

# **SECTION IV**

## **Planning Scenarios**

## **Development of Planning Scenarios for Big Sandy Independent School District**

### **Background**

In February, 2007, Ms. Tonya Knowlton, Big Sandy Independent School District (BSISD) Superintendent, called Dr. Arnold Oates, President, Texas School Planning, Inc. (TSPI) to discuss an evaluation of district facilities. She requested a proposal to evaluate school facilities, review district demographics, and prepare planning scenarios to assist in the development of a long range facility plan for the district. On February 9, 2007 TSPI submitted a proposal to conduct a Demographic and Facilities Study for the district. On March 5, 2007, Dr. Oates met with Ms. Knowlton to tour district facilities and discuss the challenges facing the district. At a regular Board of Trustees meeting at 6:30 p.m. Dr. Oates presented the TSPI proposal and discussed the scope of the work with the Board members and Ms. Knowlton. The proposal was approved by the Board of Trustees and TSPI approved the contract.

Dr. Oates met with Ms. Knowlton and campus principals on April 3, 2007 to discuss facility needs for individual campuses. Dr. Oates met Wayne Weiss, Director, Facilities and Maintenance on April 6<sup>th</sup> to evaluate the elementary, junior high and high school facilities. The BSISD administrative staff, principals and teachers were very helpful during the evaluation process and interviews. They provided all information requested and their thoughts about campus and district programs and facility needs. (A summary of each campus evaluation is presented in Section III of this report, and the completed evaluation forms are found in Appendix D.)

On April 16, 2007 Dr. Oates met with the DAT Team to work through a visioning process and to focus on the long term needs of the district related to programs and facilities. Later in the morning, at a meeting with Mayor Sonny Parsons, Councilwoman Linda Baggett, Councilman Jessie Allan, Skip McWilliams, Director, Public Works, Police Chief Tim Scott, and Lt. Kyle Benson. Ms. Knowlton, BSISD Superintendent advised the group that the Board had approved a contract with TSPI to conduct a Demographic and Facility Study of the district. Dr. Oates discussed the scope of the study and the need for local and Upshur County data concerning demographics, housing trends, transportation, public utilities, safety and security. An excellent spirit of cooperation was expressed by all in attendance. The need for more housing and

industrial/commercial development was emphasized. Chief Scott mentioned the need to improve the communication capabilities between the schools and police department during the time of a possible emergencies. He also called for more youth activities and the possibility of developing a youth center to keep the youth engaged in more meaningful activities with the goal of reducing youth crimes. At the regular scheduled Board of Trustees meeting on April 16, Dr. Oates updated Members on the status of the study and interviewed them about their vision for BISD and the challenges it faces, especially as related to facilities.

Dr. Oates met with Ms. Knowlton, Mr. Weiss, and Architect Michael Craig on April 26, 2007 to discuss the development of planning scenarios and long range facility needs for the district. (Dr. Oates was to follow-up with Mr. Craig as he developed the planning scenarios.) Later in the day Dr. Oates and Ms. Knowlton met with the Chief Appraiser of the Upshur County Appraisal District. In the afternoon Dr. Oates met with the DEIC to present a summary of the evaluations of BSISD educational facilities and to solicit information about the district's strengths, expectations, and challenges.

On the evening of April 26, Dr. Oates presented a status report to the district's facility committee before conducting a meeting with community patrons and Board of Trustees members to gain their perspectives regarding the issues presented to the DEIC. A brief review of the State Board of Education Facility Standards was presented with emphasis on the need for long range facility planning. The importance of developing planning assumptions (related to grade structure and organization, size of schools related to number students, educational adequacy and educational environment) and the cost of renovating versus replacement of current facilities were discussed. Information and views garnered from these meetings were beneficial to TSPI staff in developing planning scenarios for the district.

Recommendations in this report are based upon on-site appraisal of facilities; an analysis of data and related information (e.g., student enrollment data, site acreage, capacity of existing facilities, and dates of construction); and interviews with staff, Board of Trustees and community leaders. The interviews provided insight into the community's values and beliefs about education, areas of concern, and perceptions of the district's needs. Suggestions and recommendations from the groups mentioned above and other meetings (where thoughts, data

and information were collected) further aided in the development of the planning scenarios presented for consideration by the staff, Board of Trustees and the Board appointed Facility Advisory Committee (FAC).

**Development of Scenarios**

Information relating to the district’s beliefs, aspirations, expectations and critical issues are vital to the development of facility planning assumptions. Additionally, these kinds of data will assist the district staff and Board as they update the strategic plan and develop of a forward looking facilities master plan. TSPI recommends using a "holistic" planning model (Appendix C) that utilizes phases for the implementation of these important planning tasks. The results of the analysis of data, planning assumptions and other information collected are reflected in four planning scenarios or options presented in this section. The following table illustrates the optimum enrollment (an example of a planning assumption) used in developing the scenarios.

**Table 4 - 1. Optimum Enrollment by Grade Level for the Ten-Year Planning Period**

<b>Grade Level</b>	<b>Optimum Enrollment</b>
Elementary School- PreK-5	400-500
Junior High School- 6-8	200-300
High School- 9-12	200-300

In addition to optimum enrollment, planning requires consideration of each school’s capacity. Capacity calculations are considered by *design* and *operation*. Design capacity is for “maximum efficiency” with all classrooms in full use. Operational capacity is for “use efficiency” with less than the maximum number of students in each classroom.

**Table 4 - 2. Operational Capacity by Grade Level**

<b>Grade Level</b>	<b>Operational Capacity</b>
Elementary	85 - 90 percent maximum
Junior HS	80 - 85 percent maximum
High School	60 - 80 percent maximum

Texas School Planning recommends that the Board of Trustees, central administration staff, campus staff, and a community facilities committee study the scenarios and recommendations carefully before final adoption of a facilities master plan for BSISD. Following community and staff involvement in the review and planning process, some adjustments may be warranted that could include a combination of the options presented or creation of a new option. Texas School Planning strongly urges that the Board and administration take into consideration the following issues or requirements in their decision-making process:

- An instructional design that enhances student learning for “all students.”
- Appropriate use of existing facilities.
- Creation of barrier-free environments for handicapped persons per Americans with Disabilities Act -ADA (see Appendix B).
- Life-safety codes (e.g., fire alarms/safety equipment, emergency exits/lighting, health).
- EPA regulations related to the storage and use of hazardous materials.
- Universal Building Code and/or appropriate local building code(s).
- Initial and life-cycle costs for renovation versus the costs for new construction.
  
- Awareness of life-cycle and costs for replacement of equipment and furnishings (heating, ventilation/ air conditioning (HVAC), carpet, tile, roofs, etc.).
- Inclusion of inflation factor in final cost estimates for projects not planned for completion within five years of the bond issue. This cost is in addition to the architecture/engineering (A/E) fees, furniture and fixtures, and contingencies.
- Renovation and/or new construction that meet State Board of Education (SBOE) standards related to classroom size, core areas, and rules and regulations for new construction, remodeling/ renovations and finance (Appendix B).
- District's belief system and planning assumptions should be considered and established before final adoption of a facilities master plan as presented in the planning model in Appendix C.
- Development of a close working relationship with the city and county in the joint use of facilities (e.g. natatorium, gym, auditorium, health clinics, etc.) and land for parks and recreation.
- Development of working relationship with other school districts in the county and area and local Junior and/or Community Colleges to expand Career Technology and academic opportunities for students.

- Maintain or expand a dual enrollment program for students at local colleges and universities.
- Implementation or continuation of a community education program to expand use of school facilities and equipment by adults.

### **Planning Scenarios**

Four different planning scenarios are presented on the following pages. Each is followed by a cost estimate spread sheet which provides detailed information concerning the scenario. Please note that expenditures are approximate and based on current, average school construction costs. Architectural expertise at the time of construction planning will be needed to assess more accurately actual, timely costs.

## Planning Scenario 1

### Strategy for 2006-2017

Enrollment projection for grades K-12 is 975 students through 2017. This strategy provides instructional facilities to accommodate an enrollment averaging 75 students per grade level in grades K-12 and 50 students in Early Childhood/Pre-K programs using existing facilities and renovation and expansion of facilities as follows:

#### General Modernization Requirements

- Bring all campuses into compliance with the Life Safety Code (fire alarms/safety equipment, emergency exits/lighting, air quality, and health) and address traffic and parking issues as feasible.
- Bring all campuses into compliance with the Texas Accessibility Standards, Americans with Disabilities Act (ADA) and Environmental Protection Agency (EPA) requirements as feasible.
- Renovate existing facilities and repair or replace roof and mechanical, electrical, plumbing (MEP) systems including HVAC with consideration given to the life-cycle of each facility as feasible.

#### Individual Campus Changes

- Remodel, upgrade and expand **Big Sandy Elementary School** for programs and increased enrollment in grades Pre-K through 5 under general requirements above. Upgrade student safety (loading-unloading) and security system, drainage, and paving. Expand/remodel classrooms, gym, and library. Acquire 4 classrooms from current Jr. High classrooms. (500 students)
- Remodel, upgrade and expand **Big Sandy Junior High School** for grades 6-8 under general requirements above. Maintain current classrooms (less those provided to elementary) and acquire and/or share 6 classrooms from and with the high school. (225 students)
- Remodel, upgrade and expand **Big Sandy High School** for grades 9-12 under general requirements above and construct and/or expand by 7,000 sq. feet to include a new library and three (3) science classrooms. Convert the old library and Vocational Ag shop to classrooms for junior High and/or high school classes. Use commons area to expand seating for the cafeteria. Upgrade the master site plan for future growth and expanded programs for elementary, junior high and high school. (300 students)
- Remodel and upgrade buildings/spaces used for central administration and for transportation, and maintenance departments with site clean-up and paving.

Planning Scenario One Big Sandy ISD													
School Name/ Grades	Exist. SF/ New	Enrollment	Acreage	Code Compliance/ ADA, Security	Modification /Up-grade: labs,Ctrs, Café	Expand/ New:Ctrs, Café, Career/ Tech, Science	MEP/ HVAC Roofs/ site	Library / Tech.	Prof. Spaces/ Adm Support	Fine Arts, Music, Band, Choir, Auditorium	Gym, Dressing, P.E.; Athletics Stadium	Total	Capacity Current/ Proposed
<b>Elementary</b>													
Big Sandy Elementary Grades Pre-K-5 Constructed 1973,75,86,87,91 ,2003	46,664 SF 25,000 SF shared	398	52 AC w/26 AC Park share w/JHS/HS	\$ 100,000	\$ 250,000		\$ 150,000	\$ 50,000	\$ 50,000		\$ 35,000	\$ 635,000	400/500
<b>Jr. High</b>													
Big Sandy Jr. HS Grades 6-8 Constructed 1973,75,76,78,89 ,91,93,2003	117,342 SF Jr/Sr HS	181	52 AC w/26 AC Park share w/Elem/HS	\$ 50,000	\$ 250,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 100,000		\$ 700,000	300/300
<b>High School</b>													
Big Sandy H.S. Gr. 9-12 Constructed 1973,75,76,78,89 ,91,93,2003	117,342 SF Jr/Sr HS	204	52 AC w/26 AC Park share w/Elem/JHS	\$ 100,000	\$ 1,000,000	\$ 660,000	\$ 250,000	\$ 500,000	\$ 200,000	\$ 500,000		\$ 3,210,000	225/300
						4,000 sf new @ \$165/sf		3,000 sf new @ \$165/sf					
<b>Ed Support Facility</b>												\$ 200,000	
<b>Total</b>												\$ 4,745,000	
<b>A&amp;E Fees 8.0 %</b>												\$ 379,600	
<b>Furniture 4.0 %</b>												\$ 189,800	
<b>Contingency 3.0 %</b>												\$ 142,350	
<b>Grand Total</b>												\$ 5,456,750	

## Planning Scenario 2

### Strategy for 2006-2017

Enrollment projection for grades K-12 is 975 students through 2017. This strategy provides instructional facilities to accommodate an enrollment averaging 75 students per grade level in grades K-12 and 50 students in the Early Childhood/Pre-K programs using existing facilities and renovation and expansion of facilities as follows:

#### General Modernization Requirements

- Bring all campuses into compliance with the Life Safety Code (fire alarms/safety equipment, emergency exits/lighting, air quality, and health) and address traffic and parking issues as feasible.
- Bring all campuses into compliance with the Texas Accessibility Standards, Americans with Disabilities Act (ADA) and Environmental Protection Agency (EPA) requirements as feasible.
- Renovate existing facilities and repair or replace roof and mechanical, electrical, plumbing (MEP) systems including HVAC with consideration given to the life-cycle of each facility as feasible.

#### Individual Campus Changes

- Remodel, upgrade and expand **Big Sandy Elementary School** for programs and increased enrollment in grades Pre-K through 5 under general requirements above. Convert the current band hall and office area to six classrooms and redefine the entry for the elementary school. . Upgrade student safety (loading-unloading) and security system, drainage, and paving. Expand/remodel classrooms, gym, and library. (500 students)
- Remodel, upgrade and expand **Big Sandy Junior High School** for grades 6-8 under general requirements above. Maintain current classrooms and acquire and/or share classrooms from and with the high school as needed. (225 students)
- Remodel, upgrade and expand **Big Sandy High School** for grades 9-12 under general requirements above. Construct and/or expand building by 10,200 sq. feet for a new library and drama/band hall. Convert the old library and Vocational Ag shop into classrooms, science and computer labs for junior high and/or high school classes. Use commons area to expand seating for the cafeteria. Upgrade the master site plan for future growth and expanded programs for elementary, junior high and high school. (300 students)
- Remodel and upgrade buildings/spaces used for central administration and for transportation, and maintenance departments with site clean-up and paving.

Planning Scenario Two Big Sandy ISD													
School Name/ Grades	Exist. SF/ New	Enrollment	Acreage	Code Compliance/ ADA, Security	Modification /Up-grade: labs,Clrs, Café	Expand/ New:Clrs, Café, Career/ Tech, Science	MEP/ HVAC Roofs/ site	Library / Tech.	Prof. Spaces/ Adm Support	Fine Arts, Music, Band, Choir, Auditorium	Gym, Dressing, P.E.; Athletics Stadium	Total	Capacity Current/ Proposed
<b>Elementary</b>													
Big Sandy Elementary Grades Pre-K-5 Constructed 1973,75,86,87,91 ,2003	46,664 SF 25,000 SF shared	398	52 AC w/26 AC Park share w/JHS/HS	\$ 100,000	\$ 600,000		\$ 150,000	\$ 50,000	\$150,000		\$ 35,000	\$ 1,085,000	400/500
<b>Jr. High</b>													
Big Sandy Jr. HS Grades 6-8 Constructed 1973,75,76,78,89 ,91,93,2003	117,342 SF Jr/Sr HS	181	52 AC w/26 AC Park share w/Elem/HS	\$ 50,000	\$ 250,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 100,000		\$ 700,000	200/225
<b>High School</b>													
Big Sandy H.S. Gr. 9-12 Constructed 1973,75,76,78,89 ,91,93,2003	117,342 SF Jr/Sr HS	204	52 AC w/26 AC Park share w/Elem/JHS	\$ 100,000	\$ 1,250,000		\$ 250,000	\$ 500,000	\$200,000	\$ 1,200,000		\$ 3,500,000	225/300
								3,000 sf new @ \$165/sf		7,200 sf @ \$165/sf			
<b>Ed Support Facility</b>												\$ 200,000	
<b>Total</b>												\$ 5,485,000	
<b>A&amp;E Fees 8.0 %</b>												\$ 438,800	
<b>Furniture 4.0 %</b>												\$ 219,400	
<b>Contingency 3.0 %</b>												\$ 164,550	
<b>Grand Total</b>												\$ 6,307,750	

## **Planning Scenario 3**

### **Strategy for 2006-2017**

Enrollment projection for grades K-12 is 975 students through 2017. This strategy provides instructional facilities to accommodate an enrollment averaging 75 students per grade level in grades K-12 and 50 students in the Early Childhood/Pre-K programs using existing facilities and renovation and expansion of facilities as follows:

#### **General Modernization Requirements**

- Bring all campuses into compliance with the Life Safety Code (fire alarms/safety equipment, emergency exits/lighting, air quality, and health) and address traffic and parking issues as feasible.
- Bring all campuses into compliance with the Texas Accessibility Standards, Americans with Disabilities Act (ADA) and Environmental Protection Agency (EPA) requirements as feasible.
- Renovate existing facilities and repair or replace roof and mechanical, electrical, plumbing (MEP) systems including HVAC with consideration given to the life-cycle of each facility as feasible.

#### **Individual Campus Changes**

- Remodel, upgrade, and expand **Big Sandy Elementary School** for programs and increased enrollment in grades Pre-K through 5 under general requirements above. Convert the current band hall and office area to six classrooms and redefine the entry for the elementary school. Use some of the current Jr. High area as needed. Upgrade student safety (loading-unloading) and security system, drainage, and paving. Expand/remodel classrooms, gym, and library. (500 students)
- Remodel, upgrade and expand **Big Sandy Junior High School** for grades 6-8 under general requirements above. Maintain current classrooms and acquire and/or share classrooms from and with the high school as needed. (225 students)
- Remodel, upgrade and expand **Big Sandy High School** for grades 9-12 under general requirements above, and construct and/or expand building by 19,000 sq. feet for a new cafeteria, science labs, library, and drama/band hall. Convert the old library and Vocational Ag shop into classrooms and computer labs for use by junior high and/or high school classes. Upgrade the master site plan for future growth and expanded programs for elementary, junior high and high school. (300 students)
- Remodel and upgrade buildings/spaces used for central administration and for transportation and maintenance departments with site clean-up and paving.

Planning Scenario Three Big Sandy ISD													
School Name/ Grades	Exist. SF/ New	Enrollment	Acres	Code Compliance/ ADA, Security	Modification /Up-grade: labs,Clrs, Café	Expand/ New:Clrs, Café, Career/ Tech, Science	MEP/ HVAC Roots/ site	Library / Tech.	Prof. Spaces/ Adm Support	Fine Arts, Music, Band, Choir, Auditorium	Gym, Dressing, P.E.; Athletics Stadium	Total	Capacity Current/ Proposed
<b>Elementary</b>													
Big Sandy Elementary Grades Pre-K-5 Constructed 1973,75,86,87,91 ,2003	46,664 SF 25,000 SF shared	398	52 AC w/26 AC Park share	JHS/HS	\$ 100,000	\$ 600,000	\$ 150,000	\$ 50,000	\$150,000		\$ 35,000	\$ 1,085,000	400/500
<b>Jr. High</b>													
Big Sandy Jr. HS Grades 6-8 Constructed 1973,75,76,78,89 ,91,93,2003	117,342 SF Jr/Sr HS	181	52 AC w/26 AC Park share	w/Elem/HS	\$ 50,000	\$ 250,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 100,000	\$ 700,000	200/225
<b>High School</b>													
Big Sandy H.S. Gr. 9-12 Constructed 1973,75,76,78,89 ,91,93,2003	117,342 SF Jr/Sr HS	204	52 AC w/26 AC Park share	w/Elem/JHS	\$ 100,000	\$ 1,250,000	\$ 1,452,000	\$ 250,000	\$ 500,000	\$200,000	\$ 1,200,000	\$ 4,952,000	225/300
						8,800 sf @ \$165/sf		3,000 sf new @ \$165/sf		7,200 sf @ \$165/sf			
<b>Ed Support Facility</b>												\$ 200,000	
<b>Total</b>												\$ 6,937,000	
<b>A&amp;E Fees 8.0 %</b>												\$ 554,960	
<b>Furniture 4.0 %</b>												\$ 277,480	
<b>Contingency 3.0 %</b>												\$ 208,110	
<b>Grand Total</b>												\$ 7,977,550	

## Planning Scenario 4

### Strategy for 2006-2017

Enrollment projection for grades K-12 is 975 students through 2017. This strategy provides instructional facilities to accommodate an enrollment averaging 75 students per grade level in grades K-12 and 50 students in the Early Childhood/Pre-K programs using existing facilities and renovation and expansion of facilities as follows:

#### General Modernization Requirements

- Bring all campuses into compliance with the Life Safety Code (fire alarms/safety equipment, emergency exits/lighting, air quality, and health) and address traffic and parking issues as feasible.
- Bring all campuses into compliance with the Texas Accessibility Standards, Americans with Disabilities Act (ADA) and Environmental Protection Agency (EPA) requirements as feasible.
- Renovate existing facilities and repair or replace roof and mechanical, electrical, plumbing (MEP) systems including HVAC with consideration given to the life-cycle of each facility as feasible.

#### Individual Campus Changes

- Construct a new **Big Sandy Elementary School** building (62,500 SF) with a core for 600 students and academics for 500. (500 students)
- Remodel, upgrade and expand some of the current elementary area to accommodate programs at **Big Sandy Junior High School** for grades 6-8 under general requirements above into. (225 students)
- Remodel, upgrade and expand **Big Sandy High School** for grades 9-12 under general requirements above. Upgrade and Enlarge library, labs, classrooms and convert the Vocational Ag shop into science classroom/labs, drama area, computer labs for use as junior high and/or high school classes. Upgrade the master site plan for future growth and expanded programs for junior high and high school. (300 students)
- Remodel and upgrade buildings/spaces used for central administration and for transportation and maintenance departments with site clean-up and paving.

Planning Scenario Four Big Sandy ISD													
School Name/ Grades	Exist. SF/ New	Enrollment	Acreage	Code Compliance/ ADA, Security	Modification /Up-grade: labs,Ctrs, Café	Expand/ New:Ctrs, Café, Career/ Tech, Science	MEP/ HVAC Roofs/ site	Library / Tech.	Prof. Spaces/ Adm Support	Fine Arts, Music, Band, Choir, Auditorium	Gym, Dressing, P.E.; Athletics Stadium	Total	Capacity Current/ Proposed
<b>Elementary</b>													
Big Sandy Elementary Grades Pre-K-5 Constructed New Core 600 Academics 500	62,500 SF	398	TBD									\$ 10,000,000	400/500
<b>Jr. High</b>													
Big Sandy Jr. HS Grades 6-8 Constructed 1973,75,76,78,89, ,91,93,2003	46,664 SF 25,000 SF shared	181	52 AC w/26 AC Park share w/HS	\$ 50,000	\$ 250,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 100,000		\$ 700,000	200/300
<b>High School</b>													
Big Sandy H.S. Gr. 9-12 Constructed 1973,75,76,78,89, ,91,93,2003	117,342 SF Jr/Sr HS	204	52 AC w/26 AC Park share w/JHS	\$100,000	\$1,660,000		\$250,000	\$500,000	\$200,000	\$500,000		\$3,210,000	225/300
<b>Ed Support Facility</b>												\$ 200,000	
<b>Total</b>												\$ 14,110,000	
<b>A&amp;E Fees 7.0 %</b>												\$ 987,700	
<b>Furniture 4.0 %</b>												\$ 564,400	
<b>Contingency 3.5 %</b>												\$ 493,850	
<b>Grand Total</b>												\$ 16,155,950	