



Task Force to Joint Committee on Educational Facilities

Arkansas School Facility Manual
Section Two: Standards & Guidelines

Minimum Requirements to be Employed to Assure Educational Adequacy and Substantial Equality in the Provision of Educational Facilities in the State of Arkansas

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Preamble “ - - - to ensure that adequate facilities and substantially equal facilities are, and will continue to be provided for Arkansas’ school children.”
Act 1181 of 2003

Background:

On November 21, 2002, the Arkansas Supreme Court affirmed in the Lake View School case (*Lake View School District No.25 of Phillips County, Arkansas et al, vs. Governor Mike Huckabee, et al.*) that educational facilities serving the public school system in Arkansas were inadequate, unequal, and in violation of the state constitutional guarantee of a free, adequate, efficient, and substantially equal public education for the children of Arkansas. The court has charged the Governor and the Arkansas General Assembly with the responsibility of correcting these defects in public policy. To meet these ends, the Arkansas General Assembly, in Regular Session of the 84th General Assembly of 2003, has established a joint legislative committee under Act 1181 of 2003, AN ACT TO CREATE THE JOINT COMMITTEE ON EDUCATUIONAL FACILITIES; AND FOR OTHER PURPOSES, to serve the General Assembly in exercising its responsibilities relative to the provision of adequate and substantially equal educational facilities for the State of Arkansas.

The 84th General Assembly determined the need to have an updated statewide educational facilities study. The General Assembly further recognized that, such a study performed an important responsibility toward satisfying the requirements imposed by the Supreme Court’s decision in Lake View, as the General Assembly is ultimately responsible for making a final determination of what constitutes an adequate facility and how to provide substantially equal educational facilities throughout the state. To this end, the General Assembly established the “Joint Committee on Educational Facilities” in April, 2003.

By law, the joint committee has the responsibility to deliver eight mandates relative to state-wide educational facilities in Act 1181 of 2003. Mandate–Two (2) requires that the General Assembly:

Recommend what constitutes an adequate school facility, including all necessary components for:

- a. Elementary education***
- b. Middle school education, and***
- c. High school education***

This mandate further requires the State to establish and maintain the substantial equality of educational facilities, equipment, and technology infrastructure as may be required to ensure equal opportunity for an adequate education for the children of Arkansas. To meet these ends, the Task Force to Joint Committee on Educational Facilities established the Educational Facilities Standards Committee chaired by Mr. Jack See, Jr., Vice President of Wittenberg, Deloney,& Davidson, a nationally recognized architectural firm located in Little Rock, Arkansas.

The Educational Facilities Standards Committee was charged with:

1. Determining the educational facilities standards requirements necessary to perform an educational facilities adequacy assessment.
2. Determining the construction standards necessary to evaluate the educational facilities structural and functional suitability.
3. Determining the technology infrastructure standards required to support the technology requirements necessary for adequacy in education.

The Educational Facilities Standards Committee:

The Standards Committee (See Appendix A) is comprised of seventeen (17) members who have been meeting continuously since February 2003. The committee is composed of a diverse group of volunteers who hold professional leadership positions representing government and private industry including:

- Architecture
- Professional Engineering
- Manufacturing
- State Agencies
- Information Technology
- School District Administration

The goal of the Standards Committee was to review all current educational facilities standards (See Appendix B) in the State of Arkansas, along with recognized national consensus standards, and relate them to the legislative mandate of providing a baseline educational facilities standard that will apply to all educational facilities in the State of Arkansas. Since many of the members of this committee have a national presence in the design, development and construction of educational facilities, both in their professional functions and in relevant trade associations, our state will benefit greatly from their combined experience in the generation and application of educational facilities standards.

The Work of the Standards Committee:

In May 2004, the Standards Committee hosted a full day Educational Framework Session in Little Rock (See Appendix C). A diverse group of approximately 130 Arkansans from all regions of the state met to discuss the facilities needs currently desired to meet the educational program and functional applications of school buildings at the local level. The participants of the framework session represented the interests of:

- Parents
- Students
- Teachers

- School Administrators
- Business
- Local and state government

The participants formed small groups that “brainstormed” and reported their findings to the assembled group regarding several key questions. A sample of key questions includes:

1. How do demographic trends impact educational facilities?
2. How do economic trends impact educational facilities?
3. How do trends in technology impact educational facilities?
4. How do the current trends in education impact educational facilities?
5. How do we make schools more flexible?
6. What do you think is the most appropriate size (number of students) for elementary school, middle school, and high school?
7. What should be the minimum / maximum size of a school facility?
8. What level of pre-kindergarten programs should be offered in Arkansas’ schools?
9. Should vocational education programs be located in every high school?
10. When should vocational education start?
11. How should room assignments for teachers be handled?
12. What criteria should be considered to define capacity?
13. How important are athletics and extra-curricular activities?
14. Should the school district provide facilities for use by students and the community for non-curricular activities?
15. Are temporary buildings appropriate for classroom use?

Based on the responses generated from the Educational Framework Session, a report was developed that helped to define a baseline for the development of educational facilities standards. The first phase of the standards evaluation was to perform a full code review of the current Arkansas building code. These codes were then studied in comparison with building codes from other states, e.g. North Carolina, Ohio, Texas, and others.

In June 2004, the Standards Committee broke into sub-committees that developed detailed standards on maintenance items, mechanical systems, and building structural systems. Other groups worked on educational adequacy and technology infrastructure requirements. A great deal of discussion was directed toward the impact of needed remodeling and significant renovations existing facilities.

In July 2004, the Standards Committee entered into the most intensive work period. The Standards Committee broke into two internal focus groups working on independent time schedules. One group was dedicated to building systems and the other to educational adequacy. Focus groups consisting of local school district superintendents added a great deal of information and perspective to the standards development process.

The Design Manual:

The end product of the studies of the Standards Committee is a comprehensive educational facilities design manual that is titled: **Arkansas School Facility**

Manual. This manual is a living document that records and maintains in five (5) volumes the following material:

- Section One: Policies & Procedures
- Section Two: Standards & Guidelines
- Section Three: Custodial & Maintenance
- Section Four: Furniture, Fixtures, and Equipment Procurement
- Section Five: Technology

The purpose of this white paper is to provide a briefing and a context for the application of Section Two: Standards & Guidelines portion of the Arkansas School Facility Manual.

The Arkansas Department of Education (ADE) is charged with overseeing the design and construction of school facilities. The Arkansas School Facility Manual has been developed to provide consistent, clear information for school districts and design professionals as a new generation of schools is being created for Arkansas. The standards and guidelines contained within this section are the culmination of standards, accepted procedures, statutory requirements, and the experience of experts and authorities across the United States and establish a uniform level of quality for all public school buildings. The Standards & Guidelines will apply to all new school construction and new additions to existing buildings. Renovation to existing facilities school adhere to the Standards & Guidelines whenever possible.

Since the Standards & Guidelines must communicate information about so many issues, the length and quantity of the document can be intimidating. However, understanding how the Standards & Guidelines is organized and which information is needed during the various phases of the process will enable each participant to be better prepared for the exciting opportunity of creating and developing school facilities.

An important consideration in developing a statewide program that must provide equity among districts is the balance between broadly applicable standards and program delivery. A fundamental tenet of educational facility planning is that school districts must be responsive to a school district's educational program. The Standards & Guidelines allows districts to develop building programs that respond to their current, unique needs as well as preparing for their educational future. There are also many different ways in which districts are delivering educational programs and helping students accomplish learning objectives at every school and grade level. By designing classrooms and other instructional spaces to be flexible and adaptable, individual districts are better prepared to accommodate future educational program requirements.

Throughout the planning, design, and construction phases of a project there are three factors that must be considered and held in balance: quality, cost, and time (schedule). The Standards & Guidelines was created to provide parameters to fairly balance these three essential elements for all projects throughout the state.

The Standards & Guidelines are intended as a starting point for architects, engineers, and other design professionals along with school districts to develop solutions to meet the needs of the individual school communities. The information is provided to allow the planning, design, and construction process to proceed most efficiently, without undo restriction on the design of facilities, focusing efforts on the creation of

the best possible school facilities for each project rather than “reinventing the wheel”.

Section Two: Standards & Guidelines:

The Standards & Guidelines is organized into eight (8) chapters that explain the planning, design, and construction process. It also suggests current educational best practices and facility planning concepts by recommending components for an educational framework; identifying the instructional space provisions for each school level; detailing the features and amenities of each space; providing guidelines for selecting building materials and systems; and providing technology infrastructure recommendations.

The contents of Section Two: Standards & Guidelines are:

Chapter 1: How to Use This Section contains introductory material that describes the organization of Section Two. The Executive Summary highlights the standards and guidelines; provides a glossary of general Facility Manual definitions and abbreviations; provides a general overview of the planning, design, and construction process intended to respond to the educational facilities needs of Arkansas’ schools.

Chapter 2: Educational Facility Planning Concepts contains planning concepts related to current educational best practices, special education, work force development, and program / design capacity. The facility planning concepts contained within this chapter are intended to be informative only and are not standards.

Chapter 3: Educational Framework contains a series of broad principles associated with organizational, facility, program, and service issues, including grade configuration, school size, and class size. In conjunction with Chapter 2: Educational Facility Planning Concepts, Chapter 3 provides assistance when developing an educational facility.

Chapter 4: Site Guidelines contains information about site size and site amenities. Guidelines are also outlined for a multitude of factors that must be considered, including: various types of circulation and site access, drainage, play fields and playgrounds, fencing, lighting, mechanical / electrical yard, landscaping, site furnishings, and exterior security provisions.

Chapter 5: Program Requirements [Bracketing] assists the school district in establishing the size and quantity of instructional and support spaces for the construction of a new facility or an addition to an existing facility. Instructional and support spaces are selected based on the District’s programs and their methods of delivery. The size of a school facility is based on total student population, grade configuration, and square foot per child. The Bracketing identifies an overall square feet for a facility and then identifies spaces that may be included for instructional and support spaces.

Chapter 6: Program Space Guidelines contains space plates for each type of space in the Programs of Requirements. Each space plate contains a graphic

representation and information related to features, loose furnishings, finishes, and related notes.

Chapter 7: Building Systems provides an overview of options of the various materials and systems that have been used to establish a design standard and level of quality for the systems and materials to be incorporated into new buildings.

Chapter 8: Cost Guidelines projects the cost for new construction based on a soft cost new construction model. Cost estimates were developed using RS Means, a highly recognized national estimating system, as well as a regional Arkansas index that was developed to address cost variations by region of the State.

Summary:

The Design Manual establishes standards, specifications, and recommendations to meet Arkansas' school facility needs for an extended period of time. The Design Manual places a priority on classroom facilities and less of an emphasis on extracurricular programs, such as athletics. The classrooms and other instructional spaces are anticipated to be flexible, expandable, and adaptable to curricula of the future.

The Design Manual establishes a level of quality for materials and systems based upon a 40-year life cycle cost. These levels of quality have been indicated in the Design Manual through building systems descriptions and specifications. It is anticipated that this manual will be amended regularly to recognize future improvements in materials and/or systems performance and efficiency.

The Design Manual establishes a formula to determine the budget for new facilities and additions to existing facilities. The formula takes into consideration the space requirements and the cost per square foot necessary for the grade levels to be housed in the facility, the variation across the state in construction and related costs, and the professional design and administration fees associated with a project.

The standards established in Section Two have been authorized for use by the Joint Committee solely for the purpose of establishing the cost basis (see APPENDIX D) of the statewide facilities assessment that was executed in the summer of 2004. The Joint Committee continues to have the ultimate responsibility under Act 1181 of 2003 to recommend statewide educational facilities standards, and/or a method or process, by which such standards will be recommended, developed, established, and adopted. This will be the work product of the 85th General Assembly of the State of Arkansas. The standards provided in Section Two by the Task Force may provide a starting point upon which the Joint Committee can base their further deliberations prior to the 85th General assembly.

In any case, it is the intention of the Design Manual to be a reliable resource to facilities planners and school district administrators to provide and maintain adequate and substantially equal educational facilities for the State of Arkansas. The Design Manual allows for and encourages flexibility in design while establishing a uniform baseline of design considerations that support educational adequacy and efficiency of facilities design. It is anticipated that consistent review of this document

will increase the performance and efficiency of school facilities and will support the requirements of the educational program in Arkansas well into the 21st century.

End

***Task Force to Joint Committee on Educational Facilities
December 2004***

APPENDIX A

THE EDUCATIONAL FACILITIES STANDARDS COMMITTEE ORGANIZATION

Jack See, Jr. – Chair
Thomas Kimbrell – Vice Chair
Scott Claiborne – Staff

Teri Borton
Sam Cumming
Steve Elliott
Jim Engstrom
Lloyd Franklin
Rick Geraci
Terry Granderson
Bob Higginbottom
Merle Lewis
Drew Mashburn
Janice Meyer
Johnny Thaxton
Andrew Tolbert
Keith Williams

Wittenberg, Deloney & Davidson
North Little Rock School District
Task Force Assessment Headquarters

Trane Arkansas
Pettit & Pettit Consulting Engineers
Lewis, Elliott & Studer, Inc.
H. James Engstrom & Associates, Inc.
Arkansas State Police
The Batson Firm
Arkansas Department of Health
Arkansas Department of Health
Lewis, Elliott & Studer, Inc.
Office of Information Technology
Cromwell Architects Engineers, Inc.
Russellville School District
Warren School District
Beebe School District

APPENDIX B

**MINIMUM SCHOOL HOUSE CONSTRUCTION STANDARDS
(Adopted by the Arkansas State Board of Education, August 1998)**

Educational Space	Minimum Standard Total Net Area in Square Feet			
	<u>K-4</u>	<u>5-8</u>	<u>9-12</u>	<u>K-12</u>
<u>Instructional Classrooms</u> (Includes all grade levels and disciplines in general education, all programs in workforce education and self-contained special education classrooms.)	900	850	800	
<u>Supplemental Instructional Classrooms</u> (Includes all compensatory education programs, special education resource rooms and gifted education resource rooms.)	450	425	400	
<u>Health Room</u>				
Nurse's Station				150
Clinic (Includes toilet and shower facility.)				400
<u>Guidance</u> (Includes area for private counseling.)				520
<u>Media Center</u> (Reading, Listening and Viewing Area)	3000	4000	5000	
<u>Laboratories/Studios</u>				
Agriculture			2800	
Art	1560	1750	1800	
Business Education			1200	
Family and Consumer Sciences (One-Teacher Department -600 square feet for each additional teacher)			2400	
Industrial Technology				
Work Area			1200	
Studio Area			220	
Medical Professions Education			1000	
Science				
Multi-purpose	850	900	1400	
Chemistry/Physics			1500	
Biology			1200	
<u>Music</u>				
Music Room (Vocal and Instrumental)	1050			
Vocal Music Room		1800	1800	
Band Rehearsal Room		2500	2500	

APPENDIX C

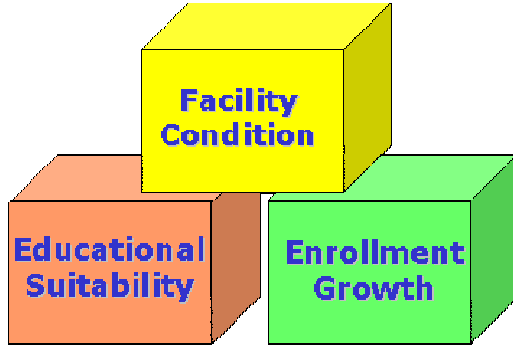
TASK FORCE TO JOINT COMMITTEE ON EDUCATIONAL FACILITIES HOSTS EDUCATIONAL FRAMEWORK SESSION

On Wednesday, May 12, 2004, the Educational Facilities Standards Committee of the Task Force to Joint Committee on Educational Facilities hosted a statewide community dialogue to provide the citizens of Arkansas an opportunity to contribute their ideas regarding Arkansas' public school facilities. Approximately 230 invitations were sent to all corners of the state to a broad group of elementary and secondary school educators, superintendents, parents, business officials, government representatives, and community members. The all day session was held at the Robinson Center in Little Rock.

The gathering marked the beginning of the statewide school facilities assessment. Attendees broke into small diverse groups that engaged in discussions providing valuable input toward the development of educational facility standards for the State of Arkansas. In addition, the attendees gained a better understanding of the assessment study ordered by the General Assembly resulting from the Lake View Court Case of 2002. "**The Report on the Educational Framework Session**" is available on < arkansasfacilities.com >.

APPENDIX D

Determination of Facility Adequacy & Condition Cost



The public educational facility needs in Arkansas are composed of three major variables:

Facility Condition is the state of repair of the building infrastructure. Facility condition takes into consideration all of the building systems from roofs and windows to electrical and mechanical systems.

Educational Suitability is based on having adequate space to support the educational program.

Enrollment Growth addresses the projected school enrollment for the next five and ten years.

The facility condition cost includes the cost of bringing all schools to current codes and standards. This is a process that will likely require ten or more years to accomplish.

Nearly all schools in Arkansas were constructed prior to current building codes and standards. Over half of the schools are 40 years or older. Since that time, there have been new codes and standards published for virtually every building system ranging from air quality and air conditioning to technology and fire and safety.

Although there is a cost associated with rectifying every building according to current codes and standards, this does not mean that all schools need massive and immediate repairs and renovations. Rather, this provides an understanding of the effort it would take to bring all facilities up to the same standard.

At the same time, the facility condition information does provide:

- comparative analysis of building conditions
- approximate cost to address the facility conditions of all buildings in the State of Arkansas
- understanding of which buildings are in the worse conditions that might be slated for more immediate focus

