

**TASK FORCE
TO JOINT COMMITTEE
ON EDUCATIONAL FACILITIES**



Phase I Plan

November 20, 2003

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Task Force to Joint Committee on Educational Facilities

Executive Summary

FY2003-2005

November 20, 2003

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 that educational facilities serving the public school system in Arkansas were both inadequate and unequal, and in violation of the state constitutional guarantee of a free, adequate, and equal public education for the children of Arkansas. The Court has charged the Governor, the Arkansas General Assembly, and the Arkansas Board of Education with the responsibility of correcting these defects in public policy. To meet these ends, the Arkansas General Assembly has established joint committees to serve the General Assembly in exercising its responsibilities.

Currently, the total statewide organization of public schools consists of 308 independent school districts operating approximately 5,700 buildings comprising approximately 80 million square feet of floor space. In order to establish the educational adequacy and substantial equality of the facilities across the State as required by the Court, an assessment of all educational facilities must be made. The physical assessment must be standardized, uniformly applied, and objectively evaluated and reported.

The Task Force to the Joint Committee on Educational Facilities has prepared this report as the important initial step to develop measurement standards and implement a statewide assessment plan to ensure that there are adequate and substantially equal facilities for all public elementary, middle, and high schools in Arkansas. The findings and recommendations presented herein are drawn from research, best practices, and a synthesis of information from the Task Force members comprised of representatives of Arkansas school districts, building and life safety codes enforcement specialists, representatives from several departments of State government, experienced professionals from the design and construction industries, and members of the Arkansas Legislature.

Formed in June 2003 the Task Force has met in a series of intense work sessions that culminated in formulating the proposals, recommendations, and interim costs presented herein.

General:

All findings of this Task Force are for the sole purpose of determining the adequacy, as further defined in the General Scope of Work for Facilities Adequacy Assessment (Attachment A), of all public school structures in light of their intended educational use. The determination of adequacy will be based on an assessment of the general condition of each facility and compliance with current building codes, current technology support systems requirements, and educational operating standards. The possibility of alternative or dual-purpose usage or occupancy will not be considered. The assessment of the educational adequacy of a facility will also be evaluated in the context of its equality in comparison to the required standards for educational facilities and to other educational facilities serving the same purpose.

All estimated costs for achieving and maintaining statewide facilities adequacy resulting from the assessment will be presented as general estimates, within a reasonable range, and may not necessarily reflect the actual cost of renovating or upgrading a specific facility at some future point in time. The core principle of the 'as is, where is' assessment is that it will be an objective evaluation of the facility's current condition for its intended use.

Scope of Work:

The scope of work of the Task Force to the Joint Committee on Educational Facilities and its consultants is described herein as a two-phase process that is intended to achieve the goals and mandates relating to educational facilities as set forth in Act 1181 of 2003. The work embodies the preparation of at least two reports, the first, hereinafter referred to as the "General Scope of Work" plan (Attachment A) is to be published in November 2003, as required by the Act; and the second, a more comprehensive plan, hereinafter referred to as the "Specific Scope of Work" plan, is to be published in late-October 2004 preceding the January 2005 opening of the 85th Arkansas General Assembly.

All educational structures will be assessed. The level of assessment and the prioritization of repair, renovation, and replacement of the structures will be determined by the best judgment of the Task Force. The structures will be assessed in the categories of instructional, auxiliary, administrative, extracurricular, and temporary buildings.

Educational facilities will be considered adequate by the Task Force when conditions, within reasonable exceptions, meet all current building safety, health, and accessibility standards; space requirements are based on current and/or proposed teacher/student ratios and curriculum standards; and current technology support systems requirements are met.

Phase I Plan – The General Scope of Work Plan:

The General Scope of Work plan has been developed and is in the initial stage of execution. See Attachment A for additional details.

STEP 1: Develop the General Scope of Work plan along with an estimate for all costs associated with the development of the plan for presentation to the Joint Committee on Educational Facilities on November 20, 2003.

STEP 2: Begin the development of the Specific Scope of Work plan by expanding and clarifying the General Scope of Work plan to include individual tasks, chronologically organized and scheduled, and incorporating a critical path method of organization. Establish a committee form of organization to carry out the work of defining the Specific Scope of Work plan.

Phase II – Specific Scope of Work Plan:

The Specific Scope of Work Plan has been initially developed and will be expanded and implemented once funding is approved. The Plan is summarized below. See Attachment A for additional details.

1. Furnish, equip, and staff a facilities adequacy assessment headquarters.
2. Determine the educational and facilities adequacy standards for performing assessment.
3. Develop building classifications, hereinafter referred to as “State of Condition” (SOC), to be used to delineate, within a reasonable range, the “adequacy” of all public school buildings.
4. Develop a critical path schedule of events for use in monitoring and controlling all tasks required for Phase II.
5. Determine the scope of Request for Proposals (RFP) and solicit proposals from nationwide firms experienced with public school facility assessment and monitoring.
6. Issue “Notice to Proceed” to successful firm or firms for the statewide assessment of all school facilities.
7. Prepare cost models for each category of “State of Condition” (SOC) and “Scope of Work” (SOW).
8. Prepare annual scheduled maintenance plan and cost models for determination of a proposed “Continued Assurance of Adequacy” budget.

9. Apply findings from data received in Phase II.4 to cost models determined in Phases II.5 and II.6 above and determine an overall cost including design professionals' fees for obtaining and maintaining facilities adequacy.
10. Determine the priorities and timeframes for correcting all deficiencies in public school buildings found by this Task Force.
11. Determine recommended accountability and monitoring procedures for achieving and maintaining facilities adequacy.
12. Submit findings and recommendations to the Joint Committee on Educational Facilities on or before October 31, 2004.

Cost of Assessment:

The estimated cost of the assessment of educational facilities is ten million dollars (\$10,000,000).

Absolute Requirements to Adequately Perform Assessment:

In order to adequately perform the facilities assessment, assure the intended results, and meet the deadlines set forth in Act 1181 of 2003, the following points must be provided with absolute assurance.

1. **Funding in the amount of \$10,000,000.**
2. **Complete cooperation of all school superintendents, administrators, teachers, and staff.**
3. **Unrestricted and uninterrupted access for the assessment team to all school facilities, building systems, and facilities documentation.**
4. **Assured safety and security for assessment team.**
5. **Exemption from disclosure of findings from assessment prior to submittal of final report to the Joint Committee on Educational Facilities in October of 2004.**

Technology:

Attachment B identifies technology components that would be included in a Statewide School Facilities Assessment. It concentrates the assessment on those technology components that are considered an integral part of the school facility and enable the instructional and school management applications to function effectively.

Custodial/Maintenance:

The Task Force is incorporating an interim recommendation for the continuing custodial/maintenance standards (Attachment C) that are to be adopted and practiced

by each Arkansas school district. These standards include national best practice models that shall be employed as each facility's interim custodial/maintenance program. An interim cost estimate is supplied to provide an initial focus on the budgetary impact of ongoing custodial/maintenance expenses for each facility. Note that any reduction or deferment in this recommendation of funding for custodial/maintenance programs during the year 2004 and until a final program for maintaining facilities adequacy is adopted and funded could substantially alter the findings and recommendations of the assessment. The Task Force recommends that the Joint Committee establish a minimum interim budget of nine percent (9%) of the State's total education budget (excluding custodial/maintenance budget) for maintaining the "State of Condition" of all school facilities.

Conclusion:

The Task Force recognizes that the definition of educational facilities adequacy is a dynamic issue that will change as research confirms how improvements to facilities can significantly advance the learning environment. The assessment as proposed will provide a baseline cost over a reasonable period of time for upgrading facilities to comply and maintain compliance with minimum standards - current building codes, current technology support system requirements, and educational operating standards. In addition, the final report may indicate recommended supplementary costs required to meet higher standards that promote healthier, sustainable, and more productive environments that are conducive to the physical and intellectual needs of Arkansas children. These additional standards that may be considered include but are not limited to the emerging acoustic standards of ANSI/ASA S12.60-2002, the LEED™ Green Building Rating System for New Construction and Existing Buildings as defined by the U.S. Green Building Council, and compliance with emerging Americans with Disabilities Act revisions. Lastly, the final report will propose the guidelines for meeting and maintaining all facilities standards as well as the accountability measures needed to ensure that all facilities standards are met and maintained.

The resources and conditions presented in this report are absolutely necessary to execute the assessment defined in this report through Phase I and Phase II and in advance of the commencement of the 85th General Assembly in January 2005.

**General Scope of Work
for
Facilities Adequacy Assessment**

Attachment A

**Task Force To Joint Committee on Educational Facilities
General Scope of Work for Facilities Adequacy Assessment
FY2003-2005**

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**

The proposed scope of work of the Task Force to the Joint Committee on Educational Facilities and its consultants is described herein as a two-phase process that is intended to achieve the goals and mandates relating to educational facilities as set forth in Act 1181 of 2003. It embodies the preparation of at least two reports, the first, hereinafter referred to as the “General Scope of Work” plan to be published in December as required by the Act; and the second, a more comprehensive one, hereinafter referred to as the “Specific Scope of Work” plan, to be published in late-October 2004 preceding the January 2005 opening of the 85th Arkansas General Assembly.

All findings of this Task Force are for the sole purpose of determining the general condition of facilities adequacy of all public school structures for their intended use only. No allowance for alternative or dual-purpose usage or occupancy is considered. All recommended costs for achieving and maintaining statewide facilities adequacy are to be considered as general estimates, within a reasonable range, and do not necessarily reflect the cost of achieving facilities adequacy for any specific building or school district. Care must be taken that all assessments are non-biased and truly reflect the current condition and adequacy of the structure for its intended use.

For the purpose of clearly defining the extent of all findings and recommendations of this Task Force, the following words and phrases shall be defined as indicated below.

Facilities – All structures will be assessed. The level of assessment and the prioritization of repair, renovation, or replacement of the structures will be determined in the best judgment of the Task Force. The structures to be assessed are grouped into the following categories:

- I. INSTRUCTIONAL
 - A. Classrooms
 - B. Laboratories
 - C. Media Centers
 - D. Fine Arts
 - E. Vocational
 - F. Counseling
 - G. Gymnasiums and Field Houses – used for physical education instruction
 - H. Auditoriums

- II. AUXILIARY
 - A. Cafeterias
 - B. Health Services
 - C. Food Services
 - D. Maintenance/Custodial
 - E. Transportation

- III. ADMINISTRATIVE
 - A. School Building Level
 - B. District-Wide Level

- IV. EXTRA CURRICULAR
 - A. Outdoor Athletic Facilities
 - B. Gymnasiums and Field Houses Utilized Exclusively for Athletics

- V. TEMPORARY BUILDINGS

Included in this definition are all components of the structure including but not limited to all soil preparation, roads and parking lots, landscaping and irrigation systems, fencing, playgrounds, foundations, structural systems, walls, windows and doors (including frames and hardware), insulation, roofs, waterproofing, attached cabinets, shelving and casework (including hardware), wall and floor finishes, attached interior and exterior signage, attached chalk and tack boards, attached projection screens, attached physical education equipment, kitchen equipment, attached theatrical equipment and systems, vertical transportation systems, and laboratory gas systems.

Also included in this definition are all support systems required to operate and protect the building and its occupants including but not limited to all plumbing systems (including supporting utilities serving the structure), all mechanical systems (including heating, air-conditioning and ventilation), all fire protection systems (including supporting utilities serving the structure), all electrical systems (including supporting utilities serving the structure), security systems, surveillance systems, fire alarm systems, clock and intercom systems, lightning protection systems and technology support systems (including electrical systems related to technology, Local Area Network, Wide Area Network, video systems, voice systems, and video conferencing).

Expressly excluded from the assessment are:

- I. Furniture and Equipment Not Attached to the Structure
- II. Technology Peripheral Equipment (computers, printers, monitors, servers, cameras, etc.)

Facilities Adequacy – Condition, within reasonable exception, where a facility meets all current building, safety, health, and accessibility standards; space requirements based on current and proposed teacher/student ratios and curriculum standards; and current technology accessibility requirements.

PHASE I: GENERAL SCOPE OF WORK

STEP 1: Develop a two-step “General Scope of Work” plan along with an estimate for all costs associated with the development of the plan for presentation to the Joint Committee on Educational Facilities on November 20, 2003.

- I. Prepare “General Scope of Work” plan.
- II. Determine costs associated with development of all plans.
 - A. Determine level and estimated cost of field assessment.
 1. Determine level of field assessment based on recommendations from assessment and Task Force professionals.
 - a. Determine general criteria for field assessment.
 2. Consult and/or interview potential assessment professionals for determination of estimated costs per square foot associated with the field inspection and documentation of findings resulting from the physical inspection of all structures (field assessment) at the level set forth above in Item II.A.1 for all existing facilities as defined above.
 3. Determine estimated total square footage of facilities as defined above.
 4. Determine total estimated cost for field assessment based on findings in Items II.A.2 and II.A.3 above.
 - B. Determine all other potential costs associated with the development of the plans in Phase II.
 1. Determine estimated costs for preparation, assembly, and reproduction of all reports and documents arising from the findings of this Task Force including but not limited to all labor, associated payroll and benefits costs, office space costs, office equipment costs, office supplies and postage costs, travel costs, etc.
 2. Determine estimated costs for field assessment monitoring including but not limited to all training costs, travel and security costs, and all other incidental costs of field assessment monitoring personnel or consultants.
 3. Determine estimated costs for developing facility classifications and cost models for obtaining and maintaining facilities adequacy including but not limited to document preparation costs as defined in Item II.B.1, cost consultant fees, design and engineering consultant fees.

4. Determine estimated costs for developing critical path schedule for monitoring and controlling all tasks required in Phase II including but not limited to document preparation costs as defined in Item II.B.1, cost consultant fees, design and engineering consultant fees.

C. Determine an interim preventive maintenance/custodial program to be followed by the school districts of the State of Arkansas and submit an estimated annual cost, including annual escalation factors, for the program.

III. Determine “Request for Authority” and “Limitations of Findings” warnings.

A. Determine authority requirements related to structure access timeframes and construction documents access for review.

B. Determine “Limitations of Findings” warning based on any reduction of funding as requested by the Task Force in Phase I.

IV. Submit Phase I Report to Joint Committee on Educational Facilities.

STEP 2 – Begin development of the “Specific Scope of Work” plan by expanding and clarifying the “General Scope of Work” plan to include individual tasks, chronologically organized and scheduled, incorporating a critical path method of organization.

I. Create committees with responsibility for all work included within the assigned steps listed in Phase II. All procedures, recommendations and findings of each committee shall be presented to the Executive Committee for approval. All procedures, recommendations and findings approved by the Executive Committee will be submitted to the Task Force for approval.

A. Educational Facilities Standards Committee

1. Determine educational standards requirements for assessment
2. Determine construction standards requirements for assessment
3. Determine technology standards requirements for assessment

B. Format & Values Committee

1. Determine format for assessment
2. Determine classifications of “State of Condition”
3. Determine values for classifications
 - a. Determine values for specific scopes of work
 - b. Determine values for structure replacement
 - c. Determine escalation factors

C. Assessment and Monitoring Operations Committee

1. Determine timeframe for performing assessment and monitoring operations

2. Determine best method of packaging assessment and monitoring projects that allows for sufficient availability of qualified assessment and monitoring contractors
 3. Solicit and interview or bid and select assessment and monitoring contractors
 4. Issue contracts for the assessment and monitoring
 5. Administer assessment and monitoring contracts
- D. Custodial/Maintenance Committee
1. Determine maintenance procedures for maintaining current and upgraded conditions of existing facilities
 2. Determine formulas and/or values for maintaining facilities adequacy on an annual basis
- E. Technology Support Committee
1. Determine support standards for supporting technical infrastructure
 2. Determine formulas and/or values for maintaining technology support adequacy on an annual basis.
- F. Data Accumulation and Preparation Committee
1. Determine format for presenting data and recommendations to Joint Committee on Educational Facilities
 2. Accumulate and perform all data processing
- F. Executive Committee
1. Obtain all facilities, equipment, and staff required to perform all tasks required by committees
 2. Create and monitor overall CPM Project Schedule
 3. Administer overall operations of the Task Force
 - a. Task force budget and expenditures
 - b. Task force headquarters operations
 4. Represent Task Force at all meetings with Joint Committee on Educational Facilities members
 5. Represent Task Force at all public and/or media meetings

PHASE II: SPECIFIC SCOPE OF WORK

STEP 1: Furnish, equip, and staff a facilities adequacy assessment headquarters. This will be administered by the Executive Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 2: Determine educational and facilities adequacy standards for performing assessment based solely on building construction standards as defined in all current building, safety and health and accessibility codes, within reasonable exception, as adopted by the State of Arkansas and current and proposed educational standards as defined by the Arkansas Department of Education. No allowance for “facilities adequacy” requirements related to potential new curriculum or technology standards

arising from determinations on “educational adequacy” would be considered in this assessment of existing facilities unless criteria is determined and released to the Task Force prior to the start of Phase II. All work will be administered by the Educational Facilities Standards Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 3: Develop building classifications, hereinafter referred to as “State of Condition” (SOC), to be used to delineate, within a reasonable range, the “adequacy” of all public school facilities. Develop values for classifications and individual scopes of work and determine a format for performing and documenting assessment. All work will be administered by the Format and Values Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 4: Develop a critical path schedule of events for use in monitoring and controlling all tasks required for Phase II. This will be administered by the Executive Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 5: Determine scope of proposal and solicit and accept proposals from nationwide firms experienced with public school facility assessment and monitoring issued and administered by the Assessment and Monitoring Operations Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 6: Issue “Notice to Proceed” to successful firm or firms for the statewide assessment of all school facilities administered by the Assessment and Monitoring Operations Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 7: Prepare cost models for each category (SOC) and (SOW) determined in STEPS 2 & 3 and administered by the Format and Values Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 8: Prepare annual scheduled maintenance plan and cost models for determination of a proposed “Continued Assurance of Adequacy” budget. All work will be administered by the Custodial/Maintenance Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 9: Apply findings from data received in Phase II.4 to cost models determined in Phases II.5 and II.6 above and determine an overall cost including professional fees for obtaining and maintaining facilities adequacy for all public school facilities in the State of Arkansas. All work will be administered by the Data Accumulation and Preparation Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 10: Determine priorities and timeframes for correcting all deficiencies found by this Task Force. All work will be administered by the Executive Committee of the Task Force to Joint Committee on Educational Facilities.

STEP 11: Determine recommended accountability and monitoring procedures for achieving and maintaining facilities adequacy.

STEP 12: Submit findings and recommendations to the Joint Committee on Educational Facilities on or before October 31, 2004.

**Technology in Education
Task Force
Recommendations**

Attachment B

Task Force to Joint Committee on Educational Facilities Technology in Education Task Force Recommendations FY2003-2005

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

The purpose of this report is to identify technology components that should be included in a Statewide School Facilities Assessment.

The Technology in Education Task Force is concentrating the assessment on those technology components that are considered an integral part of the school facility and enable the instructional and school management applications to function effectively. All of our recommendations are based upon the above concept. Thus, the assessment would not include computers, printers, monitors, servers, cameras, VCR/DVD players, or any other technology peripherals. (Local school districts should have this constantly changing information readily available through their own inventories.)

This Task Force recommends the following seven technology categories be included in the facilities assessment. Once the Joint Committee on Educational Facilities approves the scope of work for the facilities adequacy assessment, each of these category descriptions will be expanded to include a detailed, acceptable standard upon which each category will be assessed.

Technology Categories to Include in the Statewide Facilities Assessment

- I. Assess electrical power system based on National Electric Code (NEC) and ensure the facility has the electrical capacity to support the technology program. Electric power upgrades are often overlooked when computer and network cabling is implemented.
 - A. Determine the electrical capacity of the facility; information will be obtained from district maintenance staff and/or the local electric utility company. By comparing the campus peak usage with the capacity of the building service, it should be apparent whether the building is below, at, or over the code-allowed capacity.
 - B. Determine type of building electrical service grounding.

- C. Determine type of grounding for panels/circuits serving technology equipment.
 - D. Inventory existing electrical power filtering and/or conditioning devices.
- II. Assess the Local Area Network (LAN) Communication Infrastructure which serves as a core component of the school building, much like the plumbing and electrical power. The following LAN components will be evaluated based on accepted industry standards.
- A. Determine that there is a network interface connection in ALL instructional, auxiliary, administrative and indoor extracurricular locations within the structures.
 - B. Determine that there is a network connection between each campus building.
 - C. Determine the type of transport media delivering data service (wireless, Coax cable, Category 5x, 6x twisted pair, etc.).
 - E. Determine that the telecommunication devices (switches, hubs, servers) are properly installed, secured, and have adequate climate control.
 - F. Determine that the LAN is reasonably designed and installed in conformance with international network standards (i.e. IEEE standards).
- III. Assess the Wide Area Network (WAN) Bandwidth Capacity (this information can be obtained without much effort from the Department of Information Systems).
- A. Determine the campus bandwidth capacity.
 - 1. The range of ratings for bandwidth capacity: 33.6 KBPS or under; 56 KBPS; 128 KBPS; 256 KBPS; 384 KBPS; 512 KBPS; 768 KBPS (.5 T1); 1.544 MBPS (T1); Ethernet; DS1 or higher.
- IV. Assess the Video System
- A. Determine if there is an operational satellite system. If so, determine the type (C-Band, KU-Band, Digital Broadcast Satellite (DBS) [Direct TV or DISH/EchoStar] analog, or digital).
 - B. Determine if there is a video system that can distribute video to multiple areas. If so, determine the percentage of instructional areas that have this service available.

- V. Assess the Campus Voice System:
 - A. Determine the type of campus telephone service.
 - 1. Voice-over Internet Protocol (IP)
 - 2. Plain Old Telephone Service (POTS)
 - 3. Centrex
 - 4. PBX
 - 5. Wireless
 - B. Determine if there is an intercom system that provides two-way communications.
- VI. Assess the Compressed Video Conferencing Capability
 - A. Determine the standard(s) used for video conferencing on campus (H.320, H.323).
 - B. Determine the suitability of the location used for the distance learning application.
- VII. Assess the On-Site Technical Support: This is essential for the daily maintenance and support of a district's technical infrastructure. Technical support means those preventive, diagnostic, updating, replacement, and repair procedures that the school has in place. Technical support can be provided either by persons who are part of the school district or through an outsourced contract.
 - A. Determine the number of full-time technical support positions.
 - 1. Number of full time plus the number and annual staff/years of part-time positions assigned to support the campus technology program.

**Custodial/Maintenance
Committee
Recommendations**

Attachment C

Task Force to Joint Committee on Educational Facilities Custodial/Maintenance Committee Recommendations FY2003-2005

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

The following recommendations are made to ensure that the school facilities in Arkansas are properly maintained.

The recommendations contain the best practices in custodial, maintenance, and preventive maintenance care. The adoption of the recommendations as standards for each school district in the State of Arkansas is necessary to eliminate the deterioration of existing and future buildings, provide a safe and healthy environment for the students, teachers, administrators, and staff members of the public schools, and to provide the efficient use of State and local funds in each of the school districts.

It must be noted that the recommendations cannot become standards for school districts without additional funding. One of the reasons the level of custodial/maintenance care for the State’s school buildings has reached, generally, an unacceptable level is because the funds for unfunded mandates in other aspects of the total education program have been taken from custodial/maintenance budgets in many if not all of the State’s school districts.

Custodial/maintenance program costs are based on the number of square feet reported (approximately 80,000,000) to the Arkansas Department of Education.

The 32nd Annual Maintenance and Operations Survey (2002) conducted by American School and University Magazine was used as a basis for development of cost per square foot based on a national mean cost. Due to the economic downturn of the last several years, the current custodial/maintenance expenditure of 7.43% (2002) is the lowest percentage expenditure over the last 10 years with the 1997 expenditure of 9.59% being the highest. The reductions of the last several years indicate that custodial/maintenance expenditures are being deferred because of revenue shortfalls. It is the recommendation of this committee that 9% be used as the recommended expenditure for custodial/maintenance operations.

Based on the above survey, if the 2002-03 mean cost for custodial/maintenance operations in the State of Arkansas was \$3.05 per square foot (7.43% of budget) with that number rising to \$3.69 per square foot if the budget were funded at 9%, the expenditures would have been as follows:

$$\begin{aligned} \$3.05 \times 80,000,000 \text{ sq. ft.} &= \$ 244,000,000 \\ \$3.69 \times 80,000,000 \text{ sq. ft.} &= \$ 295,200,000 \end{aligned}$$

The above costs exclude all utilities, renovations, insurance, and capital improvements.

The actual expenditure for custodial/maintenance operations in the State of Arkansas (excluding utilities, renovations, insurance, and capital improvements) for 2002-03 was \$186,580,696.

Funding must be provided at the above-described levels or the custodial/ maintenance plan described in this document cannot be implemented as designed.

The recommendations submitted are:

I. Custodial Care

- A. All school districts shall develop and implement a custodial care plan for all facilities owned by that district. This plan shall incorporate a schedule of routine care and renovation cleaning.
- B. All school districts shall maintain adequate staff or contract services to perform the mandated custodial care plan. Staff members or contract services personnel shall be properly trained. This training shall include chemical right-to-know, indoor air quality, blood-borne pathogens, AHERA two-hour asbestos, low pressure boiler operator, safety codes and procedures, crisis management, district employment policies, and procedures for routine care, renovation cleaning, supply procurement, minor maintenance, and equipment use and care.
- C. All school districts shall provide custodial staff members (or require contract services to provide) adequate supplies and equipment to perform the mandated custodial care plan. Also, adequate space must be provided for the proper storage of these supplies and equipment. Appropriate training must be provided for the use and storage of all supplies and equipment, with emphasis given to chemical right-to-know, indoor air quality, and other applicable standards.
- D. All school districts shall provide the opportunity for custodial employees to attend continuing in-service training provided and held regionally by the authority of the Arkansas Department of Education School Plant Services.
- E. Routine duties shall include but not be limited to unlocking the facilities, inspecting the facilities for vandalism, proper HVAC operations, safety violations, proper display of the American flag, assisting students, staff and patrons as needed, and securing and locking the building at the end of the day.

- F. Routine Grounds. Establish a schedule that includes the daily policing of the grounds to remove litter and other debris. A plan for mowing, landscape care, and sweeping of sidewalks, driveways, and parking lots shall also be established.
- G. Routine Restroom Care. Establish a schedule that ensures restrooms are kept clean and sanitary and includes high dusting; emptying waste containers; sweeping the floor; removing graffiti; cleaning walls, doors, partitions and mirrors; cleaning soap, towel, toilet tissue, and sanitary product dispensers; cleaning urinals, toilets, and trash receptacles; and replenishing soap, towel, toilet tissue, and sanitary product dispensers. All surfaces in the restroom must be cleaned with an antibacterial disinfectant solution prepared according to the manufacturer's instructions. A small amount of disinfectant solution shall be poured into floor drains daily. Restrooms must be inspected often when the facility is occupied and re-cleaned as necessary.
- H. Routine Classroom Care. The importance of clean and attractive classrooms cannot be overstated. Establish a schedule that includes high dusting; cleaning of chalk or marker boards (do not erase any information); emptying pencil sharpeners and wastebaskets; cleaning desks and chairs; cleaning lavatories, counter tops and drinking fountains; daily dust mopping or vacuuming floor; spot mopping daily; and wet mopping or auto-scrubbing and buffing at least once per week. Surfaces shall be disinfected, especially during the cold and flu season. After the room is cleaned, the furnishings shall be arranged in an orderly manner, window shades and blinds adjusted to a uniform position, lights turned "off", and doors properly secured.
- I. Routine Office Care. Establish a cleaning schedule for the daily cleaning of all office areas to include high dusting; low dusting; cleaning of chalk or marker boards (do not erase any information); emptying pencil sharpeners and wastebaskets; cleaning furniture; daily dust mopping or vacuuming floor; spot mopping daily; and wet mopping and buffing weekly. Special care shall be given to ensure that papers and files left on desktops are not disturbed. After an office is cleaned the furnishings shall be arranged in an orderly manner, window shades and blinds adjusted to a uniform position, lights turned "off", and doors locked.
- J. Routine Entrance and Corridor Care. The entrance and corridors are usually the first areas of a facility to be seen by occupants and visitors. A schedule for keeping these areas clean shall include daily sweeping or blowing the sidewalks leading to the entrance; cleaning the entrance glass; maintaining an entrance mat program; high dusting of the corridors; dust mopping or vacuuming the corridor floors (may be required several times a day depending on class changes, recesses, weather conditions, etc.); cleaning of

interior glass and display cases; cleaning drinking fountains; and wet mopping or auto-scrubbing and buffing at least twice per week.

- K. Routine Cafeteria Care. Foods are served and consumed in this area of the facility and a schedule to provide for its cleanliness shall include clearing and cleaning tables, chairs, and other furnishings; sweeping and spot mopping as needed; and removal of trash after each serving of food. Following the final serving of food the schedule shall include high dusting; clearing and cleaning tables, chairs and other equipment and furnishings; placing movable equipment into proper storage area(s); emptying and washing trash containers; and the appropriate method of cleaning (sweeping, damp mopping, or auto-scrubbing using a pH neutral disinfectant-detergent and buffing).
- L. Routine Care of Special-Use Areas. Some facilities have gymnasiums, auditoriums, stadiums, and other special-use areas. Cleaning of these areas shall include high dusting; proper wood or synthetic floor care; cleaning and disinfecting restrooms, shower rooms and locker rooms; cleaning bleachers and other seating; vacuuming carpeted areas; and event preparation.
- M. Routine Care of Mechanical Rooms, Storage Rooms, and Closets. These areas of a facility tend to be overlooked when it comes to cleaning and since many contain electrical, water, and gas shut-offs, HVAC and water heating equipment, and other devices that may need to be accessed in an emergency, all mechanical rooms, storage rooms, and closets shall be kept clean and well arranged by dusting; sweeping the floor; proper storage of flammables, rags, dust mops, equipment and other chemicals; and organizing items in a safe and orderly manner. Mechanical rooms shall not be utilized for chemical, cleaner, or flammables storage.
- N. Routine Minor Maintenance. Minor maintenance tasks are to be performed by the custodial staff and shall include changing light bulbs, fluorescent tubes, and air filters; repairing and/or replacing pencil sharpeners; tightening hinge screws; lubricating hinges; holding an Arkansas Low Pressure Boiler Operator's license and operating boilers for heating and domestic hot water systems; making emergency repairs of windows and doors; painting small areas; recognizing unusual smells, sounds and signs that indicate problems with plumbing, electrical, and HVAC systems; following proper shut-off procedures when problems do exist; and reporting needed major maintenance through an established work order program.
- O. Routine Custodial Equipment Care. Some of the equipment needed for an acceptable custodial care plan (hand tools, ladders, brooms, mops, mop buckets, wringers, floor scrubbers, auto-scrubbers, high-speed burnishers, and vacuums) reflect a substantial investment of funds and require routine care. A program to ensure this care is provided will include determining the

equipment necessary to perform individual tasks; training on proper use, care, and minor maintenance of each piece of equipment; and providing adequate storage for the equipment.

- P. Restroom Renovation Cleaning. A restroom will be sanitary with continued routine cleaning but to keep it looking attractive, a program of renovation cleaning must be established. This program shall include high dusting; cleaning exhaust fan and heater vents; cleaning light fixtures; removing all unattached furnishings; sweeping the floor; cleaning the fixtures with a product that will remove stains and deposits but will not tarnish or corrode the flush valves and faucets; washing the walls, doors, baseboards, counters, and partitions with a disinfectant cleaner; cleaning the mirrors; and scrubbing the floor with a product recommended for the type of flooring.
- Q. Classroom Renovation Cleaning. Routine cleaning of a classroom will keep it functional, but approximately once a year renovation cleaning will need to take place and include washing all unattached furnishings and removing them from the room; high dusting; cleaning light fixtures; cleaning chalk or marker boards according to manufacturer's recommendations; cleaning HVAC grills and ceiling fans; washing the walls, doors, baseboards, and remaining surfaces with a general detergent; washing windows inside and outside; cleaning blinds and shades; scrubbing and recoating or stripping and refinishing resilient floors; and removing spots and cleaning carpeted floors according to the manufacturer's directions.
- R. Office Renovation Cleaning (refer to Classroom Renovation Cleaning). Special care shall be given to use the proper cleaning procedures for office furnishings and equipment.
- S. Entrance and Corridor Renovation Cleaning (refer to Classroom Renovation Cleaning). Care shall be given to drinking fountains and mats.
- T. Cafeteria Renovation Cleaning (refer to Classroom Renovation Cleaning). Special emphasis shall be placed on ensuring furnishings are free of all food residues.
- U. Special-Use Areas Renovation Cleaning. When it is time for renovation cleaning, special-use areas pose a unique problem with high ceilings and wood, synthetic, or carpeted flooring. Renovation cleaning shall include high dusting; cleaning light fixtures; cleaning chalk and marker boards according to manufacturer's recommendations; cleaning HVAC grills, ceiling fans, and floor fans; washing windows inside and outside; cleaning shower room walls and floors in a way that leaves them soap and germ free; cleaning bleachers and other seating; and refinishing floors using the proper techniques established by the manufacturer.

- V. Mechanical Rooms, Storage Rooms and Closets Renovation Cleaning. Renovation cleaning of mechanical rooms, storage rooms, and closets shall include removing all unattached items; high dusting; cleaning light fixtures and vent grills; washing walls and doors (being sure to protect electrical and electronic equipment from becoming wet); cleaning attached equipment; scrubbing the floor; and applying an appropriate floor finish, if required.
- W. Custodial Equipment Renovation Cleaning. To keep equipment looking and operating as if new for as long as possible, renovation cleaning will be required and will include thoroughly cleaning the exterior; cleaning interior compartments; cleaning or replacing filters; applying a protective coat of polish or oil to the exterior of the equipment; lubricating bearings, pivots, and hinges; and proper storage.
- X. For the protection of all building occupants, special care shall be taken to properly ventilate spaces during and after cleaning chemical use.

II. Maintenance Care

- A. All school districts shall develop and implement a scheduled preventive maintenance plan for all facilities owned by that district. Information defining the type of preventive maintenance work being performed and the dates on which it was completed shall be documented and kept on file.
- B. All school districts shall develop and implement a work request system to allow others to inform the maintenance department of needs and allow the responsible person to prioritize responses.
- C. All school districts shall maintain adequate staff or contract services to perform the mandated preventive maintenance plan listed below.
- D. All school districts shall provide a minimum of eight hours of training for new maintenance employees including but not limited to department policies, safety procedures, and training on specialized equipment.
- E. All school districts shall provide the opportunity for selected maintenance employees to attend continuing in-service training to be provided and held regionally by the authority of the Arkansas Department of Education School Plant Services.
- F. All school districts will comply with Federal, State, and local municipal laws and regulations including but not limited to the following items:
 - 1. Fire department inspections of facilities
 - 2. Fire extinguisher and kitchen hood suppression system inspections
 - 3. Gas piping pressuring test and equipment inspections

4. Boiler inspections – boilers, water heaters, expansion tanks, storage tanks, safety relief valves, and kitchen equipment
 5. HVAC equipment, ventilation and exhaust systems, and indoor air quality
 6. Electrical circuits and equipment, lockout/tagout program
 7. Plumbing, back flow prevention devices
 8. Arkansas Department of Health inspections
 9. Arkansas Department of Environmental Quality
 10. ADA compliance
 11. Asbestos – AHERA – six-month surveillance, three-year re-inspection training for employees, annual notification, and contractor awareness.
 12. Elevator equipment inspections – three-year pressure test
 13. Department of Labor
 - a. Chemical right-to-know notification to local fire departments and emergency response agencies, training, MSDS sheets.
 - b. Forklift training and operator licenses
 14. Blood-borne pathogen training.
 15. Employee equipment general safety training.
- G. New construction or renovation of school facilities shall meet or exceed the minimum construction standards set by the Arkansas Department of Education and other required state agencies. It is recommended that maintenance personnel within the district be involved during the design of a new building or renovation in an effort to use their experience dealing with the day-to-day operation of the facilities and their problems. The cost and amount of custodial/maintenance services in a facility could be reduced significantly if more consideration was given when selecting the types of materials and equipment to be used. Quality, availability, and the expectant life cycle shall all be considered when selecting these items.

III. Preventive Maintenance Care

- A. Heating, ventilation, and air-conditioning systems shall be inspected, cleaned, and serviced by properly trained personnel. Filters shall be replaced or cleaned a minimum of three times per year. The type of filter product being used and the condition and location of the area being heated or cooled shall determine scheduled filter replacement. Filter placement shall assure filtration of all system air.
 1. Split and packaged units shall be inspected annually. Clean evaporator and condensing coils to remove dirt and possible mildew growth. Clean catch pans and condensate drains. Inspect and lubricate fan and blower motors where applicable. Inspect contactors, capacitors, and wiring. Inspect and clean gas burners and exhaust flues. Route condensate drains on rooftop units to roof drains or gutters in an effort

to reduce water from ponding around units. Inspect interior of air handlers for mold and mildew.

2. Cooling tower systems shall be serviced biannually (spring and fall). Inspect equipment visually and repair as needed. Clean tank systems to remove scale, dirt, and biological growth. Clean air intake screens and sump strainers. Inspect motors and bearings and lubricate where applicable. Inspect and adjust all drive belts and pulleys. Inspect and clean all spray nozzles. Inspect fan blades for debris and damage. Inspect and adjust operation of make-up water system. Water treatments shall be performed by trained personnel only. Chemicals shall be stored away from all student occupied areas.
 3. Chilled water systems shall have water, oil, and refrigeration levels checked daily. Inspect wiring, piping, valves, pumps, chiller, and piping insulation monthly. Inspect chiller case for rust and condenser tubes for scale monthly. Inspect belts and coupling alignment on reciprocating units monthly. Change compressor oil, test, and calibrate chiller controls annually by qualified personnel.
 4. Heating boiler systems are regulated by State and local laws and shall only be operated and maintained by licensed and trained personnel.
 5. Ventilation and exhaust systems shall be inspected annually. Lubricate motors and bearings where applicable. Inspect and adjust all drive belts and pulleys. Inspect fan blades for damage. Check unit during operation for vibration and noise.
- B. Electrical systems shall be inspected and repaired by trained personnel only. Main transformers, switchgear, and breaker panels shall be accessible and kept clear of materials and supplies at all times. Covers shall be in place. Panel rooms shall be locked to prevent unauthorized persons from having access to equipment. Surge and lightning protection devices shall be used for all electronic equipment. Flammable materials must be stored away from all equipment.
- C. Hot water boilers and heaters shall be inspected annually by trained personnel. Equipment fired by natural gas shall have burners and flues cleaned. Inspect storage tanks and piping for leakage. Inspect and lubricate circulating pumps and motors. Inspect couplings for wear. Special attention must be given to safety devices and controls. Flammable materials must be stored away from equipment.
- D. Fire alarms shall be tested on a monthly basis when performing fire drills within each facility and shall be inspected by a licensed contractor annually. Equipment such as pull stations and alarm bells or buzzers shall be checked

as well as strobe light indicators where applicable. Inspect and clean smoke and heat detectors within the building and duct work to prevent false alarms from occurring. Control panels shall be accessible and clear of materials and supplies but restricted to authorized personnel only.

- E. Fire sprinkler systems shall be inspected annually and serviced only by a licensed contractor.
- F. Fire extinguishers and kitchen hood vent suppression systems shall be inspected monthly by trained personnel and checked annually by a certified inspector. Extinguishers must have a current year inspection tag fastened to it and must be inspected and recharged or pressure tested, if needed, at least annually.
- G. Emergency lighting and exit light fixtures shall be inspected and tested each month while performing fire extinguisher inspections. Inspect wiring and batteries for corrosion and leakage.
- H. Elevators and wheel chair lifts shall be inspected and serviced by a licensed contractor. Equipment rooms and pits shall be kept clean at all times. A licensed contractor will perform hydraulic pressure test of equipment every three years.
- I. Plumbing within all facilities shall be inspected including but not limited to piping and insulation, toilets, urinals, sinks, strainers, floor drains, flush valves, and faucets. Licensed personnel must inspect back flow prevention devices annually.
- J. Roofing shall be inspected biannually (spring and fall). Penetrations including but not limited to flue stacks, chimneys, HVAC roof curbs and duct work, gas lines, electrical conduit, and roof drains shall be checked for watertight seal. Ponding water on flat roof areas shall be addressed to prevent future deterioration of roof surfaces and possible problems with indoor air quality. Check gutters and downspouts for debris and leaking joints. Check metal roofs for screws, fasteners, and panels that may have worked loose due to the expansion and contraction of the roof. Only sealant recommended by the manufacturer shall be used on metal surfaces. Repair roof leaks as soon as possible to prevent deterioration of the building and damage to the contents. If leaks occur, damaged materials such as drywall, ceiling tiles, insulation, and carpet shall be cleaned, repaired, and/or replaced to prevent the possibility of mold and other indoor air problems.
- K. Stairwell areas shall be inspected to verify that adequate lighting is being provided and that all hand railing is positioned correctly and is secure. Stair treads shall be level and secure and the surface condition shall be satisfactory for the type of location.

- L. Lighting within the facilities shall meet or exceed the recommendations of the minimum construction standards set by the Arkansas Department of Education. Adequate exterior lighting shall be provided for security of persons and property around buildings and in parking areas. Automatic control devices for exterior lighting shall be checked monthly.
- M. Doors and windows shall be inspected including but not limited to jambs, frames, hinges, thresholds, closing devices, panic devices, lock sets, latches, silencers, glazing, push plates, kick plates, pull handles, screens, and weather stripping. Doors, windows, and hardware shall be functional and in good repair.
- N. Floor coverings including but not limited to VCT, terrazzo, brick, ceramic and porcelain tile, linoleum, carpet, synthetic rubber, and wood shall be maintained as recommended by the product manufacturer. Transitions from surfaces shall be maintained level and smooth to prevent trips and falls.
- O. Masonry and concrete building exteriors shall be inspected biannually (spring and fall) for open expansion joints, cracking, spalling, and porosity. Cracked and open joints shall be repaired by using a urethane sealant. Mortar joints shall be repaired by tuck-pointing. Surfaces shall be washed at regular intervals to remove accumulated dirt, mildew, and stains from surface. It is recommended that a flood coat of an approved type of sealant be applied every three to five years to protect exterior surfaces from damage caused from moisture.
- P. Painting of facilities, interior and exterior, shall be performed by trained and experienced painters only. This ensures that the correct type of paint is used for the application and that all precautions to prevent health hazards to the students and staff have been taken. Proper ventilation is always required. Paints and solvents shall be stored away from all student areas and disposed of properly. Proper ventilation shall be utilized during painting operation.
- Q. Kitchen equipment shall be inspected biannually (summer and winter breaks).
 - 1. Inspect all electrical supply cords and connectors on equipment.
 - 2. Clean condenser and evaporator coils, catch pans, and condensate drains on cooler, freezers, and mailboxes.
 - 3. Inspect fan blades and lubricate motors where applicable.
 - 4. Clean and check gas burner operation on ranges, ovens, fryers, steamers, and brazing pans.
 - 5. De-scale steamers and inspect water supply and drain piping.
 - 6. Check lights, doors, latches, and seals on all equipment where applicable.

7. Check controls, safeties, motors, pumps, piping, conveyor, and sprayers on dishwashers.
 8. Check garbage disposal controls, safeties, and inspect blades for wear.
 9. Check lubricant level in gearboxes on mixers. Inspect seals for leakage. Inspect bowl lift mechanism, controls, and guard safeties where applicable.
 10. All other electrically operated equipment shall be inspected including but not limited to warmers, slicers, can openers, and hand mixers.
 11. Empty and sanitize ice machines. Replace filter on water supply line. Clean filter, coils, and fan blade. Check refrigerant level.
- R. A pest control program shall be maintained in all kitchens, food storage, and serving areas. This includes but is not limited to insects, spiders, and rodents. It is recommended that all areas within the building be maintained under a similar plan. Districts shall maintain all existing termite protection contracts along with any new contracts that may be a result of new termite infestation, new construction and/or renovation.
- S. Sidewalks, driveways, parking areas and paved play areas shall be inspected monthly. Surface areas shall be level, free of holes and depressions and provide smooth transitions to all areas to prevent trip and fall hazards. Clean and fill cracks and expansion joints in concrete with a urethane sealant to prevent moisture from entering. Inspect asphalt for cracking and alligatored areas. Recommended fillers and sealant shall be used to prevent moisture from entering surface. Asphalt sealant with a sand additive shall be applied to all surfaces approximately every three years to add oil and flexibility back to the material. This will help prevent moisture from entering, extend the life of the asphalt, and reduce costly repair and/or replacement.
- T. Parking lots, handicap parking spaces, driveways, fire and emergency vehicle zones, and bus and car loading/unloading areas shall be marked with lettering, symbols, and striping as needed to provide information identifying these areas as such. Marking shall be repainted as needed to maintain a good appearance and visibility.
- U. Playground equipment shall be inspected monthly for wear and damage. Repairs shall be made immediately or equipment must be disabled or removed from use until repairs can be made. Proper fall surfaces and zones shall be checked and corrected if found insufficient. Field areas must be maintained to provide a smooth and level playing area.
- V. Grounds maintenance is very crucial to the public perception of a school facility. Daily inspections and trash pick up with scheduled mowing is the first step in maintaining the appearance of the facility. Trees and large shrubbery shall not be planted close to the buildings. This not only poses a

security program but also may create damage to the foundations from the root systems as well as damage to roofs and gutters from limbs and foliage. Plants located too close to a building can also create mold and mildew problems on exterior wall surfaces. This could lead to indoor air quality problems within the building. Trees shall have branches pruned high enough to allow for mowing equipment to pass under them. Proper drainage shall be provided to prevent water from ponding and erosion from occurring around the buildings. Fencing and gates shall be maintained in good condition at all times to discourage unauthorized access and prevent injuries to the students.