Section 3602(6)(b)(2) provides a 10 percent increase in building aid for projects approved by the voters after July 1, 1998. This increase applies to all districts. Districts formerly ineligible for building aid are now eligible for a minimum of 10 percent aid. The upper limit for building aid is capped at 95 percent. This section does not apply to BOCES.

In addition, Education Law, section 3602(6)(a)(1)&(2) provides a regional factor that will be applied to capital construction projects, for contracts signed on or after July 1, 1998. This factor will assist school districts in regions with high labor costs. The maximum cost allowance will be multiplied by the regional cost factor to arrive at a regionally adjusted maximum cost allowance on a project-by-project basis. The regional cost factor was calculated by dividing the county composite labor rate by the median statewide composite labor rate. When the regional cost factor has a value less than 1.0, a regional cost factor of 1.0 will be used in the building aid calculations. A table of regional cost factors, listed county by county, is available on the facilities planning web site (www.nysed.gov/fmis/facplan).

The Commissioner of Education must approve plans and specifications for capital construction projects undertaken by public school districts and BOCES. This charge is administered by the Office of Facilities Planning, pursuant to Section 408 of the Education Law and Part 155.2 of the Regulations of the Commissioner of Education. Proper procedures for obtaining approval of plans and specifications are outlined in other office publications.

It is important to note that Commissioner’s approval of plans and specifications and issuance of a building permit are necessary whether or not building aid is involved. Staff are available to answer any questions pertaining to building aid or plan approval. A Project Manager from the Office of Facilities Planning will be assigned who can assist a district during the development phase of a project to maximize building aid.

Eligibility for new construction is determined through an assessment of information contained in the school district’s long-range plan, and includes educational need, a comparison of pupil enrollment projections, and the rated pupil capacity of existing buildings.
In the case of school buildings, building aid is a function of the pupil capacity assigned to the capital construction project. In the case of bus garages, expenses eligible for building aid are limited to those necessary to maintain and store district-owned school buses and other vehicles used for transportation of pupils. Facilities for driver training cars, grounds maintenance equipment and similar vehicles not used to transport pupils are not eligible for aid.

**PURPOSE OF BUILDING AID**

The purpose of building aid, indeed a major purpose of Facilities Planning, is to assure that each school district and BOCES provides suitable and adequate facilities to accommodate the students and programs of the district. To this end, new facilities -- new buildings, additions, major alterations -- must meet specific standards pertaining to the type, size and number of teaching stations, as well as building code requirements. Existing facilities must meet health and safety regulations, and reconstruction of existing facilities must meet building code requirements.

The emphasis on standards of higher performance by all educational institutions requires an increased focus on the adequacy of educational facilities. This added emphasis magnifies the need to provide safe, healthy, comfortable and acceptable educational facilities which promote effective and efficient learning for all New York students.

**ELIGIBILITY FOR BUILDING AID**

The Project Manager will assist a district in maximizing eligibility for building aid. This assessment involves a comparison of districtwide pupil enrollment projections with the efficient operating capacity of existing school buildings to determine building needs. The vehicle for accomplishing this is a room schedule of minimum spaces necessary to house a district's educational program for a given number of pupils. In the case of an addition, the format of the room schedule allows for the listing of existing spaces and how they will be used prospectively. Thus, the difference between needed spaces and existing spaces will indicate the needed scope of work. The various formulas necessary to develop such a room schedule are included in this publication.

**MINIMUM ROOM SIZES** - new buildings and additions, new spaces created in existing space

**General**

a. Spaces in new buildings and additions which are required to house a district's educational program shall meet the size standards listed below. Where no square footage (sq. ft.) is listed, the size may be as determined locally.

b. In every case, listed square footage means minimum, net, clear, new educational space.

c. Newly created spaces in alterations to existing school buildings should attempt to meet the size standards insofar as possible or practical.
d. Criteria to determine the number of spaces necessary is also included below. The number of pupil stations (i.e., rated capacity) assigned to various rooms is discussed later, beginning on page 9.

**Elementary School**

a. Classrooms --

1. Grades 1-6 ................................................................. 770 sq. ft.  
   (27 pupils/room)
2. Pre-kindergarten/kindergarten ........................................ 900 sq. ft.  
   (27 pupils/room)

b. Library ........................................................................... 900 sq. ft.  
   (1 thru 12 classroom buildings -- none required)  
   (13 plus classroom building -- 1 required)

c. Physical Education - gymnasium ..................................... 36' x 52'  
   (1 and 2 classroom buildings -- none required)  
   (2 thru 14 classroom building -- 1 required)  
   (1 thru 14 additional classrooms -- 1 additional)

d. Special Education

<table>
<thead>
<tr>
<th>Student/Teacher Ratio</th>
<th>Maximum Pupil Capacity</th>
<th>Minimum Classroom Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:1 or 15:1</td>
<td>12/15</td>
<td>770 sq. ft.</td>
</tr>
<tr>
<td>12:1:1</td>
<td>12</td>
<td>770 sq. ft.</td>
</tr>
<tr>
<td>6:1:1</td>
<td>6</td>
<td>450 sq. ft.</td>
</tr>
<tr>
<td>8:1:1</td>
<td>8</td>
<td>550 sq. ft.</td>
</tr>
<tr>
<td>12:1+3:</td>
<td>12</td>
<td>900 sq. ft.</td>
</tr>
<tr>
<td>Resource Room</td>
<td>----</td>
<td>300 sq. ft.</td>
</tr>
</tbody>
</table>

**NOTE:** Provide ancillary space equivalent to at least ¼ of the area of a special education classroom for each special education classroom being constructed, either as part of the new classroom or other designated space.

**Preschool:** 50 sq. ft. per student or 60 sq. ft. per for classroom serving non-ambulatory students (maximum of 12 students per room)

**NOTE:** Approval may be given for classrooms less than 50 sq. ft. per student recreational space if other areas of the building are allocated for preschool or instructional use.
Usual ancillary spaces --
1. Administration
2. Adult Education
3. Auditorium or multi-purpose room
   (number of fixed seats, or 36 'x 52' usual, 7 sq. ft./person)
4. Art Room .................................................. (usual) 770 sq. ft.
5. Cafeteria and Kitchen
   (36'x52' usual, 15 sq. ft./person)
   (operating capacity of building divided by number of servings)
6. Computer Lab
7. Conference
8. Gifted and Talented
9. Grounds Maintenance
10. Health Suite
11. Music Room .................................................. (usual) 770 sq. ft.
12. Music Practice room(s) -- small, individual
13. Remedial Rooms
14. Resource Rooms
15. Storage
16. Swimming Pool -- 25 yds. x 7 ft. lanes
17. Teachers' room(s)
18. Toilets -- individual and/or gang

Secondary School

a. Agricultural shop 1500 sq. ft. and classroom 400 sq. ft.

b. Art room, including storage ........................................ 1200 sq. ft.
   (1 room for each 400 7th and 8th grade pupils)
   (1 room for each 500 9th-12th grade pupils)

c. Business and Computer Classrooms
   1. Distributive Education .................................... 1000 sq. ft.
   2. Office Practice/Secretarial Practice/Computer ............. 840 sq. ft.
      classrooms

d. Home and Careers (homemaking)...............................(first room) 1200 sq. ft.
   (1 room for each 500 pupils, other rooms per program)

e. Technology Classroom including 200 sq. ft. storage
   Industrial Arts (1 space for each 500 pupils) .................... 2000 sq. ft.
   Mechanical Drawing/CAD ...................................... 840 sq. ft.

f. Vocational shops -- including storage . . . varies with program

g. Library Reading Room
   (10% of planned building enrollment in reading room at 25 sq. ft./person)
(See Study Hall, item "1", below)

h. Music (1 room for each 500 pupils including #1, 2 and 3, below)
1. Classroom ................................................................. 770 sq. ft.
2. Instrumental/Band (15 sq.ft./pupil) ................ (usual minimum) 1400 sq. ft.
3. Vocal (7 sq. ft./pupil) .............................................(usual minimum) 1200 sq. ft.
4. Practice Rooms (1 for a piano)

i. Physical Education -- gymnasium -- 48'x 66'
( up to 500 pupils) -- 1 required
(501 to 1000 pupils) -- 1 additional
(each additional 500 pupils or fraction thereof -- 1 additional station --
36' x 52' minimum or a swimming pool, 25 yds. x 7 ft. lanes)

j. Recitation room/interchangeable classroom ....................... 770 sq. ft.
[no. of classrooms =
(planned building enrollment) + 33, ÷ 7 teaching periods/day]
   9

k. Science -- including preparation and storage
1. General Science .......................................................... 1000 sq. ft.
   [no. of rooms = (100% of 7th and 8th grades ÷ 25) ÷ 7 teaching periods/day]
2. Earth Science ............................................................ 1000 sq. ft.
   [no. of rooms = (100% of 9th grade ÷ 25) ÷ 7 teaching periods/day]
   [no. of rooms = (70% of 10th grade ÷ 24) ÷ 5 teaching periods/day]
4. Chemistry ........................................................................ 1200 sq. ft.
   [no. of rooms = (40% of 11th grade ÷ 24) ÷ 5 teaching periods/day]
5. Physics ............................................................................ 1200 sq. ft.
   [no. of rooms = (35% of 12th grade ÷ 24) ÷ 5 teaching periods/day]

l. Study Hall -- up to 25% of rated capacity may be out of class at any given time.
   Accommodate these in library or study hall -- number of fixed seats.
m. Special Education

<table>
<thead>
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<td>770 sq. ft.</td>
</tr>
<tr>
<td>6:8:1</td>
<td>6</td>
<td>450 sq. ft.</td>
</tr>
<tr>
<td>8:1:1</td>
<td>8</td>
<td>550 sq. ft.</td>
</tr>
<tr>
<td>12:1+3:1</td>
<td>12</td>
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<td>Resource Room</td>
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<td>300 sq. ft.</td>
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</table>

**NOTE:** Provide ancillary space equivalent to at least 1/4 of the area of a special education classroom for each special education classroom being constructed, either as part of the new classroom or other designated space.

Preschool: 50 sq. ft. per student or 60 sq. ft. per for classroom serving non-ambulatory students (maximum of 12 students per room).

**NOTE:** Approval may be given for classrooms less than 50 sq. ft. per student if other areas of the building are allocated for preschool recreational or instructional use.

n. Usual ancillary spaces --
1. Administration
2. Adult education
3. Auditorium (no. of fixed seats, 7 sq. ft./person)
4. Cafeteria/Kitchen (15 sq. ft./person)
5. Conference/Seminar Rooms
6. Computer Laboratory
7. Guidance Suite
8. Health Suite
9. Lockers and showers (for 100% of rated capacity)
10. Large group instruction (no. of fixed seats, 7 sq. ft./person)
11. Resource Rooms
12. Remedial Rooms
13. Storage
14. Maintenance
15. Teachers' room(s)
16. Toilets
DETERMINING BUILDING AID

In the actual determination of estimated building aid, the following terms apply:

- **Pupil Capacity** -- It is imperative that the definitions and differences in the following terms be understood.

  1. **Original Capacity** -- The total number of students the original building, or total complex in the case of additions, was designed to accommodate [i.e., a 21 room (567 pupil) elementary school; a 1000 pupil high school]. Essentially, this number was the rated capacity of the building or complex when it was constructed and was the basis for the determination of minimum size of site.

  2. **Rated Capacity (State-Rated Capacity)** -- The total number of students assigned by Facilities Planning to a building for the purpose of determining the maximum cost allowance for a capital construction project -- new building, addition(s), alterations, or reconstruction -- pursuant to Education Law, section 3602, subdivision 6.

     The rated capacity of a building is computed using space standards established by the Commissioner. Note that a change in room use may change the rated capacity. When new facilities are planned, the total of the rated capacity of all of the buildings in the district must relate and be congruous with the total projected student enrollments recorded in the district's long-range plan.

  3. **Operating Capacity** -- The total number of students the building can reasonably and efficiently house based on the district's educational program and class size policy, and the number, size and current use of rooms as represented on approved plans. The operating capacity of a building is computed using the space standards established by the Commissioner modified by any differences due to the district's educational program and/or class size policy.

  4. **Enrollment (building enrollment)** -- The number of students assigned to a building during a current school year.

- **Building Cost Index** -- A New York State Labor Department index represents the cost of labor and materials on the date the major construction contract is signed. It varies monthly and is used to determine the per pupil building cost index for both construction and incidental costs. The building cost index accounts for the various factors included in statute (K-6 = $100, 7-9 = $140, 7-12 = $150, remotely housed special education = $200, contiguously housed special education = $300) and is adjusted using July 1992 as the base year.
• **Maximum Cost Allowance** -- The maximum amount the State will aid at a district's aid ratio. Pursuant to Section 3602, subdivision 6, a maximum cost allowance is determined for both construction costs and incidental costs. The maximum cost allowance for incidentals is 25% of the maximum cost allowance for construction for secondary schools and special education, and 20% for elementary schools. In the case of a project having construction of a new addition, as well as reconstruction or alterations of an existing building, a separate maximum cost allowance is determined for the construction costs and for the incidental costs for both the addition and the reconstruction or alteration. (Allowable incidental costs are defined on page 18.)

• **District Aid Ratio** -- A fixed number (percent) determined annually for each individual school district, based on the value of property in the district and the number of students in the district compared to the State average value/pupil. The district aid ratio may vary from 0% in the wealthiest districts to a maximum of 95% in the poorest districts. With incentive aid added to the district aid ratio, approved capital projects are aided up to a maximum of 95% of approved expenditures. The 10% building aid incentive for those projects approved by the voters after July 1, 1998 can have a dramatic leveraging effect on a district's ability to fund capital projects. For example, a district which previously received 80% aid with a 20% local share now receives 90% with a 10% local share. If the local share remains at 20%, the district can complete twice the amount of capital work for the same local effort.

**FORMULA FOR BUILDING AID**

Using the above terms, the formula for determining estimated building aid for a new building, addition, reconstruction and/or alteration is as follows:

The rated capacity is multiplied by the per pupil building cost index to determine a maximum cost allowance for construction costs and incidental costs.

The maximum cost allowances are multiplied by the district aid ratio. The Regional Cost Factor is then applied to the product. A regional cost factor greater than 1.00 will increase the funds available under the maximum cost allowance to compensate for geographically higher construction costs. A regional cost factor equal to or less than 1.00 will have no effect on the maximum cost allowance. The results are the dollars which the district will receive if the actual expenditures for construction and incidentals are equal to, or greater than, the maximum cost allowances. If the actual expenditure in either category is less than the maximum cost allowance, the aid ratio is applied to the actual expenditure to determine what dollars the district will receive. If the actual expenditures exceed the maximum cost allowances, there is no penalty; however, the aid ratio applies only to the maximum cost allowance figures.

**Rated Capacity for Elementary Schools**
The rated capacity for a new or an existing elementary school shall be determined by assigning 27 pupils to each 770 square foot classroom used for grades 1-6, and to each 900 square foot kindergarten or prekindergarten room. Where formal board policy or union contract, results in less than 27 pupils in a classroom, use the lesser number when determining operating capacity to justify additional classrooms.

a. There is no provision in law for building aid on rooms housing any program below prekindergarten.

b. Prekindergarten rooms are those used for prekindergarten children as defined in Commissioner’s Regulations, Section 151.2 (g). Prekindergarten children generally mean children who will be four years of age on or before December 1st of the current school year, or who will otherwise be first eligible to enter public school kindergarten commencing with the following school year.

The rated capacity for a new or existing open-planned classroom space elementary school shall be determined by dividing the open planned classroom space by 35 sq. ft. and then rounding off to the next lower multiple of 27 pupils.

In an existing elementary building, the rated capacity of a room over 550 square feet, but less than 770 square feet shall be determined by dividing the area of the room by 28.5 square feet/pupil and assigning the whole number.

a. Existing rooms of less than 550 square feet are not included in capacity calculations.

Only classrooms and kindergartens/prekindergartens are counted for capacity in an elementary school. It is assumed that the basic per pupil cost allowance generally will be sufficient to provide for both classrooms and ancillary spaces. A library, cafeteria, art room, music room, gymnasium, remedial/resource rooms, etc., do not increase the rated capacity of the school except as noted below.

If the estimated budget for an addition exceeds the maximum cost allowances produced by the rated capacity using the criteria established above, you should then determine the rated capacity using the "Square Foot" Method explained on page 16. The rated capacity which is most advantageous for building aid will be used.

**Rated Capacity for New Elementary School/Addition**

a. **Method for Computing Rated Capacity**

   1. Determine capacity according to space standards explained in the section immediately above.
2. If the estimated budget for an addition exceeds the maximum cost allowances produced by the rated capacity using the criteria established above, you should then determine the rated capacity using the "Square Foot" Method explained on page 16. The rated capacity which is most advantageous for building aid will be used.

b. Special Cases: Elementary School Additions

If the estimated budget for the addition of an elementary school library, cafeteria, teacher's conference room, gymnasium and auditorium exceeds the estimated maximum cost allowance determined by using the above criteria, an additional capacity for building aid purposes may be assigned.

Such additional capacity, up to the maximums indicated below, shall be assigned on an "as needed" basis so that the estimated maximum cost allowance covers the estimated cost of the listed spaces, or at least an increased portion of the estimated project costs.

The additional capacity for building aid purposes shall not exceed the result of dividing the size of the specific area [up to the maximum size (for aid purposes) as indicated below] by 70 sq. ft./pupil.

- **Elementary Auditorium**
  
  Maximum size - 4,200 sq. ft. (600 seats @ 7 sq. ft./seat)  
  Maximum capacity - 60 pupils

- **Elementary Cafeteria or Gymnasium**
  
  Maximum size - 1,872 sq. ft. (gymnasium - 36 ft. x 52 ft. required)  
  Maximum capacity - 27 pupils

- **Elementary Library**
  
  Maximum size - 1,900 sq. ft.  
  Maximum capacity - 27 pupils

- **Elementary Teacher's Conference Room**
  
  Maximum size - 770 sq. ft.  
  Maximum capacity - 11 pupils

**Rated Capacity for Special Education**
The rated capacity for special education facilities shall be determined by assigning the pupil capacities for classrooms for the various student-teacher ratios which are listed below. Only classrooms are counted for capacity. It is assumed that the basic per pupil cost allowance generally will be sufficient to provide the classrooms and required ancillary space.

<table>
<thead>
<tr>
<th>Student/Teacher Ratio</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:1 or 15:1</td>
<td>15 pupils - maximum</td>
</tr>
<tr>
<td>12:1:1</td>
<td>12 pupils - maximum</td>
</tr>
<tr>
<td>6:1:1</td>
<td>6 pupils - maximum</td>
</tr>
<tr>
<td>8:1:1</td>
<td>8 pupils - maximum</td>
</tr>
<tr>
<td>12:1+3:1</td>
<td>12 pupils - maximum</td>
</tr>
</tbody>
</table>

**Rated Capacity for Secondary Schools**

**General**

a. A secondary school is a new or existing building housing any or all grades above sixth grade.

b. When a school houses both elementary and secondary pupils, the rated capacity is separately determined for the elementary versus the secondary spaces.

c. Rated capacity of a secondary school is determined by either the Teaching Station Method or Pupil Station Method, dependent on the size of the school.

d. The rated capacity is based on seven instructional periods/day.

**Teaching Station Method**

a. The Teaching Station Method applies to:

1. Junior High School having 29 or fewer teaching stations - typically a school of up to 750 capacity.

2. Junior/Senior High School having 25 or fewer teaching stations - typically a school of up to 500 capacity.

3. Senior High School having 22 or fewer teaching stations - typically a school of up to 500 capacity.

b. For the purposes of this method, the following are teaching stations:

1. Agricultural shop, including an agricultural classroom.
2. Art room (each).
4. Home and Careers (homemaking) (each, if 1000 sq. ft. or more).
5. Technology (industrial arts) shop (each).
6. Mechanical drawing room (each).
7. Music room (each, if 770 sq. ft. or more).
8. Physical education/gymnasium (each, if standard size).
9. Recitation classroom/interchangeable classroom (each).
11. Study hall (each, if 770 sq. ft., or more, and cafeteria/study hall, if so labeled and used).
12. Swimming pool.

c. Junior High School having 29 or fewer teaching stations: (up to 750 capacity)

   1. Ascertain the total number of teaching stations used for (only) English, social studies, mathematics, languages, health education and general science (not biology, chemistry or physics). Multiply this total by 30. The result is the rated capacity.

d. Junior/Senior High School having 25 or fewer teaching stations: (up to 500 capacity)

   1. Ascertain the total number of teaching stations used for (only) English, social studies, mathematics, languages, health education and general science (not biology, chemistry or physics). Multiply this total by 33. The result is the rated capacity.

e. Senior High School having 22 or fewer teaching stations: (up to 500 capacity)

   1. Ascertain the total number of teaching stations used for (only) English, social studies, mathematics, languages, and health education. Substitute this total for "X" in the formula: 8 (7X - 12)  The result is the rated capacity.

Pupil Station Method

a. The Pupil Station Method applies to:

   1. Junior High School having 30 or more teaching stations.
   2. Junior/Senior High School having 26 or more teaching stations.
   3. Senior High School having 23 or more teaching stations.

b. A listing of teaching stations is included at "Teaching Station Method", above.

c. To determine the total number of pupil stations (PS) in a building:
1. Divide the net area (square feet) of each of the rooms listed in "e" below by the listed square feet/pupil allowance to determine the PS in each room.

2. Record each result, not exceeding the listed maximums.

3. Total the above.

4. **Subtract 200 from the total and divide the remainder by 1.16.** The resulting number of PS is the rated capacity of the building for aid purposes.

d. Operating capacity by this method is computed using the same method as outlined in "c" above, but modified by any differences due to the district’s educational program and/or class size which is clearly outlined in formal board policy and/or teacher's contracts.

e. **Pupil Stations --**

<table>
<thead>
<tr>
<th>Room</th>
<th>Sq. Ft/Pupil</th>
<th>Maximum Number of Pupil Stations (PS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. agricultural shop and classroom</td>
<td>75</td>
<td>20</td>
</tr>
<tr>
<td>2. art room</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>3. business or computer rooms</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>a. distributive education</td>
<td>--</td>
<td>25</td>
</tr>
<tr>
<td>b. office/secretarial</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>c. computer classroom</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>4. home and careers ( homemaking)</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>5. technology (industrial arts)</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>a. vocational shop</td>
<td>75</td>
<td>24</td>
</tr>
<tr>
<td>6. mechanical drawing</td>
<td>--</td>
<td>20</td>
</tr>
<tr>
<td>7. library -- reading room only</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Not to exceed 15% of PS in #10</td>
</tr>
<tr>
<td>8. music classroom</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>a. instrumental music</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>b. vocal music</td>
<td>25</td>
<td>(area of room + 25) x .4</td>
</tr>
<tr>
<td>9. physical education</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>a. gymnasium</td>
<td>--</td>
<td>(area of room + 20) x .4</td>
</tr>
<tr>
<td>b. swimming pool</td>
<td>per station</td>
<td></td>
</tr>
<tr>
<td>10. recitation classroom</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>a. interchangealable classroom</td>
<td>--</td>
<td>30</td>
</tr>
<tr>
<td>b. open planned classroom</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>11. science</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>a. science-general, earth</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>b. science-advanced (biology, chemistry,</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>physics)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. study hall</td>
<td>16.5</td>
<td>Not to exceed 40% of PS in #10</td>
</tr>
<tr>
<td>a. cafeteria/study hall - if so labeled &amp;</td>
<td>16.5</td>
<td>Not to exceed (area of room/16.5) x .7</td>
</tr>
<tr>
<td>used</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rated Capacity of a Secondary School Addition

a. Method for Computing Rated Capacity

1. Determine the capacity of the existing building (i.e., no addition), considering prospective space usage by applying the appropriate "Teaching Station" or "Pupil Station" method explained above.

2. Determine the capacity of the total building complex, including the addition, again using the appropriate "Teaching Station" or "Pupil Station" method explained above.

3. Subtract the answers derived for #1 above from the answers derived for #2 above. The result is the rated capacity of the addition.

4. If the estimated budget of the project exceeds the maximum cost allowances based on the rated capacity from #3 above, determine the capacity using the "Square Foot" method (see "b" below) and use that capacity which is most advantageous for building aid purposes.

b. Special Cases: Secondary School Additions

If the estimated budget for the addition of a secondary school library, cafeteria, teacher's conference room, gymnasium or auditorium exceeds the maximum cost allowance determined by using the above criteria, an additional capacity for building aid may be assigned.

Such additional capacity, up to the maximums indicated below, shall be assigned on an "as needed" basis so that the estimated maximum cost allowance covers the estimated cost of the listed spaces or at least an increased portion of the estimated project costs.

The additional capacity for building aid purposes shall not exceed the result of dividing the size of the specific area up to the maximum size (for aid purposes) as indicated below by 100 sq. ft./pupil.

Secondary Auditorium

Maximum size - 7,000 sq. ft. (1,000 seats @ 7 sq. ft./seat)

Maximum capacity - 70 pupils
Secondary Cafeteria

Maximum size - 4,000 sq. ft. - determine size by dividing operating capacity of building by number of servings, multiply result by 15 sq. ft./pupil, subtract area of any existing cafeterias.

Maximum capacity - 40 pupils

Secondary Gymnasium

Maximum size

a. 1,872 sq. ft. (for required minimum 36 ft. x 52 ft. gym)

   Maximum capacity - 19 pupils

b. 3,168 sq. ft. (for required minimum 48 ft. x 66 ft. gym)

   Maximum capacity - 32 pupils

Secondary Library

Maximum reading room size - 3,750 sq. ft. -- determine size of reading room by dividing 10% of operating capacity by 25 sq. ft./pupil.

Maximum capacity - 37 pupils

Secondary Teacher's Conference Room

Maximum size - 770 sq. ft.

Maximum capacity - 8 pupils

c. The "Square Foot" Method for computing rated capacity is a method which allows building aid up to a predetermined statewide average square foot allowance per pupil for different kinds of buildings. This method may result in more capacity for an addition than the Teaching Station or Pupil Station methods and may also have application when a proposed addition does not contain teaching stations which produce capacity. However, when an existing building plus the proposed addition already exceeds the statewide average square foot allowances, there is no building aid.
Square Foot Method for computing capacity.

1. Determine the gross square foot area of the existing building. Divide the gross area by the appropriate square foot/pupil allowance listed below. The result represents the capacity assigned to the existing building.

<table>
<thead>
<tr>
<th>Grades Housed</th>
<th>Square Foot/Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-6</td>
<td>85</td>
</tr>
<tr>
<td>K-9</td>
<td>100</td>
</tr>
<tr>
<td>7-9</td>
<td>100</td>
</tr>
<tr>
<td>K-12</td>
<td>100</td>
</tr>
<tr>
<td>7-12</td>
<td>125</td>
</tr>
<tr>
<td>10-12</td>
<td>125</td>
</tr>
</tbody>
</table>

NOTE -- Space associated with special education is included in these numbers.

2. Determine the capacity of the total building complex (i.e., existing and proposed addition) based on prospective space usage and apply the appropriate Teaching Station method or Pupil Station method explained above.

3. Subtract the answer derived for #1 above from the answer derived for #2 above. The result is the rated capacity of the addition for the purpose of determining maximum cost allowances. Note that if the square foot/pupil allowance for the specific kind of building is exceeded, #1 will exceed #2 and the subtraction will result in a negative number which means that no capacity or building aid will result from this method.

EXPENSES ELIGIBLE FOR BUILDING AID

General

Section 408 of the Education Law stipulates that no school building can be erected, purchased, repaired, enlarged or remodeled until the plans and specifications for the work have been submitted to and approved by the Commissioner. Section 3602, subdivision 6, of the law states that building aid is available for approved expenditures for both construction or acquisition of new school buildings, and for the reconstruction and modernization or improvement of existing school buildings.

Definition of Terms

- **New Construction** -- New construction includes construction of new school buildings and additions to existing school buildings.

- **Acquisition** -- Acquisition means the same as purchase.
Repair -- Repair in Section 408 refers specifically to the requirement that plans and specifications for major repairs which affect the health and safety of occupants must be approved by the Commissioner. Other repairs include occasional work of a recurring nature which are intended to restore to a satisfactory condition that which has decayed, deteriorated, weathered or become broken, torn or otherwise inoperable. Maintenance is recurring work which is intended to promote the upkeep of a property in properly operating condition. Repairs and maintenance are not eligible for building aid.

Alterations -- Alterations are construction within an existing building which results in a change in educational space or use. For the discussion of building aid, an alteration may be considered a reconstruction project.

Reconstruction -- Reconstruction includes replacement and/or remodeling in an existing school building. The term reconstruction is synonymous with the term capital improvement (sometimes written only as "improvement") and means to rebuild, to renovate, to remodel, (i.e., to construct again). Essentially, reconstruction embodies all of the terms defined below and includes all types of capital construction work other than new buildings or additions.

1. Capital Improvement -- Capital improvement is defined in part by the Local Finance Law as any physical public betterment or improvement. An improvement means a valuable addition to an existing building, addition in the sense of an enhancement, not a structural addition. An improvement is permanent and is intended to increase a building's value, beauty, or utility, or adapt the building for a new or further purpose. As such, an improvement must do more than merely replace or restore to original condition.

2. Remodeling -- Remodeling is defined as work performed to alter, modernize, renovate, or otherwise change a building in a different way.

3. Replacement -- Replacement refers to the replacement and/or installation of components of a building which prolongs the life and/or increases the value of the building. Examples --replacement of a roof, windows, walls, etc., or of an element of the mechanical systems such as a boiler, temperature controls, water distribution, toilet fixtures, or electrical service.

4. Emergency Repairs/Recovery Work -- Key elements of the definition of a public emergency are that an emergency results from an unforeseen occurrence, and that it requires immediate corrective actions, but only in the form of emergency repairs. Mitigation measures to correct an emergency are needed immediately and are temporary in nature. They are not capital construction in the usual sense, and do not require approval of the Commissioner. Costs associated with the mitigation activities are ordinary contingent expenses.

An emergency ends upon completion of the mitigation activities. Next comes the recovery period which may, and probably will, involve capital construction. Any
capital construction associated with the recovery must be properly planned, developed, authorized, and advanced as any other capital construction project. As with any capital construction project affecting health and safety, approval of plans and specifications for the recovery project and issuance of a building permit by the Commissioner is required before advertising for bids and signing contracts.

- **Construction Costs** -- Certain costs for construction and/or reconstruction work which is approved pursuant to Section 408 of the Education Law, are eligible for building aid pursuant to Section 3602, subdivision 6. To be eligible for aid, construction costs must be equal to or exceed $10,000, and the various elements of the work must have received prior approval and a building permit from the Commissioner.

- **Incidental Costs** -- In addition to aid for construction costs, certain expenditures for site purchase, grading or improvement of the site, original furnishings, equipment, machinery or apparatus, or professional fees (design and legal) and other incidental costs (such as insurance during construction and general administrative costs) are eligible for aid.

Building aid may also be available for accounting, tabulation, or computer equipment and the areas for housing such equipment when requested in accordance with Section 155.2(a) (1)(vi) of the Commissioner’s Regulations.

**ELIGIBLE RECONSTRUCTION PROJECTS**

- **Building Features Affected** -- A reconstruction project must embody permanent improvements and replacements which increase the value or prolong the life of a building. Essentially, such improvements relate to various components of a building's structural envelope and various elements of the mechanical systems, rather than cosmetic features, or certain furnishings or equipment attached to (i.e., built into) the building.

The structural envelope of a building includes such things as roof, walls, windows, doors, insulation (including asbestos control) and fire/safety work, etc. Mechanical elements include plumbing, such as water distribution, sanitary drainage, fixtures, etc.; heating, such as boiler/burner, temperature control, ventilation, etc.; and electric, such as service, power/light distribution, lighting fixtures, communications, etc.

- **Scope of an Eligible Project** -- To be eligible for building aid, reconstruction work must be done in the total building or a substantial portion of a circumscribed portion of the building. "Substantial portion" may include such divisions as the original building, a dated addition, a wing of the building, one total floor of a multi-story building or wing, or a program area (such as the auditorium/gymnasium complex) and, of course, the whole building.
In addition, reconstruction work must include the whole of a particular building component or system element, or a substantial portion thereof. For example, replacement of a whole roof would be eligible for aid. Likewise, replacement of a part of the roof which is bounded by parapets and/or roof edges would also be eligible for aid. Conversely, replacement of only a portion of the roof area which is included within the parapets and/or roof edges would not be eligible.

Replacement of one light fixture in each of three or four classrooms would not be eligible for aid; nor would replacement of all the fixtures in only one classroom. However, replacement of all light fixtures in all of the classrooms, or a substantial portion of the classrooms on a particular floor or wing, would be eligible for aid.

The same concept is applicable to something like ceiling tiles. Replacement of a few tiles in each of three or four classrooms would not be eligible for aid; nor would the replacement of the whole ceiling in only one classroom. However, replacement of the ceiling in the whole building, or in a substantial portion of a floor or wing, would be eligible for aid.

The principle represented above applies equally to the remodeling or replacement of all building components and system elements. Any questions concerning what makes up a "substantial portion" should be discussed with the Project Manager.

**Deteriorated Building Elements** -- Over the course of time, certain items and elements of a school building which are attached to or built into the building reach a point where it can be documented that they no longer can be reasonably or properly maintained. They are represented by the following list:

- auditorium seating installations
- auditorium seating (recovering)
- auditorium proscenium curtains
- bleacher installations (interior)
- cabinetry installations
- chalk/tackboard installations
- sun/light control (curtains, drapes, blinds)
- wall finishes (other than painter's finishes)

These listed kinds of work items are eligible for building aid if they meet the following criteria:

1. The district must document in writing that the particular listed item(s) has extensively deteriorated and can no longer be reasonably or properly maintained;

2. The listed work must be performed in a "substantial portion" of the building, as previously defined; and,
3. The listed work must be included in a bonafide and otherwise eligible reconstruction project, and be listed on the Project Description form for that project. A project which consists of only the kind of work items listed above is not eligible for building aid.

Also, if these kinds of work items are done outside of a "substantial portion" of the building the work will not be eligible for aid unless the district can document that such work is cost effective only if done in conjunction with similar work which is being performed in a "substantial portion" of the building.

Painter's finishes in an existing building are not eligible for building aid except where the painter's finishes are necessary to complete the finishing of a building element or an area which has been reconstructed.

- **Ineligible Expenses in a Reconstruction Project** -- Work or expenses which do not prolong the life of a building or add to its value are not eligible for building construction aid. Typically, this type of work is intended to simply keep a building in an operating condition and includes both maintenance and repair work.

  **Maintenance** -- As previously stated, maintenance is recurring work which is intended to promote the upkeep of a property and otherwise maintain the property in properly operating condition. Maintenance includes refinishing or resurfacing with painter's type finishes.

  **Repairs** -- Also, as stated previously, repairs are occasional work of a recurring nature which are intended to restore to a satisfactory condition that which has decayed, deteriorated, weathered or become broken, torn, or otherwise inoperable. As such, repairs will fix, mend, make good or replace a part(s), or put it together again, or cause it to operate satisfactorily. In a reconstruction project which is otherwise eligible for building construction aid, repair and maintenance portions are not eligible for aid.

- **Site Development** -- Site development work which is accomplished in conjunction with a bonafide reconstruction project, as previously defined, is eligible for building aid as an incidental cost to the reconstruction project.

Eligible site development includes development of new (original) plantings, turf areas, playground and athletic installations (including bleachers, and walks, roads and parking areas). Site development also includes the replacement and/or reconstruction of such items which can no longer be reasonably and practically maintained. Site maintenance work such as reseeding or fertilizing turf areas, marking game lines, and patching or resurfacing blacktop or similar paving are not eligible for building aid. Construction of new bleachers, storage buildings for field equipment, public toilet and team locker facilities, or similar new ancillary buildings are not eligible for building aid unless done in conjunction with a new school.
Corrections to be made to “State Building Aid for Public School Districts and BOCES” dated April 1999, which was recently sent to all Superintendents of Schools and District Superintendents.

Page 3  --  Elementary School

d. Special Education

   Student/Teacher Ratio

   12:1 or 15:1
   12:1:1
   6:1:1
   8:1:1
   12:1+3:1

Page 6  --  Secondary School

m. Special Education

   Student/Teacher Ratio

   12:1 or 15:1
   12:1:1
   6:1:1
   8:1:1
   12:1+3:1

Page 8  --  FORMULA FOR BUILDING AID

Using the above terms, the formula for determining estimated building aid for a new building, addition, reconstruction and/or alteration is as follows:

1. The rated capacity assigned by the Office of Facilities Planning is multiplied by the per pupil construction cost index which is in effect the month the contracts are signed to determine a maximum cost allowance both for construction costs and for incidental costs.

2. The maximum cost allowances are adjusted upward by multiplying each one (i.e., new versus existing capacity and contracts versus incidental cost indices) by the district’s applicable Regional Cost Factor. Note that the maximum cost allowances are multiplied by the Regional Cost Factor, and if the Regional Cost Factor is greater than 1.0, this will increase the total expenditures that are eligible for Building Aid in order to compensate for higher construction costs in various geographical areas of the state.

3. The actual expenditures by category (i.e., new versus existing and contacts versus incipientals) are then multiplied by the district’s building aid ratio as long as the expenditures are within the adjusted maximum cost allowances. Any actual expenditures which exceed the adjusted maximum cost allowances by category will not be eligible for Building Aid.

Note: Total expenditures for a capital project are limited to the amount properly authorized, either by a vote of the people in a public school district (or declaration of an ordinary contingent expense by the Board of Education when appropriate) or by the Boards of Education in the Big Five City School Districts.
### Pupil Station Method

**e. Pupil Station**

<table>
<thead>
<tr>
<th>Room</th>
<th>Sq. Ft./Pupil</th>
<th>Maximum Number of Pupil Stations (PS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. agricultural shop and classroom</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2. art</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>3. business or computer rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. distributive education</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>b. office/secretarial/typing/ keyboarding</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>c. computer classroom</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>4. home and careers</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>5. technology (industrial arts)</td>
<td>75</td>
<td>24</td>
</tr>
<tr>
<td>6. mechanical drawing</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>7. library – reading room only</td>
<td>25</td>
<td>Not to exceed 15% of PS in #10</td>
</tr>
<tr>
<td>8. music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. classroom</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>b. instrumental</td>
<td>25</td>
<td>(area of room ÷ 25) x .4</td>
</tr>
<tr>
<td>c. vocal</td>
<td>20</td>
<td>(area of room ÷ 25) x .4</td>
</tr>
<tr>
<td>9. physical education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. gymnasium per station</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>b. swimming pool per station</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>10. recitation classroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. interchangeable classroom</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>b. open planned classroom</td>
<td>30</td>
<td>----</td>
</tr>
<tr>
<td>11. science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. general, earth</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>b. advanced – biology, chemistry, physics</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>12. study hall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. cafeteria/study hall (if so labeled and used)</td>
<td>16.5</td>
<td>Not to exceed 40% of PS in #10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not to exceed (area of room/16.5) x .7</td>
</tr>
</tbody>
</table>
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Author(s): Thurnau, Carl

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Publication Date: 1999

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