

**THE
NEW MEXICO
PUBLIC SCHOOL**

**ADEQUACY PLANNING
GUIDE**



New Mexico Public School Facilities Authority

July 15th, 2010

Including Change No.4 dated August 28th, 2013

SPECIAL ACKNOWLEDGEMENT

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RECORD OF CHANGES

Each page of the *Adequacy Planning Guide*, including the table of contents, introduction, and appendices bears a heading which indicates the PSFA publication date for the entire document. Changes may include simple modifications of text, or the deletion or addition of entire sections. PSFA will list each change made between the previous and current version of the *Guide* on the RECORD OF CHANGES spreadsheet below. A changed section, article, paragraph, sub-paragraph, or table is marked with a corresponding single, vertical line appearing in the left-hand margin opposite the change.

It is the responsibility of the planner or design professional to make sure that the version being consulted is the latest version. This may be verified by checking the most current edition of this document posted on the PSFA web site at www.nmpsfa.org.

No.	Date	Location	Description
1	01/27/11		<ul style="list-style-type: none"> Appendix A: Calculation error corrected in “Total Facility GSF ‘to Adequacy’” column for 200 Student row (all school types).
2	09/14/12	Sec. III-A	<ul style="list-style-type: none"> In "A. Space Allocation", Item 2 referencing "Total Gross Square Footage (General)": Add new "Item a" describing the process for excluding floor area of certain oversized existing spaces in calculation of Total Gross Square Foot area of entire facility. In “A. Spaced Allocation”, Item 2, add at end of second sentence in main paragraph new text related to efficient design and programmatic requirements. "A. Space Allocation", Item 2 referencing "Total Gross Square Footage (General)": Add new "Item b" referring to new Square Foot Interpolation Guide tool on PSFA web site.
		Sec. VI-B	<ul style="list-style-type: none"> In "B. Long-Term Operations, Maintenance and Sustainability": Add new paragraph at end describing recommendations toward minimizing air infiltration into buildings.
		Sec. VI-C	<ul style="list-style-type: none"> In "C. Long-Term Energy Costs": Add new paragraph at end mentioning considerations in HVAC system selection and performance of building envelope components.
		Sec. VIII-B	<ul style="list-style-type: none"> In “Best Practices-Academic Classroom Space,” in section entitled "General Classroom Environment", under subsection related to "Size": Add text which addresses classroom arrangement and design features which minimize glare problems on instructional surfaces.

No.	Date	Location	Description
2	09/14/12 Cont'd	Sec. VIII-L	<ul style="list-style-type: none"> In “Best Practices-Food Services”, in first item referencing maximum number of meal periods per day: Eliminate reference to PED requirement (matching change in Adequacy Standards).
		Sec. VIII-N	<ul style="list-style-type: none"> In “Best Practices-Circulation, Entries & Commons”, in first section referencing design of hallways and entries: Add an item suggesting controllability of vision between classrooms and corridors if interior windows provided.
		Sec. VIII-O	<ul style="list-style-type: none"> In “Best Practices-Bldg. Support Spaces”, add new fifth item recommending provision of secure filing space for maintenance documents, etc. within this area.
		Appendix A	<ul style="list-style-type: none"> Add note referencing new Square Foot Interpolation Guide tool on PSFA web site. Delete note referencing potential incentive for space reduction.
		Appendix B	<ul style="list-style-type: none"> After second paragraph: Insert two new paragraphs referring to control of visual access, views and natural light into classroom.
		Appendix D	<ul style="list-style-type: none"> In section entitled "Classroom Acoustics": Transfer and insert entire text from deleted Appendix E and add detailed best practices related to sound reverberation times in classrooms.
		Appendix E	<ul style="list-style-type: none"> Delete entire appendix and transfer text to Appendix D (see above)
3	01/15/13	Appendix A	<ul style="list-style-type: none"> <u>Delete “Appendix A: Maximum Building Gross Square Footage (GSF) per Student” tables and text and replace with revised tables along with supplemental language.</u>
		Section III-A-2b	<ul style="list-style-type: none"> Replace words “Square Foot Interpolation Guide” with words “Maximum Gross SF per Student Calculator”.
4	08/28/13	Appendix A	<ul style="list-style-type: none"> In both <u>Middle School</u> and <u>High School</u> sections of Appendix A, insert words “Use Maximum GSF per Student Calculator available at www.nmpsfa.org” into cells horizontally adjacent to “above 1000” in the Maximum Total Projected Enrollment columns.

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I. INTRODUCTION TO THE *GUIDE*

In 2003, the Public School Capital Outlay Council, through its Standards Subcommittee and Guidelines Advisory Group, drafted a reference guide to the *New Mexico Public School Facility Adequacy Standards*. This document was developed to clarify the standards and to provide assistance through references and ‘best practice’ examples to complement the adopted *Standards* {6.27.30 NMAC, 9/1/2002}. Recently, the *New Mexico Public School Adequacy Planning Guide* was incorporated by reference into the *Adequacy Standards* rule and coordinated with the 2007 revisions to the *Adequacy Standards*. The *Adequacy Standards* now state that the *New Mexico Public School Adequacy Planning Guide* is to be used in the programming and design of school projects to meet adequacy requirements. The *Guide* remains by design a dynamic document, meant to be re-visited and modified periodically in such a manner in order to adapt to changes in New Mexico educational programs and facility requirements.

II. THE PURPOSE OF THE *GUIDE*

The *Adequacy Planning Guide* is a reference that will guide the user on the acquisition of school sites and the planning and design of new schools, additions, and renovation in compliance with the *Adequacy Standards*.

The *Adequacy Planning Guide* does not supersede or increase the state's adopted *Adequacy Standards* when evaluating existing facilities for adequacy. It is provided as a reference tool which complies with the *Adequacy Standards* and is used for the design of new construction, additions and renovations of sites and facilities. If there appears to be a conflict between the *Adequacy Standards* and the *Adequacy Planning Guide* during the appraisal for adequacy of an existing facility, the *Adequacy Standards* control.

Use of the *Adequacy Planning Guide* provides acceptable models for how statewide school sites should be selected and how facilities can be designed to support statewide educational programs and other needs. Both *Adequacy Planning Guide* and *Adequacy Standards* underscore the assumption that facilities and sites exist to support statewide instructional needs, leading to student achievement and success.

III. POLICIES AND PROCEDURES

A. Space Allocation:

1. **Minimum areas:** The minimum net square foot area requirements (NSF) stated for each category of space in the *Adequacy Planning Guide* are in conformance with the requirements listed in the current version of 6.27.30 NMAC, *New Mexico Public School Facility Adequacy Standards*. No new space shall be constructed below the *Adequacy Standards* NSF requirements.

2. **Total Gross Square Footage (General):** The State of New Mexico Public School Capital Outlay Council (PSCOC) has established maximum allowable square foot guidelines for entire facilities based on type of school and number of students. The state will provide funding up to the maximum gross square footage (GSF) per student as provided in these guidelines and as justified by an efficient design solution based upon actual programmatic requirements. See Appendix A for a table of maximum allowable square foot figures. Individual spaces within the allowed Total GSF for the facility shall be sized to accommodate the program and required efficiency (utilization ratio). The aggregate of all such spaces, including TARE shall not exceed the total maximum allowable GSF as established by Appendix A for the facility.

- a) **Exception:** Certain oversized existing spaces may cause an entire facility to exceed the Allowable Total GSF calculated using Appendix A. If the excess existing space cannot be economically subdivided or converted for other required purposes to meet adequacy while remaining functional, then the excess amount of such space shall be individually identified, quantified separately, and excluded from the Total GSF calculation for the entire school.
- b) A Maximum Gross SF per Student Calculator is available on the PSFA web site as a tool for calculating the Total GSF of a facility based upon the number of students and the school type in accordance with Appendix A.

Available at: http://www.nmpsfa.org/facility_planning/adequacy_standards.htm

3. **Exceeding the Allowable Total GSF:** If the maximum allowable GSF per student area for the entire school is exceeded, the school district may wholly fund the excess area through a locally-funded initiative in addition to contributing the required local share to the project.

4. **Utilization:** Utilization analysis identifies the number of classrooms needed to accommodate a given student enrollment. The inputs needed for the analysis are the number of classrooms, general and special education (C&D levels), enrollment by grade, state PTR requirements, special programs (federal and categorical), and classroom schedules. The utilization of school facilities is normally less than 100%, due to scheduling inefficiencies. The ideal utilization ratio for elementary schools is 95%-100%; middle and high schools can range from 80-95%, depending upon scheduling variations. The Total Allowable GSF figures in Appendix A assume a high utilization ratio for the facility.

5. **Efficiency Ratio and Tare:** The Total Allowable GSF figures in Appendix A assume a high level of building efficiency. When determining *building efficiency* and related *tare*, school buildings are considered to have two categories of space:

- a) Net square feet (NSF), also known as Net Assignable Square Feet is the interior usable space required to meet general or specific programmatic needs.

- b) *Gross Square Feet (GSF)* is total of all space in the building that includes the NSF plus all other non-assignable spaces measured to the outside of the exterior walls. The "left over" non-assignable space is called "**tare**" and includes:
- i. Circulation, including corridors, stairways, elevators
 - ii. Restrooms (specialized restrooms such as in a kindergarten classroom are typically counted in the NSF)
 - iii. Mechanical Rooms
 - iv. Electrical Rooms
 - v. Custodial Closets
 - vi. Thickness of the walls
- c) Tare space is limited to 30% of the GSF on PSCOC-funded projects.
- d) The ratio of NSF / GSF is the **building efficiency**. Building efficiencies for school buildings typically vary depending on the specific building design and variables such as school level, number of students, climate, and programmatic requirements.
- e) If you know the NSF you can estimate the GSF by two methods:
- i. Dividing the NSF by the target building efficiency.

Sample calculation: An example for a facility with 70,000 NSF of programmable area is as follows:

GSF = NSF divided by 70%:

Divide 70,000 NSF by 70% = 100,000 GSF

Tare: 100,000 – 70,000 = 30,000 sf

- ii. Multiplying NSF by target efficiency factor

Efficiency factor examples:

75% efficiency = 1.33

70% efficiency = 1.43

65% efficiency = 1.54

Sample calculation: An example for a facility with 70,000 NSF of programmable area is as follows:

GSF = NSF multiplied by efficiency factor

Multiply 70,000 NSF by 1.428 = 100,000 GSF (nearest 1,000)

Tare: 100,000 – 70,000 = 30,000 sf

- 6. Ineligible Features:** If the school district elects to proceed with facility components considered to be typically ineligible for PSCOC funding, the school district may wholly fund these excess features through a locally-funded initiative in addition to contributing the required local share to the project. Such deviations should be discussed with the PSFA staff during the early phases of the project. Funding excess features through special state appropriations may result in reduction of PSCOC award to school district in the form of an offset.

The following are samples of facility areas and features along with their eligibility for PSCOC funding. Other items in these categories, but not specifically mentioned on this list should be discussed with PSFA staff during the early phases of the project.

Facility items typically not eligible for PSCOC funding are as follows:

Sports facilities:

- Stadiums
- Swimming pools
- Baseball fields
- Softball fields
- Football fields
- Soccer fields
- Tennis courts
- Miscellaneous facilities (e.g. football, golf)

Performing arts facilities:

See “G. ART EDUCATION – PERFORMING ARTS” for exceptions to ineligibility of following features:

- Auditoriums
- Stages (permanent and temporary)

School support facilities:

- Bus compounds or garages
- Board offices
- Equipment or tool sheds
- District administrative offices

Non-school facilities

- School-based health centers
- Recreation centers
- Senior citizens centers

Technology

- Technology infrastructure and equipment (except wiring, conduit, cable trays, receptacles, and patch panel assembly).
- Computers/Software

Special athletic program areas

- Multipurpose/auxiliary gym
- Athletic locker rooms
- Main athletic lockers (Boys/Girls)
- Athletic team storage
- Training room
- Weight room
- Wrestling room

Other

- Sinks in regular classrooms

Certain major facility features may be eligible for PSCOC funding if supported by educational program need and degree of utilization. Those are as follows:

- Auditoriums – See “G. Art Education – PERFORMING ARTS”
- Auxiliary gymnasiums
- Additional playing fields
- Early childhood education (except special education pre-K facilities)
- Daycare
- Youth group facilities

7. **Community Use:** Schools are an important focal point of the community that they serve and can support the needs of a community. Communities provide important family and community facilities such as parks, auditoriums, and playing fields. As resources such as water and energy become more expensive, the opportunity to create joint use facilities is becoming more important. The school district may partner with communities by allowing community facilities to be built on school grounds and then sharing operational costs with a community. Alternately, a district may be able to justify a facility for joint use with a community that by itself could not be financially justified. In addition to direct financial advantage, state direct appropriations for jointly used facilities on school property will be offset against Public School Capital Outlay Awards to the degree the facility can be demonstrated to be used by the school for educational programs.

- a) Example: An auditorium might be funded by a direct appropriation to a county. The county builds the facility on a high school campus. The high school uses the facility for drama classes and as a lecture hall about half of the time during its regular hours. The offset would be reduced by 50%. If then the county pays for one half its operational costs, the school is in far better financial shape than it would be building an auditorium and operating it on its own.

B. School classifications:

1. Elementary schools are typically considered by the *Adequacy Standards* to be grades K-5. However, for the purposes of the *Guide*, schools with grades K-6 shall be subject to the same guidelines as those pertaining to elementary schools only, and not considered combination schools.
2. Combination schools shall provide the elements of all the grades served (Elementary/Mid-Jr. High/High School) without duplication.
3. Recommendations related to small/large schools, rural schools, special programs, community use, etc. are provided in order to establish a reasonable degree of flexibility in the planning and design of school projects that meet state standards.

C. Educational Specifications:

Space allocations for a new project are initially developed during the production of Educational Specifications on PSCOC-funded projects. The *Adequacy Planning Guide* is a primary resource which will assist the planner and district in determining the total size of the project, individual space needs, and offers guidance on PSCOC funding for space. More information on Educational Specification requirements is available at www.nmpsfa.org.

D. Process for submitting planning and design documents to PSFA:

A school facility design will typically meet adequacy if the requirements of the *Guide* are met. The PSFA Planning & Design Department reviews programs and plans for new facilities and renovation projects to check for compliance with the *Guide's* intent. Written notification is sent by the PSFA plan reviewer to the district, design professional, and PSFA regional manager which lists the results of each review. If the PSFA plan review process results in identification of non-compliant or unacceptable items in the program or design, the district and design professional must respond promptly with either corrections or further clarifications. These should be addressed directly to the PSFA plan reviewer. In the event that the corrections or clarifications have not, in the judgment of the PSFA plan reviewer, resulted in conformance with the intent of the *Guide*, the district may either accept the decision or request a Final Administrative Interpretation (FAI) from PSFA as follows:

1. **Requesting an FAI:** If an issue cannot be resolved directly between the district and the PSFA plan reviewer, a district, through their design professional, may request in a timely manner, an FAI hearing by the PSFA during any phase of a project. A written request must be addressed to the PSFA Planning & Design Department Manager with copies to the PSFA plan reviewer and regional manager. This request shall contain the following information about the issue(s) in question:

- a. One copy of the latest correspondence from the PSFA plan reviewer indicating disapproval regarding the issue(s) to be considered in the FAI.
 - b. Detailed programmatic information relevant to the issue.
 - c. Spatial utilization information and calculations indicating the anticipated efficiency of use for any space in question.
 - d. Any anticipated impact on the total project budget if a variance to the *Guide* is granted.
 - e. Any other information which may justify or explain the request.
2. **PSFA Agency Review of FAI:** The agency will review the FAI and request additional information as necessary from any party involved with the project in order to make an administrative decision. The district and design professional will be offered an opportunity to meet with the agency to present their request in person. The agency's decision will be conveyed after that meeting in writing to the district and design professional with copies sent to the PSFA plan reviewer and regional manager. If the variance is granted, then no further steps are necessary.
3. **Appeal to Council:** In the event that PSFA upholds the decision of the agency plan reviewer to disapprove, the district may either accept the decision or file for a variance from the PSCOC. Filing must be made in writing within 10 calendar days from the date of the agency's letter announcing the decision and no later than two weeks before the next scheduled PSCOC monthly meeting. Filing must be made directly to the chair of the Council with copies of the filing request sent by the district to the PSFA Planning & Design Department Manager. Filing documents sent by the district shall include a description of the request and any information and/or justification which the district feels supports its request. The district must also include with their filing who will present the variance request at the Council meeting. PSFA staff will be present at the meeting to provide the Council with background information and consultation as required for considering the appeal. The decision of the Council shall be considered final and will be documented in the official meeting minutes.

IV. 'BEST PRACTICES'

A. Definition: A 'best practice', as considered by the *Guide* is a technique, process, activity, or consideration that typically proves to be effective in accommodating or exceeding adequacy. These techniques, processes, etc. have been tested on past school design and construction projects and can usually be adapted for use on new projects. The 'best practices' included in the *Guide* should provide for increased efficiency in the programming and design process and reduce the chance for errors in meeting the owner's needs. The 'best practices' in this document are divided into those that are general in nature and others that are specific to each building area category. An example of a 'best practice' would be in relation to the general safe site access

minimum requirements contained in 6.27.30.10 NMAC. ‘Best practices’ in the *Guide* recommend methods for establishing proper site access such as having “two separated road access points” for a typical site.

V. ORGANIZATION OF INFORMATION IN THE *GUIDE*

A. Format:

1. For each section there are two parts. The first part of each section is labeled “Adequacy Requirements” and contains the excerpted *Adequacy Standards* text pertaining specifically to the section.
2. The “Adequacy Standards Area Summary” table follows with the minimum area requirements listed in outline form for clarity.
3. The next part entitled “Best Practices” provides supplemental information to be considered for new school construction and renovation projects. See definition of Best Practices above.
4. The *Guide* references the *Primary and Secondary Educational Standards General Requirements – Standards for Excellence (6.30.2 NMAC)* where necessary to clarify intent.
5. Facility areas and spaces which typically *do not* currently qualify for PSCOC funding are identified where possible.
6. Refer to the *Adequacy Standards* “Definitions” section (6.27.30.7 NMAC) for a list of commonly-used terms used also in the *Guide*.

VI. BEST GENERAL PLANNING PRACTICES

A. Function: The facility’s physical characteristics must reinforce and support the implementation of the basic educational requirements set by statute, and preferred by the school district. These include, in part, site development, arrangement of spaces, occupant circulation, lighting, temperature comfort such as individual room controls, adequate air changes, storage, security, safety, and so on. Functional school buildings are a product of an educational planning process that leads to a design that organizes all activity and space around students and teachers and the desired educational outcomes.

The design of facilities must be a collaborative process developed by staff and community members with a clear vision of both learning methods and human roles to be served by the spaces in the school. Good design for any school building pays attention to vision, educational standards and performance criteria and includes the activities for translating those standards into

learning, the spaces needed and the relationship between those spaces and the persons who use them.

The educational requirements for the public schools in New Mexico that must be accommodated by the facility have been expanded upon in the content standards, benchmarks and performance standards, which essentially define the curriculum to be delivered and the learner outcomes to be achieved by all students. The educational standards provide guidance to the work of the Public Education Department, local school boards and administrators, and local school personnel.

B. Long-Term Operations, Maintenance and Sustainability: Sustainable design, construction and operation of K-12 educational facilities are highly valued. The ASHRAE definition of Sustainability is “providing for the needs of the present without detracting from the ability to fulfill the needs of the future”. The fruit of a good sustainable design is protection of taxpayer investment, lesser operational costs, and more funding available for the classroom.

Maintainability is a major consideration through the entire building life-cycle, such as how often maintenance is required, location/accessibility to equipment, unintended consequences of one system upon another (such as roof top equipment and roof damage), ease of custodial upkeep and safety of chemicals used for custodial, and so on.

Durable construction materials and efficient systems typically reduce long-term operational and maintenance costs. The significant public investment in school facilities requires solutions that consider the continued costs and responsibilities of long-term building ownership. The design must facilitate the ability of school support staff to sustain the efficient operation and maintenance of the building after occupancy.

Sustainability also pertains to the facility location. Consider water availability, snow accumulation, blowing sand, freeze thaw, drainage patterns, wind loads, expansive/collapsible soil, transportation availability and cost, future traffic, future neighborhood, and so on, in the design solutions.

Air infiltration shall be considered per ASHRAE Standard 62.1. All reasonable measures will be taken to minimize undesirable air infiltration for purposes of energy management, maintenance, and building occupant health. These measures should include applicable vapor barriers, foam sealing of building penetrations, continuous air infiltration retarder, airtight seals of window and doors, sally port (i.e., double barrier) ingress and egress, and any other applicable measures. Tracer gas and/or pressure testing may be used as a performance measure, per ASTM E779.

C. Long Term Energy Costs: The volatility of energy supply markets present a difficult challenge in predicting long-range utility costs for schools. School buildings must be designed to optimize energy use and minimize utility costs, mainly by complying with the ‘*PSFA Design Guidelines for HVAC and Controls*’ (Appendix B of the PSFA HVAC and Controls Performance Assurance Program). This document is available on the PSFA website at www.nmpsfa.org.

All school building construction or renovation projects should include the best available technologies to minimize energy use and life costs within the budgets of individual projects. Refer to ‘*PSFA Design Guidelines For HVAC and Controls*’ for information on specific systems. Special consideration shall be given to the building envelope, where actual performance for building systems and components installed in the structure must meet or exceed applicable standards and code requirements, verifiable upon installation.

D. Construction Cost: Although last on this list of criteria, attention to the limits of the project construction budget is essential. PSFA encourages innovative and cost effective design appropriate to the facility location.

School construction budgets are not infinite and rapid cost escalation can jeopardize timely execution of even modest building projects. The designer must clearly update the public owner regarding any new factor significantly impacting the project budget as the design develops. Long-term operational cost savings appear to be a benefit related to simpler and more efficient designs.

When more costly solutions are needed to achieve desired functional or long term operational benefits, the designer should weigh the pros and cons with the owner prior to proceeding.

For example, a design solution which will require discussion with the owner is as follows:

- The ceiling height for spaces not serving a multi-purpose function is limited by PSFA to a maximum of fourteen (14) feet high. Discuss with owner any design reason that might require an exception to this limitation.

VII. PSFA WEBSITE AND CONTACT INFORMATION

- The most recent versions of PSFA documents, procedures, standards, and contact information are available at www.nmpsfa.org.

VIII. FACILITY AREAS

A. SCHOOL SITE

Adequacy Requirements

Two sections of the *New Mexico State Adequacy Standards* separately address minimum requirements for school sites and site development. The following *Section 6.27.30.10 NMAC* pertains to school site size and general minimum requirements in site development:

6.27.30.10 SCHOOL SITE. A school site shall be of sufficient size to accommodate safe access, parking, drainage and security. Additionally, the site shall be provided with an adequate source of water and appropriate means of effluent disposal.

A. Safe access. A school site shall be configured for safe and controlled access that separates pedestrian from vehicular traffic. If buses are used to transport students then separate bus loading/unloading areas shall be provided wherever possible. Dedicated student drop-off and pickup areas shall be provided for safe use by student passengers arriving or departing by automobile.

B. Parking. A school site shall include a maintainable surfaced area that is stable, firm and slip resistant and is large enough to accommodate 1.5 parking spaces /staff FTE and one student space /four high school students. If this standard is not met, alternative parking may be approved after the sufficiency of parking at the site is reviewed by the council using the following criteria:

- (1) availability of street parking around the school;
- (2) availability of any nearby parking lots;
- (3) availability of public transit;
- (4) number of staff who drive to work on a daily basis; and
- (5) average number of visitors on a daily basis.

C. Drainage. A school site shall be configured such that runoff does not undermine the structural integrity of the school buildings located on the site or create flooding, ponding or erosion resulting in a threat to health, safety or welfare.

D. Security.

- (1) All schools shall have safe and secure site fencing or other barriers with accommodations for safe passage through openings to protect students from the hazards of traffic, railroad tracks, steep slopes, animal nuisance, and to discourage unauthorized access to the campus. This standard is met if the entire school is fenced or walled. If this standard is not met, alternative security may be approved after the sufficiency of security at the site is reviewed by the council using the following criteria:
 - (a) amount of vehicular traffic near the school site;
 - (b) existence of hazardous or natural barriers on or near the school site;
 - (c) amount of animal nuisance or unique conditions near the school site;
 - (d) visibility of the play/physical education area; and
 - (e) site lighting, as required to meet safe, normal access conditions.
- (2) For schools which include students below grade 6, a fenced or walled play/physical education area shall be provided.

[6.27.30.10 NMAC - N, 9/1/02; A, 12/14/07]

The following *Section 6.27.30.11 NMAC* relates to the minimum requirements necessary to accommodate recreation and outdoor physical education activities on the school site:

6.27.30.11 SITE RECREATION AND OUTDOOR PHYSICAL EDUCATION. A school facility shall have area, space and fixtures, in accordance with the standard equipment necessary to meet the educational requirements of the public education department, for physical education activity.

A. Elementary school. Safe play area(s) and playground(s) including hard surfaced court(s) or unpaved recreation area(s) shall be conveniently accessible to the students. Play area(s) and appropriate equipment for physical education and school recreational purposes shall be provided based on the planned school program capacity.

B. Middle school/junior high school. Hard surfaced court(s) and playing field(s) for physical education activities shall be provided. Playing field(s) and equipment shall be based on the planned school program capacity.

C. High school. A paved multipurpose play surface and a playing field for physical education activities shall be provided. Playing fields and equipment shall be based on the planned school program capacity.

D. Combination school. A combination school shall provide the elements of the grades served by Subsections A, B and C above without duplication, but shall meet the highest standard.

[6.27.30.11 NMAC - N, 9/1/02; A, 12/14/07]

Best Practices – Site (Section 6.27.30.10 NMAC)

Consider the following when selecting or developing a site:

- In practice, site size may be reduced significantly for urban schools, and other small schools requiring creative solutions in site development, facility utilization and building design and still remain educationally viable.
- Considerations determining the ability to properly and economically develop a school site are covered in detail in Appendix C in this document. The on-site characteristics that primarily impact the design and construction of a school facility are generally summarized as follows:
 - Sub-surface conditions
 - Topography (slope, drainage, etc.)
 - Size and shape of site
- *Site location and size:* The initial site purchase should meet all the site location requirements because land adjacent to a new educational facility may not be available later. The site for anticipated full development should be determined largely by the nature and scope of the contemplated educational program.
- *Site Utilities:* Essential utilities should be available to serve the site as follows:
 - *Energy:* The site should have economical access to adequate energy sources such as natural gas and electrical power. Alternative energy sources for utilities may include solar power, wind, biomass fuel, and geothermal energy. Establish the availability of all utilities early in the site selection and planning process and ensure that quantity and quality of service is sufficient to accommodate estimated present and future needs.

- *Water:* There should be an ample supply of water for the facility needs which include potable water, water for landscaping, and for fire-suppression.
- *Access: *see Adequacy Standards, Sec. 6.27.30.10-A*
 - *General access:* There should be good connectivity between the school site and surrounding neighborhood. It should be designed with respect for the safety and convenience of all users. Coordinate motor vehicle and non-motorized vehicle flow to avoid or reduce conflicts between the users.
 - *Vehicular access:* The site should have clear, separate, distinct and safe on-site circulation paths for pedestrians, buses, staff, students, visitors and service vehicles. PSFA recommends that each site have two separated road access points for safe egress from the property.
 - *Pedestrian/Bicycle Access:* On-site pedestrian and bicycle paths should be connected with street bike lanes, pedestrian routes, etc. to ensure safe travel to and through the campus.
 - *Sidewalks:* The school site should have safe walking routes for all children and adults accessing the school. These on-site routes should be connected to off-site sidewalks to provide safe and convenient walking routes. Avoid or minimize road, driveway and parking lot crossings by pedestrians. Provide wide sidewalks (5' minimum) and student gathering areas in convenient locations that are easily supervised. Speed zones around the school site and crossing locations need to be coordinated with local jurisdictions responsible for traffic controls in the public right-of-way.
 - *Bus loading/unloading:* The site should have separate bus loading/unloading zones accommodating the required number of buses for that school that do not conflict with other vehicular or pedestrian pathways and that provide for the safe loading and unloading of students. Typically a 45' minimum outside turning radius is needed for a full-size bus. Consider also:
 - Separate bus drive and entrance to avoid conflicts with private cars and service vehicles.
 - Counter-clockwise circulation for loading/unloading areas to prevent students exiting buses from crossing other vehicular paths.
 - *Student drop-off/pick-up:* The site should have a separate area for the drop-off and pick-up of students by private vehicles that provides for the safe loading and unloading of students. Traffic circulation should move in a counterclockwise direction and student waiting areas should be designed to provide adequate area for waiting students. A good resource for pick-up/drop-off strategies is at http://www.saferoutesinfo.org/guide/pdf/SRTS-Guide_Dropoff-Pickup.pdf.

- *Vehicular entrances/exits:* Vehicular entrances and exits should be planned for safe and efficient traffic flow. Avoid conflict with pedestrian traffic flow.
 - *Service/emergency access:* The site should have properly identified, appropriate, and safe access to all areas for service and emergency vehicles. Service and delivery access routes should not conflict with other vehicular pathways and should avoid sharing on-site bus lanes.
 - *Trash dumpsters:* Locate convenient to pickup vehicles but also within reasonable distance from the building area(s).
 - *Portable buildings:* The site should have sufficient room for ingress and egress of portable buildings. Good planning practice is to consider future potential placement of portable buildings during initial site master-planning. It is important that portable classrooms have equal access to centralized facilities and school support facilities while not obstructing future expansion.
- *Parking. *see Adequacy Standards, Sec. 6.27.30.10-B*
 - Reliance on curbside parking to handle school parking should be avoided when possible. Most Authorities-Having-Jurisdiction consider off-street parking essential. Adequate parking that is well designed for safe entrance and exit of traffic at peak hours is a key site element. Circulation patterns of students, staff, visitors and service vehicles must be separated from bus drives and pedestrian walkways. Provide appropriate, secure, easy to use, and conveniently-located bicycle parking. See the Association of Bicycle and Pedestrian Professionals’ “Bicycle Parking Guidelines” at:

http://www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf.
 - Provide adequate visitor parking conveniently located near the school office. Driveways and parking areas should be well-drained with solid, traffic-bearing surfaces. Parking areas should be landscaped to improve appearance.
 - Parking lots should address the needs of motorists when in their vehicles and when walking through the parking lots, such as providing pedestrian pathways and raised crosswalks.
- *Grading & Drainage. *see Adequacy Standards, Sec. 6.27.30.10-C*
 - *Grading:* Creative, functional grading of the site can improve the appearance of the building and provide screening from noise, wind and other climatic conditions. For example, earth berms, or mounding, along highways can shield the site from traffic noise.
 - *Storm Drainage:* The school site should be well-drained and free from erosion. The maximum site slope is recommended as 2% - 4% over a minimum of 50% of

the site for ease of design and access. Drainage considerations include the following:

- Consider the impact of off-site drainage patterns upon the site itself must be considered to prevent the danger of erosion or flooding.
 - Water should not discharge over sidewalks except by un-concentrated sheet flow.
 - Design sidewalks with a 1% cross slope for drainage.
 - Drainage should be removed by adequate catch basins and drainpipes or retained on-site.
 - Roof drainage should be directed away from the building while avoiding sidewalk areas subject to freezing during cold weather (i.e., at the north side of structures).
 - Recreation and play areas should be properly drained.
 - Drainage into public rights of way should be avoided.
 - Consider use of run-off water as a resource. Incorporate water-harvesting techniques where practical for use in irrigation or ground-water re-charge.
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- *Security. *see Adequacy Standards, Sec. 6.27.30.10-D*
 - *Safety/security hazards:* The site should be free of safety or security hazards such as excessive slope and improperly designed stairs or retaining walls. Sidewalks should be located and designed to reduce the formation of ice upon their surfaces. Balance safety and security with invited community access.
 - *Fencing:* Safety security fences should be provided to protect students from the hazards of traffic, railroad tracks and steep terraces; to protect adjacent properties from trespass by students; and to discourage passersby from walking onto the campus. Security fencing should not prohibit students who are walking or bicycling from accessing the school site via the most convenient and direct access points. Connectivity with the surrounding neighborhood should be considered to provide multiple access points that facilitate safe and convenient walking and bicycling routes for students.
 - *Security lighting:* Site should have illuminated parking areas, walks, entrances and exterior building areas for both safety and security purposes. Comply with any “night sky” ordinances and avoid creating lighting nuisance conditions for adjacent neighbors.
 - *Utility systems:* Discourage tampering and improper activation of exposed utility fixtures such as backflow preventers, electrical panels, irrigation and fire safety systems by installing protective lockable coverings, fencing, etc.

- *Drain fields:* Septic tanks and drainage fields should be isolated from recreational areas where possible and protected from traffic.
- *Site and playground supervision:* The site and play areas should be laid out to allow ease of visual supervision of the whole area by school personnel from one to two spots. The school facility needs to invite the community in while ensuring student safety. Locate the office in a prominent place to help control access to the site. Community use of fields and other school facilities must not interrupt the educational mission.

Best Practices – Site Recreation and Outdoor Physical Education (Section 6.27.30.11 NMAC):

Consider the following when developing recreation and outdoor physical education facilities on the school site:

- The physical education program of the school determines the main extent of outdoor playing areas required while the general category of “Site Recreation” is established to allow for outdoor activities.
- *Community and Shared Use:* Opportunities to share facilities with other schools and/or districts should be explored. The site facilities may be used as community resources as long as they can operate as such without disrupting the educational program. Sharing the funding and operational costs with community groups and public organizations should be explored when considering expanded or enlarged site recreation facilities which serve the community beyond the educational program needs.

Note: Additional or expanded portions of facilities for community use beyond the school program do not currently qualify for PSCOC funding.

- *Intramural and Interscholastic athletics:* Intramural athletics are commonly a part of the total educational program. The type and quality of special facilities for interscholastic athletic programs will depend on the available local funds and on the importance attached to competitive sports by the school's students, staff, parents, alumni and community. PSCOC does not typically fund interscholastic athletic facilities Refer to “PSCOC Funding Guidance” in “Using the Guide” section above.
- *Suggested K to 6 Grade Recreation Areas: *see Adequacy Standards, Sec. 6.27.30.11-A*
 - *General design considerations for playgrounds:* Students should not have to cross service roads, parking lots, or driveways to access play areas. Base design of play

- facilities on the range of student ages and total student population. Provide appropriate areas and equipment devoted to safe, active play. Provide appropriate fencing for separation of play areas designed for very young students from the general playground area. Playground design and equipment installation must meet school district insurance coverage safety requirements and be in conformance with all governing safety standards. Verify such standards with the district insurance administrator.
- *Playground equipment:* Playground apparatus and equipment should be carefully selected by playground committees and playground design professionals. Only equipment of sturdy construction should be selected. It should be erected by certified playground equipment installation contractors. Hard surfaces under climbing equipment must conform to required safety standards to reduce injuries. Ease of supervision, safety and economical use of space are considerations in locating equipment. Apparatus may be placed to advantage near a school building where the noise created will not be a problem and where it is readily accessible. Ample space for safe use around equipment and fall zones are to meet playground safety standards. Hard-surfaced or unpaved play areas shall be provided for P.E based upon program capacity needs and made accessible for students.
- *Suggested Middle School/Junior High School Recreation Areas: * see Adequacy Standards, Sec. 6.27.30.11-B*
 - *Playing field(s) and fixed equipment for P.E.:* Larger schools may require more fields based on utilization requirements for physical education classes.
 - *Suggested High School Recreation Areas: *see Adequacy Standards, Sec. 6.27.30.11-C*
 - *Playing field(s) for P.E.:* Larger schools may require more fields based on utilization requirements for physical education classes.
 - *Combination School Recreation Areas: *see Adequacy Standards, Sec. 6.27.30.11-D*
 - The facility may require the provision of recreation and playground facilities to accommodate all grade levels.

B. GENERAL CLASSROOMS

Adequacy Requirements

The *New Mexico State Adequacy Standards Section 6.27.30.12 NMAC* establishes the basic minimum requirements that all academic classrooms must meet. These apply to any teaching space in the facility and are as follows:

<p>6.27.30.12 ACADEMIC CLASSROOM SPACE. All classroom space shall meet or exceed the requirements listed below:</p> <p>A. Classroom space - Classroom space shall be sufficient for appropriate educational programs for the class level needs.</p> <p>B. Classroom fixtures and equipment</p> <p>(1) Each general and specialty classroom shall contain a work surface and seat for each student in the classroom. The work surface and seat shall be appropriate for the normal activity of the class conducted in the room.</p> <p>(2) Each general and specialty classroom shall have an erasable surface and a surface suitable for projection purposes, appropriate for group classroom instruction, and a display surface. A single surface may meet one or more of these purposes.</p> <p>(3) Each general and specialty classroom shall have storage for classroom materials or access to conveniently located storage.</p> <p>(4) Each general and specialty classroom shall have a work surface and seat for the teacher and for the aide assigned to the classroom, and it shall have secure storage for student records that is located in the classroom or is convenient to access from the classroom.</p> <p>C. Classroom lighting</p> <p>(1) Each general and specialty classroom shall have a light system capable of maintaining at least 50 foot-candles of well-distributed light. Provide appropriate task lighting in specialty classrooms where enhanced visibility is required.</p> <p>(2) The light level shall be measured at a work surface located in the approximate center of the classroom, between clean light fixtures.</p> <p>D. Classroom temperature</p> <p>(1) Each general and specialty classroom shall have a heating, ventilation and air conditioning (HVAC) system capable of maintaining a temperature between 68 and 75 degrees fahrenheit with full occupancy.</p> <p>(2) The temperature shall be measured at a work surface in the approximate center of the classroom.</p> <p>E. Classroom acoustics</p> <p>(1) Each general and specialty classroom shall be maintainable at a sustained background sound level of less than 55 decibels.</p> <p>(2) The sound level shall be measured at a work surface in the approximate center of the classroom.</p> <p>F. Classroom air quality</p> <p>(1) Each general, science and arts classroom shall have an HVAC system that continually moves air and is capable of maintaining a CO₂ level of not more than 1,200 parts per million.</p> <p>(2) The air quality shall be measured at a work surface in the approximate center of the classroom.</p> <p>[6.27.30.12 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07]</p>
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Section 6.27.30.13 NMAC includes minimum area requirements for general use classrooms as described below:

6.27.30.13 GENERAL USE CLASSROOMS (LANGUAGE ARTS, MATHEMATICS AND SOCIAL STUDIES).

A. Cumulative classroom net square foot (sf) requirements, excluding in-classroom storage space, shall be at least:

- (1) Kindergarten 50 net sf/student
- (2) Grades 1 - 5 32 net sf/student
- (3) Grades 6 - 8 28 net sf/student
- (4) Grades 9 - 12 25 net sf/student

B. At least 2 net sf/student shall be available for dedicated classroom storage.

C. Sufficient number of classrooms shall be provided to meet statutory student/staff ratio requirements.

[6.27.30.13 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07]

Note:

- See also “Space for Technology-Aided Instruction” in this *Guide* for classroom computer information.
- Spaces created by temporary partitions shall not be considered below minimum size if necessary to accommodate class loads smaller than those listed above.

<u>Adequacy Standards Area Summary</u>	<u>Minimum Area (Net Square Feet)</u>
• Kindergarten	at least 50 nsf/student *
• Grades 1 – 5	at least 32 nsf/student *
• Grades 6 – 8	at least 28 nsf/student *
• High School (9-12)	at least 25 nsf/student *
Dedicated Classroom Storage	at least 2 nsf/student*

* New Mexico Statewide Adequacy Standards requirement – See Section 6.27.30.13 NMAC

Best Practices – Academic Classroom Space:

- Minimum classroom sizes:
 - Minimum total net s.f. areas for classroom space, excluding storage are limited to the following:
 - Kindergarten 650 min.
 - Grades 1 – 5 650 min.
 - Grades 6 – 8 650 min.
 - High School (9-12) 650 min.
 - The areas listed above are based upon the following ranges of class sizes:
 - Kindergarten: 13 – 20 students
 - Grades 1 – 3: 17 – 22 students
 - Grades 4 – 6: 18 – 24 students
 - Grades 7 – 8: 19 – 27 students
 - Grades 9 – 12 21 – 30 students
- General Classroom Environment: * see *New Mexico Statewide Adequacy Standards Section 6.27.30.12*
 - *Size and arrangement:* Many factors, such as furniture, equipment (computers), class size and educational programs, will affect the optimum size and arrangement of a classroom. Configure electrical outlet locations in a manner that allows for locating furnishings and equipment to suit varying needs. Take into consideration the location of white boards and interactive projection surfaces in relation to glare-producing windows. It is recommended that interactive white boards be tilted from 5 to 10 degrees away from the wall at the base to prevent glare. Provide a good balance of window vs. wall space. White boards should be installed in every room that has an interactive white board and both should be specified with a low visible sheen.
 - *Lighting:* In addition to encouraging energy savings through artificial lighting controls, the designer should emphasize the provision of diffuse natural light that can be controlled when needed into all learning spaces. The Adequacy Standards require a level of at least 50 foot candles of well-distributed light at classroom work surfaces. Skylights, clerestories, windows, with light diffusing “eyebrows”, and other daylight-harvesting features are typical elements of a well-lighted space. These apertures should be able to be darkened for AV presentations and positioned so that the room does not over-heat. Many studies correlate the levels of natural light to educational achievement. See Appendix B for reference to these studies. Dual-technology occupancy controls which are properly adjusted can help keep lights on during times of low occupancy conditions.
 - *Temperature:* Classroom temperature should be easily maintained between 68 and 75 degrees Fahrenheit with individual controls for each classroom.

- *Acoustics:* The acoustical quality of learning spaces is becoming a critical matter. Designers will need to pay attention to the effect of noise-producing factors and absorbing noise that is generated within the classroom. The *Adequacy Standards* require that a one-hour, A-weighted Noise Criteria of less than 55 decibels must be maintained (45 decibels or less is preferred). Keep reverberation times in classrooms within a range of 0.4 – 0.6 seconds. See also Appendix D of the *Guide*.
 - *Air Quality:* Comply with the “PSFA Design Guidelines for HVAC and Controls” (Appendix B of the PSFA HVAC and Controls Performance Assurance Program).
 - *Computer Technology:* Accommodations for networked multimedia computer connections are to be provided in conformance with Public Education Department requirements for educational technology. These computers may be dispersed throughout the entire facility, concentrated in computer labs, or provided through a combination of both methods.
- Grade Level Considerations
 - Kindergarten: Instruction tends to be project and center oriented. The curriculum is generally contained in one space and must accommodate many activities.
 - Grades 1 – 5: Curriculum at the elementary level tends to be self-contained within a single classroom involving a single teacher supported by any number of specialty instructors. Consequently, large groups, small groups and independent study must all be supported within the confines of the classroom at various times. Classroom activities include physical movement, long-term projects, cooperative learning groups, learning centers and process learning. Space layout must be flexible enough to accommodate these needs.
 - Grades 6 – 8: Early adolescence is a unique period of transition with specific educational requirements. Programs provide exploratory learning opportunities typically based around interdisciplinary instructional teams. The need for specialty classrooms begins to emerge at the middle school level and, therefore, the general classroom size is often reduced.
 - Grades 9 – 12: The content driven curriculum of high schools is expressed in the trend toward academic teaming with many schools developing learning academies stressing separate disciplines within a single facility. Specialized instruction and an increased need for specialty classrooms diminish the need for large general classrooms. The goal of facility planning at the high school level should be to create a dynamic learning environment that allows both faculty and students a fair amount of flexibility in organizing their time and schedules. The layout of general classrooms should allow for easy access to specialized learning environments.

- **Standard Classroom Furnishings**

- Provisions for these items should be made in the layout of each classroom.

<u>Grade Level</u>	<u>Standard Furnishings</u>
Kindergarten	Storage (some lockable) 1 snack area w/sink Adjacency to restroom facilities Access to computer networking (1 computer station for each 3 students or wireless capability) Intercom system White boards
Elementary	Storage (some lockable) Cabinets and file storage Access to computer networking (1 computer station for each 3 students or wireless capability) Projection surface Intercom system White boards
Middle School/Junior High/High School	Storage (some lockable) Cabinets and file storage Computer networking (1 computer station for each 3 students or wireless capability) Projection surface Intercom system White boards

C. SPECIALTY CLASSROOMS - SCIENCE

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.A NMAC establishes the following basic minimum requirements for science instructional space in schools:

<p>6.27.30.14</p> <p>A.</p> <p>(1)</p> <p>(2)</p>	<p>SPECIALTY CLASSROOMS.</p> <p>Science:</p> <p>For grades K through 6 , no additional space is required beyond the classroom requirement.</p> <p>For grades 7 through 12, 4 net sf/student of the specialty program capacity for science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction. The space shall have science fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the public education department. If an alternate science learning method is used by a school district, the district shall verify the appropriate alternate fixtures and equipment to the council. Provide at least 80 net sf for securable, well-ventilated storage/prep space for each science room having science fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.</p>
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Adequacy Standards Area Summary	Minimum Area (Net Square Feet)
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Lecture and Laboratories:

- | | |
|---|--|
| <ul style="list-style-type: none"> • Grades K – 6
All Science | <p>No additional specialized space required*</p> |
| <ul style="list-style-type: none"> • Grades 7 – 8
Science Lecture & Labs | <p>4 nsf/students in program
No smaller than average CR*</p> |
| <ul style="list-style-type: none"> • Grades 9-12
Science Lecture & Labs | <p>4 nsf/students in program
No smaller than average CR*</p> |
| <ul style="list-style-type: none"> • Storage/Prep Area | <p>80 net s.f / lab* min.</p> |

*see *New Mexico Statewide Adequacy Standards: Section 6.27.30.14-A*

Best Practices – Science

- Shared spaces may decrease the need for laboratories dedicated to a specific science discipline. Lecture areas can be combined with lab space or separated within the same room or in different rooms. The lab design may accommodate the following:
 - Lab equipment.
 - Computer and multimedia presentations.
 - Furnishings must be flexible and allow for working in teams, must accommodate
 - Interactive learning programs that facilitate hands-on assignments.
 - Flexible, high-density storage.
 - Secure storage.
 - OSHA requirements (e.g., eyewash stations, emergency shutoffs, etc.)
- The trend toward “virtual” lab experiments requires consideration of computer networking, portable demonstration tables, yet smaller table-based furnishings and equipment.
- Science classrooms are often larger than regular classrooms at the facility to accommodate demonstration areas and specialized furniture and equipment.
- Science classrooms in small schools might only be used for parts of the day and the same room may be used for other programs when not used for science.
- If Storage/Prep space is provided it shall be separate, well-ventilated, preferably adjacent and accessible to each lab. It shall contain safe and secure storage for valuable equipment and chemicals used for experiments. This space may be combined and shared between more than one classroom.

D. SPECIALTY CLASSROOMS - SPECIAL EDUCATION

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.B NMAC establishes the following basic minimum requirements for a classroom for special education purposes:

B. Special education classroom. If a special education space is provided and the space is required to support educational programs, services, and curricula, the space shall not be smaller than 450 net sf. When the need is demonstrated in type II (d-level) classrooms, additional space in the classroom shall be provided with, or students shall have an accessible route to; an accessible unisex restroom with one toilet, sink, washer/dryer, and shower stall/tub, and at least 15 net sf of storage. When the need is demonstrated in 7th grade classrooms and above, a kitchenette with at least 15 net sf of storage shall be provided.

<u>Adequacy Standards Area Summary</u>	<u>Minimum Area (Net Square Feet)</u>
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- | | |
|-----------------------------------|-------------------------------|
| • Type I classroom (A,B,C levels) | 450* min. (15 students, max.) |
| • Type II classroom (D level) | 450* min. (8 students, max.) |

In Type II classrooms, and when the need is demonstrated, there shall be a directly accessible or otherwise convenient unisex restroom with one toilet, sink, washer/dryer, and a shower/stall tub. Other potential ancillary areas are the following:

- | | |
|---|----------|
| • Kitchenette (7 th Grade & above) | 80* min. |
| • Storage | 15* min. |

**see New Mexico Statewide Adequacy Standards: Section 6.27.30.14-B*

Best Practices – Special Education:

- A principal goal of special education is to provide services in the least restrictive environment possible. This allows services to be performed within the regular classroom along with the typical instructional program or in special dedicated or pull-out spaces. A combination of delivery techniques may be used which have bearing on the space required. Sometimes space can be used within other regular or special program areas such as in the home economics classroom when life skills are part of the special education curriculum. The idea of including the special education student within the regular school program is promoted as beneficial to the student as well as to the entire student body.
- Most special education programs in New Mexico are historically categorized according to A, B, C or D level designations. These designations can be used in the *Adequacy Planning Guide* to describe the typical degrees of service required. Most special education students are learning-disabled and need varying types of specialized instruction.

Classifications are defined as follows in these guidelines:

- A Level: Programs serving students who primarily need specialized instruction. Students usually rotate through these programs on a periodic basis.
- B Level: Programs where management needs require a classroom assistant.
- C Level: Programs where a small group of students require highly-intensive, individualized instruction.
- D Level: Programs serving students with severe or multiple handicaps and primarily in need of habilitation and treatment, while requiring a staff person for small groups of students within the class.

- Depending on the number of students to be served, their ages, and the nature of special needs, classroom sizes will range from full-size to half-size.
- Kitchenettes may be included or used on a shared basis with other programs, (e.g. Home Ec.) and are allowed by PSFA for 7th Gr. and above, only. A kitchenette is defined as a very small room or an area within a room with compact kitchen appliances and a sink used for occasional preparation of simple meals and snacks.
- Ancillary space may include offices and shared meeting or testing rooms. These spaces should be provided within an area at least one-fourth the size of the classroom space required and in addition to the regular classroom area.
- Separate isolation areas for disruptive students are currently not recommended due to supervision issues.

- Special needs facilities may also include changing tables, pull-out tutoring areas or OT/PT equipment.
- Small-scale or limited programs might only require shared use of appropriately sized and equipped space. Type I classes can use the same space during different times of the day. These rooms can also be subdivided with movable partitions to create more flexible space.
- Type I instructional space may also serve as conference rooms.
- Small or remote schools may choose to centralize their special education services at a selected location for logistical purposes.

E. SPECIALTY CLASSROOMS - ART EDUCATION - VISUAL ARTS

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.C NMAC establishes the following minimum basic requirements for art program instructional space in schools:

C. Art education programs. A school facility shall have classroom space to deliver art education programs, including dance, music, theatre/drama, and visual arts programs, or have access to an alternate learning method. Classroom space(s) for art education shall not be smaller than the average classroom at the facility. Art education classroom space(s) may be included in the academic classroom requirement and may be used for other instruction.

(1) Elementary school. Art education programs may be accommodated within a general use or dedicated art classroom. Provide additional dedicated art program storage of at least 60 net sf per facility.

(2) Middle school/junior high school. Classroom space(s) for art education programs shall have no less than 4 net sf/student of the specialty program capacity for art. Provide additional ancillary space for group music practice, individual music practice room(s), specialized storage/library rooms, and office(s).

(3) High school. Classroom space(s) for art education programs shall have no less than 5 net sf/student of the specialty program capacity for art. Provide additional ancillary space for group music practice, individual music practice room(s), specialized storage/library rooms, and office(s).

(4) Combination school. A combination school shall provide the elements of the grades served by paragraphs (1), (2) and (3) above without duplication.

Adequacy Standards Area Summary - Minimum Area (Net Square Feet)

- | | |
|--|---|
| <ul style="list-style-type: none"> • K –6 Art facility)* | General CR size (no smaller than avg. classroom in facility)* |
| <ul style="list-style-type: none"> Storage* | 60 net s.f.* per facility |
| <ul style="list-style-type: none"> • Middle / Jr. High | No smaller than average classroom in facility |
| <ul style="list-style-type: none"> Visual Arts Classrm.* Storage / Library Rm*. Office* | |
| <ul style="list-style-type: none"> • High School | No smaller than average classroom in facility |
| <ul style="list-style-type: none"> Visual Arts Classrm*. Storage / Library Rm*. Office* | |

**see New Mexico Statewide Adequacy Standards: Section 6.27.30.14-C*

Best Practices – Visual Arts Classroom:

- *Visual Arts:* In elementary schools, the visual arts program includes painting, drawing, construction, modeling, carving, photography, printmaking and weaving. The basic media used are finger paints, clay, paper maché, water color, wood, chalk, tempera, brush and ink, charcoal, pencils and scrap materials. In secondary schools, activities may include three-dimensional construction projects, graphic arts, mechanical and fine art drawing, modeling, sculpture, ceramics, painting and photography. Some important media in use are wax and oil crayons, charcoal, watercolors, tempera, enamels, wood, metal, plastic, textiles, ink, yarns, clay, leather, wire, reed and raffia.
- High school visual arts programs at larger schools or schools with special programs may justify separate areas for classes such as painting/drawing, jewelry/ceramics/sculpture and photography/filmmaking. Small-scale or limited programs might only require shared use of appropriately sized and equipped space.
- Best practices suggest that art learning spaces be located on the ground floor with access to related curricular areas and convenient entry for delivery purposes. If the spaces are to be used after regular school hours, they should permit easy but controlled entry from the outside. During school hours, students need ready access to the out-of-doors for sketching, painting and field trips.
- Art activities are best performed on tables with mar-resistant surfaces.
- Illumination that is glare-free, intense enough for detailed work and that allows true color discrimination is vital. Natural light from northern windows is ideal.
- When photography is included in the visual arts programs, a darkroom will not be needed if the program is electronically based.
- If provided, a kiln requires an area of 40 sq ft min.
- In small schools, art is often shared with other uses or incorporated into the regular classroom. Depending on layout and design, an art room can be shared for art and music, art and science, with tutoring, or other general education functions.

F. ART EDUCATION - MUSIC

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.C NMAC establishes the following minimum basic requirements for art program instructional space in schools:

<p>C. Art education programs. A school facility shall have classroom space to deliver art education programs, including dance, music, theatre/drama, and visual arts programs, or have access to an alternate learning method. Classroom space(s) for art education shall not be smaller than the average classroom at the facility. Art education classroom space(s) may be included in the academic classroom requirement and may be used for other instruction.</p> <p>(1) Elementary school. Art education programs may be accommodated within a general use or dedicated art classroom. Provide additional dedicated art program storage of at least 60 net sf per facility.</p> <p>(2) Middle school/junior high school. Classroom space(s) for art education programs shall have no less than 4 net sf/student of the specialty program capacity for art. Provide additional ancillary space for group music practice, individual music practice room(s), specialized storage/library rooms, and office(s).</p> <p>(3) High school. Classroom space(s) for art education programs shall have no less than 5 net sf/student of the specialty program capacity for art. Provide additional ancillary space for group music practice, individual music practice room(s), specialized storage/library rooms, and office(s).</p>
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Adequacy Standards Area Summary - Area (Net Square Feet)

<ul style="list-style-type: none"> • K –6 Music/Drama facility)* 	<p>General CR size(no smaller than avg. classroom in facility)*</p> <p>Storage 60 net s.f.* per facility</p>
<ul style="list-style-type: none"> • Middle / Jr. High 	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Band/Orchestra Chorus Room 	<p>No smaller than the avg. CR in the facility *</p> <p>No smaller than the avg. CR in the facility*</p>
<ul style="list-style-type: none"> • High School 	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Band/Orchestra Chorus Room 	<p>No smaller than the avg. CR in the facility*</p> <p>No smaller than the avg. CR in the facility*</p>
<ul style="list-style-type: none"> • Support Space (Mid/Jr. High School) 	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Instrument Storage* Music Library* Office (each)* Individual Prac. Rm.* Group Prac. Rm.* 	

**see New Mexico Statewide Adequacy Standards: Section 6.27.30.14-C*

Best Practices – Music:

Consider the following when designing a performing arts program in music:

- Teaching spaces for instrumental and vocal instruction on an individual and group basis.
- Acoustically-treated rehearsal room for individuals and small groups. Offices for the faculty and staff, some of which may double as studios.
- Storage areas to accommodate musical instruments, teaching aids, uniforms, music stands, risers, shells, lights and other performance apparatus. These should be located close to areas where equipment will be used.
- Facilities for instrument repair.
- Careful attention to acoustics, room size, shape, temperature, relative humidity and spatial relationships.
- Because acoustics are obviously critical, a consultant can be helpful in designing spaces that enhance the quality of sound. Surface materials that eliminate distortions and undesirable transmissions of sound can be applied. Windows, doors, walls and floors should be treated so that transmission of sounds to and from areas is reduced. Keep reverberation times in rehearsal areas within a range of 0.6 – 1.1 seconds.
- Band, orchestra and chorus programs at larger schools may justify separate areas for each program while small-scale programs might only require shared use of appropriately sized and equipped space.
- Music may need to be delivered in the regular classroom. If this is the case, provisions should be made within the facility for storage of instruments and other music items. In other cases, the music instruction may be combined with another program [e.g., visual art] or the room may be used for other purposes [e.g., parent room, tutoring, etc.]

G. SPECIALTY CLASSROOMS - ART EDUCATION - PERFORMING ARTS

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.C NMAC establishes the following minimum basic requirements for art program instructional space in schools:

C. Art education programs. A school facility shall have classroom space to deliver art education programs, including dance, music, theatre/drama, and visual arts programs, or have access to an alternate learning method. Classroom space(s) for art education shall not be smaller than the average classroom at the facility. Art education classroom space(s) may be included in the academic classroom requirement and may be used for other instruction.

(1) Elementary school. Art education programs may be accommodated within a general use or dedicated art classroom. Provide additional dedicated art program storage of at least 60 net sf per facility.

(2) Middle school/junior high school. Classroom space(s) for art education programs shall have no less than 4 net sf/student of the specialty program capacity for art. Provide additional ancillary space for group music practice, individual music practice room(s), specialized storage/library rooms, and office(s).

(3) High school. Classroom space(s) for art education programs shall have no less than 5 net sf/student of the specialty program capacity for art. Provide additional ancillary space for group music practice, individual music practice room(s), specialized storage/library rooms, and office(s).

Adequacy Standards Area Summary - Minimum Area (Net Square Feet)

- K –6 Music/Drama/Dance in facility) General classroom size* (no smaller than avg. CR in facility)
- Middle / Jr. High Theatre/Drama/Dance No smaller than avg. CR in facility*
- High School
 - Drama CR No smaller than avg. CR in facility*
 - Dance CR No smaller than avg. CR in facility*
- Support Spaces
 - Storage*
 - Office*

**see New Mexico Statewide Adequacy Standards: Section 6.27.30.14-C*

Best Practices – Performing Arts:

- Auditoriums and stages may qualify for PSCOC funding if supported by educational program need and a high degree of utilization. Many schools expressing an interest in creating some form of performance venue may develop performance space within schools without creating a separate auditorium. The most common solutions are through cafeteriums and auditerias. Such spaces must have proper lighting and acoustics. More recent and more creative solutions have addressed many of these issues and have created dynamic environments which can be used for both cafeteria and for performances. Music rooms can be located next to cafeterias to double as a stage or green room. Combining gyms and cafeterias separated by movable partitions help to create even larger spaces. Other creative suggestions have also included space for dance instruction.
- Separate space for high school dance programs mentioned in the *New Mexico Primary and Secondary Educational Standards (6.30.2.17 NMAC)* may be included if the district demonstrates appropriate programmatic need. These may be accommodated in multipurpose space associated with the physical education area and shared with aerobics, gymnastics and other activities. In high schools, dressing rooms and access to showers is desirable. P.E. or gym locker rooms may be jointly used when located nearby.

H. CAREER EDUCATION

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.D NMAC establishes the following minimum basic requirements for typical career education program space in mid / jr. high schools:

- D. Career education
- (1) Elementary school. No requirement.
 - (2) Middle school/junior high school. Career education programs shall be provided with no less than 3 net sf/student of the specialty program capacity of the school for career education. Each program lab or classroom space shall not be smaller than 650 net sf.
 - (3) High school. Career education programs space shall be provided with no less than 4 net sf/student of the specialty program capacity of the school for career education. Each program lab or classroom space shall not be smaller than 650 net sf.
 - (4) Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards

Adequacy Standards Area Summary

Minimum Area (Net Square Feet)

- Middle / Jr. High (At least 3 n.s.f./student in progr.)*
650 net s.f min. for ea. Lab or CR*

- High School (at least 4 n.s.f. /student in
progr.)*
650 net s.f. min. for ea. Lab or CR*

**see the New Mexico Statewide Adequacy Standards: Section 6.27.30.14-D*

Best Practices – Career Education:

- Typical space sizes are based upon the ranges of class sizes listed in the previous section entitled “General Classrooms”.
- The following are examples of curriculum areas that might appear in a modern school program:

Middle / Jr. High

- *Technology Education:*
 - Tech Ed Lab
 - Clean Area
 - Fabrication Area
 - Consumer Science
 - Food/Kitchen Area
 - Multipurpose Area

High School

- *Technical Education*
 - Construction / Manufacturing
 - Power & Transportation
 - Computers & Communications
 - Technical Drawing
 - Photography / Graphics
- *Agricultural Education:*
 - Science Lab
 - Ag Business
 - Demonstration Area
- *Consumer Science:*
 - Culinary Occupations
 - Hospitality & Catering
 - Child Development & Parenting
 - Child Care Occupations
 - Introduction to Design
- *Business:*
 - Accounting
 - Computer Systems/ IT
 - Keyboarding / Key Applications
 - Business Law
 - Office Administration
- *Marketing:*
 - Marketing
 - Fashion
- *Health:*

Classroom/Lab

- During the initial planning phase, it is essential to consult with faculty, administration and community members to gain a thorough understanding of the immediate and long-range goals and needs of the career education program. Many districts have begun to organize these programs into career academies and school-to-work or career pathway programs fostering or strengthening partnerships with community colleges, technical/vocational schools and the surrounding business community. The character and design of career education spaces will depend on the nature of the instruction program, the students involved and the resources of the school.
- The Career Education field is undergoing rapid change. Today all fields have a major technology focus. Agriculture is dominated by science and business, manufacturing by robotics and advances in technology based tools. The space requirements to accommodate the Tech Ed [career/vocational] requirement of the future will include:
 - Multipurpose classrooms which have the ability to incorporate extensive technology, especially computers with moveable furnishings and equipment.
 - Fabrication areas that are multidisciplinary and spaces which can be rearranged easily depending on the curriculum and the instructor.
- *Business education classrooms:* (for instruction in word processing, short-hand, office bookkeeping and accounting, use of general business machines, duplicating equipment, computers, etc.) These classrooms will require adequate circuitry with receptacles in well-planned locations. Floor outlets should be avoided while considering the use of power poles and receptacles mounted in “pony” walls or integral with furnishings. Ceilings should be acoustically treated and carpeting considered as floor covering. These classrooms should be placed for easy access by visitors. Adequate storage should be provided and should include cabinets, shelving and closets. Consider including a sink with hot and cold water. Beyond minimum standards, the space should be large enough to accommodate persons, machinery and furniture and to allow easy traffic flow.
- *Consumer Science classrooms:* (for instruction in nutrition and consumer education.) These rooms should be placed to minimize problems of delivery service, waste removal and adult and student traffic. The space may be required to include unit kitchens typical of those found in the community. Spaces should accommodate tables, counters, chairs and other home furnishings as well as flat work surfaces for clothing construction. Adequate plumbing and drainage for hot and cold water as well as electrical and gas connections and ventilation hoods should be provided. Access to laundry equipment, storage space for garments and portable or stationary sewing equipment should be considered. Carpeting may be preferred in some areas. Wall finishes should be durable and easy to clean. Careful consideration of acoustics is required.
- *Technical Education:* Organized education programs that offer a sequence of courses that are directly related to the preparation of individuals for employment in current or emerging occupations requiring other than a baccalaureate or advanced degree. Such

programs shall include competency-based applied learning which contributes to an individual's occupational-specific skill.

- *Agricultural education programs:* Agricultural education programs will vary greatly from district to district depending on the availability of resources and the needs and concerns of the community being served. In addition to instructional space, more developed programs may consider providing a land laboratory of an acre or more for agricultural production, floriculture, natural resources and/or forestry. Space to provide a shop for agricultural mechanics might also be considered.

I. SPACE FOR TECHNOLOGY-AIDED INSTRUCTION

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.14.E NMAC establishes the following minimum basic requirements for computer and technology-aided instruction in all schools:

E. Technology-aided instruction. A school facility shall have space to deliver educational technology-aided instructional programs or have access to an alternate learning method. This requirement may be distributed throughout other program spaces within the facility.

(1) Elementary school. Provide space that meets 3 net sf/student of the planned school program capacity, with no less than 700 net sf.

(2) Middle school/junior high school. Provide space that meets 3 net sf/student of the planned school program capacity, with no less than 800 net sf.

(3) High school. Provide space that meets 3 net sf/student of the planned school program capacity, with no less than 900 net sf.

(4) Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

Adequacy Standards Area Summary - Minimum Area (Net Square Feet)

- K –6 700* min.
- Middle / Jr. High 800* min.
- High School 900* min.
- Support Spaces

**see the New Mexico Statewide Adequacy Standards: Section 6.27.30.14-E*

Best Practices – Space for Technology-Aided Instruction:

- Adequate access to electrical outlets and phone jacks must be provided to ensure flexibility of the space.
- Include dust-free writing boards (instead of chalkboards), and increased shelving, cabinets and storage space.
- Carpet should be used for flooring to improve acoustical quality.
- Include independent temperature controls if the lab is in a separate room.
- Determine if wireless, portable technology should be accommodated.
- There are few differences between a classroom, tech ed lab, computer lab, business lab and other classroom areas in a building. If all of the spaces are equipped appropriately, any space can be designated as a computer lab. Portable carts may be used to transport laptops to classrooms for computer instruction.

J. PHYSICAL EDUCATION

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.15 NMAC establishes the following minimum basic requirements for indoor physical education teaching space for all schools:

6.27.30.15 PHYSICAL EDUCATION.

A. General requirements. A school facility shall have an area, space and fixtures for physical education activity. This space may have more than one function and may fulfill more than one standard requirement.

(1) Elementary school. Provide an indoor physical education teaching facility with at least 2,400 net sf. This space may have multi-purpose use in accommodating other educational program activities such as art program performances. In addition, no less than 200 net sf for office/physical education equipment storage space shall be provided.

(2) Middle school/junior high school. For a middle school/junior high school facility, an indoor physical education teaching facility that shall have a minimum of 5,200 net sf plus bleachers for 1.5 design capacity.

(3) High school. A physical education complex shall have a minimum of 6,500 net sf plus bleachers for 1.5 design capacity.

(4) Combination school. Provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher net sf standards with bleacher capacity for at least 2.0-planned school program capacity. A single high school gymnasium shall fulfill the minimum requirements of both high school and middle school/junior high school classes. If the school includes an elementary, then it shall provide in addition the separate space required for an elementary school. This space may have more than one function and may fulfill more than one standard requirement.

B. Additional physical education requirements. In addition to space requirements in Subsection A:

(1) Elementary school. One office shall be provided, with physical education equipment storage with a minimum of 150 net sf. This space may have more than one function and may fulfill more than one standard requirement.

(2) Middle school/junior high school. Two dressing rooms shall be provided, with lockers, showers and restroom fixtures. Two offices shall be provided, each with a minimum of 150 net sf. Each shall be provided with a telephone. Physical education equipment storage space shall be provided.

(3) High school. Two dressing rooms shall be provided, with lockers, showers and restroom fixtures. Two offices shall be provided, each with a minimum of 150 net sf. Each shall be provided with a telephone. Physical education equipment storage space shall be provided.

(4) Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

[6.27.30.15 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07; A, 7/15/10]

Note: See “School Site” section for outdoor P.E. area requirements.

<u>Adequacy Standards Area Summary</u>	<u>Minimum Area (Net Square Feet)</u>
<ul style="list-style-type: none"> • <u>K-6</u> <ul style="list-style-type: none"> Multipurpose/Indoor P.E Gym/Play Area Office PE equip storage 	<p>2,400 n.s.f. min.)*</p> <p>150 *</p>
<ul style="list-style-type: none"> • <u>Middle / Jr. High</u> 	
<p>Note: Mid-Jr. high school gyms are not required when a high school gym exists or is provided at a combination school.</p>	
<ul style="list-style-type: none"> Gymnasium <ul style="list-style-type: none"> Basketball court Seating (in additional space) P.E. storage* P.E. locker rms. (2)* Office (2) 	<p>5,200*</p> <p>Provide bleachers for 1.5 planned school program capacity *</p> <p>150 (ea.)*</p>
<ul style="list-style-type: none"> • <u>High School</u> <ul style="list-style-type: none"> Gymnasium <ul style="list-style-type: none"> Basketball court Seating (in additional space) P.E. lockers (2)* Offices P.E. storage* 	<p>6,500*</p> <p>Provide bleachers for 1.5 planned school program capacity *</p> <p>150 (ea.)*</p>

* see the New Mexico Statewide Adequacy Standards: Section 6.27.30.15

Best Practices - Physical Education:

- Due to the high cost and difficulty of expanding physical education facilities, consider the immediate and long-range use requirements during initial planning phases. Careful attention should be paid to program areas that are eligible to receive PSCOC funds and those that will require local funding. The PSCOC funds spaces that support physical education; however it is the local responsibility to fund spaces for interscholastic sports and community recreation. The education program, available funding, size of the school, involvement in competitive and spectator sports, and the support of the community for recreational programs should all be weighed during the planning phase.
- Indoor gymnasium facilities made larger for expanded community use will have greater construction and operational costs. Consideration should be given to partnering with local government, community groups or organizations to share in both initial and operating/maintenance costs for added portions of enlarged facilities if shared use is planned.
- It is important to define the interrelationship between indoor and outdoor facilities early on. Interscholastic sports and community recreation provide opportunities for partnerships between the school district, parks & recreation, and/or other local organizations. Since these facilities may be used during non-school hours, considerations should be made for separate entrances, zoning of HVAC, location of parking, exterior lighting, storage, location of restrooms, and the ability of accessing these facilities without accessing the entire building.
- Include the provision of equal facilities for men and women, access and suitability for physically impaired persons and providing flexibility so that the facility can be used for a variety of purposes.
- Isolate physical education facilities from other classroom areas due to noise considerations. Reduce noise, reverberation and echo within the gymnasium. Keep reverberation times in the gym within a range of .8 - 1.5 seconds. (See “Performing Arts” section for acoustical recommendations for gyms used also as performing arts spaces)
- Specify non-slip floors and non-abrasive wall surfaces.
- Ensure that there are no sharp edges, corners, or dangerous protrusions within reach in court space.
- Protect all wall-mounted items susceptible to damage with wire guards or other durable coverings.
- Suitable light fixtures that are recessed or shielded should be installed. Windows in the gymnasium should be elevated and protected.

- The installation of a public address system should be considered.
- Facilities for applying emergency first aid should be conveniently accessible.
- PE facilities in elementary schools are typically designed to allow for multi-use of the space.
- For middle school / junior high and high school:
 - It is important to recognize the trend at the middle school/junior high school level to use the physical education facility for all-school assemblies. This may result in the-increased need for proper acoustic control.
 - Placement and storage of bleachers should be carefully studied.
 - Consider providing outdoor equipment storage accessible from outdoor areas.
 - Floors in shower and drying areas should have slip-resistant floor surfaces.
 - Ensure adequate storage space for equipment (recreation mats, chairs, etc.), especially if the space is to be used for multiple functions.

J. LIBRARIES AND MEDIA CENTERS

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.16 NMAC establishes the following minimum basic requirements for libraries and media centers:

6.27.30.16 LIBRARIES AND MEDIA CENTERS/RESEARCH AREA - GENERAL REQUIREMENTS.

A. A school facility shall have space for students to access research materials, literature, non-text reading materials, books and technology. This shall include space for reading, listening and viewing materials.

(1) Elementary school. The area for stacks and seating space shall be at least 3 net sf/student of the planned school program capacity, but no less than 1,000 net sf. In addition, office/workroom space and secure storage shall be provided.

(2) Middle school/junior high school or high school. The area for stacks and seating shall be at least 3 net sf/student of the planned school program capacity. In addition, office/workroom space and secure storage shall be provided.

(3) Combination school. Provide the elements of the grades set out in Paragraphs (1) and (2) above without duplication, but meeting the higher standards.

B. A school facility shall have library fixtures, equipment and resources in accordance with the standard equipment necessary to meet the educational requirements of the public education department. [6.27.30.16 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07; A, 7/15/10]

<u>Adequacy Standards Area Summary</u>	<u>Minimum Area (Net Square Feet)</u>
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- | | |
|--|---|
| <ul style="list-style-type: none"> • K – 6 <ul style="list-style-type: none"> Main room w/stacks & seating* Librarian’s office/workroom* Storage* | at least 3 nsf/student (1,000 nsf min.) |
| <ul style="list-style-type: none"> • Middle / Jr. High <ul style="list-style-type: none"> Main room w/stacks & seating* Librarian’s office/workroom* Storage* | at least 3 nsf/student |
| <ul style="list-style-type: none"> • High School <ul style="list-style-type: none"> Main room w/stacks & seating* Librarian’s office/workroom* Storage* | at least 3 nsf/student |

**see the New Mexico Statewide Adequacy Standards: Section 6.27.30.16*

Best Practices – Libraries and Media Centers:

- The library/media center is the academic core of the building, serving as an extension of each classroom. It should occupy a central physical and visual position in the building.
- Provide space for instruction, storage, secure areas and appropriate space for computers and telecommunications equipment.
- Design the library/media center as an inviting, stimulating and accessible place providing workspace for individuals and small and large groups for research, browsing, listening, viewing, reading and producing materials for instructional purposes.
- Provide maximum flexibility in order to meet the needs of students and staff, accommodate program priorities and respond to student population growth, information expansion and changing technologies.
- Since library/media centers may receive extensive after hour use by students, staff and the community, consideration might be given to locating the media center near the front entry of the building.
- Logical circulation patterns should be considered early in the design process. Design for ease of visual control.
- The use of natural lighting is encouraged.
- Lighting fixtures and patterns should be designed to illuminate between, not over, bookcases. Strive to maintain a light level of between 50 and 70 foot candles in reading areas. Efforts should be made to reduce glare in computer areas.
- Appropriate wiring for audiovisual and computer equipment is required.
- There should be limited, controlled access.
- Provide an adjacent office for the librarian.
- Carefully consider immediate and long-term library/media center needs and technological trends. As some portions of a collection are converted to digital technology, the overall storage needs of a facility may diminish. The spread of wireless technology may make expensive wiring of computer stations obsolete. Flexibility of design and technology planning is becoming increasingly necessary in considering the infrastructure and space layout of new libraries and the updating of existing facilities.
- Sturdy equipment with adjustable shelving is recommended to ensure prolonged use and flexibility.
- In addition to computers, other electronic communications equipment (copiers, telephone, fax machine, scanner, printer, etc.) should be planned for. Provide appropriate storage and workstation space for such equipment.

- To protect the collection and electronic equipment, controls for the heating, cooling and ventilation of a library/media center should be independent of other parts of the facility.

L. FOOD SERVICES

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.17 NMAC establishes the following minimum basic requirements for food service areas in all schools:

6.27.30.17 FOOD SERVICE STANDARDS.

A. Cafeterias - general requirements

(1) Serving and dining. A school facility shall have a covered area or space, or combination, to permit students to eat within the school site, outside of general classrooms. This space may have more than one function and may fulfill more than one adequacy standards requirement. Dining area shall be sized for the planned school program capacity to allow for a meal period requiring no more than 3 servings. The dining area shall have no less than 15 net sf/seated student.

(2) Serving area shall be provided in addition to dining area.

(3) Fixtures and equipment. A school facility shall have space, fixtures and equipment accessible to the serving area, in accordance with the standard equipment required, for the preparation, receipt, storage or service of food to students.

(a) The space, fixtures and equipment shall be appropriate for the food service program of the school facility and shall be provided in consideration of the location of the facility and frequency of food service supply deliveries. Food service facilities and equipment shall comply with the food service and food processing regulations of the New Mexico department of environment.

(b) Fixtures and equipment should include: food prep area items, including sink, oven, range, serving area equipment (or buffet equipment), dishwasher, cold storage, dry storage and other appropriate fixture and equipment items.

B. Kitchen. Kitchen and equipment shall comply with either the food preparation kitchen or the serving kitchen standards defined as follows:

(1) Food preparation kitchen - 2 net sf/meal served minimum based upon the single largest serving period:

(a) Elementary school: 1,000 net sf minimum

(b) Middle school/junior high school: 1,600 net sf minimum

(c) High school: 1,700 sf minimum

(d) Combination school: shall provide the elements of the grades served by Subparagraphs (a), (b) and (c) above without duplication, but meeting the higher standards.

(2) Serving kitchen. Where food is not prepared, there shall be a minimum of 200 net sf with a hand wash sink and a phone.

[6.27.30.17 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07; A, 7/15/10]

Adequacy Standards Area Summary

Minimum Area (Net Sq. Ft.)

• K – 12		
	Dining	15 nsf / seated student (3 seatings per meal period max.)*
	Serving	Provided in addition to Dining Area*
	Kitchen (full-prep)	2 nsf / meal served (min.)*
	Dishwashing area	
	Cold storage	
	Dry storage	
	Kitchen (serving/warming kitchen)	200*

**see the New Mexico Statewide Adequacy Standards: Section 6.27.30.17*

Best Practices – Food Services:

- The designer should work to understand the owner's plan for food service and consider the following:
 - Design to a maximum of three servings per meal period.
 - Food service equipment, layout of serving areas and overall size depend on the typical menu and food preparation and serving concepts.
 - Determine whether the kitchen will provide food for other sites in addition to the facility where located.
 - Many schools have satellite kitchens which serve or warm food entirely prepared off-site. Some schools serve as main food prep facility for several satellite kitchens and require more space and equipment.
 - Many locations in New Mexico can augment a cafeteria with protected outdoor dining areas.
 - It is recommended that enough storage be provided for a schedule that does not exceed one week between deliveries. Schools in remote locations may require additional storage space depending on a lesser frequency of deliveries.

- For most schools under 300, and allowing 2 cafeteria sittings per day, the likely solution will be a multi-purpose space which is used as the cafeteria, for PE classes, and for assemblies and performances. If a cafeteria is to double with any other function, the designer should eliminate interior columns where possible and provide adequate space for storage. A multi-use space also calls for extra attention to acoustics and a built-in sound system with reverberation times within a range of 0.7 – 1.2 seconds.
- Areas in which large amounts of food are prepared are typically regulated by the appropriate state and federal agencies concerned with health and environmental hazards related to prevention of food contamination. In addition, the types of activities inherent in the delivery and preparation of food demand great care. **Hazard Analysis and Critical Control Points (HACCP)** is a systematic preventive approach to food safety. It is recommended that a HACCP is performed by the food services designer to identify potential food safety hazards which can be avoided by the design. Large kitchen projects may benefit from the services of a consultant who is experienced in this type of analysis.
- *General requirements for related spaces:*
 - *Receiving Area:* The receiving dock should permit easy unloading of supplies and food. This area should be located away from student traffic. The floor level of the dock and the storage/kitchen areas should be the same.
 - *Storage:* Storage for food items that do not require refrigeration should be adjacent to the receiving area and convenient to the kitchen. This area should be dry and clean. Separate bulk storage from food preparation area.
 - *Kitchen:* The type of kitchen planned will depend on the nature of the food service program. The following questions should be answered:
 - Is the food to be prepared on site or will it be delivered from a central kitchen?
 - What type of food will be served – hot meals, convenient pre-packaged foods, vended items?
 - How many meals will be served every school day for breakfast, for lunch, for after-school programs, and special events?
 - The size of the kitchen will depend on the nature of the equipment and the number of people required preparing meals. Food preparation equipment is expensive, and it should be chosen with care before the kitchen can be designed. Refrigerators and freezers for food storage – if required by the program – must be planned for and accommodated. Lay out the kitchen with defined cold food prep, hot food prep, and assembly areas to enable the staff to operate efficiently.

- *Service:* Food service may occur in a section of the kitchen, in a separate room or in the dining area. The space needed, the equipment required and the food preparation/service program will determine the arrangement of service counters. The objective here is to facilitate an attractive display, easy selection and quick service of food. Student circulation related to serving must be well-planned and coordinated within the space with other traffic paths.
- *Dishwashing:* The dishwashing and maintenance area is a separate function from food prep and holding, and should be located separately but adjacent to the dining room, preferably near its exit. Equipment selected for cleaning dishes and utensils will determine the size of the space.
- Garbage and trash disposal must be separated from food to prevent contamination. This applies to dirty dishes and trays, food waste, soaps and detergents, degreasers, pesticides, and other potential contaminants.
- *Office:* Enclosed office(s) for the head cook and/or administrator will be needed to accommodate menu preparation, purchasing and other tasks related to the management and supervision of the kitchen. The office should have a window providing a view of the kitchen and serving areas. Provide ability to have a telephone with an external line. Locate the office near the receiving door and/or near the cafeteria dining room.
- *Utility Room:* A utility/custodial room with mop sink is required within the food services area.
- *Staff Restrooms:* Appropriate restroom facilities, isolated from food prep areas but easily accessible to the kitchen staff, should be provided. Individual lockers for the use of kitchen staff may be required.
- The type of food service program operated by the school will depend on the site location of the school and the ease with which deliveries can be made. Site therefore influences the type of kitchen facility that will be needed and the type of equipment that must be purchased. Thus, if a school is in a rural area, daily deliveries from a central kitchen may be impractical, and a fully equipped, independent kitchen may be a necessity. Also, a remote location may call for the installation of large freezers for the storage of food that would not be necessary in a suburban school to which deliveries could be quickly and easily made.
- If the preparation and packaging of food is done at a remote location outside the immediate school, the elaborate cooking, service and clean-up facilities described above are superfluous.

M. ADMINISTRATION & OTHER FACILITY SUPPORT AREAS

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.18 NMAC establishes the following minimum basic requirements for “Other Facility Areas”:

School-Based Health Center (SBHC): In addition to the general student health area, a school may be eligible to incorporate a non-PSCOC -funded school based health center. The SBHC program is managed and funded through the Office of School Health within the New Mexico Department of Health.

6.27.30.18 OTHER FACILITY AREAS.

A. Parent workspace. A school facility shall include a workspace for use by parents. If this space is provided, it shall consist of at least .5 net sf/student of the planned school program capacity but no less than 150 net sf. The space may consist of more than one room and may have more than one function.

B. Administrative space. A school facility shall have space to be used for the administration of the school. The space shall consist of a minimum of 150 net sf, plus 1.5 net sf/student of the planned school program capacity.

C. Student health, counseling and ancillary space. A school facility shall have space to isolate a sick student from the other students and may include space for the delivery of other health, counseling, testing and ancillary programs. This space shall be a designated space that is accessible to a restroom, and shall consist of at least 1 net sf/student of the planned school program capacity with a minimum of 150 net sf. The space may consist of more than one room and may have more than one function. This space shall include a telephone.

D. Faculty workspace or teacher lounge. A school facility shall have workspace available to the faculty. This space is in addition to any workspace available to a teacher, in or near a classroom. The space shall consist of 1 net sf/student of the planned school program capacity with no less than 150 net sf. The space may consist of more than one room and may have more than one function. This space shall include a break area with a sink.

[6.27.30.18 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07]

Adequacy Standards Area Summary - Minimum Area (Net Square Feet)

• Administrative suite	At least 150 n.s.f. plus 1.5 n.s.f. x the planned school program capacity (150 n.s.f. minimum) *
• Parent workspace	150*min. (.5 n.s.f. x planned school program capacity)*
• Student health	At least 1 n.s.f. x planned school program capacity (Includes counseling and ancillary space)*
Nurse's area	150* min.
Toilet room	Included*

Storage	Included*
• School Based Health Center	See below (non-PSCOC funded)
• Counseling suite	See “Student Health” above”
• Faculty workroom 150* min.	
• Teachers’ lounge 150* min.	

**see the New Mexico Statewide Adequacy Standards: Section 6.27.30.18*

Best Practices – Administration and Other Facility Support Areas:

- *Parent Workspace:* Parents are encouraged to form active partnerships with schools to assist with planning and carrying out school activities. This space should have:
 - Small group meeting capabilities.
 - Space to house parent coordinator or volunteers to coordinate school outreach activities.
 - Easy access to administration and outside entrance.

- *Administrative Space:* Provide space for the basic administrative functions concerned with the operation of the school. This area should be located near the main entrance of the school where it is easily accessible to visitors and close to parking areas, with a suitable reception area readily available to students, teachers and visitors. Appropriate display areas should be available to display student art and other school artifacts. The administration offices should be accessed directly through the administrative reception area. The principal's office should be accessible from within the main office area as well as directly from the main corridor and commons areas. Additional considerations for the administrative space should include:
 - Ample and conveniently located storage.
 - Conferencing space.
 - Secure place for permanent records (fireproof file storage). (REQUIRED)
 - A small safe.
 - All appropriate building infrastructure for telecommunications and technology.
 - Mail rooms/workrooms (adjacent to teacher lounge).
 - Acoustically-separated small meeting or conference spaces for specialized staff use.

- *Counseling:* In elementary schools these services may be only needed on a part-time basis but space for both individual and small group consultation sessions is recommended. Middle and high schools typically require space for full-time counseling staff and usually employ the services of several counselors depending on school size. Small schools may have only one counselor. Part-time counseling services may be provided on a shared-schedule basis in another office. Students should feel secure and comfortable in accessing and utilizing the counseling area.
- *Student Health:* Provide space for activities include maintaining student health records, treating minor injuries, conferencing with students and parents, conducting health screening activities, immunizations and conferring with other health professionals, teachers and administrators. Additional considerations are as follows:
 - The school nurse's area should, if necessary, be adjacent to and entered by way of the school's central control and reception area.
 - The school secretary should, if necessary, have direct visual contact with the health reception area.
 - There should be sufficient space to conduct eye examinations (minimum of 20 feet).
 - The office for the nurse or the nurse's aide shall be provided with a telephone.
 - Student health records must be maintained in secure storage.
- *Faculty Workspace/Teacher Lounge:* Locate near the administrative hub of the facility. The atmosphere of the lounge should be relaxing and comfortable. The room should invite relaxation and informal communication, as well as provide an atmosphere of work-related collaboration. The space should be provided to accommodate the following:
 - A sink
 - A break area
 - Technology access (Internet, etc.).

School-Based Health Center (SBHC): Each **separately-funded** center provides primary and behavioral health care including substance abuse treatment. Services are available to all students/clients regardless of ability to pay. The SBHC is operated by contracted health professional partners and groups who may be subject to additional accrediting requirements and regulations pertaining to facilities. Each state SBHC is classified to provide one of three levels of service (Level 1, 2 or 3) depending upon staffing capabilities and arrangements. Some SBHCs are designed to serve a client base which extends beyond the school campus and into the surrounding community. The SBHCs and schools work as cooperative partners serving the needs of the students and the community.

When planning the SBHC it is important to identify the anticipated level of the program, who will provide professional services, and whether services will extend into the community. The SBHC must have qualities of privacy, safety and comfort and should be convenient to accessible student pathways, parking and emergency vehicle access. Proximity to the school nurse's area is preferred, dependent upon that area's location on campus. Sharing of the center's waiting area with the general student health center waiting area may also be considered. Confidentiality in accessing SBHC services must be fostered by the location on campus and the design. The location must be inclusive without impairing the student's perception of privacy when traveling to and visiting the center. Locating the SBHC in proximity to administration and/or security staff offices is not recommended. Interior provisions for privacy and confidentiality are necessary and can be achieved through the use of visual screening and sound transmission control. Other important considerations are security of records, medications, instruments, etc., maintaining hygiene and the proper disposal of clinical waste. The private areas of the SBHC should be designed as a suite of spaces that can be entirely secured after-hours or when not in use. **The table below is provided for general reference in space planning. More detailed programmatic information is available from the NM Department of Health, Office of School Health.**

<u>Program Spaces (Net Only)</u>	Area (s.f.)	Area (s.f.)	Area (s.f.)
	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Waiting/Reception	120	120	120
Business/Recep Office	100	100	100
Coordinator's Office	100	100	100
Providers Office	100	100	100
Exam Room			
x 1	80		
x 2		160	160
Behavioral Health Office/Therapy		100	100
x 1	100	100	
x 2			200
Group Counseling/Conf. Rm.	120	120	120
Pharmacy Area	50	50	50
Laboratory Area	110	110	110
General Storage	50	50	50
Toilet Room	60	60	60
Medical Record Storage	50	75	75
Total Area (s.f.):	1040	1245	1345

Note: General circulation space and area for walls, partitions, etc. are not included in the figures above

N. CIRCULATION, ENTRIES & COMMONS

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30 NMAC does not establish the minimum basic requirements for school building circulation, entries, and commons. Code requirements shall determine the minimum criteria for these items.

NOTE:

- Circulation and entry vestibules are generally included as *tare* space within the building. See discussion on *Efficiency Ratio and Tare* in PART III – POLICIES AND PROCEDURES.
- Commons areas are typically considered as part of circulation, and therefore *tare* space, with some exceptions. They are usually part of the net area when they are used more as regularly occupied space than for building traffic circulation.

Best Practices – Circulation, Entries, and Commons:

- Key points to consider when designing *hallways* and *entries* are as follows:
 - Exit way widths are prescribed in the code, and can be increased to allow for locker installations in secondary schools.
 - Exit ways should be carefully laid out to provide a simple, clear, supervised way out of all school facilities.
 - Openings to outdoor areas may include vestibules and airlocks.
 - If interior windows are provided between classrooms and corridors, install blinds to allow visual control capability.
- Key points to consider when designing *commons* are as follows:
 - The student commons can be a central location in the school where students can congregate for relaxation, conversation, committee meetings, study and snacks. Its purpose is to nurture social and personal as well as academic advancement and to provide for student-teacher interchange in an informal atmosphere. It is normally provided only in secondary facilities and may be a repetitive feature in schools designed for learning academies.
 - Although the student commons should be centrally located – perhaps in conjunction with a library, auditorium or dining area – it should be somewhat secluded.
 - Commons space in a learning academy school may be dispersed among the various “houses”.
 - It should always be available for use and furnished as a place for informal study and socializing.

Snacking facilities may be incorporated within or adjacent to the area.

O. BUILDING SUPPORT SPACES

Adequacy Requirements

New Mexico State Adequacy Standards Section 6.27.30.19 NMAC and Section 6.27.30.20 NMAC establish the following minimum basic requirements for general storage and maintenance or janitorial space:

6.27.30.19 GENERAL STORAGE (EXCLUDES LOCKERS, JANITORIAL, KITCHEN, GENERAL CLASSROOM, SPECIALTY CLASSROOMS, AND ADMINISTRATIVE STORAGE).

For storage, at least 1 net sf/student of the planned school program capacity may be distributed in or throughout any type of room or space, but may not count toward required room square footages. General storage must be securable and include textbook storage.

[6.27.30.19 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07]

6.27.30.20 MAINTENANCE OR JANITORIAL SPACE. Each school shall designate .5 net sf /student of the planned school program capacity for maintenance or janitorial space. Janitorial space shall include a janitorial sink.

[6.27.30.20 NMAC - N, 9/1/02; A, 8/31/05; A, 12/14/07]

<u>Adequacy Standards Area Summary</u>	<u>Minimum Area (Net Square Feet)</u>
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- | | |
|---|---------------------------|
| • Custodial rooms** | .5 net s.f/student total* |
| • Storage areas (does not include in-classroom storage) | 1 net s.f/student total* |
| General storage* | |
| Textbook storage* | |

**see the New Mexico Statewide Adequacy Standards: Section 6.27.30.19*

***see the New Mexico Statewide Adequacy Standards: Section 6.27.30.20*

Best Practices – Building Support Spaces:

- General storage is typically dispersed throughout the facility and receiving areas should be located where easily and safely accessed for deliveries without disrupting other normal school traffic.
- The number and locations of such areas are dependent upon the scale of the facility and the limitations of the systems or functions provided. For example, custodial space should be provided to allow for reasonable access to a mop sink and supplies in every major building area.
- **It is critical that custodial and grounds maintenance storage be sufficient in size, properly located, and separate from general storage and mechanical /electrical rooms. Safe storage of potentially hazardous cleaning materials, fuels, etc. is mandatory. Code compliance in rooms with mechanical and electrical equipment requires that general and custodial storage is not accommodated within these spaces.**
- Provide a roof top access hatch accessible by a fixed steel ladder placed within a lockable storage or custodial space.
- Provide secure filing space for building maintenance documents, training videos, handbooks, and manuals.
- General design considerations related to building maintenance are as follows:
 - Where there will be above-ceiling space for mechanical and electrical system components, design for convenient installation and maintenance of fixtures and equipment. Provide access panels in ceilings and include doorways for large chase spaces to facilitate maintenance and repair work.
 - Make sure there is proper lighting in all support spaces.
 - When planning rooms for specialized data and telephone electronics equipment, work closely with the appropriate specialists to determine room sizes, clearances and any critical ventilation requirements to handle the heat buildup from this equipment. Louvers in interior doors are not recommended. Use ducted transfer ventilation or undercut doors. Consider any other special requirements such as needed to prevent or reduce dust infiltration.

IX. APPENDICES

APPENDIX A: Maximum Building Gross Square Footage (GSF) per Student

Max. Building Gross Square Footage Per Student for Elementary Schools (Grades K - 5)		
Maximum Total Projected Enrollment	Gross Square Footage per Student (GSF/Student) To Adequacy	Total Facility GSF To Adequacy
25	150	3750
50	149	7441
100	146	14647
150	144	21616
200	142	28350
250	139	34849
300	137	41112
350	135	47139
400	132	52930
450	130	58486
500	128	63806
550	125	68750
600	123	73740
650	121	78353
700	118	82731
750	116	86872
800	113	90779
850	111	94449
900	109	97884
950	106	101084
1000	104	104047

Max. Building Gross Square Footage Per Student for Middle Schools (Grades 6, 7, 8)		
Maximum Total Projected Enrollment	Gross Square Footage per Student (GSF/Student) To Adequacy	Total Facility GSF To Adequacy
50	170	8500
100	167	16685
150	164	24554
200	161	32107
250	157	39345
300	154	46288
350	151	52875
400	148	59167
450	145	65144
500	142	70804
550	138	76150
600	135	81180
650	132	85894
700	130	91000
750	126	94377
800	123	98145
850	120	101598
900	116	104735
950	113	107557
1000	110	110063
above	1000	Use Maximum GSF/Student Calculator available at www.nmpsfa.org

Max. Building Gross Square Footage Per Student for High Schools (Grades 9 - 12)		
Maximum Total Projected Enrollment	Gross Square Footage per Student (GSF/Student) To Adequacy	Total Facility GSF To Adequacy
50	215	10750
100	211	21053
150	206	30909
200	202	40319
250	197	49281
300	193	57797
350	188	65865
400	184	73487
450	179	80662
500	175	87390
550	170	93500
600	166	99505
650	161	104892
700	157	109832
750	152	114326
800	148	118372
850	143	121972
900	139	125125
950	135	127830
1000	130	130089
above	1000	Use Maximum GSF/Student Calculator available at www.nmpsfa.org

By reducing the APG GSF per student, every project may be challenged with regards to space utilization efficiency. The revised APG are intended to functionally support all of a school's educational programs, yet to encourage multi-use spaces and other utilization maximizing strategies that will reduce facility size. It is however recommended that guideline maximums be allowed to be challenged first to the PSFA on a case-by-case and educational program-by-program basis. If agreement cannot be reached, districts may appeal any PSFA decisions to the PSCOC. Appeals to the PSCOC should be required to be in writing and no later than 20 days prior to the next PSCOC meeting

APPENDIX B: Natural Lighting in the Classroom

A recent study found that over half of the energy use in New Mexico public schools goes toward lighting the facilities.

The proper use of natural lighting in the classroom can help to reduce overall energy use. Recent studies have shown that daylighting in the classroom can also have a positive effect upon human psychology and performance. A number of studies have demonstrated a direct correlation between increased daylight exposure in the classroom and increased test scores on standardized tests for students at all grade levels. Properly designed daylighting systems can be both aesthetically pleasing and cost-effective to integrate into building design. Successful daylighting solutions in schools include translucent wall panels and clerestory light monitors with operable shading devices. Any solution needs to consider the problems of glare and the distribution of usable light.

Consider the potential of distracting views to the outside, any necessity for visual monitoring, safety, and security in selecting window types, sizes, and locations.

Properly selected blinds or shades are typically useful in controlling natural light and views to the outside and classroom interior. Avoid types that introduce visual patterns which are distracting to students. Consider the need for a certain level of room-darkening for audio/visual presentations. Black-out shades are not recommended except where absolutely necessary.

The National Clearinghouse for Educational Facilities posts a web page linking to a number of books, journal articles, related web sites and resource links dealing with natural light in the classroom environment, its effect upon human performance and the design of daylighting systems. This resource list can be viewed at: <http://www.edfacilities.org/rl/daylighting.cfm>.

APPENDIX C

Site Selection Criteria			
Site Name:	Site:		Date:
Area:			
Location	Yes	No	Comments
Is it within the attendance area?			
Is adjacent land use compatible?			
Is it centrally located to avoid extensive transporting and to minimize student travel distance?			
Is it compatible with current and probable future zoning regulations?			
Is it close to libraries, parks, museums and other community services?			
Is there available fire and police protection, including fire lines?			
Is there favorable orientation to wind and natural light?			
Is the site close to other schools?			
Are there known or potential significant environmental concerns impacting site habitat (e.g., fish-bearing streams, unique flora or fauna)?			
Are there heritage/archaeological artifacts of known or potential historical/archaeological significance?			
Is there existing or proposed zoning/land use designation which prevents development as school site?			
Is there known or anticipated unsuitable development on adjacent properties?			
Is there convenient potential for joint-use opportunities?			
Is there existing trash and garbage disposal service conveniently available to the site?			
Is there proximity to available housing?			
Adjacencies			
Is it properlydistanced from roadways with high volumes of traffic?			
Is it farther than 1,500 feet away from railway tracks?			
Is it farther than two miles away from an airport runway?			
Is it free from the existing paths of high voltage lines?			
Is it free from the existing paths of high-pressure lines (gas*, sewer or water lines)? *Contact the PRC Pipeline			

Safety Division for more info			
Are there safe and convenient routes for students to walk and bicycle to school? (Use NM Safe Routes to School neighborhood assessment forms available at www.nmshtd.state.nm.us).			
Is the site free of contaminants/toxics in soil or ground water, such as from landfills, dumps, chemical plants, refineries, fuel tanks, nuclear power plants or agricultural use of pesticides or fertilizer, etc.?			
Is far from high-decibel noise sources?			
Is it far from open-pit mining?			
Is it far from a fault zone or active fault?			
Is it outside a dam inundation area or a 100-year flood plain?			
Is it relatively free of social hazards in the neighborhood, such as high incidence of crime and drug or alcohol abuse?			
Are air quality levels acceptable?			
Can school regulate access by unwanted visitors?			
Soils			
Is the site far from faults or fault traces?			
Is there stable subsurface and bearing capacity?			
Is it free of the danger of slides or liquefaction?			
Is there adequate percolation for septic system and drainage?			
Is there an adequate water table water level?			
Is existing land fill reasonably well compacted? Note: A geological hazard report must be conducted to determine soil and seismic conditions			
Is the site free from hazardous materials?			
Accessibility			
Is public transportation available?			
Are there safe, convenient routes for all users (students, staff, parents and visitors) to walk and bicycle to the site? (Use NM Safe Routes to School neighborhood assessment forms available at www.nmshtd.state.nm.us).			
Does it have easy community access for shared use?			
Is adjacent traffic reasonable?			
Can buses get in and out easily?			
Can emergency vehicles get in and out easily?			

Is the site free from nearby off-site obstacles such as crossings on major streets and intersections, narrow or winding streets, or heavy traffic patterns?			
Is the site clear from natural obstacles such as grades or gullies?			
Is there reasonable freeway access for bus transportation without the site being adjacent to the freeway?			

Environment	Yes	No	Comments
Is the site free from sources of noise that may impede the instructional process?			
Is the site free from air, water and soil pollution?			
Is the site free from smoke, dust, odors and pesticide spray?			
Does the site provide aesthetic off-site and on-site views?			
Is the site environment compatible with the educational program?			
Are there places for outdoor education?			
Is there natural vegetation?			
Topography			
Can the site be drained properly?			
Can grading be performed easily and economically?			
Can vehicles easily negotiate the terrain?			
Are there flat areas for playing fields?			
Is the site free of rock ledges or outcroppings?			
Is it below the maximum site slope of 2-4% over minimum of 50% of site for ease of design and access?			
Size and Shape			
Is the net acreage consistent with intended use?			
Is the length-to-width ratio below 2:1?			
Is there sufficient open play area and open space?			
Is there potential for expansion for future needs?			
Is there area for adequate and separate bus loading and parking?			
Is there adequate space for bus loading and separate parent drop-off / pick-up areas?			
Does the site shape facilitate pedestrian and bicycle access?			

Utilities			
Is there availability of water, electricity, gas, and sewer?*			
Is there the feasibility of bringing utilities to site at a reasonable cost?			
Are there no restrictions on rights of way?			
*Contact State Fire Marshal for requirements for fire suppression water needs and site approval			
Availability			
Is the property on the market for sale?			
Are title clearance issues non-existent or resolved?			
Is condemnation of property unnecessary?			
Is it free of site easements or restrictions?			
Cost			
	Yes	No	Comments
Are anticipated costs for purchase of property, severance damages, relocation of residents and business, and legal fees reasonable?			
Are estimated costs for site preparation, including drainage, parking, driveways, removal of existing buildings and grading reasonable?			
Are the estimates for any long-time site maintenance costs reasonable?			
Is the site free of need for toxic cleanup beyond the owner's obligation?			
Is the site free of any extensive need for environmental mitigation?			
Does the site location minimize the need for long-distance transportation of students to and from the site and the associated costs?			
Public Acceptance			
Is there public acceptance public acceptance of the proposed site?			
Is the city or county planning commission receptive to the location of the site?			
Is the site free from prime agriculture or industrial use zoning designations?			
Is the site free of a negative environmental impact report?			
Is there coordination of the proposed school location with future community plans?			

APPENDIX D: ACCESSIBILITY AND UNIVERSAL DESIGN

The New Mexico Building Code has adopted accessibility codes for all public buildings. Compliance with the Americans with Disabilities Act (ADA) is a requirement for all public schools. Further, in 1997 the Individuals with Disabilities Education Act (IDEA) was amended to strengthen, to the maximum extent possible, the right of students with disabilities to be educated with non-disabled students (mainstreaming). Once relegated to special needs classrooms or specialized facilities, an increasing number of students with moderate, severe and even profound disabilities are now requiring full accessibility to public school facilities at all grade levels. Thus, issues of accessibility must become a fundamental component of public school facility design. The final decision on interpretation of accessibility requirements shall be according to the State of New Mexico Building Code.

The following issues should be considered in regard to accessibility in public schools:

Universal Design—Pursuing universal design principles results in easier access and increased safety for all users. The expansion of school-based programs means an increase of users ranging from pre-schoolers to senior citizens. The application of universal design principles can allow a wider range of users access to a facility.

Versatile Classroom Space—Classrooms that provide a variety of choices in the physical environment can be important in meeting the needs of students with a wide range of disabilities. The creation of alcoves and use of varying ceiling heights to define space separations within the classroom can aid students with emotional disabilities and those with attention disorders who require greater physical and/or acoustic separation between activities to reduce distractions. Modular furniture can also lend an element of versatility to the classroom. Data outlets should be dispersed throughout a classroom rather than clustered.

Minimal Travel Distances—It is important to minimize the distance any student travels from one destination to another, especially for students with disabilities. Gymnasiums, libraries, music and art classrooms and elevators should all be centrally located to reduce travel distances. In multi-story facilities, it may be necessary to provide more than one elevator to provide reasonable travel distances.

Integration of General and Specialty Classrooms—To the extent possible, specialized education spaces should not be isolated or clustered in a single area of the building, but dispersed throughout the school.

Outdoor Areas — Accessibility issues are not limited to the facility but should be extended to include the entire site. Far too often playgrounds and other outdoor areas are inaccessible to students with disabilities. New federal guidelines address what types and to what extent playground components must be made accessible. Though the Department of Justice has not yet adopted these, they should be used as a guide. (The outdoor play area guidelines and all other regulations of the ADAAG and UFAS are available at <http://www.access-board.gov>.)

Classroom Acoustics — The acoustical quality of learning spaces is becoming a critical matter in today's schools. Designers must pay specific attention to the effect of noise-producing factors and absorption of noise generated within the learning space and of noise isolation between spaces. A good source of information on this subject is the publication entitled "Classroom Acoustics" issued by the Acoustical Society of America, www.asa.aip.org.

In 2002, voluntary acoustic standards were adopted for classrooms serving students with hearing impairments, attention disorders, emotional disabilities and multiple disabilities. The background noise standard is set at a maximum of 35 dBA with a reverberation time standard in an unoccupied classroom of 0.5 seconds for classroom volume under 10,000 cubic feet, 0.6 seconds for volumes between 10,001 and 20,000, and reverberation times of 1.5 seconds for classrooms with volumes exceeding 20,001 cubic feet.

For classrooms serving mainstream students the background noise standard is set at a maximum of 45 dBA for new construction and renovation projects, with a reverberation time standard in an unoccupied classroom of 0.6 seconds for classroom volume under 10,000 cubic feet, 0.7 seconds for volumes between 10,001 and 20,000, and reverberation times of 1.5 seconds for classrooms with volumes exceeding 20,001 cubic feet.

Special attention shall be given to noise isolation of and between classrooms and noisy agencies as outlined in ANSI S12.60 - 2002.

Building Security — The general trend toward controlling access to keep unauthorized individuals from entering schools can also serve to keep students with disabilities, such as autism and emotional disabilities from leaving the school building. Such students are prone to leaving the school building unsupervised and risking harm to them. Access to areas such as storage rooms and mechanical areas with potentially dangerous equipment or supplies presents other security issues worthy of consideration.

Resources:

Association of Bicycle and Pedestrian Professionals, *Bicycle Parking Guidelines*, 2nd Edition, 2010, available at <http://www.apbp.org/?page=Publications>.

US Environmental Protection Agency, *School Siting Guidelines*, October 2011, available at www.epa.gov/schools/siting.

Hawkins, Harold, Ed.D., and H. Edward Lilley, Ph.D., in cooperation with the Council of Educational Facilities Planners International, *Guide for School Facility Appraisal*, 1998

ITE Technical Committee TENC-105-01: *School Site Planning, Design and Transportation*, September 2007.

Myers, Nancy, Ed.D., R.E.F.P, and Robertson, Sue, R.E.F.P., published by the Council of Educational Facilities Planners International, *Creating Connections: CEFPI Guide for Educational Facility Planning*, (2004).

National Center for Safe Routes to School, *Safe Routes to School Guide: Student Drop-off and Pick-up Strategies*, 2007, available at http://www.saferoutesinfo.org/guide/dropoff_pickup/index.cfm.

National Clearinghouse for Educational Facilities Resource Lists. View online at: <http://www.edfacilities.org/rl/>

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