



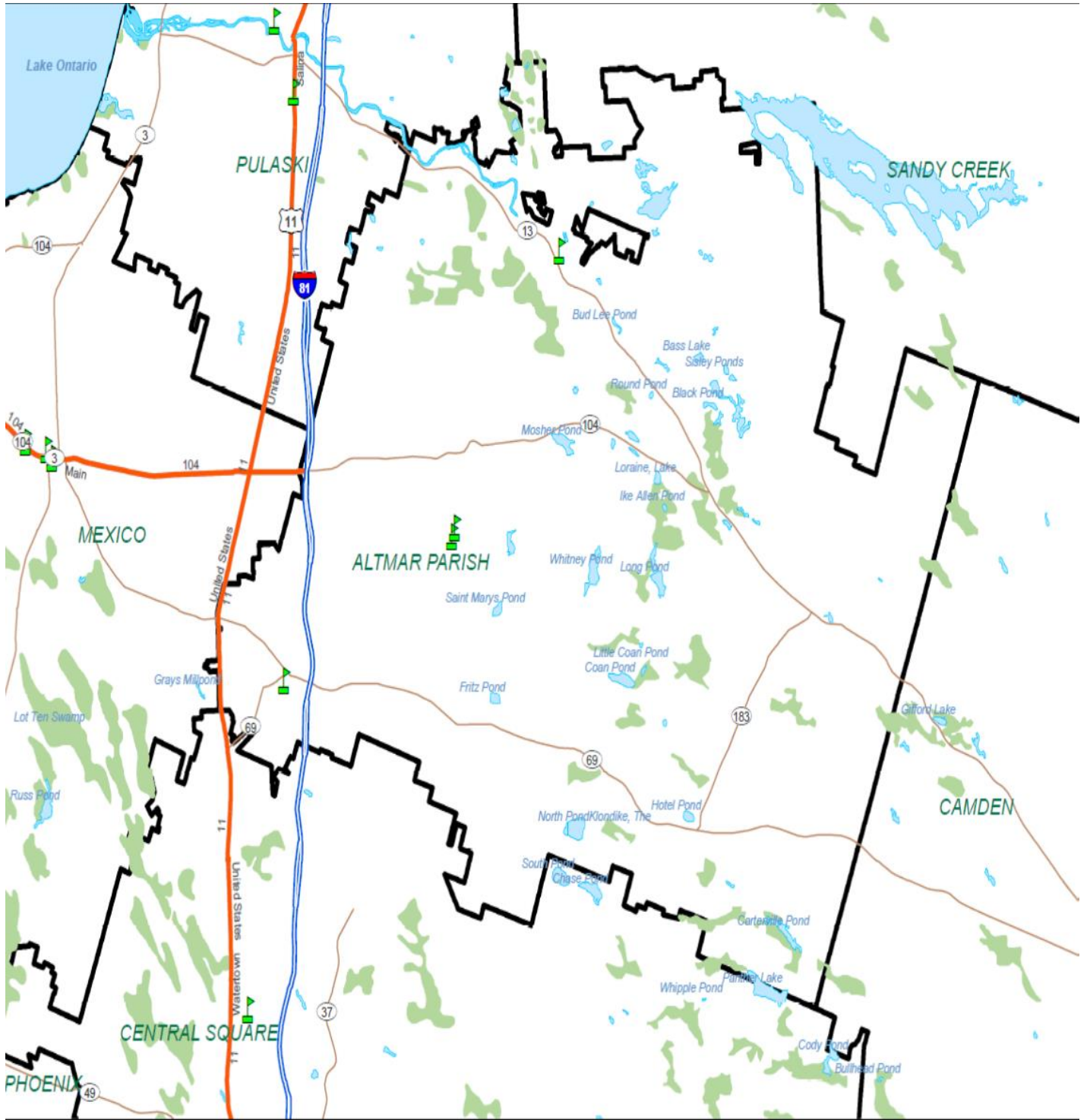
**PUPIL CAPACITY ANALYSIS  
OF EACH SCHOOL BUILDING OF  
THE ALTMAR-PARISH  
WILLIAMSTOWN CENTRAL  
SCHOOL DISTRICT**

**Pre-KINDERGARTEN  
THROUGH  
GRADE 12**

*A Tool to Help Plan and Discuss  
the Future*

*March 12, 2018*

*“Custom tools and research to aid a school district in defining a vision and  
decision options for serving students in the future.”*



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## **PURPOSE OF THE SCHOOL BUILDINGS CAPACITY STUDY**

This study provides a school building pupil capacity assessment that documents how the instructional spaces in all of the school buildings of the Altmar-Parish-Williamstown Central School District are utilized in the 2017-2018 school year to deliver *the current pre-kindergarten through grade twelve program including special education*. Second, it provides an assessment of pupil capacity of each building measured against local district goals for grade level class sizes and measured against State Education Department building aid unit capacity guidelines for instructional space.

The study is instructionally focused on the current year implementation of the educational program within the school buildings of the district. It does not provide technical or qualitative evaluation regarding architectural specifications, design, construction or management of the facilities. The best source for such infrastructure analysis is the architect for the district.

The protocol to accomplish the school building capacity assessment is guided by two elements. Element one applies the New York State Education Department defined room schedule of minimum spaces necessary to house a school district's educational program and the square foot guidelines for each specific space to define the *State-rated pupil capacity*. State-rated pupil capacity helps to define State financial support of local capital projects. *Appendix A* describes the New York State guidelines and term definitions about State-rated school building pupil capacity.

The second element key to an analysis of school building pupil capacity is local school district class size values stated in Board of Education Policy and/or the contract between the Board of Education and the Teachers' Association. If there is such class size policy or contract language, then the State-rated pupil capacity for the school buildings is modified by the *local district class size guidelines*.

## **USE OF THE PUPIL CAPACITY ANALYSIS**

The analysis provides:

- ✓ A comprehensive inventory of all instructional and instructional support spaces in the two school buildings of the district and how they are used to implement and deliver the 2017-2018 grades Pre- K-12 program.
- ✓ A measure of balance between available pupil capacity in a school and the enrollment to be served in the building.
- ✓ Indication of which buildings have available pupil capacity to host new or different programming and/or host different grade level configurations than are now assigned.

**ALTMAR-PARISH-WILLIAMSTOWN CENTRAL SCHOOL DISTRICT GUIDELINES  
GOVERNING CLASS SIZE**

The Teachers’ Contract refers to “Class Size and Teacher Load” under Article 4, Clauses 4.1 and 4.2.

4.1 Teaching Conditions

1. The Board of Education, superintendent of Schools and the Administration will continue to endeavor to provide the optimum conditions for teaching and learning
2. In this respect the board and the superintendent are aware of the relationship of class size and teaching load to good education and will attempt to bring class size and work load to reasonable limits as suggested by the NYS Education Department to the extent the resources of the District permit.

**Board Policy number 7132 states the following:**

*Recommended class size as follows:*

*Kindergarten – Second Grade 20 Students*

*Grade 3 – Grade 5 23 Students*

**DISCRETIONARY ‘FUNCTIONAL’ OPERATING CLASS SIZE GOALS IDENTIFIED BY THE BOARD AND ADMINISTRATION**

At its discretion, the district currently utilizes the following class size ‘functional’ goals to guide the delivery and implementation of the program in 2017-2018.

<b>Altmar-Parish-Williamstown Central Class Size ‘Functional Operating Goals’ 2017-2018</b>	
<b>Grade Level</b>	<b>Class Size Goal</b>
<b>K – 2</b>	20
<b>3 - 5</b>	23
<b>6 -12</b>	25

\*Individual periods of specialized, advanced instructional offerings may well have lower class enrollments in grades 9-12 as approved by the Board of Education

The ‘functional operating class size goals’ of the district are used by the pupil capacity study to modify the state-rated capacity calculations to determine the *functional* operating pupil capacity of each school building. It is this *functional operating capacity* that the study suggests the District use for short-range and long-range planning for the delivery of instruction and the program.

The following pages outline the detailed pupil capacity analysis for each of the Altmar-Parish-Williamstown Central School District buildings/schools. The analyses are benchmarked to and reflect

how the instructional spaces are deployed in each building in the school year 2017-2018 to deliver the curriculum to Pre-Kindergarten through grade 12 as reported by each respective building principal.

Two pupil capacity measurements are provided:

1. The *functional operating capacity* calculation reflects the class size “goals” that the Board and Administration use at their discretion to deliver the instruction in grades K-12.
2. The *estimated building aid units/State Education Department rated guidelines* calculation that likely would guide the determination of building aid allocation to the district in the case of a facility project.

***Summary of the Pupil Capacity of each Altmar-Parish-Williamstown  
Central School District School Buildings  
2017-2018***

School Building	2017-2018 Enrollment (October 1, 2017)	2017-2018 Pupil Capacity K-12	Total Pupil Capacity Used in 2017-2018 As Per District Class Size Goals	Remaining K-12 Pupil Capacity Available in 2017-2018 As Per Class Size Goals	
		Operating Capacity Given how the Program is Implemented/Deployed in the available spaces in the <i>Current School Year</i> Guided by the Local District ‘Functional Operating’ Class Size Goals	Percentage	Estimated Additional Pupil Enrollment that Could be Served Now	% of Pupil Capacity Not Now Used in 2017-2018
APW Elementary K-6	584	687	85%	103	15%
Junior/Senior High School 7-12	576	721	79.9%	145	20.1%

**APW  
ELEMENTARY SCHOOL**

Total Enrollment as of October, 2017	
• Grades K-6 including Special Needs Self-contained	584
• BOCES provided programming	15
• Pre-Kindergarten	39

**BUILDING CAPACITY ANALYSIS:  
'OPERATING' BASED ON LOCAL INSTRUCTIONAL DELIVERY STANDARDS;  
'RATED' BASED ON CURRENT SED GUIDELINES AS OF 10/1/17**

**OPERATING CAPACITY BENCHMARKED TO HOW SPACE IS CURRENTLY ASSIGNED  
TO MEET THE EXPECTED INSTRUCTIONAL PROGRAM FOR 2017-2018:**

<b>FUNCTIONAL OPERATING PUPIL CAPACITY as per DISTRICT CLASS SIZE GOALS</b>	
PRE-KINDERGARTEN	36
KINDERGARTEN–GRADE 6	618
ALTMAR-PARISH-WILLIAMSTOWN SPECIAL EDUCATION	69
SPECIAL EDUCATION IN RENTED SPACE TO BOCES	16
<b>TOTAL FUNCTIONAL PUPIL CAPACITY K-6</b>	<b>687</b>
<b>ESTIMATED 'BUILDING AID UNITS' FOR CAPITAL PROJECT CALCULATIONS</b>	
PRE-KINDERGARTEN	54
KINDERGARTEN–GRADE 6	756
ALTMAR-PARISH-WILLIAMSTOWN SPECIAL EDUCATION	69
SPECIAL EDUCATION IN RENTED SPACE TO BOCES	16
<b>TOTAL 'BUILDING AID UNITS'</b>	<b>895</b>

<b>UNDER OR OVER BUILDING PUPIL CAPACITY</b>	<b>CURRENT GRADES K-6 ENROLLMENT COMPARED TO THE PUPIL CAPACITY OF THE SCHOOL BENCHMARKED TO THE IMPLEMENTATION OF THE 2017-2018 PROGRAM</b>
<i>FUNCTIONAL OPERATING CAPACITY K-6 AS PER THE CLASS SIZE GOALS OF THE DISTRICT</i>	<i>UNDER BY 103 PUPILS OR BY 15%</i>

**CAPACITY ANALYSIS APW ELEMENTARY SCHOOL**

<b>CLASSROOM USE</b>	<b>ROOM NUMBER</b>	<b>SQUARE FEET</b>	<b>OPERATING CAPACITY AS PER LOCAL DISTRICT CLASS SIZE GOALS</b>	<b>RATED CAPACITY SED GUIDELINES AND EST. BUILDING AID UNITS</b>
Pre-Kindergarten	210	770	18	27
Pre-Kindergarten	211	900	18	27
Kindergarten	215	770	20	27
Kindergarten	212	770	20	27
Kindergarten	213	770	20	27
Kindergarten	214	770	20	27
Grade 1	216	900	20	27
Grade 1	217	900	20	27
Grade 1	219	900	20	27
Grade 1	220	900	20	27
Grade 2	202	770	20	27
Grade 2	204	770	20	27
Grade 2	206	770	20	27
Grade 2	208	770	20	27
Grade 3	116	770	23	27
Grade 3	117	770	23	27
Grade 3	119	770	23	27
Grade 3	120	770	23	27
Grade 4	110	770	23	27
Grade 4	111	770	23	27
Grade 4	113	770	23	27
Grade 4	115	770	23	27
Grade 5	105	770	23	27
Grade 5	107	770	23	27
Grade 5	108	770	23	27
Grade 5	109	770	25	27
Grade 6	400	900	25	27
Grade 6	401	770	25	27
Grade 6	402	770	25	27
Grade 6	403	770	25	27
<b>TOTAL GRADES K-6</b>			<b>618</b>	<b>756</b>

<b>APW ELEMENTARY SPECIAL EDUCATION INSTRUCTIONAL CLASSROOMS</b>				
<b>CLASS</b>	<b>ROOM NUMBER</b>	<b>SQUARE FEET</b>	<b>OPERATING CAPACITY</b>	<b>BUILDING AID UNITS</b>
12:1:1	218	900	12	12
12:1:1	104	770	12	12
15:1	103	955	15	15
15:1	102	770	15	15
15:1	118	770	15	15
BOCES Rental 8:1:1	205	770	8	8
BOCES Rental 8:1:1	207	770	8	8
<b>TOTAL SPECIAL EDUCATION</b>			<b>85</b>	<b>85</b>



## APW ELEMENTARY INSTRUCTIONAL SUPPORT SPACE

Instructional support space in an elementary building does not have ‘pupil capacity’ assigned to it. Only space that serves grade level sections generates ‘pupil capacity’. If an instructional support space is changed to serve a grade level section instead of a support service, then it does have a pupil capacity assigned to its use as a grade level classroom. Please note that a blank next to a support service/program indicates that this school building does not have a space assigned to the support service/program and that other elementary building(s) in the district do have assigned space.

<b>SUPPORT SERVICE/PROGRAM</b>	<b>ROOM NUMBER</b>	<b>SQUARE FEET</b>
Library	310	2000
Computer Lab	300	770
Art Room	101	956
Art Room	200	1100
Gymnasium	310	6336
Cafeteria	141	4225
Music-Instrumental	304	1413
Music-Vocal	305	774
Nurse	503	692
School Based Health Center	501	470
Psychologist	507	120
School Counselor	506	114
School Counselor	302	126
OT/PT Room	106	955
Sensory Room	209	530
Interventionist Room	112	420
Speech Therapist Room	310	89
Speech Therapist Room	309	89
Speech Therapist Room	301	225
Special Ed Resource Room	307	136
Faculty Workroom	203	945
ISS room	201	345
Conference room	508	220
Conference room	500	257

**ALTMAR-PARISH-WILLIAMSTOWN  
JUNIOR/SENIOR HIGH SCHOOL**

<b>Total Enrollment as of October, 2017</b>	
<b>Grades 7-12 including Special Needs Self-Contained</b>	576

**BUILDING CAPACITY ANALYSIS:  
'OPERATING' BASED ON LOCAL INSTRUCTIONAL DELIVERY STANDARDS;  
'RATED' BASED ON CURRENT SED GUIDELINES AS OF 10/1/17**

<b>FUNCTIONAL OPERATING PUPIL CAPACITY as per DISTRICT CLASS SIZE GOALS</b>	
GRADES 7-12	(971-200)/1.16 = 664
ALTMAR-PARISH-WILLIAMSTOWN SPECIAL EDUCATION	57
SPECIAL EDUCATION IN RENTED SPACE TO BOCES	0
<b>TOTAL FUNCTIONAL PUPIL CAPACITY 7-12</b>	<b>721</b>
<b>ESTIMATED 'BUILDING AID UNITS' FOR CAPITAL PROJECT CALCULATIONS</b>	
GRADES 7-12	(1091-200)/1.16 = 768
ALTMAR-PARISH-WILLIAMSTOWN SPECIAL EDUCATION	57
SPECIAL EDUCATION IN RENTED SPACE TO BOCES	0
<b>TOTAL 'BUILDING AID UNITS'</b>	<b>825</b>

<b>UNDER OR OVER BUILDING PUPIL CAPACITY</b>	<b>CURRENT GRADES 7-12 ENROLLMENT COMPARED TO THE PUPIL CAPACITY OF THE SCHOOL BENCHMARKED TO THE IMPLEMENTATION OF THE 2017-2018 PROGRAM</b>
<i>FUNCTIONAL OPERATING CAPACITY 7-12 AS PER THE CLASS SIZE GOALS OF THE DISTRICT</i>	<i>UNDER BY 145 PUPILS OR BY 20.1%</i>

**CAPACITY ANALYSIS ALTMAR-PARISH-WILLIAMSTOWN JUNIOR/SENIOR HIGH SCHOOL**

**(Methodology: Teaching Station method since there are over 25 teaching stations 7-12.)**

<b>CLASSROOM USE</b>	<b>ROOM NUMBER</b>	<b>SQUARE FEET</b>	<b>OPERATING CAPACITY AS PER LOCAL DISTRICT CLASS SIZE GOALS</b>	<b>RATED CAPACITY SED GUIDELINES AND EST. BUILDING AID UNITS</b>
Art	B116	1482	25	25
Art	B115	1328	25	25
Instrumental Music	D103	2928	25	45
Choral Music	D102	1510	25	30
Music Classroom	B118	729	25	24
Spanish	C214	800	25	30
Spanish	C207	683	25	26
French	C206	686	25	26
Chemistry	C102	1269	25	25
Physics	C106	941	25	18
Science 7-8	C107	941	25	30
Earth Science	C101	1269	25	30
Science Living Environment	C201	1269	25	25
Science Living Environment	C202	1269	25	25
Health	C213	680	25	26
English	A101	812	25	30
English	A102	812	25	30
English	A107	809	25	30
English	A108	829	25	30
English	C209	803	25	30
English	C205	737	25	28
Social Studies	C208	683	25	26
Social Studies	C204	748	25	28
Social Studies	A103	812	25	30
Social Studies	A104	812	25	30
Social Studies	A105	812	25	30
Social Studies	A106	812	25	30
Math	B126	785	25	30
Math	B121	785	25	30
Math	B122	785	25	30
Math	C215	800	25	30
Distance Learning Classroom	B119	753	25	28
CADD	D112	848	24	24
Technology	D111	1810	24	24
Technology	D114	1807	24	24
Home and Careers	C109	1740	24	24
Library-reading area	A110	3966; Reading area 625	25	25
Phys Ed	E101	9828- 2 stations	50	60
<b>RAW TOTALS 7-12</b>			<b>971</b>	<b>1091</b>

**JUNIOR/SENIOR HIGH SCHOOL SPECIAL EDUCATION  
INSTRUCTIONAL CLASSROOMS**

<b>CLASS</b>	<b>ROOM NUMBER</b>	<b>SQUARE FEET</b>	<b>OPERATING CAPACITY</b>	<b>BUILDING AID UNITS</b>
12:1:1	B101	809	12	12
15:1	B123	785	15	15
15:1	B102	809	15	15
15:1	C212	800	15	15
<b>TOTAL SPECIAL EDUCATION</b>			<b>57</b>	<b>57</b>

\*Denotes classroom size below minimum.

**GRADES 7-12 INSTRUCTIONAL SUPPORT SPACE**

Instructional support space in a secondary building does not have ‘pupil capacity’ assigned to it. Only space that serves grade level subject sections generates ‘pupil capacity’. If an instructional support space is changed to serve a grade level subject section instead of a support service, then it does have a pupil capacity assigned to its use as a grade level subject classroom.

<b>SUPPORT SERVICE/PROGRAM</b>	<b>ROOM NUMBER</b>	<b>SQUARE FEET</b>
Cafeteria	F113	3490
Stage/Auditorium	D108/D109	3219
Computer Lab	B114	785
Computer Lab	B105	863
Nurse	C110	840
School-Based Health Center	C111	783
Fitness Room	D104	2102
OT/PT	B111	460
Speech	B109	529
Testing Room	B110	529
Reading	B113	791
Special Ed. Learning Center	B112	1356
Special Ed. Resource	C211	680
Guidance Suite	C115	1308
Psychologist	C116	404
Social Worker	C116	132
Counselor	B107	117
Counselor	B106	117
Faculty Workroom	C112	1015
In-School Suspension	B108	529
Instructional Tech Support	B104	756

## APPENDIX A:

### BACKGROUND ABOUT THE ROLE OF PUPIL CAPACITIES OF SCHOOL BUILDINGS, THE STATE EDUCATION DEPARTMENT OF PROGRAM/FACILITY PLANNING, AND STATE BUILDING AID FOR SCHOOL DISTRICT CAPITAL PROJECTS\*

The instructional program envisioned by the district and how best to deploy effectively that program within the educational facilities drive the analysis of school building pupil capacity. The protocol to define pupil capacity is first a program delivery analysis tool, and is second the basis for possible State building aid if a capital work is approved for a school building.

The Commissioner of Education must approve plans and specifications for capital construction projects undertaken by public schools and BOCES. Such construction may include new buildings, additions, and alterations/reconstruction of facilities. Eligibility for new construction as well as state building aid to help in funding a facility project is determined through an assessment of information contained in the school district's Facilities Needs Assessment summary, enrollment projections, Instructional Space Review form, floor plans of actual and proposed use of space, as well as the required curriculum and the specific educational programs offered by the district.

The calculated pupil capacity number based on the program to be implemented represents a factor that is then used by the SED to determine a maximum 'aid ceiling' for proposed facility project construction and related incidental expenditures upon which NYS Building Aid is computed.

This 'aid ceiling' calculation is the total project expenditure amount *up to* which the State of New York will provide building aid.

An estimate of building aid equals the calculated *maximum cost allowances* derived for both the construction contracts and for incidental costs or the actual costs incurred, *whichever is less*, multiplied by the district's Building Aid Ratio at the time a project is approved. A district may expend beyond the maximum cost allowance. However, such expenditure beyond the calculated maximum cost allowances for contracts and incidental expenses will receive no state building aid and thus would be fully funded by the local taxpayers.

*\*Information outlined, quoted, and discussed is sourced to the New York State Education Department Office of Facilities Planning documents.*

The Maximum Cost Allowance is determined by three factors: the *Building Aid Units (BAU)* assigned to the project by grade level or category within existing space and proposed new space; the *Construction Cost Index* that is in effect the month the general construction contract is signed; and a *Regional Cost Factor (by county)* for the fiscal year that the project contracts are signed.

The purpose of Building Aid is to help ensure that each school district provides suitable and adequate facilities to accommodate the students and programs of the district and that the allocation of building aid is done in an equitable manner regardless of the wealth or location of the school district in the State. Therefore, new buildings, additions to existing facilities, and major alterations to existing facilities 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. A project is not eligible for building aid unless the construction costs of the project equal or exceed \$10,000 excluding incidental costs.

The determination of the eligibility for Building Aid is a result of an assessment that *compares district-wide pupil enrollment projections with the efficient operating pupil capacity of existing school buildings to determine building needs*. The tool for a pupil capacity assessment is a room schedule of minimum spaces necessary to house a district's educational program for a given number of pupils.

## **DEFINITION OF TERMS RELATED TO PUPIL CAPACITY OF SCHOOL FACILITIES AND DETERMINING BUILDING AID**

### **▪ ORIGINAL CAPACITY**

This represents the total number of pupils the original building, or total complex in the case of additions, was designed to accommodate. This number is the operational capacity of the building or complex when it was constructed and was the basis for the determination of minimum size of the site. The original capacity factor is not germane since current pupil capacity is based on the current program offered in the facilities of the school district.

### **▪ STATE-RATED 'CAPACITY'—BUILDING AID UNITS**

The measure for the state-rated capacity is called *Building Aid Units (BAUs)*. The BAUs assigned to a particular building is computed using space standards established by the Commissioner. Using these standards, the total anticipated pupil enrollment by grade levels *across the district* is compared to the

actual number of Building Aid Units assigned by formula to the classrooms *in all the buildings* that serve specific grade levels of those pupils. When new buildings, additions, or major renovations are planned, the total projected pupil enrollments for the grade levels to be housed in a specific new/renovated building is compared to the total number of Building Aid Units generated by the classrooms in all district buildings proposed to deliver the program to the same grade levels.

Therefore, regardless of the grade level configuration of specific school buildings in the district, state-rated capacity allowed for the district as a whole is viewed as total K-6 elementary pupils to be served; total secondary 7-8 or 7-9 and total 9-12 or 10-12 pupils (if a separate building (s) for junior high or middle school or senior high exist in the district); and/or total 7-12 pupils to be served if separate buildings do not exist for secondary pupils.

In the case of the Altmar-Parish-Williamstown Central School District for 2017-2018 there are two schools in two buildings: one Pre-Kindergarten through grade six elementary school building, and the Junior/Senior High School which serves 7-12. Therefore, when considering State building aid support, the pupil capacity of the district-wide K-6 school is compared to the enrollment projections five years into the future to determine space need. The combined grades 7-12 pupil capacity is compared to the enrollment projections ten years into the future to determine space need.

It is important to note that *a change in room use to deliver the program may result in a change in Building Aid Units assigned and pupil capacity as per the established SED space standards*. The pupil capacity analyses offered in this study are benchmarked to the program use of the spaces by the building principals to deliver the program in the 2017-2018 school year.

#### ▪ **OPERATING CAPACITY**

This measure reflects the total number of pupils a building can reasonably and efficiently house *based on the district's educational program and class size policy as per formal Board of Education policy and/or teacher contract language* and the number, square footage size, and the program delivery use of the rooms in that building. The operating capacity of a building is computed using the space standards established by the Commissioner to define state-rated capacity *modified* by any differences due to the district's documented educational program delivery model and/or formal class size policy or contract language.

Using these standards, the total pupil enrollment by grade levels *across the district* is compared to the number of Building Aid Units assigned by formula to the classrooms *in all the buildings* that serve specific grade levels of those pupils *modified* by formal class size practice as found in board policy or written teacher contract clauses. When new buildings, additions, or major renovations are planned that create classrooms, the total operating capacity BAUs projected for the grade levels to be served in a specific new/renovated building is compared to the total operating capacity BAUs in all district buildings proposed to deliver the program to the same grade levels.

When determining a building aid ceiling allowance for an Altmar-Parish-Williamstown facility project, the total of the BAUs calculated as the district's K-2 and grades 3-6 operating capacity cannot exceed the projected enrollment five years from now. The total grades 7-12 BAUs calculated as the district's 7-12 operating capacity cannot exceed the projected 7-12 enrollment ten years from now.

- **“FUNCTIONAL CAPACITY”**

*Functional Capacity* is a term not in SED regulations regarding school facilities. It is used in the study to describe the result of planning for a flexibility factor of unassigned pupil capacity as a district develops its ongoing long range plan for program delivery in the schools of the district. If a district supersedes *district-wide* the number of classrooms necessary to house projected enrollment K-6 and 7-12, then the district receives no building aid on ‘excess’ classrooms that are built. Normally, SED project managers are granted some discretion of approving an aid ceiling for a facility project without deductions for excess capacity if the operating capacity of the project is within 10% of the projected enrollment.

## **CALCULATION OF BUILDING AID UNITS FOR ELEMENTARY SCHOOLS**

The SED does not endorse any one particular class size. Class size is at the discretion of the Board of Education of each school district. When defining state-rated capacity the Building Aid Units for a new or an existing elementary school is determined by assigning 27 BAU to each 770 square foot classroom used for grades 1-6 and to each 900 square foot kindergarten or pre-kindergarten room. The operating capacity is the same as state-rated capacity (Building Aid Units) *unless* formal board policy or union contract language exists that limits the number of students in a classroom to less than 27 for Pre-K through grade 6. When such policy or contract language is in place, the lesser number will be used to define the **operating** pupil capacity of the elementary classrooms grades Pre-K through grade 6 in all of the



buildings in the district as a whole. The higher state-rated capacity (Building Aid Units) is used by SED to define potential building aid ceilings for each school building.

In an existing elementary building, the BAU of a room over 550 square feet, but less than 770 square feet is determined by dividing the area of the room by 28.5 square feet per pupil and assigning the whole number without rounding up. Rooms of less than 550 square feet are not included in BAU calculations. Only classrooms for Pre-Kindergarten through grade 6 are counted for BAU in an elementary school. It is assumed by the State that the aid ceiling calculated by multiplying the BAUs times a cost index will be sufficient to provide for both classrooms and all ancillary spaces including instructional support spaces like a library, cafeteria, gymnasium, and auditorium. Normally, the aid ceiling for an elementary school will be sufficient for most reconstruction projects and possibly for a small addition. There is the possibility for BAUs (called ‘supplemental’ or ‘special case’ BAU) to be increased for an elementary project to build a new building or an addition that might include a library, cafeteria, gymnasium, auditorium and teacher-parent conference rooms only on an ‘as needed’ basis. An alternative method to determine BAUs for an elementary addition is the square foot method. The gross area for grades K-6 in the existing building is divided by 100. Then, the BAU are determined for the entire complex including existing and proposed as described above. The second factor is subtracted from the first. The result is the BAU of the addition for the purpose of determining maximum cost allowances. The square foot method for elementary schools may have application when a proposed building does not contain classrooms which produce BAU. *The Room Schedule of Minimum Spaces and Sizes for Elementary Schools* (source: NY SED Office of Facility Planning) is reported on the next page.

**MINIMUM ROOM SIZES** – required for new buildings and additions; recommended for new spaces created within 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.

**Elementary School**

- a. Classrooms --
  - 1. Grades 1-6 ..... 770 sq. ft.  
(27 BAU/room)
  - 2. Pre-kindergarten/kindergarten.....900 sq. ft.  
(27 BAU/room)
- b. Library ..... 900 sq. ft.  
(1 thru 12 classroom buildings -- none required)

(13 plus classroom buildings -- 1 required)

c. Physical Education - gymnasium ..... 36' x 52'

(1 and 2 classroom buildings -- none required)

(2 thru 14 classroom buildings -- 1 required)

(1 thru 14 additional classrooms -- 1 additional)

d. Special Education

Student/Teacher/Ratio	Max. Pupil Capacity	Min. Classroom Size
12:1 or 15:1	12 or 15	770 sq. ft.
12:1:1	12	770 sq. ft.
6:1:1	6	450 sq. ft.
8:1:1	8	550 sq. ft.
12:1+3:1	12	900 sq. ft.
Resource Room	----	300 sq. ft.

**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. 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.

e. 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 Room
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 meters x 7 ft. lanes
17. Teachers' room(s)
18. Toilets -- individual and/or gang

## CALCULATION OF BUILDING AID UNITS AND PUPIL CAPACITY FOR SPECIAL EDUCATION

The BAUs for special education classrooms are determined by assigning the BAU and pupil capacity based on the disabilities of the students (i.e. 15:1, 12:1, 12:1:1, 12:1+3:1, 8:1, 6:1). Only classrooms are counted for BAU in K-6 buildings and in 7-12 buildings. It is assumed by the State that the aid ceiling calculated by multiplying the BAUs times a cost index will be sufficient to provide for both classrooms

and all ancillary spaces including resource rooms and other spaces that may be needed to provide appropriate spaces for special education students.

## **CALCULATION OF BUILDING AID UNITS AND PUPIL CAPACITY FOR SECONDARY SCHOOLS**

A secondary school is a new or existing building housing any or all grades above sixth grade. When a school houses both elementary and secondary pupils, the Building Aid Units and pupil capacities are determined separately for the elementary versus the secondary spaces. The Building Aid Units and pupil capacity for a secondary school is determined by either of two methods: the Teaching Station Method or the Pupil Station Method, dependent on the size of the school. Teaching stations are considered to be:

1. Agricultural shop, including an agricultural classroom.
2. Art room (each).
3. Business education rooms (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).
10. Science; general, earth or advanced (i.e. biology, physics, chemistry).
11. Study hall (each, if 770 sq. ft., or more, and cafeteria/study hall, if so labeled and used).
12. Swimming pool.

The Teaching Station Method applies to:

- Junior High Schools having 29 or fewer teaching stations.
- Junior/Senior High Schools having 25 or fewer teaching stations.
- Senior High Schools having 22 or fewer teaching stations.

For Junior High Schools with 29 or fewer teaching stations, the total number of teaching stations used only for English, social studies, mathematics, languages, health education and general or earth science (not biology, chemistry, or physics) is calculated. This total is multiplied by 30. The result is the Building Aid Units. The same calculation of teaching stations with the same criteria is done for Junior/Senior High Schools having 25 or fewer teaching stations. The total number of defined teaching stations is then multiplied by 33. The result is the BAU. For Senior High Schools with 22 or fewer teaching stations, the total number of teaching stations used only for English, social studies, mathematics, languages, and health education is calculated. This total (**X**) is used in the formula:  $8(7\mathbf{X} - 12)$ . The result is the BAU.

The Pupil Station Method applies to:

- Junior High Schools having 30 or more teaching stations.
- Junior/Senior High Schools having 26 or more teaching stations.
- Senior High Schools having 23 or more teaching stations.

The total number of pupil stations in a building is determined by first dividing the net square foot area of each of the rooms in the building that are listed in the “Pupil Stations” chart below by the listed square feet per pupil allowance to calculate the pupil stations in each room. The results of the pupil station calculations for each room are totaled not exceeding the maximums listed in the “Pupil Stations” chart. Then, the calculation continues by subtracting 200 from the total pupil stations calculated for the building, and dividing the remainder by 1.16. The resulting number of pupil stations is the Building Aid Units total of the building for calculating building aid ceiling. Note that the operating pupil capacity by the pupil station method is computed using the same method as outlined, but *modified* by any differences due to the district’s educational program and/or maximum class sizes that are clearly outlined in formal board policy and/or in teacher contract clauses.

**Pupil Stations Chart**

ROOM	SQUARE FEET PER PUPIL	MAXIMUM # OF PUPIL STATIONS
Agriculture shop and classroom	75	20
Art	45	25
Business or computer classrooms		
• Distributive education	50	20
• Office/secretarial/typing/keyboarding	35	24
• Computer classroom	35	24
Home and careers	50	24
Technology (industrial arts)	75	24
Mechanical drawing	35	25
Library—reading room only	25	Not to exceed 15% of PS total for recitation classrooms
Music		
• Classroom	25	30
• Instrumental	25	(area of room/25) x .4
• Vocal	20	(area of room/20) x .4
Physical education		
• Gymnasium	Per station	30
• Swimming pool	Per station	30
Recitation classroom		
• Interchangeable classroom	26	30
• Open planned classroom	30	----
Science		
• General, earth	30	30
• Advanced—biology, chemistry, physics	50	24
Study hall	16.5	Not to exceed 40% of PS total for recitation classrooms
• Cafeteria/study hall (if so labeled and used)	16.5	Area of room/16.5) x .7 Not to exceed 40% of PS total for recitation classrooms

**CALCULATION OF BUILDING AID UNITS AND PUPIL CAPACITY FOR SECONDARY SCHOOL ADDITIONS**

The Building Aid Units of the existing building are calculated by applying the appropriate “Teaching Station” or “Pupil Station” method. Next, the BAU of the total building including the existing and the

addition is calculated. The BAU calculation for the existing building is subtracted from the BAU calculated for the entire proposed complex. The result is the Building Aid Units assigned for the addition to the existing building. An alternative method to determine BAUs for a secondary school addition is the square foot method. The gross area for grades 7-9 or 7-12 (10-12) in the existing building is divided by 100 or 125 respectively. Then, the BAU are determined for the entire complex including existing and proposed as described above. The second factor is subtracted from the first. The result is the BAU of the addition for the purpose of determining maximum cost allowances. The square foot method for secondary schools may have application when a proposed building does not contain classrooms which produce BAU.

## **BUILDING AID**

Regardless of the building aid for which a district may qualify, total expenditures for capital construction are limited to the amount properly authorized by either a district vote of the public in a referendum or as part of the annual budget vote. In specific circumstances, a declaration of an ordinary contingent expense by a Board of Education also can authorize facility work that qualifies for building aid. There are additional avenues for the Big Five City School Districts.

The formula for determining estimated building aid for a new building, addition, reconstruction and/or alteration is described below.

*Building Aid Units* are calculated using the rules and guidelines described earlier. The total Building Aid Units are multiplied by a *construction cost index* resulting in a dollar total called the *maximum cost allowance*. The construction cost index is prepared by the New York State Labor Department which represents the cost of labor and materials. It varies monthly. Each set of grade levels qualify for a factor of the monthly construction cost index. Grades K-6 qualify for 1.0 times the current index; grades 7-9 qualify for 1.4 times the current index; and 7-12 (10-12) qualify for 1.5 times the index. Special Education housed in a separate facility qualifies for 2 times the index, while special education students served in a building with regular education students qualify for 3 times the index.

The index has two parts: one for *construction costs*, and one for *incidental costs*. Construction costs are normally those expenditures for labor and materials to accomplish the project. Incidental costs are expenditures for site purchase, grading or improvement of the site, original furnishings or equipment, professional fees both design, construction management, and legal, and other miscellaneous incidental

costs such as insurance and general administrative costs during construction. Generally, 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. Further, 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 alterations separately. The month the district signs the major contract for the work proposed under each particular project determines what construction index amount is used to compute actual Building Aid.

The result of multiplying the total Building Aid Units by category (i.e. K-6, 7-9, 7-12, or 10-12 as applicable, special education integrated, and special education stand-alone) times the construction cost index results in a total called *the maximum cost allowance*. An allowance is determined separated for new construction as well as renovation and/or reconstruction for each project by building in a school district with multiple projects even though the projects were approved by the public in one referendum. The maximum cost allowances for new versus existing BAU and contracts versus incidental costs, are *adjusted* by the district's *regional cost factor*. The regional cost factor is used to compensate for higher construction costs in various geographical areas of the State. No part of the State can have a regional cost factor less than 1.0. The current regional cost factor for O County is designated as 1.0 by the SED.

To determine the *estimated building aid* a district will receive for a project, the maximum cost allowance adjusted by the regional cost factor is multiplied by the *district's building aid ratio*. The district building aid ratio represents a fixed percentage determined annually for each individual school district in the State. The ratio is based on the full value of property in the district and the number of students in the district and reflects the wealth of the school district. Normally, the standard building aid ratio varies from 0% in the wealthiest districts to as high as 95% in the poorest districts in the State. For 2017-2018 Altmar-Parish-Williamstown qualifies for an aid ratio of up to .95 subject to the Final Cost Report for a specific approved project submitted by the district to the State Education Department. The ratio is determined annually by the State Education Department.

The actual building aid a district will ultimately receive is determined when the *final cost report* for an approved project is filed with the SED when the project is completed. If the documented actual expenses allowed for construction and incidentals are equal to, or less than the adjusted maximum cost allowances for construction and incidentals, the district will receive building aid equal to its building aid ratio times

those documented expenditures. If the final documented expenses in either the construction or incidental categories exceed the adjusted maximum cost allowances provided to the district for those categories before the project began, there is no penalty. However, the building aid ratio will be applied only to the adjusted maximum cost allowances and not to the total expenditures the district documents by category in the final cost report.

