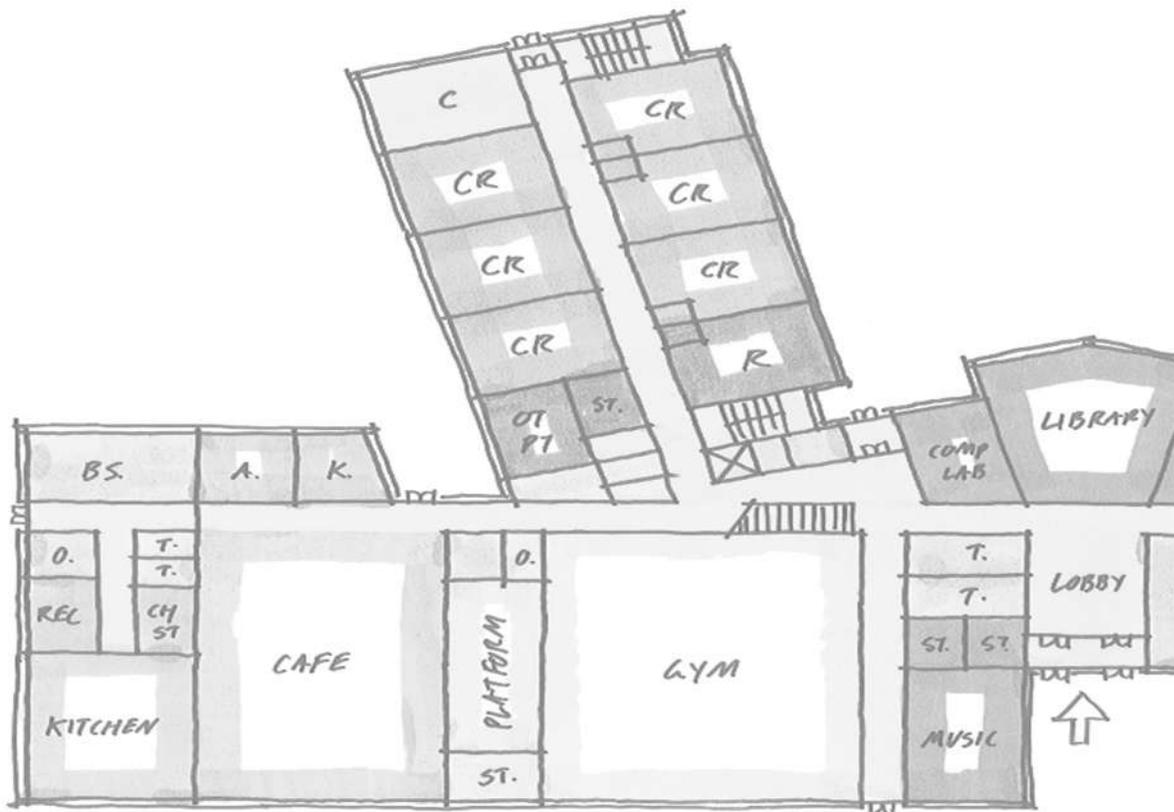

SPACE ALLOCATION GUIDELINES

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I. INTRODUCTION

The Space Allocation Guidelines together with the Educational Specifications and the Public School Standards and Guidelines for New School Construction and Major Renovation Projects constitute planning documents for the design of new school facilities that meet the goals and objectives of education in the 21st Century. In applying these Space Allocation Guidelines keep in mind that they are only that – guidelines. There will be exceptions because of the unique difference between school systems that will need to be considered by state and local officials.

It is the State's desire to find a solution to these situations in a cooperative and collegial manner. The State believes that this document will be very helpful to school boards, building committees, school officials, and designers in the process of planning a school that will be supported by the Department of Education and the State Board of Education. The Department of Education looks forward to working with individual school systems in applying these guidelines.

II. DOCUMENTATION OF EXISTING EDUCATIONAL PROGRAMS AND INSTRUCTIONAL SPACE

The State of Maine requires that new and renovated schools be built efficiently to maximize the use of state construction dollars. Therefore, it is important for the Department of Education to understand your existing situation and your vision to better help you develop a solution that meets your school system's educational needs and that is fiscally responsible.

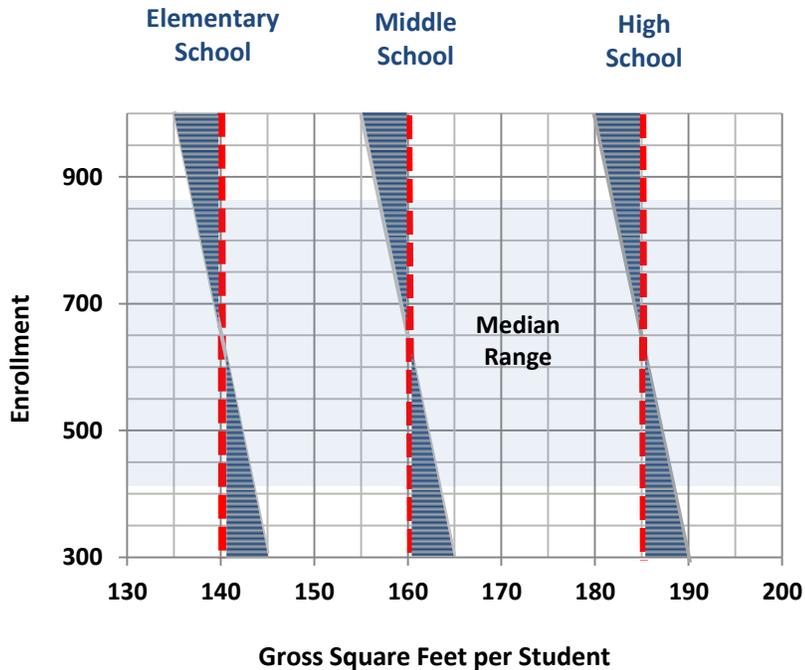
Please respond to each of the bullets below by providing information in a format that will give clarity to the existing situation. Include the school administration in preparing the responses.

- Class Size – Attach or explain your school board's policy on class size.

For Middle and High Schools only, provide the following information:

- Classroom Scheduling – Provide an existing weekly classroom schedule for every room in the building and any temporary (portable) classrooms. Include the room number, size, teacher(s), number of students, and subject taught for each period.
- Vacant Rooms – Provide a list of vacant rooms for each period of the day and each day of the week using your present schedule.
- Departmental vs. Interdisciplinary Subject Organization – Explain your program organization and the philosophy that supports it.
- Collegiate Model (multiple teachers share same classroom) vs. Single Teacher Classroom Model – Explain your existing model and why you use it.
- Athletic Programs – Provide a list of sports teams by season and the number of participants for each sport. List the number of fields available and their locations.

III. STATE SQUARE FOOTAGE STANDARDS



The Maine Department of Education supports the following standards in the planning of public school Projects: Elementary School 140 square feet per student, Middle School 160 square feet per student, High School 185 square feet per student and CTE Regions/Centers 250 square feet per student. These Standards will only vary in projects with very small or large enrollments, or those projects that include renovation components.

IV. SPACE ALLOCATION GUIDELINES

The following table establishes space guidelines for the various types of spaces typically found in an Elementary, Middle, or High School facility. Guidelines are also included for Career and Technical Education (CTE) programs for those projects that include that component. In general, the areas given will be funded by the state when supported by a district's specific program requirements. School districts may add programs or increase the areas of different program spaces but any added programs or increased area over what the state will fund will be at local expense. The square foot cost of locally funded spaces shall be the same square foot cost as for state funded spaces.

PreK Thru 12

<i>Space/Enrollment</i>	<i>Area (Square Feet)</i>
Classrooms	
Regular Classroom	
Pre-K & Kindergarten	1,000
Elementary School	800
Middle School	800
High School	800
Small Classroom	
Middle School	300 - 600
High School	300 - 600
Science Classroom/Lab	
Middle School	900
High School	900 - 1,200
Science Prep/Storage	200
Fine Arts	
Music	
Elementary School <300 Students	800
Elementary School 300-600 Students	1,000
Elementary School >600 Students	1,200
Middle School <300 Students	1,000
Middle School 300-600 Students	1,400
Middle School >600 Students	1,600
High School <400 Students	1,400
High School 400-800 Students	1,600
High School >800 Students	1,800 - 2,400
Practice Room	80 - 150
Music Storage	Negotiable

PreK Thru 12 *continued*

Space/Enrollment	Area (Square Feet)
Art (Includes Storage & Kiln)	
Elementary School	1,200 - 1,500
Middle School	1,200 - 1,500
High School	1,200 - 1,500
Auditorium	
	10 sf per student x 1/3 student body
High School	minimum size: 300 seats
Support Spaces (Storage, Dressing Rooms, etc.)	Negotiable - Program Driven
Stage	
Elementary School <300 Students	800
Elementary School 300-600 Students	1,000
Elementary School >600 Students	1,200
Middle School <300 Students	1,000
Middle School 300-600 Students	1,500
Middle School >600 Students	1,800
High School <400 Students	1,500
High School 400-800 Students	2,000
High School >800 Students	2,400
Projects Room (Unified Arts/STEM)	
Elementary School	Negotiable - Program Driven
Middle School	Negotiable - Program Driven
High School	Negotiable - Program Driven

PreK Thru 12 *continued*

Space/Enrollment	Area (Square feet)
Special Services	
Classrooms	
Elementary School	250 - 800
Middle School	250 - 800
High School	250 - 800
Technology	
Tech Support/Server Rooms	
Elementary School	80 - 200
Middle School	80 - 200
High School	80 - 200
Learning Commons	
Library/Media Center	
Elementary School	See Library Guidelines Attached
Middle School	See Library Guidelines Attached
High School	See Library Guidelines Attached
Physical Education	
Gymnasium	
Elementary School (Pre K- 3) <600 Students	2,400 No bleacher seating
Elementary School <600 Students	42' x 64' court plus 3' sidelines Bleacher seating for 1/3 student body
Elementary School >600 Students	42' x 64' court plus 3' sidelines Bleacher seating for 1/3 student body
Middle School <600 Students	50' x 74' court plus 7' sidelines Bleacher seating for ½ student body
Middle School >600 Students	50' x 74' court plus 7' sidelines Bleacher seating for ½ student body
High School	50' x 84' court plus 10' sidelines Bleacher seating for full student body
Locker rooms, Storage, PE Offices	Negotiable

PreK Thru 12 *continued*

Space/Enrollment	Area (Square feet)
Food Services	
Cafeteria	Enrollment ÷ 3 servings x 15 sf per student
Elementary School <300 Students	1,500
Elementary School 300-600 Students	Formula
Elementary School >600 Students	Formula
Middle School <300 Students	1,500
Middle School 300-600 Students	Formula
Middle School >600 Students	Formula
High School <400 Students	2,000
High School 400-800 Students	Formula
High School >800 Students	Formula
Kitchen/Dry Storage/Walk-Ins	Enrollment x 80% x 4 sf per student
Elementary School <300 Students	950
Elementary School 300-600 Students	Formula
Elementary School >600 Students	Formula
Middle School <300 Students	950
Middle School 300-600 Students	Formula
Middle School >600 Students	Formula
High School <400 Students	1,120
High School 400-800 Students	Formula
High School >800 Students	Formula
Office/Staff Lockers/Staff Toilet	Formula
Satellite Kitchen	Negotiable

PreK Thru 12 *continued*

Space/Enrollment	Area (Square feet)
Administration/Offices	
Administrative, Guidance & Special Service Offices, Conference Rooms, Work Spaces	
Elementary School	75 - 300
Middle School	75 - 300
High School	75 - 300
Clinic	
Elementary School	350-500
Middle School	350-700
High School	350-900
Volunteer Room	150-300
Other	
Recycling Room	
Elementary School	100-250
Middle School	100-250
High School	100-250
Maintenance/Storage	Negotiable

Career and Technical Education (CTE)	
Space	Area (Square feet)
CTE Programs of Study	
Automotive Technology	Total 9,235
Tech Lab	4,020
Collision Lab	3,910
Instructional Area	350
Tool Storage (shared between labs)	710
Paint Storage	95
Office (2)	150
Building Trades	Total 4,965
Lab	3,960
Instructional Area	330
Finishing Room	200
Storage	400
Office	75
Business Services	Total 2,265
Business Lab	800
Marketing Lab	800
Conference/Instruction	400
Office (shared between labs)	150
Sales Kiosk	115
CADD Lab	Total 1,605
Lab (including Plotting)	1,430
Storage	100
Office	75

Career and Technical Education (CTE) <i>continued</i>	
Space	Area (Square feet)
CTE Programs of Study	
Cosmetology	Total 2,745
Practical Lab	650
Clinical Lab	1,870
Dispensary	150
Office	75
Criminal Justice	Total 1,175
Lab	800
Forensic Studio	300
Office	75
Culinary Arts	Total 5,190
Culinary Arts Lab	3,065
Dining	1,300
Lockers (2)	165
Dry Storage	170
Cooler/Freezer	190
Office	150
Linen	90
Custodial	60
Early Childhood Education	Total 3,150
Daycare Room	1,715
Classroom	650
Observation	160
Conference Room	90
Office	75
Storage	180
Secure Entry	70
Toilets	210

Career and Technical Education (CTE) <i>continued</i>	
Space	Area (Square feet)
CTE Programs of Study	
Electricity (Residential Wiring)	Total 2,080
Lab	1,525
Instructional Area	330
Storage	150
Office	75
EMS Training	Total 1,450
EMS Instruction	520
EMS Training	560
Storage	145
Office	75
Toilets	70
Practice	80
Firefighting Science	Total 3,300
Fire Science Lab	1,280
Instructional Area	390
Drill Area	925
Training Stair	170
Storage	150
Prop Storage	310
Office	75
Graphic Communication/Digital Design	Total 3,175
Lab	2,200
Print Room	500
Light Studio	200
Storage	200
Office	75

Career and Technical Education (CTE) <i>continued</i>	
Space	Area (Square feet)
CTE Programs of Study	
Health Occupations	Total 3,810
Labs (2 at 1,445 sf each)	2,890
Training Restrooms (2 at 200 sf each)	400
Lockers (shared between labs)	150
Storage (shared between labs)	220
Office (shared between labs)	150
Heavy Equipment	Total 1,875
Lab	1,500
Storage	300
Office	75
Horticulture	Total 4,165
Lab (including Hydroponic)	1,960
Greenhouse	1,600
Instructional Area	330
Storage	200
Office	75
Hospitality & Recreation Marketing	Total 1,275
Classroom	1,200
Office	75
HVAC/Plumbing	Total 2,070
Lab	1,400
Instructional Area	330
Storage	265
Office	75

Career and Technical Education (CTE) continued

Space	Area (Square feet)
CTE Programs of Study	
Information Technology	Total 1,775
Lab	1,200
Server	200
Print Lab	300
Office	75
Marine Maintenance/Fitter & Ship Repair	Total 4,155
Lab	3,500
Instructional Area	330
Storage	250
Office	75
Precision Manufacturing	Total 4,755
Lab	4,000
Instructional Area	350
Storage	280
Office	75
Inspection	50
Robotics (Pre- Engineering)	Total 1,775
Lab	1,500
Storage	200
Office	75
Small Engine Mechanics & Repair	Total 3,155
Lab	2,500
Instructional Area	330
Storage	250
Office	75

Career and Technical Education (CTE) <i>continued</i>	
Space	Area (Square feet)
CTE Programs of Study	
Truck & Bus Driver/Commercial Vehicle	Total 875
Classroom	800
Office	75
Video Production	Total 2,630
Studio	995
Classroom	850
Control Room	240
Editing	80
Server	40
Storage	200
Offices (3 at 75 sf each)	225
Welding (Fabrication)	Total 4,540
Lab	3,775
Instructional Area	330
Storage	360
Office	75

Note: CTE program spaces based on an enrollment of 16 students per class period.

Library Square Footage Guidelines

Student Enrollment	Student Usable Space Minimum Area (SF)			Non-Student Usable Space**
	Elementary	Middle	High	All Levels
100	500	600	800	400
150	700	800	1000	400
200	750	850	1100	475
250	850	975	1200	475
300	1000	1150	1400	550
350	1150	1325	1600	550
400	1300	1500	1800	625
450	1450	1675	2000	625
500	1600	1850	2200	700
550	1750	2025	2400	700
600	1900	2200	2600	775
650	2050	2375	2800	775
700	2200	2550	3000	850
750	2350	2725	3200	850
800	2500	2900	3400	950
850	2650	3075	3600	950
900	2800	3250	3800	1050
950	2950	3425	4000	1050
1000	3100	3600	4100	1150
1050			4200	1150
1100			4300	1250
1150			4400	1250
1200			4500	1350
1250			4600	1350
1300			4700	1450
1350			4800	1450
1400			4900	1550
1450			5000	1550
1500			5100	1650
1550			5200	1650
1600			5300	1750
1650			5400	1750
1700			5500	1850
1750			5600	1850
1800			5700	1950
1850			5800	1950
1900			5900	2050
1950			6000	2050
2000			6100	2150

***Non-Student usable space includes work area and storage and should be added to the Student Usable space to determine the total recommended space. Approved by the State Board of Education on April 11, 1992.*

V. SPACE ALLOCATION WORKSHEETS

A. Explanation

The Department of Education has established four worksheets addressing space allocations for elementary, middle, high school, and CTE projects. Select the grade level worksheet(s) that pertain to your project and complete them prior to the beginning of program conferencing. The headings are self-explanatory. Categories will need to be expanded to meet individual program needs. The educational program will dictate the number of rooms to be entered.

These worksheets will allow planners to understand the present deficiencies of the existing facility and the need for space in the proposed facility. Only spaces for approved programs will be considered. The State will not support spaces for future programs that cannot be funded at the time the facility opens.

Space allocation worksheets can be found at <http://www.maine.gov/doe/facilities/>

B. Non-Assignable Areas

In order to bring consistency across a broad range of school projects, the state utilizes a gross mark-up factor of up to 1.4 to calculate a school building's total square footage. (Total square footage equals the total net area of the program space plus the gross mark-up factor.) This mark-up allows for accounting of all non-assignable areas. Non-assignable area is the sum of all areas on all floors of a building not assigned to a specific use, but necessary for the general operation and function of the building.

Non-assignable spaces include:

- Building Service Area
 - Custodial rooms
 - Toilet rooms
 - Other custodial facilities specifically for building maintenance
- Circulation Area
 - Corridors and hallways
 - Stairwells and landings
 - Lobbies and vestibules
- Mechanical Area
 - Mechanical rooms
 - Boiler rooms and fuel storage vaults
 - Electrical/Telephone/Data rooms
 - Elevator and elevator machine rooms
 - Mechanical/plumbing chases
- Other Area
 - Exterior and interior wall thicknesses

Plans developed prior to Concept Approval are to be drawn to scale. This will permit the Department of Education to verify whether building circulation and common space fall within the maximum 1.4 mark-up. Gathering spaces will not be considered as a part of the 1.4 mark-up but will be considered as educational space when computing square footage for educational delivery and will be at local expense. Project rooms and similarly named spaces may also be at local expense.



Maine Department of Education

Division of School Facilities

<http://www.maine.gov/doe/facilities/>

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