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	Executive Summary INTRODUCTION



EXECUTIVE SUMMARY

Executive Summary

Spring Branch ISD/AECOM Partnership

From the beginning of the data gathering process through the development and delivery of the Level 1 Long Range Facility Plan, Spring Branch ISD and AECOM developed a collaborative partnership working in concert to ensure that the District's Senior Leadership, Board of Trustees, and Long Range Facilities Planning Committee were fully engaged in the assessment and planning process.

Working through the Director of Facilities Planning and Construction, the AECOM team was provided extensive background information on the District's facilities, maintenance issues, and long term system replacement needs. Access to Maintenance and Operations leadership and staff was coordinated to provide timely interviews with key M&O teams. Access to the District Technology Cabling and Child Nutrition Services professionals aided in the assessment of these important District assets.

As the field assessment process was undertaken, the District provided access to key campus leadership enhancing the Educational Suitability assessment process and the understanding of the educational programs conducted on each campus. Facility Assessment Teams were provided District staff to assist in access to facilities and identification of specific campus issues.

The District assumed an active and participatory role in the ongoing development of the assessment process and reporting, providing timely reviews and feedback as each phase of work progressed. This engagement and interaction resulted in meaningful information and direction being provided to the Team, to the benefit of the District and the achievement of the District's Strategic and Educational Goals.

Scope of Work

The ultimate goal of the Level 1 Long Range Plan effort is to develop a decision framework for annual facilities capital planning, and build a high-level long-range financial strategy for school modernization, maintenance and development. The Plan will build on the available analytical fact base and framework, address facility deficiencies, and suggest strategies for Plan implementation.

Developing the Level 1 Long Range Facilities Plan was a focused, fast-tracked process that involved four major components. The Team identified and integrated relevant data sources from studies and analyses recently generated for the SBISD, and analyzed and organized the data to produce preliminary output reports that identified the schools in most need.

A very beneficial process involved surveying the LRFPC members regarding their priorities and relative importance of the various facility system categories, elements, and components, and using the resultant scoring/ weights from the survey results to rank systems and asset replacements on a school by school basis.

Application of the output rankings allowed the Team to develop a timebased and costed program of prioritized work for the portfolio of facilities we analyzed.

Data Sources

Key data sources that were utilized in development of the Level 1 LRP include:

- AECOM Facilities Condition Assessment (FCA), together with assessment reports for Educational Suitability (by MGT Consulting, Inc.), Child Nutrition Services (By FDP) and Technology Cabling (by TechKnowledge)
- Roof Study provide to SBISD by Michael Hamilton & Assoc.
- Demographics Study and Capacity Study by Stantec

Planning Methodology

Our approach utilized a clear, four-step process that was designed to take advantage of the direction provided by the LRFPC prioritization and weighting outputs, as follows:

Step 1 – Identify and Integrate Relevant Data Sources

Step 2 – Identify Critical Locations

Step 3 – Rank Systems / Assets

Step 4 – Timing And Schedule - Identify order of projects and cost

Prioritization

The LRFPC understood the need to 'dissect' the outputs from the various studies and data sources, and ranked relative importance of the various Categories, Elements, and Components.

At the Feb. 22nd 2017 LRFPC Meeting, the Committee provided its rankings of the four FCA Categories - Facility Condition, Educational Suitability, Child Nutrition Services, and Technology Cabling.

At the March 8th 2017 LRFPC Meeting, the Committee engaged in a collaborative exercise to define the official and adopted terminology – "Critical, Moderate, & Non-Critical".

And, at the April 19th 2017 LRFPC Meeting, the Committee, the committee prioritized the Elements within the Building Envelope and the Mechanical, Electrical, Plumbing Categories.

Calculation methodology

Using the LRFPC prioritization results as guidance, the Team organized the data based on a reasonable hierarchy, Levels A thru D, as follows:

Level A - Criticality analysis

Level B - FCA Category-based analysis

Level C - Facility Element-level analysis

Level D – Facility Component-level analysis

The relative scoring and weights attributed to each item in each Level by the Committee were used to rank the portfolio and generate output reports for each calculation method.

Summary of Findings & Recommendations

Careful evaluation of the output reports and data leads to the conclusion that all of the Calculation Methods employed are mathematically sound and reasonable. Each Method provides visibility into the ranking of facility status based on that particular measure, and can be used to answer the specific questions posed by the Committee relative to particular issues that arose during the Level 1 Plan process.

The proposed 10-Year Plan, provided as part of the 'Summary Schedule and Costs', is effectively based on a Comprehensive Calculation Methodology that takes advantage of the evaluations provided by the level of detail requested by the Committee. That 10-Year Plan is therefore considered a reasonable and sensible starting point for detailed discussion regarding the disposition of each individual facility, in the context of available funding and other SBISD considerations.

Given the additional insight provided by utilization of the Facility Condition Assessment (FCI), those facilities with total cost of deficiencies equal to or greater than the calculated facility replacement cost are also identified, again creating a sensible starting point for detailed discussion regarding the disposition of each individual facility.

Results of the Study

Proposed 10-Year Plan (with Data Overlay)

Facility / Campus		Facility Type	Year Built	Area (SF)	LRFPC Weighted Ranking	Total Estimated Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
BEC - DAEP	1	High	1980	21,260	41	\$ 6,664,640	\$ 6,664,640									
errace Elementary	2	Elementary	1973	74,349	43	\$ 18,250,055	\$ 18,250,055									
pring Woods Middle	3	Middle	1961	200,616	43	\$ 59,926,041	\$ 59,926,041									
pring Woods High	4	High	1964	336,366	43	\$ 110,522,932	\$ 110,522,932									
Memorial High	5	High	1962	311,115	44	\$ 101,520,062	A 44 000 000	\$ 101,520,062								
herwood Elementary	6	Elementary	1968	69,371	45	\$ 14,899,260	\$ 14,899,260									
endwood Campus	7	Elementary	1958	38,830	46	\$ 13,331,513 \$ 20,515,549	\$ 13,331,513									
Voodview Elementary Iorthbrook High	8	Elementary	1958	70,508	46 46	+//	\$ 20,515,549	\$ 94,275,559								
Memorial Middle	9	High	1974	394,609	46	\$ 94,275,559 \$ 51,569,352		\$ 51,569,352								
Hunters Creek Elementary	10	Middle	1963 1954	188,852 61,937	47	\$ 18,957,694		\$ 18,957,694								
andrum Middle	11 12	Elementary Middle	1954	177,665	47	\$ 52,062,456		\$ 16,557,054	\$ 52,062,456							
ast Transition Campus	13	Transition	1956	68,978	48	\$ 22,358,085			\$ 22,358,085							
Bunker Hill Elementary	14	Elementary	1956	58,385	49	\$ 17,755,567		\$ 17,755,567	\$ 22,536,083							
pring Branch Middle		Middle	1958	226,208	49	\$ 62,928,124		ÿ 17,755,507	\$ 62,928,124							
pring Branch Middle	15 16	Middle	1953	189,660	49	\$ 54,804,143			J 02,320,124	\$ 54,804,143			+		1	
hornwood Elementary	17	Elementary	1967	69,038	50	\$ 13,999,951			\$ 13,999,951	9 34,804,143			+		1	
normwood Elementary	18	High	1961	28,300	50	\$ 7,315,598			÷ 13,333,331	\$ 7,315,598		1				
edar Brook Elementary	19	Elementary	1993	82,179	51	\$ 16,417,288			\$ 16,417,288	Ç 7,313,336					<u> </u>	
pring Shadows Elementary	20	Elementary	1968	83,904	51	\$ 17,687,958			\$ 17,687,958							
pring Forest Middle	21	Middle	1967	192,559	51	\$ 51,808,263			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 51,808,263						
Vestchester Academy	22	High	1967	294,963	51	\$ 89,081,550						\$ 89,081,550			Ì	
Suthrie Center (CTE)	23	High	1972	83,614	51	\$ 20,328,659					\$ 20,328,659					
tratford High	24	High	1974	320,000	51	\$ 65,539,268					\$ 65,539,268					
lottingham Elementary	25	Elementary	1969	66,393	52	\$ 12,548,943				\$ 12,548,943						
Memorial Drive Elementary	26	Elementary	1949	58,965	53	\$ 17,171,302				\$ 17,171,302						
ion Lane	27	Pre-K Center	2001	26,000	53	\$ 5,966,445					\$ 5,966,445					
Vildcat Way	28	Pre-K Center	2002	26,000	54	\$ 6,278,764					\$ 6,278,764					
ear Boulevard	29	Pre-K Center	2001	26,000	54	\$ 5,505,847					\$ 5,505,847					
lorthbrook Middle	30	Middle	1973	203,020	54	\$ 38,284,391						\$ 38,284,391				
reasure Forest Elementary	31	Elementary	1996	82,149	55	\$ 16,155,732					\$ 16,155,732					
iger Trail	32	Pre-K Center	2001	26,000	56	\$ 5,323,443					\$ 5,323,443					
Buffalo Creek Elementary	33	Elementary	1997	82,179	57	\$ 11,882,365					\$ 11,882,365					
Hollibrook Elementary	34	Elementary	2010	111,352	58	\$ 4,602,331							\$ 4,602,331			
Vestwood Elementary	35	Elementary	2010	98,264	59	\$ 3,602,202							\$ 3,602,202			
pring Branch Elementary	36	Elementary	2011	101,897	59	\$ 3,804,516							\$ 3,804,516			
lidgecrest Elementary	37	Elementary	2010	112,095	59	\$ 4,384,287							\$ 4,384,287			
shadow Oaks Elementary	38	Elementary	2011	118,314	59	\$ 4,649,638							\$ 4,649,638			
dgewood Elementary	39	Elementary	2011	109,000	59	\$ 4,566,070							\$ 4,566,070			
Meadow Wood Elementary Vilchester Elementary	40 41	Elementary	2012 2011	97,749 123,253	59 59	\$ 5,357,415 \$ 3,886,628							\$ 5,357,415	\$ 3,886,628		
Pine Shadows Elementary	42	Elementary	2012	118,167	60	\$ 4,216,684								\$ 3,886,628 \$ 4,216,684		
lousman Elementary	43	Elementary	2012	109,422	60	\$ 3,340,348								\$ 3,340,348		
rostwood Elementary	44	Elementary	2013	110,145	61	\$ 4,705,170								\$ 4,705,170		
/alley Oaks Elementary	45	Elementary	2015	117,872	61	\$ 3,530,851								\$ 3,530,851		
tummel Creek Elementary	46	Elementary	2016	106,260	62	\$ 3,400,426								\$ 3,400,426		
BEC - Academy of Choice HS (New)	47	High	2016	32,281	Pending	\$ 2,300								,,	\$ 2,300	
BEC - Gymnasiums (Rubber)	48	High	1990	30,000	Pending	\$ 2,810,260							+		\$ 2,810,260	
BEC - Gymnasiums (Wood)	49	High	1950	30,000	Pending	\$ 7,833,169			\$ 7,833,169			1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
dministration Building	50	Support	1965	59,125	Pending	\$ 21,970,242			,,				\$ 21,970,242			
uildings and Grounds/Facility Services	51	Support	1967	34,100	Pending	\$ 20,488,433								\$ 20,488,433		
entral Warehouse	52	Support	1976	53,945	Pending	\$ 7,804,230									\$ 7,804,230	
Oon Coleman Coliseum	53	Support	2007	59,523	Pending	\$ 8,776,427									\$ 8,776,427	
rob Stadium	54	Support	1952	10,950	Pending	\$ 8,623,961									\$ 8,623,961	
latatorium	55	Support	1976	21,525	Pending	\$ 6,235,031				-	-			-	\$ 6,235,031	
ecurity Services/Police Department	56	Support	2007	16,195	Pending	\$ 2,563,938									\$ 2,563,938	
ax Office	57	Support	1996	3,136	Pending	\$ 1,355,303									\$ 1,355,303	
echnology Training Center	58	Support	2012	9,222	Pending	\$ 2,130,965										\$ 2,130
extbook Warehouse	59	Support	1968	10,469	Pending	\$ 6,178,543										\$ 6,178
ransportation	60	Support	1967	12,965	Pending	\$ 7,738,306										\$ 7,73
fully Stadium & Press Box (2 Facilities)	61	Support	2007	23,262	Pending	\$ 11,512,228										\$ 11,51
lines Science Center	62	Support	1967	18,917	Pending	\$ 5,886,651	^	ć		^	<u>^</u>	ć	ć 40.012.02-	<u>^</u>		\$ 5,88
Vest Support Center	63	Support	1963	59,334	Pending	18,042,936	\$ -	<u>\$</u> -	\$ -	\$ -	\$ -	\$ -	\$ 18,042,936	\$ -	\$ -	\$
	64	1				\$ 1,315,636,289	\$244,109,990	\$284,078,235	\$193,287,031	\$143,648,249	\$136,980,522	\$127,365,941	\$70,979,638	\$43,568,540	\$38,171,450	\$33,44
							\$ 1,315,636,289					1				1
				BILITY SCORE								1				

The results of the analyses identify and focus on facilities with the greatest needs, as determined by the various assessments and reflecting the priorities expressed by the LRFPC.

The Proposed 10-Year Plan shown on Page 5 organizes the facilities based on Level B (Category) rankings, and adds an overlay to annotate those facilities with an FCI score of 'zero' (0), indicating that the facility deficiency costs are equal to or greater than the replacement cost.

The Proposed 10-Year Plan also reflects incorporation of the Educational Suitability Assessment findings as described fully in Section 04 of this Plan. Because the Committee determined that the Educational Suitability/ Environment classification is critical to mission success, the Proposed 10-Year Plan includes an overlay of the Educational Suitability / Environment classification highlighted according to the scoring system provided in the Educational Suitability Assessment.

The Committee also identified critical facility categories, elements, and components as fully described in Section 04, and Table 1 on Page 6 organizes the portfolio based on those rankings and prioritization. And, those facilities with an FCI score of 'zero' (0) are highlighted.

Finally, because the Committee concluded that the Educational Suitability/Environment classification is a critical element, Table 2 on Page 6 organizes the portfolio based on that scoring system.

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Results of the Study (continued)

Level B - by FCA Category

LRFPC Weights: 0.48 0.50 0.00 0.02

Facility / Campus	Facility Type	Year Built	FCI Score	Educational Suitability Score	Child Nutrition Services Ranking	Technology Ranking	Total Cost	Level B Weighted Ranking
Spring Woods High	High	1964	0	4	30	44	\$ 110,522,932	3
Bendwood Campus	Elementary	1958	0	5	4	41	\$ 13,331,513	3
Memorial High	High	1962	0	8	28	38	\$ 101,520,062	5
East Transition Campus	Transition	1960	1	10	11	11	\$ 22,358,085	6
Landrum Middle	Middle	1956	0	12	23	37	\$ 52,062,456	7
Memorial Middle	Middle	1963	1	12	20	43	\$ 51,569,352	7
Woodview Elementary	Elementary	1958	0	14	17	23	\$ 20,515,549	7
Spring Woods Middle	Middle	1961	0	14	26	40	\$ 59,926,041	8
Spring Oaks Middle	Middle	1967	0	17	24	45	\$ 54,804,143	9
Ferrace Elementary Bunker Hill Elementary	Elementary	1973 1956	16 0	4 21	15 14	34 22	\$ 18,250,055 \$ 17,755,567	10 11
· · · · · · · · · · · · · · · · · · ·	Elementary	1956	0	22	32	57	\$ 89,081,550	12
Westchester Academy SBEC - DAEP	High High	1980	21	5	34	17	\$ 6,664,640	13
Hunters Creek Elementary	Elementary	1954	0	27	16	14	\$ 18,957,694	14
Spring Branch Middle	Middle	1953	0	27	27	55	\$ 62,928,124	15
Memorial Drive Elementary	Elementary	1949	0	32	12	31	\$ 17,171,302	17
Spring Forest Middle	Middle	1967	1	32	22	46	\$ 51,808,263	17
Sherwood Elementary	Elementary	1968	33	3	9	28	\$ 14,899,260	18
Thornwood Elementary	Elementary	1973	37	3	6	26	\$ 13,999,951	20
Northbrook High	High	1974	28	13	29	36	\$ 94,275,559	21
Cedar Brook Elementary	Elementary	1993	32	12	31	29	\$ 16,417,288	22
Spring Shadows Elementary	Elementary	1968	36	11	13	8	\$ 17,687,958	23
Freasure Forest Elementary	Elementary	1996	28	23	25	30	\$ 16,155,732	26
Bear Boulevard	Pre-K Center	2001	37	16	3	12	\$ 5,505,847	26
Lion Lane	Pre-K Center	2001	30	26	5	13	\$ 5,966,445	28
Stratford High	High	1974	45	10	19	59	\$ 65,539,268	28
Guthrie Center (CTE)	High	1972	38	19	34	15	\$ 20,328,659	28
Figer Trail	Pre-K Center	2001	38	24	2	10	\$ 5,323,443	30
Nottingham Elementary	Elementary	1969	40	27	1	21	\$ 12,548,943	33
Northbrook Middle	Middle	1973	41	25	18	61	\$ 38,284,391	33
Wildcat Way	Pre-K Center	2002	41	28	8	16	\$ 6,278,764	34
Buffalo Creek Elementary	Elementary	1997	53	23	21	18	\$ 11,882,365	37
Ag Farm	High	1961	69	16	34	24	\$ 7,315,598	42
Rummel Creek Elementary	Elementary	2016	88	33	34	60	\$ 3,400,426	60
Edgewood Elementary	Elementary	2011	89	90	34	52	\$ 4,566,070	89
Frostwood Elementary	Elementary	2014	87	93	34	54	\$ 4,705,170	89
Hollibrook Elementary	Elementary	2010	88	89	34	2	\$ 4,602,331	87
Housman Elementary	Elementary	2013	89	92	34	56	\$ 3,340,348	90
Meadow Wood Elementary	Elementary	2012	82	91	34	27	\$ 5,357,415	85
Pine Shadows Elementary	Elementary	2012	90	91	34	42	\$ 4,216,684	90
Ridgecrest Elementary	Elementary	2010	90	89	34	51	\$ 4,384,287	89
Shadow Oaks Elementary	Elementary	2011	88	90	34	47	\$ 4,649,638	88
Spring Branch Elementary	Elementary	2011	87	90	34	25	\$ 3,804,516 \$ 3,530,851	87
Valley Oaks Elementary	Elementary	2015	88	94	34	53	9 3,330,031	90
Westwood Elementary	Elementary	2010 2011	89 89	89 90	34 34	49 58	+ 0,000,000	88 89
Wilchester Elementary Administration Building	Elementary	1965	89	90	34	32	\$ 3,886,628 \$ 21,970,242	89
Buildings and Grounds/Facility Services	Support Support	1965	0	-	34	32	\$ 21,970,242	
Central Warehouse	Support	1967	29	-	34	63	\$ 7,804,230	
Don Coleman Coliseum	Support	2007	59	-	7	5	\$ 8,776,427	
Grob Stadium	Support	1952	61	-	33	62	\$ 8,623,961	
Natatorium	Support	1976	17	-	34	50	\$ 6,235,031	-
BEC - Academy of Choice HS (New)	High	2016	88	-	34	1	\$ 2,300	-
BBEC - Gymnasiums (Rubber)	High	1990	65	-	34	20	\$ 2,810,260	-
BEC - Gymnasiums (Wood)	High	1950	2	-	34	48	\$ 7,833,169	-
Security Services/Police Department	Support	2007	61	-	34	35	\$ 2,563,938	-
Tax Office	Support	1996	22	-	34	3	\$ 1,355,303	-
echnology Training Center	Support	2012	78	-	34	4	\$ 2,130,965	-
Textbook Warehouse	Support	1968	20	-	34	7	\$ 6,178,543	-
ransportation	Support	1967	2	-	34	19	\$ 7,738,306	-
Fully Stadium & Press Box (2 Facilities)	Support	2007	26	-	10	9	\$ 11,512,228	-
/ines Science Center	Support	1967	2	-	34	33	\$ 5,886,651	-
Vest Support Center	Support	1963	13		34	6	18,042,936	

EDUCATIONAL SUITABILITY - Critical Element: ENVIRONMENT

Name	Grade Config	GSF	Suitability Score	Environment Average %	Size Average %	Location Average %	Storage/ Fixed Equip. Average %	Budget Estimate
Sherwood Elementary	PK-5	69,371	67	53%	81%	81%	83%	\$1,972,900
Thornwood Elementary	PK-5	69,038	76	56%	80%	84%	69%	\$1,462,300
Spring Wood High	9-12	336,366	67	57%	75%	75%	58%	\$11,265,500
Terrace Elementary	K-5	74,349	69	59%	55%	87%	61%	\$2,010,700
SBEC - DAEP	9-12	21,260	63	62%	57%	79%	50%	\$801,200
Bendwood Campus	PK-K, 3-5	38,830	74	63%	31%	43%	31%	\$864,700
Stratford High	9-12	320,000	76	64%	90%	84%	63%	\$7,681,800
Landrum Middle	5-8	177,665	76	65%	93%	95%	76%	\$3,959,900
Memorial High	9-12	311,115	71	67%	73%	74%	67%	\$9,201,400
East Transition Campus	ES - TBD	68,978	81	67%	85%	88%	68%	\$1,347,500
Memorial Middle	6-8	188,852	78	68%	88%	87%	75%	\$3,850,900
Northbrook High	9-12	394,609	78	69%	88%	91%	72%	\$8,723,000
Cedar Brook Elementary	PK-5	82,179	77	71%	80%	79%	68%	\$1,651,200
Woodview Elementary	PK-5	70,508	78	71%	89%	88%	84%	\$1,322,900
Bear Boulevard	PK	26,000	81	71%	93%	100%	70%	\$433,000
Spring Woods Middle	6-8	200,616	72	71%	90%	77%	68%	\$5,275,900
Spring Shadows Elementary	K-5	83,904	82	71%	70%	98%	96%	\$1,314,700
Spring Oaks Middle	6-8	189,660	80	72%	82%	91%	77%	\$3,500,200
Ag Farm	9-12	28,300	72	73%	79%	72%	48%	\$809,000
Guthrie Center (CTE)	9-12	83,614	79	74%	87%	80%	83%	\$1,763,900
Westchester Academy	6-12	294,963	84	75%	93%	86%	88%	\$4,811,200
Bunker Hill Elementary	K-5	58,385	82	75%	90%	97%	84%	\$927,600
Tiger Trail	PK	26,000	85	76%	94%	100%	67%	\$343,300
Treasure Forest Elementary	K-5	82,149	85	76%	92%	94%	73%	\$1,046,300
Nottingham Elementary	PK-5	66,393	82	77%	99%	88%	89%	\$1,056,900
Buffalo Creek Elementary	K-5	82,179	89	79%	87%	90%	94%	\$754,000
Wildcat Way	PK	26,000	80	79%	100%	82%	65%	\$456,800
Hunters Creek Elementary	K-5	61,937	80	80%	91%	85%	72%	\$1,067,300
Spring Branch Middle	6-8	226,208	82	81%	90%	91%	84%	\$3,833,700
Lion Lane	PK	26,000	80	82%	86%	86%	73%	\$454,000
Northbrook Middle	6-8	203,020	84	82%	81%	89%	86%	\$3,031,300
Memorial Drive Elementary	PK-5	58,965	88	86%	98%	95%	77%	\$596,300
Spring Forest Middle	6-8	192,559	90	92%	94%	99%	79%	\$1,711,800
Rummel Creek Elementary	PK-5	106,260	95	99%	96%	97%	97%	\$463,400
Other Educational Total/Average		68,978	81	67%	85%	88%	68%	\$1,347,500
Assessment Total		5,350,679	79	73%	86%	87%	76%	\$89,766,500

AECOM AECOM



Scope of Work

AECOM was engaged by the Spring Branch Independent School District to undertake a Long Range Facilities Plan (LRFP).

Process

A four stage process has been used to assemble the LRFP. Step 1 was to identify the data sources from reports previously produced, Step 2 was to assemble the data into preliminary output reports that identified the schools in most need. Using information on numbers critical FCIs, systems end of life and schools containing high number of portables will allow Bond Committees to make decisions on schools requiring replacement and / or expansion at a later date. Step 3 involved surveying the LRFP Committee on their priorities from the data sets and using the survey results to rank systems / asset replacements on a school by school basis. Parallel facilities plans were developed following identification that Roofing, Technology Cabling and Child Nutrition Services should be considered separately. Step 4 involved the application of critical end of life data to arrive at a time based and costed program of works for the asset / system element of each school.

Integrate Data Sources

On March 31st 2017 AECOM delivered a Facilities Condition
Assessment, together with reports outlining Education Suitability
(by MGT), Child Nutrition Services (by FDP) and Technology Cabling
(by TechKnowledge) capabilities at each of the 60 SBSID Campuses.
The information contained in these reports, together with reports
on Roof Condition (updated 2017 by Michael Hamilton & Assoc.), and
Demographics (by Stantec) formed the data sets used to identify
the sequences and costs of works to Schools within the District.
Summaries of these reports can be found in Section 3 of this report and
the full reports are contained in the Appendices.

Prioritization

During February, March and April the results of these reports were shared with the LRFP Committee and surveys of the Committee undertaken to identify and prioritize the importance of each data set, the surveys were progressively more detailed at each meeting, moving

from overall performance to building components to individual building elements. The results of these surveys were used to weight each of the aspects of each report and arrive at a ranking by school of the priority works required within the District Facility Portfolio and produce initial costed output reports.

At the meeting of the Long Range Facilities Planning Committee (LRFPC) on February 22nd three surveys of the Committee members were undertaken. The first survey identified education suitability and facility condition as priority aspects. The second survey identified, Building Envelope, MEP and Roofing as priority aspects. The third survey identified Environment from the Educational Suitability report as a priority aspect. The detailed results of these surveys and their application into output reports is illustrated in Section 4.

At the meeting of the LRFP Committee on March 8th 2017 discussion with Committee members identified "Critical", "Moderate" and "Non Critical" as groupings within which to group the priority elements identified at the previous meeting. Subsequent discussion with the School Board Leadership identified as "Critical", the environment from the educational suitability report, together with Building Envelope, MEP and Roofing from the Facility Condition report. Moderate were size from Education Suitability and FFE, site Improvements and interior finishes from the Facility Condition Report. Non Critical Elements were Storage / Equipment from Education Suitability. The detailed results of these surveys and their application into output reports is illustrated in Section 4

At the meeting of the LRFP Committee on April 19th 2017 two further surveys of the Committee members were undertaken. The surveys dissected the Building Envelope, and Mechanical / Electrical and Plumbing (MEP) aspects prioritized at the previous meeting. The first survey of building envelope identified foundations as the most critical element followed by superstructure, exterior doors, exterior windows and finally external walls. The second survey of MEP identified HVAC as the most critical element, followed by electrical, plumbing and finally fire protection. The detailed results of these surveys and their application into output reports is illustrated in Section 4.

Report Completion

A Final Portfolio Analysis Report was presented for approval to the Long Range Facilities Planning Committee on May 10, 2017.



Project Team

Long Range Facilities Planning Committee

SBISD Parent/ Community Member

Community Member
Kathy Abshire
Victor Alvarez
Ainsworth Barnes
Melanie Bash
Courtney Boone
Wade Cline
Kristina Cupic
Peter Dalle Pezze
Matt Daniel
Fraser Dealy

Thomas DeBesse
Carin Domann
Chip Dudley
Jorge Escatell
Pam Ferwom
Britt Gardner
Peter Gilmore
Lewis Gissel
Eva Gomez
Kathy Goss
Kirk Guilanshah
Laura Gutierrez

Mano DeAyla

Kathy Goss
Kirk Guilanshah
Laura Gutierrez
Jeanine Haller·Piskurich
Clint Harrington
Mary Hoffman
Jed Howard
Bill Jensen
Alan Johnston
Randall Kale
Greg Kieschnick
Vanessa Lagunas
Scott LeMaire

Jacob Lipp
Andrew Lozano
Charlene Mahaley
Diana Martinez
Stacey Mendiola

Stacey Mendiola
Blanca Montoya
Mike Moody
Brian Muecke
John Murphy
Bessie Nguyen
Shannon Oterrnat

Jen Perroni Razia Phillip Jarret Price Venu Rao Maria Rayas Dina Reyes

Guadalupe Perez

Gerthie Darline Reyes Igris Rodriguez Shirley Rouse Chuck Russell Roland Sauermann

Wayne Schaper, Sr. Bruce Shelby Steven Simmons David Slattery Alma Soto

Alma Soto
Jay Southerland
Dmel Tatum
Karen Teegarden
Hannah Troyer

Samantha Valle
Elva Villegas
John Wright

SBISD Staff

Marcie Baker
Raymorris Barnes
Ami Bessette
Linda Buchman
Teresa Dolan
Darlene Evans
Sarah Guerrero
Karen Heeth
Paiae Hershey
Chris Juntti
Karen Justl
Patricia Kassir
Sasha Luther

Lynda Maxwell

Robye Snyder

Amanda Tysor

Karen Wilson

Lisa Weir

Wayne Schaper, Jr.

SBISD Students

Geoffrey Baring
Zeke Coleman
Charles Fenn
Esperanza Garcia
Julia Klein
Alec Miller
Crystal Miranda

SBISD Board of Trustees

J. Carter Breed Pam Goodson

SBISD Leadership

Dr. Scott Muri, Superintendent

Dr. Jennifer Blaine, Associate Superintendent, Talent and Operations

Travis Stanford, *Director, Planning & Construction*

AECOM

Mel Butler, Jr., CCM, LEED AP
Program Manager/Houston Operations Lead
PMCM Business Line
AECOM

Kenneth L English, AIA Vice President, PM/CM, Greater Houston AECOM

Justin L. Goodman

Program & Project Development

PMCM Business Line

AECOM

Jill Kurth
Western Regional Practice Leader
Strategy+
AECOM

Monica Shields
Sr. Graphic Designer
AECOM

Mark Whiteley, RIBA

Americas Practice Leader

Strategy+

AECOM

Facility Condition Assessment

Richard Kaselow, Associate Vice President, Buildings + Places - Asset Management Division (AMD)

Kurt Engler, Associate Vice President, AMD

Brian Holmes, Project Manager, AMD

Julia Leacock, Intern Architect, AMD

Jesse Rodgers, Consultant, AMD

Educational Suitability Assessment

Susan Zoller, *PK-12 Director, Education Services* MGT Consulting Group

Edward P. Humble, Ph.D., *Sr. Vice President, Education Services*MGT Consulting Group

Roofing Report

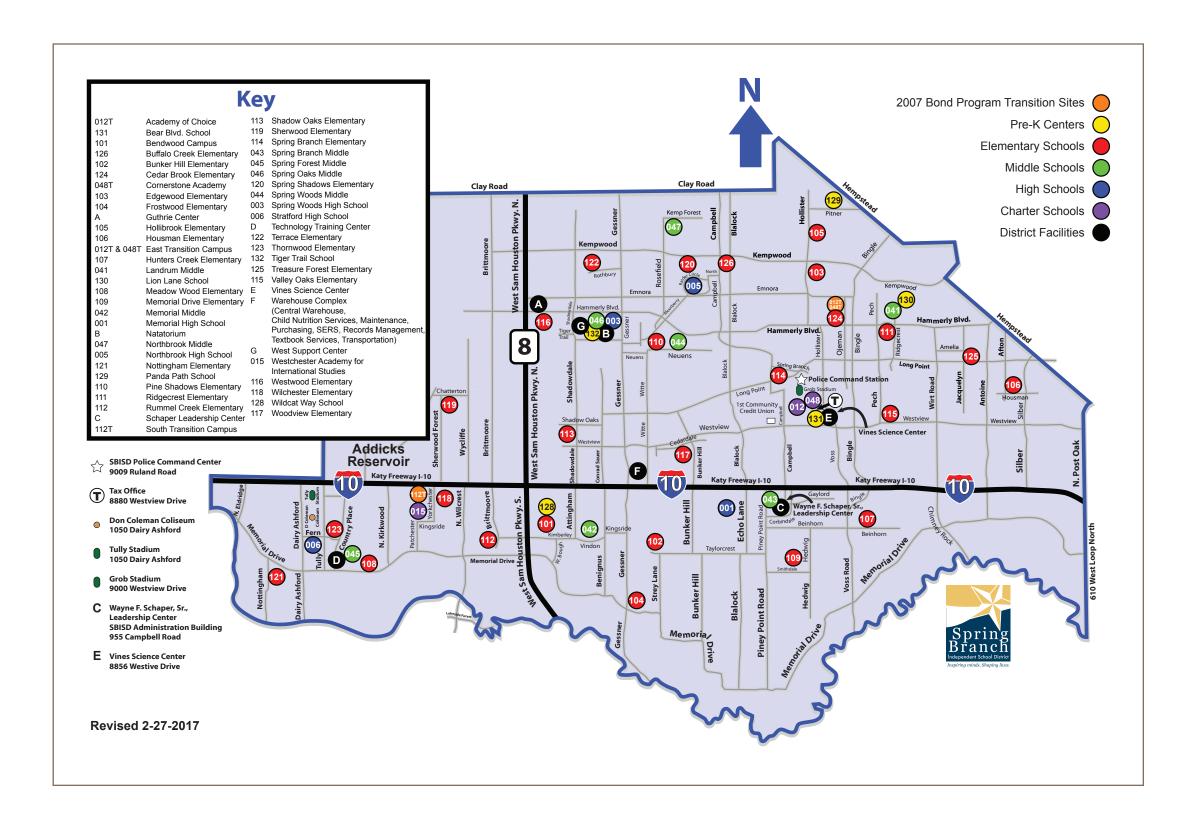
Michael L. Hamilton, Inc. Building Envelope Consultants, Michael L. Hamilton, *Principal*

Technology Cabling Assessment

TECHKnowledge Consulting Corporation, David Jacobs, *Principal*

Child Nutrition Services

Foodservice Design Professionals, Robert J. Millunzi, *Principal in Charge*



The Spring Branch Independent School District (SBISD) owns, maintains, and operates a 6,155,442 gross square foot portfolio of buildings located within a 43 square mile area whose ultimate goal is to support the mission of providing excellence in education to residents of the Spring Branch community. "The Spring Branch Way" communicates a single-focused goal (T-2-4), four belief statements and five core values that articulate the District's educational philosophy and a promise to each other and the community.

With an enrollment of more than 35,000 students and 4,800 employees district-wide, SBISD operates twenty six (26) elementary schools, seven (7) regular middle schools, one (1) charter middle school, four (4) traditional high schools and three (3) special purpose campuses, and various support and administrative facilities.

This diverse collection of facilities requires a comprehensive plan of strategic investments to maintain, renew, replace, and modernize the existing structures and infrastructure to continue to support the mission of delivering the highest quality education to its community.

Board of Trustees

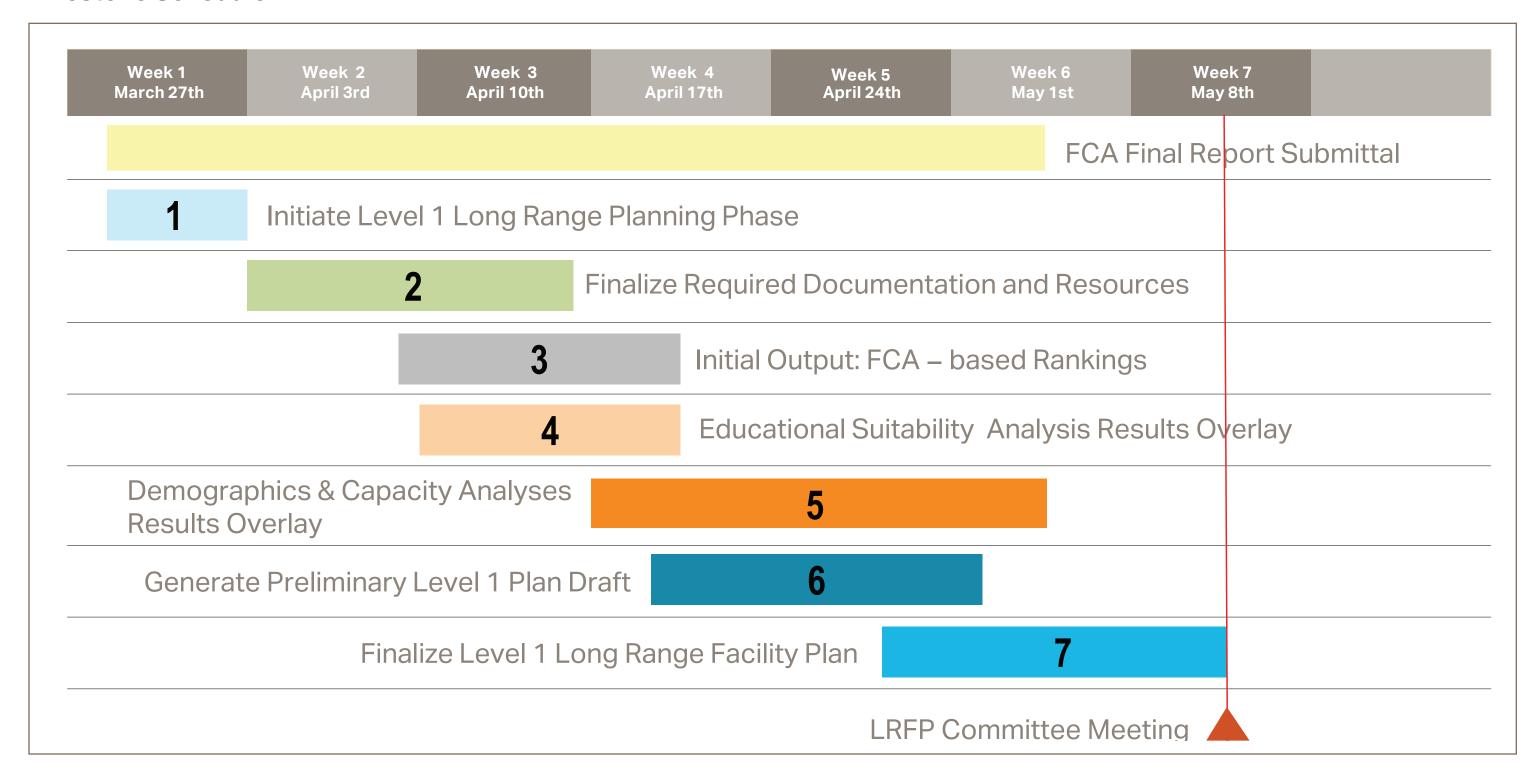
Karen Peck, *President*Pam Goodson, *Vice President*Katherine Dawson, *Secretary*J. Carter Breed, *Trustee*

Chris Gonzalez, Trustee

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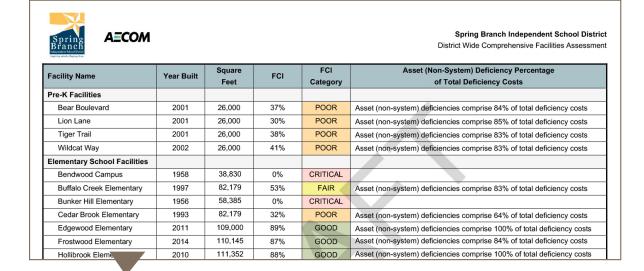
Chris Vierra, Trustee

Milestone Schedule

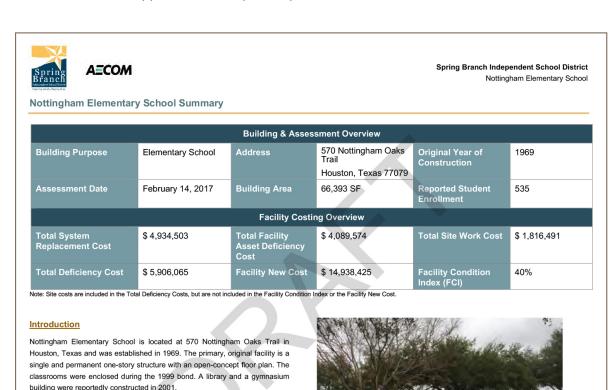




Facility Condition Assessment Summary



See Appendix for complete report



See Appendix for complete report

Background

The District is committed to providing learning environments and related support spaces that help deliver on the District's guiding principles, core values, and priorities for growth. The passage of time and the age of many District facilities dictate the need for re-evaluation of the facility portfolio as the first step in developing information in order to continue meet the District's facilities' needs.

To that end, a facility condition assessment (FCA) was conducted for 60 SBISD campuses to identify the physical condition of the building systems and determine existing deficiencies within those systems. The information collected during the FCA supports the development of a sound capital plan by providing baseline data to advocate for the strategic recommendations founded on the assessment findings. This very important process includes identifying, quantifying, and prioritizing of the maintenance and capital needs to minimize costs, and help manage risk. The goal was to deliver a comprehensive understanding of each facility's core systems, enabling SBISD decision makers to make informed investment decisions about capital and maintenance project options.

Process

AECOM executed the field assessments and cost estimating services with experienced technical and financial experts. The assessment consisted of visual assessments by a multi-disciplinary team of engineers and architects to evaluate existing deficiencies of key building systems. SBISD provided District personnel knowledgeable about existing building systems and deficiencies to ensure the field assessment teams could access areas of the facility, identify systems with major maintenance concerns and observe conditions reported within an online questionnaire completed by District staff. The key components of the facility assessment project include the following:

- Architectural Systems
- Plumbing Systems
- Mechanical Systems
- Electrical Systems
- Site/Civil Systems

Findings and recommendations are based on field work performed between January 9th and March 3rd 2017, as well as collaborative discussions with SBISD campus and District personnel.

Output and Results

Once the facility condition assessments were completed, cost estimation experts estimated costs for the resolution of identified system deficiencies. The approach used for estimate development is intended for budgetary planning and future project prioritization. Once it was determined if a system would be recommended to be replaced in total or recommendations would be developed to repair the system deficiencies, the cost estimation experts developed estimates for the resolution of identified deficiencies.

The Current Facility Replacement Value (CRV) for the facility is developed using the Square Foot Estimation method and presents the cost required to construct a replacement facility.

The Facilities Condition Index (FCI) often serves as the basis of a strategic facilities capital plan. It is a standardized scale utilized by the federal government. It results in a benchmark to analyze the effect of investing in facility improvements. The FCI is calculated using the data gathered in facility condition assessments.

Metrics such as the FCI give District stakeholders the ability to compare the condition of similar buildings to each other, as well as to establish target condition ratings. Comparing buildings analytically also rapidly highlights the buildings that are in the greatest need for updates, repairs, or replacements. FCI analysis provides the true cause and effect of investment decisions.

The Facility Condition Index (FCI) is a metric that objectively measures the current condition of a facility by assigning it a numerical value. The number reflects a grading system where a low FCI percentage means that the facility is in poor condition, and a high FCI percentage means that the facility is in good condition. Percentage values may range from 0%-100%. FCI values are typically calculated using the following formula:

FCI = Cost to Correct Identified Deficiencies ÷ Current Facility Replacement Value (CRV)*



Educational Suitability Assessment Summary

SITE NAME	GRADE CONFIG.	GSF	SUITABILITY SCORE	BUDGET ESTIMATE
	Elementary School	ols		
Bear Boulevard	PK	26,000	81	\$433,000
Bendwood Campus	PK-K, 3-5	38,830	74	\$864,700
Buffalo Creek Elementary	K-5	82,179	89	\$754,000
Bunker Hill Elementary	K-5	58,385	82	\$927,600
Cedar Brook Elementary	PK-5	82,179	77	\$1,651,200
Hunters Creek Elementary	K-5	61,937	80	\$1,067,300
Lion Lane	PK	26,000	80	\$454,000
Memorial Drive Elementary	PK-5	58,965	88	\$596,300
Nottingham Elementary	PK-5	66,393	82	\$1,056,900
Rummel Creek Elementary	PK-5	106,260	95	\$463,400
Sherwood Elementary	PK-5	69,371	67	\$1,972,900
Spring Shadows Elementary	K-5	83,904	82	\$1,314,700
Terrace Elementary	K-5	74,349	69	\$2,010,700
Thornwood Elementary	PK-5	69,038	76	\$1,462,300
Tiger Trail	PK	26,000	85	\$343,300
Treasure Forest Elementary	K-5	82,149	85	\$1,046,300
Wildcat Way	PK	26,000	80	\$456,800
Woodview Elementary	PK-5	70,508	78	\$1,322,900
Elementary Total/Average		1,108,447	81	\$18,198,300
	Middle Schools			
Landrum Middle	5-8	177,665	76	\$3,959,900
Memorial Middle	6-8	188,852	78	\$3,850,900
Northbrook Middle	6-8	203,020	84	\$3,031,300
Spring Branch Middle	6-8	226,208	82	\$3,833,700

				temporal dividas
School Name: Nottingham Score: 81.62	n Elementary			Grade Configuration: PK- GSF: 66.39
Budget Estimate: \$1,056,900				00,33
Music				
Environment	0.482	0.741	Fair	The music classroom does not have any natural light. The HVAC system is difficult to keep temperature correct.
Size	1.204	1.852	Fair	The music room is $800\mathrm{square}$ feet in size, compared to the recommended ,1200 square for standard.
Location	0.556	0.556	Excel	
Storage/Fixed Equip	0.444	0.556	Good	There is a lack of adequate storage for program needs.
Art				
Environment	0.304	0.468	Fair	The art classroom does not have any natural light. The HVAC system is inconsistent.
Size	0.760	1.170	Fair	The art room is 750 square feet in size, compared to the 1,200 square foot standard.
Location	0.351	0.351	Excel	
Storage/Fixed Equip	0.228	0.351	Fair	There is only one sink and it does not have a clay trap. There is a lack of adequate storage program needs.
Computer Labs				
Environment	0.341	0.341	Excel	
Size	0.853	0.853	Excel	
Location	0.256	0.256	Excel	
Storage/Fixed Equip	0.256	0.256	Excel	
P.E.				
Environment	1.920	1.920	Excel	
Size	4.800	4.800	Excel	
Location	1.440	1.440	Excel	
Storage/Fixed Equip	1.152	1.440	Good	The gym floor is slippery, vinyl composite.

See Appendix for complete report

Background

MGT conducted an educational suitability assessment for each school identified as Tier 2 in SBISD. Tier 1 schools included those constructed in the last ten years and, except for Rummel Creek Elementary School, were not included in the suitability assessments. Rummel Creek was included in the assessments as an example of a school built to the new standards and to ensure alignment between the standards used for the assessments and the district's goals for future schools.

The educational suitability or functionality assessment evaluates how well the facility supports the educational program that it houses. It is important to evaluate all schools compared to a "standard" that defines what is expected.

Process

For this assessment, each site receives one suitability score which applies to all the buildings at the facility. The educational suitability/ functionality of each facility was assessed with BASYS® software system, using the following categories:

- Environment The overall environment of the facility with respect to creating a safe and positive working/learning environment.
- Circulation Pedestrian/vehicular circulation and the appropriateness of site facilities and signage.
- Support Space The existence of facilities and spaces
 to support the educational/governmental program being
 offered. These include offices, general classrooms, special
 learning spaces (e.g. music rooms, libraries, science labs), and
 support spaces (e.g.administrative offices, counseling offices,
 reception areas, kitchens, health clinics).
- **Size** The adequacy of the size of the program spaces.
- Location The appropriateness of adjacencies (e.g., PE space separated from quiet spaces).
- Storage & Fixed Equipment The appropriateness of utilities, fixed equipment, storage, and room surfaces (e.g., flooring, ceiling materials, and wall coverings).



Educational Suitability Assessment Summary (continued)

The BASYS® score for each school is on a 100-point scale, making it possible to compare across all schools or among schools of a similar age or grade configuration. Although the reasons for a score will vary, scores within a given range provide insight into how well a school is generally functioning relative to the educational program offered there. Suitability report results for each assessed school can be found in the *Educational Suitability Report*.

Educational Suitability scores are interpreted as follows:

- 90+ Excellent: The facility is designed to provide for and supports the
 educational program offered. It may have minor suitability/functionality
 issues, but overall it meets the needs of the educational program.
- 80-89 Good: The facility is designed to provide for and support
 a majority of the educational program offered. It may have minor
 suitability/functionality issues, but generally meets the needs of the
 educational program.
- 70-79 Fair: The facility has some problems meeting the needs of the educational program and will require remodeling/renovation.
- 60-69 Poor: The facility has numerous problems meeting the needs of the educational program and needs significant remodeling, additions, or replacement.
- Below 60 Unsatisfactory: The facility is unsuitable in support of the educational program.

Output and Results

Table 1 presents the range and average of suitability/functionality scores by facility type. The suitability/functionality scores range from 63 to 95. The average scores fall within the "Good" to "Fair" range. The district has no schools that fall within the "Unsatisfactory" range.

Table 1: Spring Branch ISD Suitability Score Ranges

SITE TYPE		BILITY RANGE	AVERAGE SUITABILITY
	LOW	HIGH	SCORE
Elementary Schools	67	95	81
Middle Schools	72	90	80
High Schools	63	84	74
Other Educational	81	81	81

Source: MGT of America Consulting, LLC, 2016.

Budget Calculations

Budgets for correcting the suitability deficiencies at a given school were developed using a methodology applied to similar assessments conducted nationally by MGT. The amount calculated is intended to be used as a budget for correcting the overall educational suitability needs of a facility and not as cost estimates for individual deficiencies.

Experience has shown that it is difficult to calculate the cost of correcting items such as classrooms that are sized incorrectly, have inappropriate adjacencies, or lack of a variety of teaching/learning spaces, etc., prior to developing a specific design solution. The remediation of these deficiencies can take a variety of forms and requires a design study before accurate cost calculations can be made. We can, however, develop a budget for suitability improvements based on the overall suitability score of a school and our experience in correcting the overall deficiencies based on that score. Budget estimates for each facility are included in this report and should be used as a starting place for long-range planning.

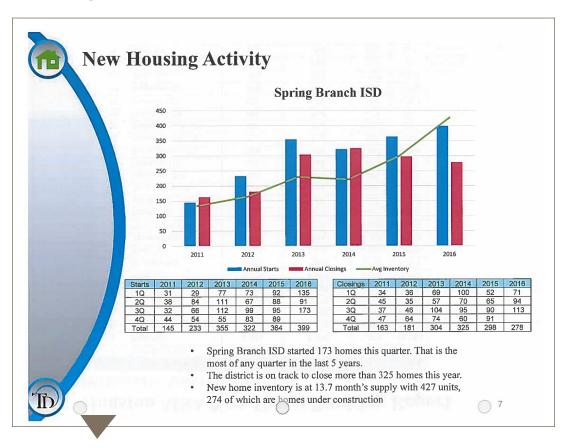
To develop the budgets, each assessment item is weighted based on its relative importance in developing the overall cost of the building(s). The suitability score is a measure of that portion of the facility that is serving the school well. The overall level of deficiencies is then multiplied by the gross square footage (GSF) in the facility and the suitability cost per square foot to renovate the facility.

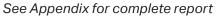
This calculation produces a budget for correcting the educational suitability deficiencies specific to theindividual school.

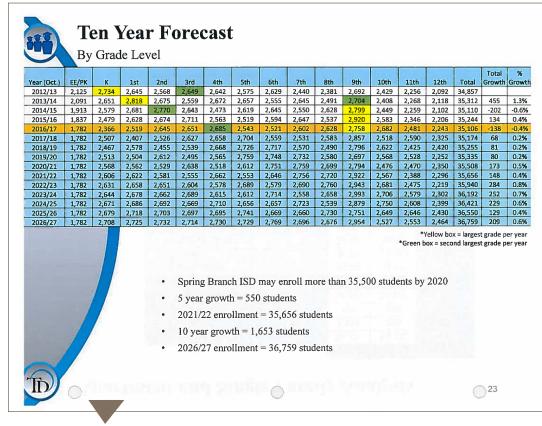
Construction costs for new construction were provided by Spring Branch using current construction data from the region for the three types of facilities, elementary schools, middle schools and high schools. The construction costs, in dollars per gross square foot, were adjusted to create "Replacement Costs" by adding factors for soft costs including a factor for fixtures, furniture and equipment, a factor for aproject contingency, and a factor for architectural/engineering/permit fees.



Demographic Study Assessment Summary







See Appendix for complete report

Background

- Economic Conditions Houston Metropolitan Statistical Area (MSA)
 - Annual Job Growth Rate
 - Unemployment Rate
- Major regional economic drivers market sectors Oil & Gas
- SBISD "footprint" Housing Market -
 - New Home Sales ranked by annual 'closings'
- New Housing Starts
- Vacant Lots Developed / Vacant Lots available
- Population Distribution by SBISD School Boundary
 - Student Yields per Type of Dwelling
 - Current and Projected

Process

The process to produce the demographic study included careful evaluation of numerous economic and market indicators and population-related statistics, including Houston regional economic trends, oil and gas industry trends, housing market trends, and residential Population patterns and density.

Output and Results

Enrollment Projections show estimated growth of 550 students in the upcoming 5-year period, a projection which is considered unlikely to produce a significant change in facilities capital planning and execution during that period.

Potential 10-Year growth of an estimated 1,653 students, approx. 4.5% of the projected total, may generate discussion about particular, focused facilities needs to accommodate that increase.

Roofing Assessment Summary

Roofing Priority for Bond					
Spring Branch ISD					
Pre-K					
1 Bendwood Early Childhood	2020	Partial Replace	s	95,000.00	
2 Bear Blvd Pre-K	2020	Partial Replace	5	600,000.00	
3 Lion Lane Pre-K	2020	Partial Replace	5	600,000.00	
4 Panda Path Pre-K	2020	Partial Replace	\$	450,000.00	
5 Tiger Trail Pre-K	2020	Partial Replace	5	600,000.00	
6 Wildcat Way Pre-K	2020	Partial Replace	5	600,000.00	
		Total Estimate - Pre-	К \$	2,945,000.00	
		SUBTOTA	£ \$	2,945,000.00	
Elementary				- 20	
1 Buffalo Creek Elementary	2019	Replace	\$	1,400,000.00	
2 Treasure Forest Elementary	2019	Replace	5	1,350,000.00	
3 Terrace Elementary	2019	Replace	\$	1,111,000.00	
4 Old Westwood Elementary	2019	Replace	5	985,000.00	
5 Bunker Hill Elementary	2019	Replace	5	959,000.00	
6 Hunters Creek Elementary	2019	Partial Replace	5	987,000.00	
7 Memorial Drive Elementary	2020	Replace	\$	1,210,000.00	
8 Nottingham Elementary	2020	Replace	5	990,000.00	
9 Old Edgewood Elementary	2023	Replace	5	995,000.00	
10 Rummell Creek Elementary	2024	Recoat	5	465,000.00	
11 Frostwood Elementary	2025	Recoat	5	500,000.00	
12 Sherwood Elementary	2025	Replace	\$	1,177,500.00	
13 Valley Oaks Elementary 14 Meadowood Elementary	2025	Recoat Replace	\$	485,000.00 1,300,000.00	
15 Cedar Brook Elementary	2026	Replace	\$	1,420,000.00	
		Total Estimate - Elementar		15,334,500.00	
Middle Schools		SUBTOTAL	. 5	18,279,500.00	
1 Northbrook Middle School	2019	Replace	\$	4,969,000.00	
2 Spring Woods Middle School	2016	Partial Replace	\$	400,000.00	
3 Spring Branch Middle School	2020	Replace	5	3,685,000.00	
4 Memorial Middle School	2021	Replace	\$	1,490,000.00	
5 Landrum Middle School	2022 °	Replace	\$		* If coatings complete in 201
6 Spring Oaks Middle School	2022	Replace	5	3,830,000.00	
7 Spring Forest Middle School	2025	Replace	5	1,434,500.00	
		Total Estimate - Middle School	H \$	19,908,500.00	
High Schools		SUBTOTAL	5	38,188,000.00	
1 Northbrook High School	2023	Replace	5	5,300,000.00	
2 Stratford High School	2024	Replace with deck	5	7,500,000.00	
3 Memorial High School	2024	Replace	5	3,222,200.00	
		Total Estimate - High School	1 \$	16,022,200.00	
	- 6	SUBTOTAL	\$	54,210,200.00	
Metal Roof Repairs	20-0	Paralle Basel Bar Fred St. Co.		207	
1 Buffalo Creek	2019	Repair Metal Roof and Skylights	5	206,000.00	
2 Cedar Brook 3 Treasure Forest	2019	Repair Metal Roof and Skylights Repair Metal Roof and Skylights	5	206,000.00	
5 Treasure Porest	2019		<u> </u>	206,000.00	
		Total Estimate - Repai		618,000.00	
		SUBTOTAL	-5	54,828,200.00	
Ancillary Buildings		Replace	S	1,850,000.00	
	2019		5	400,000.00	
Ancillary Buildings 1 Admin Building 2 Text Book	2019 2019	Replace		1,439,000.DO	
1 Admin Building	2019	Replace Replace	5		
1 Admin Building 2 Text Book	2019 2019	Replace	s s	2,265,500.00	
1 Admin Building 2 Text Book 3 Central Warehouse/Food War	2019 2019	Replace	<u>s</u>		

Background

A separate roofing study was conducted by SBISD in 2016 and the information from that report is included as an Appendix to this Report. That assessment relied on the knowledge of District personnel, detailed visual observation of the roofing systems/facilities under study, and the Building Envelope/Roofing Consultant's professional judgment to evaluate the deficiencies of the systems/facilities studied.

Process

Contained within the detailed 2016 report is a general description of each facility assessed, identified deficiencies, recommendations for corrective measures, and budgetary cost estimates to remedy or replace system deficiencies. End-of-design life and warranty considerations help guide the assessment/condition report output.

Output and Results

The Update provided herein and in the Appendix details a proposed scope of work, from Repair to full Replacement, with partial projects identified where appropriate. In the Updated Report, the portfolio is divided by School Type, and each facility's scope work is identified by the calendar year that project is contemplated.



See Appendix for complete report



Child Nutrition Services Assessment Summary

	SPRING BRANCH ISD Section	Section 114000 - Foodservice Equipment Assessment Ranking					
Facility Type	Option 1	Option 2	Option 3				
Pre-K	Overall is in poor condition and equipment has reached it's life expectancy. Recommend complete renovation and expanding the entire kitchen space to 2400 square feet. \$450,000 foodservice equipment cost.	Overall in fair condition, recommend replacing all priority 1 & 2 equipment. Consider 700 square footage expansion.	Overall all in good condition, recommend replacing all Priority 1 equipment.				

SPRING BRANCH ISD BEAR BOULEVARD PRE-K

Section 11400 - Foodservice Equipment

Assessment

No.	ltem	Present	Condition				System Impact/ Addition	Item Note	Priority / C	Cost		
			Poor	Fair	Good	Excellent			1	2	3	4
	Pre-K Sq Ft 2400	✓		✓			Х	Has 1705 sq ft Consider 700 sq ft expansion				
	Service Yard											
1	Dumpster Present / Location	✓					Х	Located on other side of building. No convenient access.				
	Receiving											
1	Air Screen	✓	✓					Rust		\$1,800		
2	4'-0" door	✓	✓				X	3' door				
3	12'-0" x 12'-0" canopy						*	Not present		\$17,804		
4	Adequate lighting at dock area						*	Not present		\$9,000		
5	3'-0" x 3'-0" wash down area						*	Not present		\$7,500		
6	Freeze proof hose bibb						*	Not present		\$125		
7	Protective bollards at canopy			- D			*	Not present		\$3,900		
	Manager's Office											
1	Minimum square footage to be 80 sq.ft	~	•	~		-		77 sq ft				
2	Floor mounted combination safe							Not present			\$700	
	Janitor / Laundry											
1	7'-0" wide x 8'-0" deep						х	Not Present				
2	Janitor sink 24" Min						*	Not Present		\$6,810		

Background and Process

A separate study of the condition and efficacy of the Food Services (Kitchen and related back-areas) facilities/equipment was conducted as part of the FCA, and the information from that report is included as an Appendix to this Report.

The scope of work included review and assessment of 14 Tier 1 Schools. For that portfolio, the consultant hosted pre-assessment meetings with SBISD managers to gather existing data on kitchens constructed between 2010 and 2016 and identified any major issues that required on-site assessments. If required, based on the facility status, an on-site assessment report with cost estimates was generated.

For 43 Tier 2 Schools, the consultant performed on-site visits to review the following functional areas/equipment: Receiving, Office, Locker/Toilet, Janitor, Dry Storage, Cold Storage, Preparation Bake, Production, Holding, Serving, and Warewash.

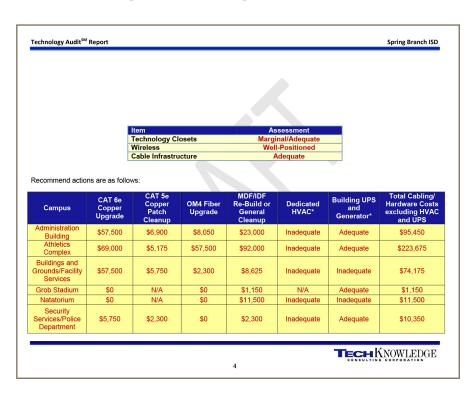
Output and Results

Conditions were noted as Poor, Fair, Good, or Excellent. Any deficiencies were identified as related to Code Violations, Food Safety/Operational, 'Should-do', and Maintenance. All deficiencies that were prioritized as noted above included cost estimates for system/issue correction/mitigation, or replacement.

See Appendix for complete report



Technology Cabling Assessment Summary



echno	nology Audit [™] Report Spring Bran	ch ISC
lotes:	s.	
1.	. <u>Cat 6 Copper Upgrade</u> : Replacing the current Cat5 or Cat5e copper horizontal cabling in the facility to standard. Estima are based on \$350/400 per data connection following the district standard for 2 data connections per classroom/office.	ites
2.	. <u>Cat5e Copper Patch Cleanup</u> : Maintenance in Network closets to for the patch panels using proper length cables. May include some of the following: vertical/horizontal wire management; clean-up of trunking/patching; grounding/bonding; fir seal; labeling of cables; painted plywood backboards; anchoring of ladder rack/rack). Estimates are based on \$1000 per cable cabinet/rack for new, specific length patch cables.	e-
3.	. <u>OM4 Fiber Upgrade</u> : Upgrade for 62.5 micron cabling and copper backbone cabling to standard. Estimates are based o approximate \$5k per fiber run and supports between MDF and IDFs. Factors such as type distances will affect cost.	n an
4.	. MDF/IDF Rebuild or General Cleanup: Remediation of network rooms which are inadequate for purpose. Materials and - coring/sleeves; grounding/bonding; racks; vertical wire management; horizontal wire management; ladder rack and associated components; fire-retardant painted plywood backboards. Rebuild costs are estimated at \$15k per MDF and \$10 per IDF. General clean up where a space functions, but should be improved, is estimated to cost \$1-2k per closet.	
5.	. <u>Dedicated HVAC</u> : Remediating network rooms that do not have dedicated/independent climate control.	
6.	. Building UPS and Generator: Installation for commercial power to insure reliable operations of network in the facility.	
Cost	st estimates are for technology related equipment and infrastructure only.	
	TECH KNOWLET	GE
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See Appendix for complete report

Background

TechKnowledge Consulting Corporation was engaged to evaluate the current technology cabling infrastructure deployment for Spring Branch ISD and determine its suitability for the district's long term use. The goals of the assessment were:

- To understand Spring Branch ISD's long-term technology cabling plan with an emphasis on short and long term deployment of IP network connected devices across the district.
- To inspect 60 Spring Branch ISD Properties, reviewing the existing conditions to technology closets, cabling, optical fiber, and inter-building conduits and connectivity.
- To review and evaluate all client-provided documentation regarding the current environment, including products present, configuration/models of hardware, costs, applications, dependencies, and the IP network.
- To provide an assessment of the current environment, identifying potential challenges that would impede full implementation of the district's technology cabling vision, exploring potential opportunities for improvement, risk reduction or change.

TechKnowledge applied the standards set forth by ANSI (American National Standards Institute), TIA (Telecommunications Industry Alliance), and BICSI (Building Industry Consulting Services International), to establish "Industry Standards" for the campus infrastructure and server rooms.

Process

TechKnowledge assigned a rating to various systems or items as to their ability to support Spring Branch ISD's long term IT infrastructure needs. These are:

- **Well Positioned** The item is well positioned to support Spring Branch ISD's technology cabling needs for the next thirty-six to forty-eight months, without significant change or investment.
- Adequate The or item is fulfilling its intended purpose and will likely continue to do so for 12 to 18 months, but will be inadequate beyond that timeframe.
 Additional investment within 12 to 18 months is considered likely.
- Marginal The or item is minimal and barely fulfilling its intended purpose. Additional investment within 6 to 12 months is considered likely.
- Inadequate The item is not fulfilling its intended purpose and prompt action is necessary. Immediate investment is required.

Output and Results

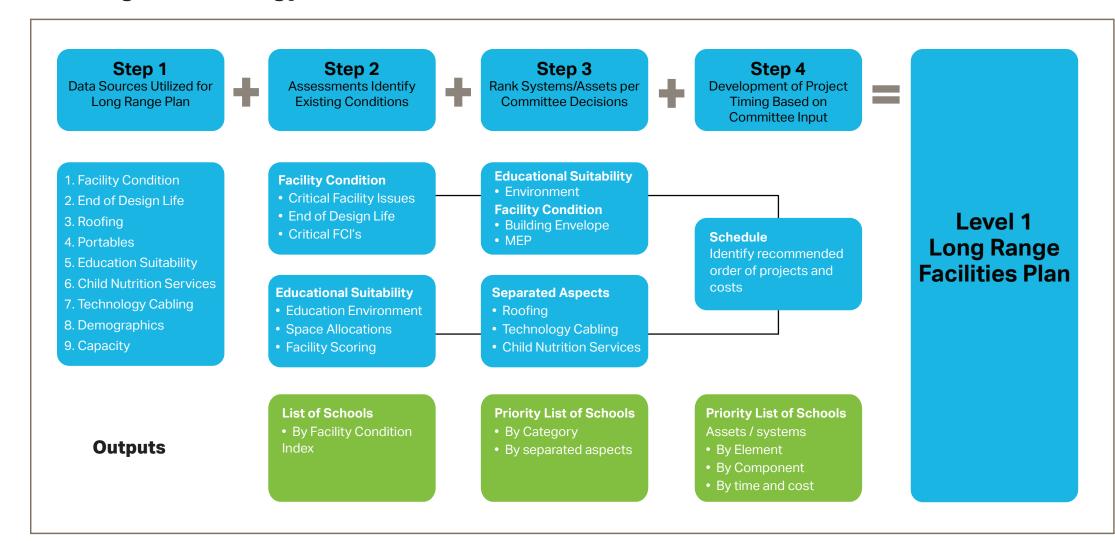
Working closely with Spring Branch ISD's technology cabling and facilities staff, the information provided in the assessment report included:

- Summarized and ranked conditions and findings by facility
- Presentation of recommended actions and a recommended order of priority
- Repair order of magnitude budget for items that are likely to cost more than \$25,000
- Identification of potential impacts on the IP network, A/V system, wireless, electrical, or the facility in general.
- Considered the merits limitations and risks associated with keeping current infrastructure versus updating at any given facility.
- Identified components which should be reused in a new design in those which are best replace with new acquire technology cabling infrastructure



APPROACH AND RESULTS

Planning Methodology



Step 1

On March 31st 2017 AECOM delivered the Facilities Condition Assessment, together with reports outlining Education Suitability, Child Nutrition Services and Technology Cabling Condition. The information contained in these reports, together with reports on Roof Condition Demographics and Capacity formed the base data sets for the LRFP.

Step 2

Step 2 was to assemble the data into preliminary output reports that identified the schools in most need. Using information on numbers critical FCls, systems end of design life and the Educational Suitability of schools will allow The LRFPC to make recommendations on addressing school's ability to deliver quality educational program in facilities capable of supporting the District's mission.

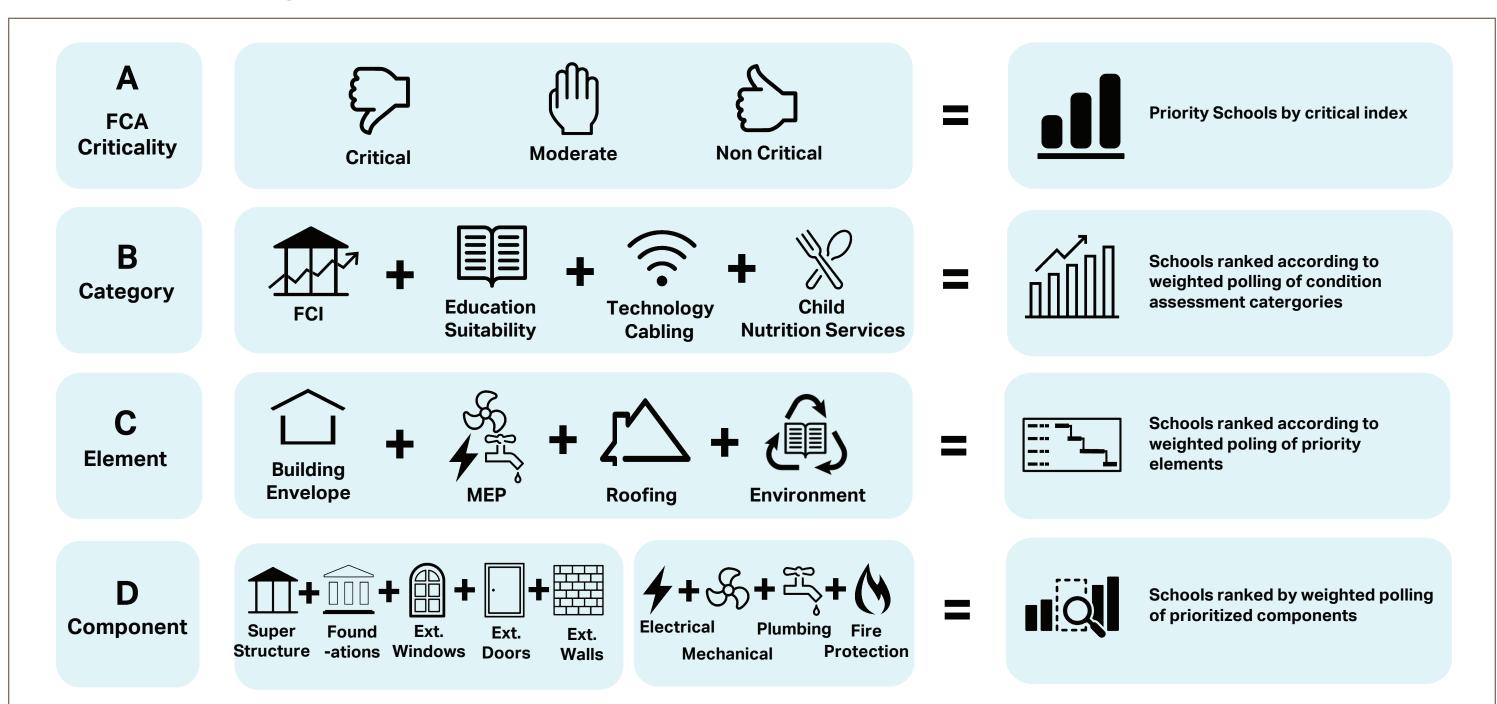
Step 3

Step Three involved surveying the LRFPC on their priorities from the data sets and using the survey results to rank systems / asset deficiencies on a school by school basis. Parallel facilities plans were developed following identification that Roofing, Technology Cabling and Child Nutrition Services should be considered separately.

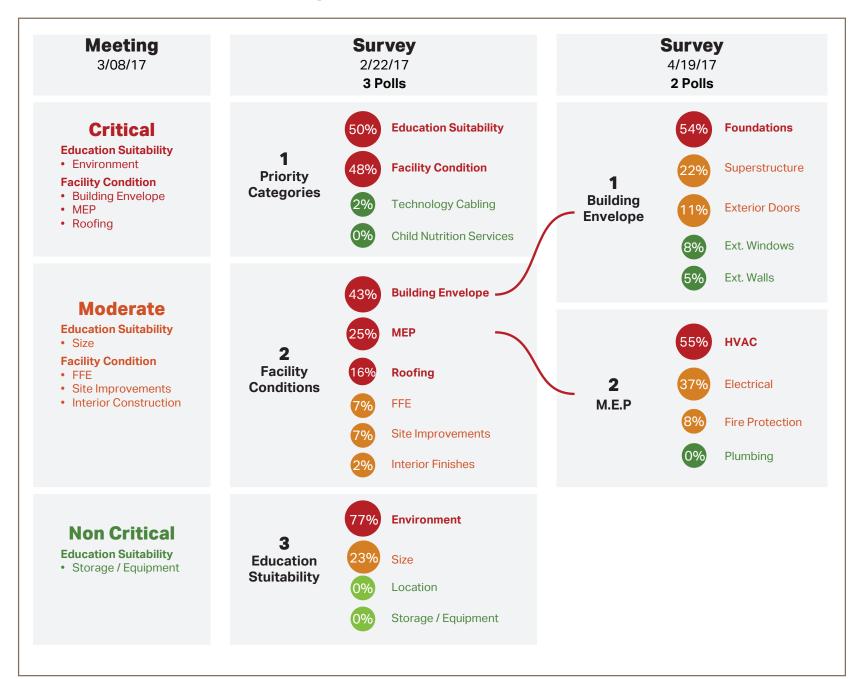
Step 4

Step 4 involved the application of critical end of design life data for systems and assets. This enabled the creation of ranking reports illustrating a time based and costed program of works for prioritized element and components of each school.

Calculation Methodology



Prioritization Methodology



Surveys: February 22nd 2017

At the meeting of the LRFPC on February 22nd three surveys of the Committee members were undertaken. The first survey identified education suitability and facility condition as priority aspects. The second survey identified, building envelope, MEP and Roofing as priority aspects. The third survey identified Environment from the Educational Suitability report as a priority aspect.

Surveys: March 8th 2017

The LRFPC engaged in an exercise to collectively define the terminology of Critical, Moderate, & Non-Critical. This exercise involved a collaborative process of definition creation followed with a group voting exercise to determine the final set of definitions. The committee then voted on which of the Categories and Elements the Facility Conditions Assessment fall into the Critical, Moderate or Non-Critical buckets.

Surveys: April 19th 2017

At the meeting of the LRFPC on April 19th 2017 two further surveys of the Committee members were undertaken. The surveys dissected the Building Envelope, and Mechanical / Electrical and Plumbing (MEP) aspects prioritized at the previous meeting. The first survey of building envelope identified foundations as the most critical element followed by superstructure, exterior doors, exterior windows and finally external walls. The second survey of MEP identified HVAC as the most critical element, followed by electrical, plumbing and finally fire protection.

The detailed results of these surveys and their application into output reports is illustrated on the following pages.

LRFPC Definitions



Critical: Imperative or crucial to the protection and safety of the occupants/users. It is also viewed as mission critical for the efficient and effective operations and intended use of the facility. In addition major facility components and life safety systems that have exceeded their life expectancy or are inoperable must be corrected to meet current district standards.

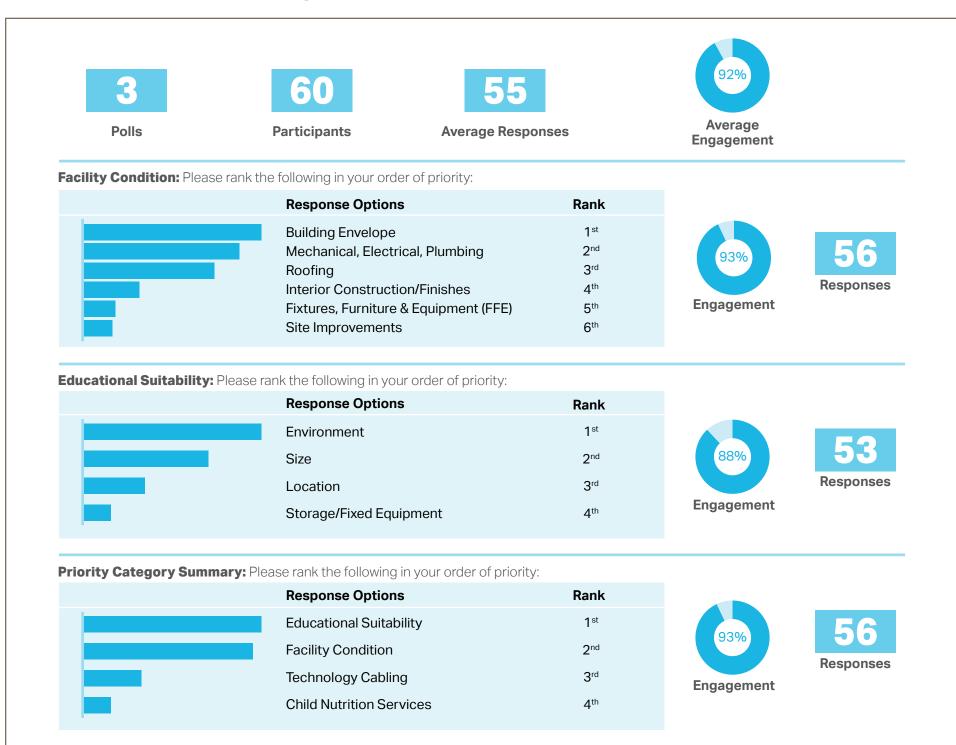


Moderate: Important or optimal to the effective use and functionality for both curriculum and operations of the facility. It is not absolutely necessary or crucial. The facility can still operate safely and function with the current condition of this facility component, for example is a comfort vs. safety. A moderate operations issue could become critical if left unchecked.



Non-critical: Minimally imperative or crucial and is not necessary to the functionality of the facility. Non-critical components are to be viewed as "nice to have items" that are not necessary to materially improve the basic educational process/mission. In addition minor facility components are to be addressed upon failure or at the end of their life expectancy and are to meet current district standards.

Prioritization Methodology – 3 Polls: February 22nd 2017

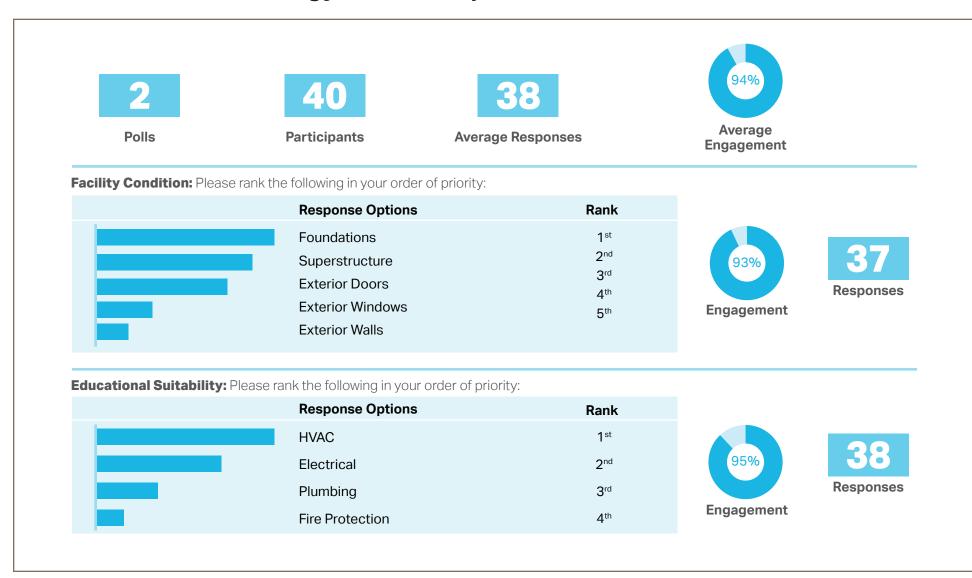


Prioritization of Main Elements

Understanding the Committee's desires are the cornerstone in developing the Long Range Facility Plan, one of the first prioritizing exercises the Committee completed was done using an interactive polling tool deployed to determine the ranking of major Facility Condition Assessment Elements. The Committee also provided its prioritization of the FCA Categories – Facility Condition, Educational Suitability, Child Nutrition Services, and Technology Cabling.



Prioritization Methodology – 2 Polls: April 19th 2017



Ranking Building Envelope and Mechanical, Electrical, & Plumbing Elements to Level D

In the continued development of Long Range Facility Plan, the Committee prioritized major Components within the Building Envelope and the Mechanical, Electrical, Plumbing systems.

AECOM :

Calculation Methodology – Level A: Criticality

Facility / Campus	Facility Type	Year Built	Building Envelope Ranking	MEP Percentage Ranking	Roofing Percentage Ranking	Educational Suitability: Environment Ranking	Total Cost	Level A Average Ranking - Critical
Northbrook High	High	1974	25	4	26	11	\$ 94,275,559	17
Terrace Elementary	Elementary	1973	36	5	24	4	\$ 18,250,055	17
Woodview Elementary	Elementary	1958	27	7	27	12	\$ 20,515,549	18

Critical Ranking

evel A Averag Interior **Educational** Interior Conveying FF&E Total Cost Facility / Campus Facility Type Year Built Stairs Ranking Suitability: Size Ranking -Construction Ranking Moderate 110,522,932 Spring Woods High High 1964 1962 Memorial High High 101,520,062

Moderate Ranking

Facility / Campus	Facility Type	Year Built	Educational Suitability: Environment Ranking	Total Cost	Level A Average Ranking - Non Critical	
Bendwood Campus	Elementary	1958	1	\$ 13,331,513	1	
Ag Farm	High	1961	2	\$ 7,315,598	2	
SBEC - DAEP	High	1980	3	\$ 6,664,640	3	

Non Critical Ranking

Criticality

At the committee meeting on March 8th 2017 discussion with LRFPC members identified "Critical", "Moderate" and "Non Critical" as groupings within which to place the priority elements. Subsequent discussion with the Committee identified the "Critical", "Moderate" and Non Critical definitions. These were then listed in the order illustrated in the table on the left.



Education Suitability

Environment

Facility Condition

- Building Envelope
- MEP
- Roofing



Education Suitability

- Size

Facility Condition

- FFE
- Site Improvements
- Interior Finishes



Education Suitability

- Storage / Equipment

Calculation Methodology – Level B: by Category

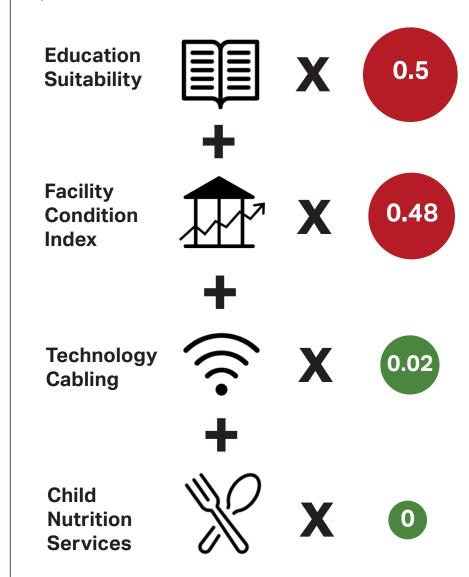
Level B - by FCA Category

LRFPC Weights:	0.48	0.50	0.00	0.02
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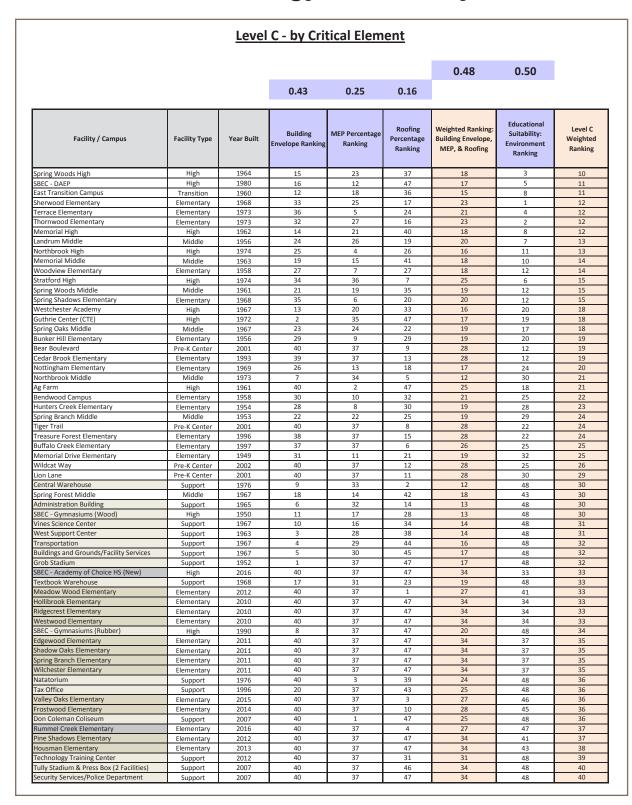
Facility / Campus	Facility Type	Year Built	FCI Score	Educational Suitability Score	Child Nutrition Ranking	Technology Ranking	Total Cost	Level B Weighted Ranking
Spring Woods High	High	1964	0	4	30	44	\$ 110,522,932	3
Bendwood Campus	Elementary	1958	0	5	4	41	\$ 13,331,513	3
Memorial High	High	1962	0	8	28	38	\$ 101,520,062	5
East Transition Campus	Transition	1960	1	10	11	11	\$ 22,358,085	6
Landrum Middle	Middle	1956	0	12	23	37	\$ 52,062,456	7
Memorial Middle	Middle	1963	1	12	20	43	\$ 51,569,352	7
Woodview Elementary	Elementary	1958	0	14	17	23	\$ 20,515,549	7
Spring Woods Middle	Middle	1961	0	14	26	40	\$ 59,926,041	8
Spring Oaks Middle	Middle	1967	0	17	24	45	\$ 54,804,143	9
Terrace Elementary	Elementary	1973	16	4	15	34	\$ 18,250,055	10
Bunker Hill Elementary	Elementary	1956	0	21	14	22	\$ 17,755,567	11
Westchester Academy	High	1967	0	22	32	57	\$ 89,081,550	12
SBEC - DAEP	High	1980	21	5	34	17	\$ 6,664,640	13
Hunters Creek Elementary	Elementary	1954	0	27	16	14	\$ 18,957,694	14
Spring Branch Middle	Middle	1953	0	27	27	55	\$ 62,928,124	15
Memorial Drive Elementary	Elementary	1949	0	32	12	31	\$ 17,171,302	17
Spring Forest Middle	Middle	1967	1	32	22	46	\$ 51,808,263	17
Sherwood Elementary	Elementary	1968	33	3	9	28	\$ 14,899,260	18
Thornwood Elementary	Elementary	1973	37	3	6	26	\$ 13,999,951	20
Northbrook High	High	1974	28	13	29	36	\$ 94,275,559	21
Cedar Brook Elementary	Elementary	1993	32	12	31	29	\$ 16,417,288	22
Spring Shadows Elementary	Elementary	1968	36	11	13	8	\$ 17,687,958	23
Treasure Forest Elementary	Elementary	1996	28	23	25	30	\$ 16,155,732	26
Bear Boulevard	Pre-K Center	2001	37	16	3	12	\$ 5,505,847	26
Lion Lane	Pre-K Center	2001	30	26	5	13	\$ 5,966,445	28
Stratford High	High	1974	45	10	19	59	\$ 65,539,268	28
Guthrie Center (CTE)	High	1972	38	19	34	15	\$ 20,328,659	28
Tiger Trail	Pre-K Center	2001	38	24	2	10	\$ 5,323,443	30
Nottingham Elementary	Elementary	1969	40	27	1	21	\$ 12,548,943	33
Northbrook Middle	Middle	1973	41	25	18	61	\$ 38,284,391	33
Wildcat Way	Pre-K Center	2002	41	28	8	16	\$ 6,278,764	34
Buffalo Creek Elementary	Elementary	1997	53	23	21	18	\$ 11,882,365	37
Ag Farm	High	1961	69	16	34	24	\$ 7,315,598	42
Rummel Creek Elementary	Elementary	2016	88	33	34	60	\$ 3,400,426	60
Edgewood Elementary	Elementary	2011	89	90	34	52	\$ 4,566,070	89
Frostwood Elementary	Elementary	2014	87	93	34	54	\$ 4,705,170	89
Hollibrook Elementary	Elementary	2010	88	89	34	2	\$ 4,602,331	87
Housman Elementary	Elementary	2013	89	92	34	56	\$ 3,340,348	90
Meadow Wood Elementary	Elementary	2012	82	91	34	27	\$ 5,357,415	85
Pine Shadows Elementary	Elementary	2012	90	91	34	42	\$ 4,216,684	90
Ridgecrest Elementary	Elementary	2010	90	89	34	51	\$ 4,384,287	89
Shadow Oaks Elementary	Elementary	2011	88	90	34	47	\$ 4,649,638	88
Spring Branch Elementary	Elementary	2011	87	90	34	25	\$ 3,804,516	87
Valley Oaks Elementary	Elementary	2015	88	94	34	53	\$ 3,530,851	90
Westwood Elementary	Elementary	2010	89	89	34	49	\$ 3,602,202	88
Wilchester Elementary	Elementary	2011	89	90	34	58	\$ 3,886,628	89
Administration Building	Support	1965	0	-	34	32	\$ 21,970,242	
Buildings and Grounds/Facility Services	Support	1967	0	-	34	39	\$ 20,488,433	-
Central Warehouse	Support	1976	29	-	34	63	\$ 7,804,230	-
Don Coleman Coliseum	Support	2007	59	-	7	5	\$ 8,776,427	-
Grob Stadium	Support	1952	61	-	33	62	\$ 8,623,961	-
Natatorium	Support	1976	17	_	34	50	\$ 6,235,031	-
SBEC - Academy of Choice HS (New)	High	2016	88		34	1	\$ 2,300	-
SBEC - Gymnasiums (Rubber)	High	1990	65		34	20	\$ 2,810,260	
SBEC - Gymnasiums (Wood)	High	1950	2	-	34	48	\$ 7,833,169	-
Security Services/Police Department		2007	61		34	35	\$ 2,563,938	
Tax Office	Support	1996	22	-	34	3	\$ 2,563,938	
Technology Training Center	Support	2012	78	-	34	4	\$ 1,355,303	
Textbook Warehouse	Support	1968	20		34	7	\$ 2,130,965	
	Support			-				-
Transportation	Support	1967	2 26		34	19 9	\$ 7,738,306	-
Tully Stadium & Press Box (2 Facilities)	Support	2007	26	-	10		\$ 11,512,228 \$ 5.886,651	-
Vines Science Center West Support Center	Support Support	1967 1963	13	-	34	33 6	\$ 5,886,651 18,042,936	-
					34			

Category

At the meeting of the LRFPC on February 22nd three surveys of the Committee members were undertaken. The first survey identified education suitability and facility condition as priority aspects along with Technology Cabling and Child Nutrition Services as less important. The survey results provided weighting multipliers that were applied to each Category to provide a prioritized list of schools.

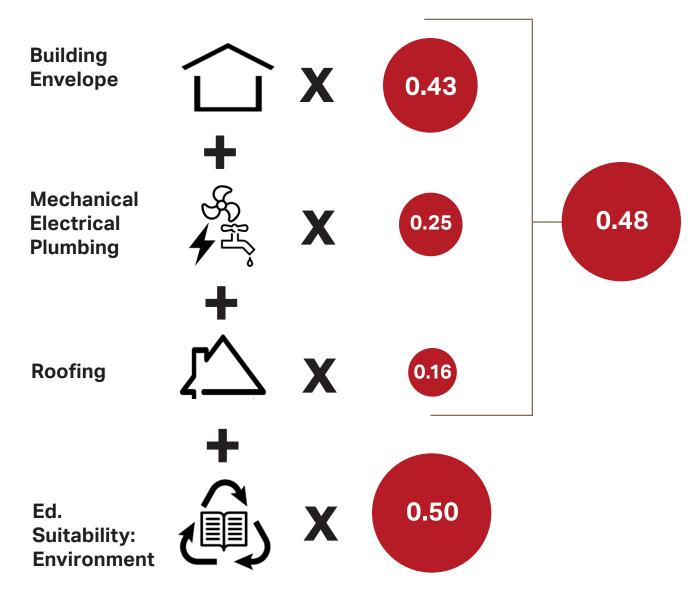


Calculation Methodology – Level C: by Element

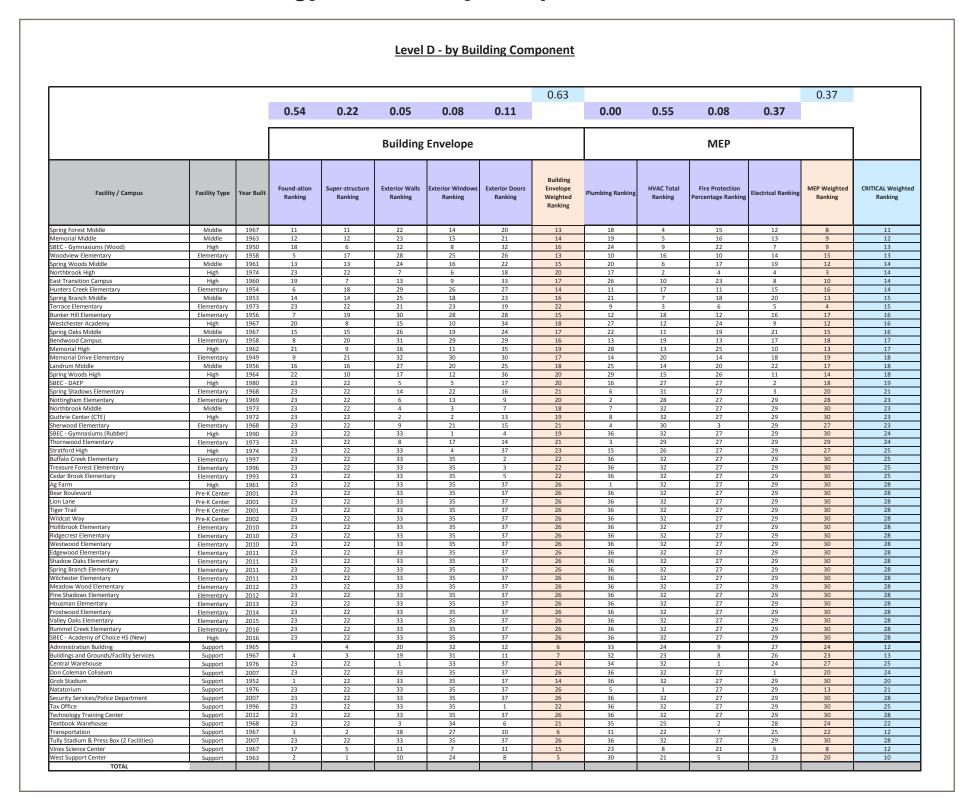


Element

At the meeting of the LRFP Committee on February 22nd three surveys of the Committee members were undertaken. The second survey identified, Building Envelope, MEP and Roofing as priority aspects. The third survey identified Environment from the Educational Suitability report as a priority aspect.

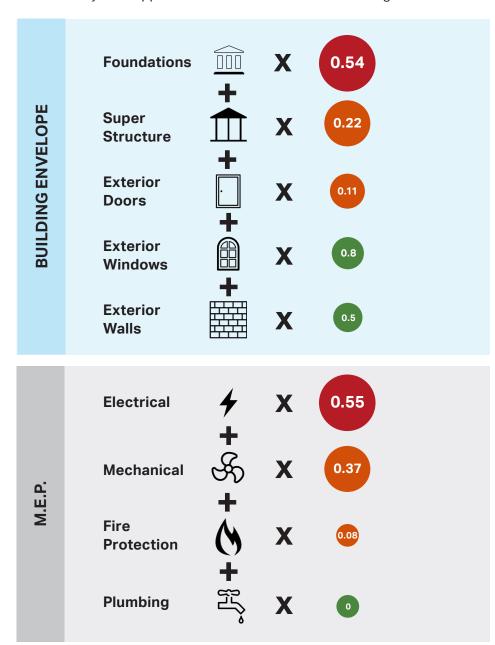


Calculation Methodology – Level D: by Component



Component

At a meeting of the LRFPC on April 19th 2017 two further surveys were undertaken. The surveys dissected Building Envelope, and Mechanical / Electrical and Plumbing (MEP). The table below illustrates the weightings that were derived from the survey and how they were applied to the data to arrive at the rankings illustrated on the left.



10 Year Priorities

			_	<u> FI</u>	oposeu 10	-Year Plan	(W) FCI-	O Oven	ауј						
Facility / Campus	Facility Type	Year Built	Area (SF)	Level B Weighted Ranking	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year
BBEC - DAEP	High	1980	21,260	41	\$ 6,664,640	\$ 6,664,640									1
Ferrace Elementary	Elementary	1973	74,349	43	\$ 18,250,055	\$ 18,250,055									
Spring Woods Middle	Middle	1961	200,616	43	\$ 59,926,041	\$ 59,926,041									
Spring Woods High Memorial High	High High	1964 1962	336,366 311,115	43 44	\$ 110,522,932 \$ 101,520,062	\$ 110,522,932	\$ 101.520.062								-
Sherwood Elementary	Elementary	1962	69,371	45	\$ 101,520,062	\$ 14,899,260	\$ 101,520,062								-
Bendwood Campus	Elementary	1958	38,830	46	\$ 13,331,513	\$ 13,331,513				1					
Woodview Elementary	Elementary	1958	70,508	46	\$ 20,515,549	\$ 20,515,549									
Northbrook High	High	1974	394,609	46	\$ 94,275,559		\$ 94,275,559								
Memorial Middle	Middle	1963	188,852	46	\$ 51,569,352		\$ 51,569,352								
Hunters Creek Elementary andrum Middle	Elementary	1954	61,937	47 47	\$ 18,957,694		\$ 18,957,694	¢ 52.062.450							
andrum Middle East Transition Campus	Middle Transition	1956 1960	177,665 68,978	47	\$ 52,062,456 \$ 22,358,085			\$ 52,062,456 \$ 22,358,085							
Bunker Hill Elementary	Elementary	1956	58,385	49	\$ 17,755,567		\$ 17,755,567	y 22,330,063							t
Spring Branch Middle	Middle	1953	226,208	49	\$ 62,928,124		, , , , ,	\$ 62,928,124	1						
pring Oaks Middle	Middle	1967	189,660	49	\$ 54,804,143				\$ 54,804,143						
Thornwood Elementary	Elementary	1973	69,038	50	\$ 13,999,951			\$ 13,999,951							<u> </u>
Ag Farm	High	1961 1993	28,300 82,179	50	\$ 7,315,598			ć 16 117 200	\$ 7,315,598						
Cedar Brook Elementary Spring Shadows Elementary	Elementary Elementary	1993	82,179	51 51	\$ 16,417,288 \$ 17,687,958			\$ 16,417,288 \$ 17,687,958							-
Spring Snadows Elementary	Middle	1967	192,559	51	\$ 51,808,263			\$ 17,007,550	51808263.06						-
Westchester Academy	High	1967	294,963	51	\$ 89,081,550						\$ 89,081,550				
Guthrie Center (CTE)	High	1972	83,614	51	\$ 20,328,659					\$ 20,328,659					
Stratford High	High	1974	320,000	51	\$ 65,539,268					\$ 65,539,268					
Nottingham Elementary	Elementary	1969	66,393	52	\$ 12,548,943				\$ 12,548,943						
Memorial Drive Elementary Lion Lane	Elementary Pre-K Center	1949 2001	58,965 26,000	53 53	\$ 17,171,302 \$ 5,966,445				\$ 17,171,302	\$ 5,966,445					
Vildcat Way	Pre-K Center	2002	26,000	54	\$ 6,278,764					\$ 6,278,764					
Bear Boulevard	Pre-K Center	2001	26,000	54	\$ 5,505,847					\$ 5,505,847					
Northbrook Middle	Middle	1973	203,020	54	\$ 38,284,391						\$ 38,284,391				
Treasure Forest Elementary	Elementary	1996	82,149	55	\$ 16,155,732					\$ 16,155,732					
Figer Trail Buffalo Creek Elementary	Pre-K Center Elementary	2001 1997	26,000 82,179	56 57	\$ 5,323,443 \$ 11,882,365					\$ 5,323,443 \$ 11,882,365					-
Hollibrook Elementary	Elementary	2010	111,352	58	\$ 4,602,331					J 11,002,303		\$ 4,602,331			
Vestwood Elementary	Elementary	2010	98,264	59	\$ 3,602,202							\$ 3,602,202			
Spring Branch Elementary	Elementary	2011	101,897	59	\$ 3,804,516							\$ 3,804,516			
Ridgecrest Elementary	Elementary	2010	112,095	59	\$ 4,384,287							\$ 4,384,287			
Shadow Oaks Elementary	Elementary	2011	118,314	59	\$ 4,649,638							\$ 4,649,638			
Edgewood Elementary Meadow Wood Elementary	Elementary Elementary	2011 2012	109,000 97,749	59 59	\$ 4,566,070 \$ 5,357,415							\$ 4,566,070 \$ 5,357,415			
Wilchester Elementary	Elementary	2012	123,253	59	\$ 3,886,628							3,337,415 ب	\$ 3,886,628		
Pine Shadows Elementary	Elementary	2012	118,167	60	\$ 4,216,684								\$ 4,216,684		
Housman Elementary	Elementary	2013	109,422	60	\$ 3,340,348								\$ 3,340,348		
rostwood Elementary	Elementary	2014	110,145	61	\$ 4,705,170								\$ 4,705,170	·	ļ
Valley Oaks Elementary Rummel Creek Elementary	Elementary Elementary	2015 2016	117,872 106,260	61 62	\$ 3,530,851 \$ 3,400,426								\$ 3,530,851 \$ 3,400,426		<u> </u>
SBEC - Academy of Choice HS (New)	High	2016	32,281	Pending	\$ 3,400,426					1		1	3,400,426 ب	\$ 2,300	+
BEC - Academy of Choice H3 (New)	High	1990	30,000	Pending	\$ 2,810,260							 		\$ 2,810,260	
BEC - Gymnasiums (Wood)	High	1950	30,000	Pending	\$ 7,833,169			\$ 7,833,169						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Administration Building	Support	1965	59,125	Pending	\$ 21,970,242							\$ 21,970,242			
Buildings and Grounds/Facility Services	Support	1967	34,100	Pending	\$ 20,488,433								\$ 20,488,433	A 300000	ļ
Central Warehouse	Support	1976	53,945	Pending	\$ 7,804,230 \$ 8,776,427									\$ 7,804,230 \$ 8,776,427	
Oon Coleman Coliseum Grob Stadium	Support Support	2007 1952	59,523 10,950	Pending Pending	\$ 8,776,427 \$ 8,623,961									\$ 8,776,427	
Vatatorium	Support	1976	21,525	Pending	\$ 6,235,031									\$ 6,235,031	
Security Services/Police Department	Support	2007	16,195	Pending	\$ 2,563,938									\$ 2,563,938	
Tax Office	Support	1996	3,136	Pending	\$ 1,355,303									\$ 1,355,303	
Technology Training Center	Support	2012	9,222	Pending	\$ 2,130,965										\$ 2,1
Textbook Warehouse	Support	1968	10,469	Pending	\$ 6,178,543										\$ 6,1
Fransportation Fully Stadium & Press Box (2 Facilities)	Support	1967 2007	12,965 23,262	Pending Pending	\$ 7,738,306 \$ 11,512,228							-			\$ 7,7 \$ 11,5
/ines Science Center	Support Support	1967	18,917	Pending	\$ 5,886,651							 			\$ 11,5
West Support Center	Support	1963	59,334	Pending	18,042,936	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,042,936	\$ -	\$ -	\$
					\$ 1,315,636,289	\$244,109,990	\$284,078,235	\$193,287,031	\$143,648,249	\$136,980,522	\$127,365,941		\$43,568,540	\$38,171,450	\$33,4
			†			\$ 1,315,636,289						+			

10 Year Priorities

The recommended 10-Year Priorities are based on the comprehensive calculation methodology which yields highly focused results that are a statistical combination of the FCA Category rankings (FCI, Educational Suitability, Child Nutrition Services, and Technology Cabling); and the detailed weighting factors determined by the LRFPC using the Component level of detail in the Element classification (Building Envelope, Mechanical, Electrical, & Plumbing).

ECOM 30

Roofing Track

							<u></u>	ACK - 10 YEAR PLAN						
								-						
Facility / Campus	Facility Type	Year Built	Area (SF)	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
drum Middle	Middle	1956	177,665 \$	730,000 \$	210,000 \$	95,000 \$	250,000 \$	175,000			=		= -	
norial Middle	Middle	1963	188,852 §	1,116,400 \$	27,900 -	÷	\$		-			-		
ng Branch Elementary	Elementary Elementary	2011 1956	101,897 \$ 58,385 \$	462,000 \$ 900,000 -	300,000 \$		-		-			-	-	
ker Hill Elementary iters Creek Elementary	Elementary	1954	61,937 5		\$ \$	900,000 - 80,000 -	-				-			
thbrook Middle	Middle	1973	203,020 \$	4,622,000 -	\$		\$	4,300,000				-		
dow Oaks Elementary	Elementary	2011	118,314 \$	718,000 -	\$	387,000 -	-		-		-	- 5	331,000 -	
tford High	High	1974	320,000 \$	1,133,000 -	\$		\$	1,003,000	-		-	-	-	
ace Elementary	Elementary	1973	74,349 \$	1,111,000 -	\$		-			:	=	-		
odview Elementary	Elementary Support	1958 1965	70,508 \$ 59,125 \$	763,500 - 1,850,000 -	\$		1,850,000 -		\$ 300,000 \$	400,000	-	-	-	
ninistration Building r Boulevard	Pre-K Center	2001	26,000 \$	1,850,000 - 600,000 -	-	\$	1,850,000 - 600,000 -				-	-		
dwood Campus	Elementary	1958	38,830 \$	95,000 -	-	\$	95,000 -				-			
alo Creek Elementary	Elementary	1997	82,179 \$	1,400,000 -	-	\$	1,400,000 -				-	-	-	
dings and Grounds/Facility Services	Support	1967	34,100 \$	837,000 -	-	\$	97,000 -		\$ 700,000 \$	40,000	=	-		
tral Warehouse	Support	1976	53,945 \$	1,439,000 -	-	\$	1,439,000 -		-		-	-	-	
Lane	Pre-K Center	2001	26,000 \$	600,000 -	-	\$	600,000 -		-	:	=	-	-	
norial Drive Elementary	Elementary Elementary	1949 1969	58,965 \$ 66,393 \$	1,210,000 -	-	\$	1,210,000 -		-		-	-	-	
tingham Elementary ng Branch Middle	Elementary Middle	1969 1953	66,393 \$ 226,208 \$	990,000 -	-	\$	990,000 - 3,685,000 -				-			
ng Branch Middle tbook Warehouse	Support	1968	10,469 S	400,000 -	-	\$	3,685,000 - 400,000 -				_	-		
r Trail	Pre-K Center	2001	26,000 \$	600,000 -	-		600,000 -				-			
sure Forest Elementary	Elementary	1996	82,149 ş	1,350,000 -	-	\$	1,350,000 -				-	-		
lcat Way	Pre-K Center	2002	26,000 \$	600,000 -	-	\$	600,000 -				-	-		
ibrook Elementary	Elementary	2010	111,352 \$	987,500 -	-	-	\$	987,500	-		-	-	-	
sman Elementary	Elementary	2013	109,422 \$	750,000 -	÷	÷	\$		-		-	-	-	
adow Wood Elementary	Elementary High	2012 1962	97,749 \$	25,500 -	-	=	\$:	=		-	
morial High ng Forest Middle	Middle	1962	192,559 s	2,282,000 - 1,400,800 -	-	-	\$		\$ 145,000 -		-	\$ 450,000 \$ \$ 696,800		
ing Oaks Middle	Middle	1967	189,660 \$	300,000 -	-	-	\$				-	- 050,000		
es Science Center	Support	1967	18,917 \$	285,000 -	-	-	\$				-	-		
thbrook High	High	1974	394,609 \$	4,700,000 -	-	÷	-		\$ 4,700,000 -	:	-	-		
rnwood Elementary	Elementary	1973	69,038 \$	988,000 -	-	-	-				-	-		
ly Stadium & Press Box (2 Facilities)	Support Support	2007	23,262 \$ 59,523 \$	180,000 -	-	-	-					\$ 145,000		
Coleman Coliseum	Transition	1960	59,523 ş 68,978 ç	444,500 -		•	-		- \$.,			- \$	
: Transition Campus b Stadium	Support	1952	10,950 \$	995,000 - 345,000 -	-	-	-		- \$ - \$,	-	\$ 250,000	-	
hrie Center (CTE)	High	1972	83,614 \$	239.000 -					- \$			- 230,000		
hester Elementary	Elementary	2011	123,253 \$	553,000 -	-		-		- \$			-		
nmel Creek Elementary	Elementary	2016	106,260 \$	815,000 -	-	-	-		-		465,000	- 5	350,000 -	
t Support Center	Support	1963	59,334 \$	995,000 -	-	-	-					-	-	
stwood Elementary	Elementary	2014	110,145 \$	500,080	-	-	-		-			\$ 500,080	-	
rwood Elementary	Elementary	1968	69,371 \$	1,015,000 -	÷	÷	-		-				475,000 -	
ey Oaks Elementary	Elementary Elementary	2015 1993	117,872 \$ 82,179 \$	350,000 -	-	=	-		-	:	:	\$ 350,000	· -	
ar Brook Elementary ewood Elementary	Elementary	2011	82,179 \$ 109,000 \$		-	-	-				-		-	
ewood Elementary Shadows Elementary	Elementary	2012	118,167 S		-	-	-				_	-		
ecrest Elementary	Elementary	2010	112,095 \$		-	-	-				-			
ng Shadows Elementary	Elementary	1968	83,904 \$		-	-	-				-	-		
twood Elementary	Elementary	2010	98,264 \$		-	-	-				-	-	-	
ng Woods Middle	Middle	1961	200,616 \$		-	-	-		-		-	-	-	
arm	High High	1961 2016	28,300 \$		-	-	-		-		-	-	-	
- Academy of Choice HS (New)	High High	2016 1980	32,281 \$ 21,260 \$		-	-	-		-		-	-	-	
- DAEP - Gymnasiums (Rubber)	High	1990	30,000 \$		-	-	=			:		-	-	
- Gymnasiums (Wood)	High	1950	30,000 \$		-		-		-					
ng Woods High	High	1964	336,366 \$		-	=	-							
tchester Academy	High	1967	294,963 \$		-	-	-				-			
atorium	Support	1976	21,525 \$		-	-	-					-		
urity Services/Police Department	Support	2007	16,195 \$		-	-	-		-		-	-	-	
Office	Support	1996	3,136 \$		÷		-		-			-		
nnology Training Center sportation	Support	2012 1967	9,222 \$ 12,965 \$		-	-	-		-		-	-		
oportación	Support	190/								·	•	-	<u>-</u>	
			\$	45,442,280 \$	537,900 \$	3,250,500 \$	15,166,000 \$	10,049,500	\$ 6,868,000 \$	2,401,500 \$	1,579,000	\$ 2,931,880 \$	2,093,000 <u>\$</u>	

Roofing Track

The independent roofing assessment provides a focused presentation for roof repair or replacement throughout the district facilities. The implementation of the roofing recommendations may proceed independently or overlap intelligently with implementation of the proposed 10 Year Plan depending on end-of-design life timing and operational efficiencies.

Technology Cabling Track

Facility / Campus	Facility Type	Year Built	Area (SF)	T	otal Cost*	MDF + CABLE* SCORE	HVAC + UPS SC
Memorial Drive Elementary	Elementary	1949	58,965	Ś	81,650	2.5	1.0
Hunters Creek Elementary	Elementary	1954	61,937	\$	156,400	2.5	1.0
Bunker Hill Elementary	Elementary	1956	58,385	\$	105,225	2.5	1.0
Landrum Middle	Middle	1956	177,665	\$	195,500	2.5	1.0
East Transition Campus	High	1960	68,978	\$	203,550	2.5	1.0
Nottingham Elementary	Elementary	1969	66,393	\$	76,475	2.5	1.0
Bear Boulevard	Pre-K Center	2001 1958	26,000 38,830	\$	49,450	2.5	1.0
Bendwood Campus	Elementary	1958	70.508	\$	46,000	3.0	1.0
Woodview Elementary	High	1958	28,300	\$	120,175	3.0	1.0
Ag Farm Spring Woods Middle	Middle	1961	200,616	\$	42,550 212,750	3.0	1.0
Memorial High	High	1962	311,115	Ś	373.750	3.0	1.0
Memorial Middle	Middle	1963	188,852	Ś	152.375	3.0	1.0
Spring Woods High	High	1964	336,366	Ś	322,000	3.0	1.0
Spring Forest Middle	Middle	1967	192,559	\$	146,625	3.0	1.0
Spring Oaks Middle	Middle	1967	189,660	\$	155,250	3.0	1.0
Westchester Academy	High	1967	294,963	\$	57,500	3.0	1.0
Sherwood Elementary	Elementary	1968	69,371	\$	77,625	3.0	1.0
Guthrie Center (CTE)	High	1972	83,614	\$	161,000	3.0	1.0
Terrace Elementary	Elementary	1973	74,349	\$	75,325	3.0	1.0
Thornwood Elementary	Elementary	1973	69,038	\$	75,325	3.0	1.0
Northbrook High	High	1974	394,609	\$	356,500	3.0	1.0
SBEC - DAEP	High	1980	21,260	\$	49,450	3.0	N/A
Treasure Forest Elementary	Elementary	1996	82,149	\$	79,925	3.0	1.0
Buffalo Creek Elementary	Elementary Pre-K Center	1997 2001	82,179 26,000	\$	87,975	3.0 3.0	1.0
Lion Lane	Pre-K Center	2001	26,000	\$	49,450	3.0	1.0
Tiger Trail	Pre-K Center	2001	26,000	\$	49,450 49,450	3.0	1.0
Wildcat Way Westwood Elementary	Elementary	2010	98,264	\$	6,900	3.0	1.0
Northbrook Middle	Middle	1973	203.020	\$	9,200	3.5	1.0
Cedar Brook Elementary	Elementary	1993	82,179	\$	82,800	3.5	1.0
Spring Branch Middle	Middle	1953	226,208	Ś	46,000	4.0	1.0
Stratford High	High	1974	320,000	\$	32,200	4.0	N/A
Hollibrook Elementary	Elementary	2010	111,352	\$	120,175	4.0	1.0
Ridgecrest Elementary	Elementary	2010	112,095	\$	6,900	4.0	1.0
Edgewood Elementary	Elementary	2011	109,000	\$	6,900	4.0	1.0
Shadow Oaks Elementary	Elementary	2011	118,314	\$	12,650	4.0	1.0
Spring Branch Elementary	Elementary	2011	101,897	\$	21,850	4.0	2.0
Wilchester Elementary	Elementary	2011	123,253	\$	2,300	4.0	2.0
Meadow Wood Elementary	Elementary	2012	97,749	\$	28,750	4.0	1.0
Pine Shadows Elementary	Elementary	2012	118,167	\$	13,800	4.0	2.0
Housman Elementary	Elementary	2013 2014	109,422	\$	2,300	4.0 4.0	1.0
Frostwood Elementary	Elementary	2014	110,145 117,872	\$	5,750	4.0	2.0
Valley Oaks Elementary Rummel Creek Elementary	Elementary	2015	106.260	\$	4,600 1,150	4.0	1.0
SBEC - Academy of Choice HS (New)	High	2016	32,281	\$	1,150 2,300	4.0	3.0
Spring Shadows Elementary	Elementary	1968	83,904	\$	179,400	N/A	1.0
SBEC - Gymnasiums (2 Facilities)	High	1950 / 1990	30,000	Ś	34,500	N/A	N/A
Textbook Warehouse	Support	1968	10,469	\$	62,675	1.5	1.0
West Support Center	Support	1963	59,334	\$	215,625	2.0	1.0
Transportation	Support	1967	12,965	\$	49,450	2.0	1.0
Vines Science Center	Support	1967	18,917	\$	25,300	2.0	1.0
Natatorium	Support	1976	21,525	\$	11,500	2.0	1.0
Buildings and Grounds/Facility Services	Support	1967	34,100	\$	74,175	2.5	1.0
Grob Stadium	Support	1952		\$	1,150	3.0	3.0
Administration Building	Support	1965	59,125	\$	95,450	3.0	2.0
Tax Office	Support	1996	3,136	\$	31,050	3.0	1.0
Don Coleman Coliseum	Support	2007	59,523	\$	108,675	3.0	N/A
Security Services/Police Department	Support	2007	16,195 23,262	\$	10,350	3.0	2.0 N/A
Tully Stadium & Press Box (2 Facilities)	Support	2007	9,222	\$	115,000	3.0	N/A 1.0
Technology Training Center	Support	2012	9,222	\$	40,250	3.0	1.0
Technology Training Center Transportation	Support	1967	12,965	\$	-		
панаронации	эаррогс	1,07	12,505	J.			

TECHNOLOGY - HVAC + UPS

Facility / Campus	Facility Type	Year Built	Area (SF)		Total Cost*	MDF + CABLE* SCORE	HVAC + UPS SCO
Memorial Drive Elementary	Elementary	1949	58,965	\$	81,650	2.5	1.0
Spring Branch Middle	Middle	1953	226,208	\$	46,000	4.0	1.0
Hunters Creek Elementary	Elementary	1954	61,937	\$	156,400	2.5	1.0
Bunker Hill Elementary	Elementary	1956	58,385	\$	105,225	2.5	1.0
Landrum Middle	Middle	1956	177,665	\$	195,500	2.5	1.0
Bendwood Campus	Elementary	1958	38,830	\$	46,000	3.0	1.0
Woodview Elementary	Elementary	1958	70,508	\$	120,175	3.0	1.0
East Transition Campus	High	1960	68,978	\$	203,550	2.5	1.0
Ag Farm	High	1961	28,300	\$	42,550	3.0	1.0
Spring Woods Middle	Middle	1961	200,616	\$	212,750	3.0	1.0
Memorial High	High	1962	311,115	\$	373,750	3.0	1.0
Memorial Middle	Middle	1963	188,852	\$	152,375	3.0	1.0
Spring Woods High	High	1964	336,366	\$	322,000	3.0	1.0
Spring Forest Middle	Middle	1967	192,559	\$	146,625	3.0	1.0
Spring Oaks Middle	Middle	1967	189,660	\$	155,250	3.0	1.0
Westchester Academy	High	1967	294,963	\$	57,500	3.0	1.0
Sherwood Elementary	Elementary	1968	69,371	\$	77,625	3.0	1.0
Spring Shadows Elementary	Elementary	1968	83,904	\$	179,400	N/A	1.0
Nottingham Elementary	Elementary	1969	66,393	\$	76,475	2.5	1.0
Guthrie Center (CTE)	High	1972	83,614	\$	161,000	3.0	1.0
Northbrook Middle	Middle	1973	203,020	\$	9,200	3.5	1.0
Terrace Elementary	Elementary	1973	74,349	\$	75,325	3.0	1.0
Thornwood Elementary	Elementary	1973	69,038	\$	75,325	3.0	1.0
Northbrook High	High	1974	394,609	\$	356,500	3.0	1.0
Cedar Brook Elementary	Elementary	1993	82,179	\$	82,800	3.5	1.0
Treasure Forest Elementary	Elementary	1996	82,149	\$	79,925	3.0	1.0
Buffalo Creek Elementary	Elementary	1997	82,179	\$	87,975	3.0	1.0
Bear Boulevard	Pre-K Center	2001	26,000	\$	49,450	2.5	1.0
Lion Lane	Pre-K Center	2001	26,000	\$	49,450	3.0	1.0
Tiger Trail	Pre-K Center	2001	26,000	\$	49,450	3.0	1.0
Wildcat Way	Pre-K Center	2002 2010	26,000	\$	49,450	3.0	1.0
Hollibrook Elementary	Elementary		111,352	\$	120,175	4.0	1.0
Ridgecrest Elementary	Elementary	2010	112,095	\$	6,900	4.0	1.0
Westwood Elementary	Elementary	2010	98,264 109,000	\$	6,900	3.0	1.0
Edgewood Elementary	Elementary	2011	109,000	\$	6,900	4.0	1.0
Shadow Oaks Elementary	Elementary	2011	97,749	\$	12,650	4.0	1.0
Meadow Wood Elementary		2012		\$	28,750		
Housman Elementary	Elementary	2013	109,422	\$	2,300	4.0	1.0
Rummel Creek Elementary	Elementary	2016	106,260	\$	1,150		1.0 2.0
Spring Branch Elementary	Elementary Elementary	2011	101,897 123,253	\$	21,850	4.0 4.0	2.0
Wilchester Elementary	Elementary	2011	123,253	\$	2,300	4.0	2.0
Pine Shadows Elementary	Elementary	2012	110,145	\$	13,800	4.0	
Frostwood Elementary		2014	110,145	\$	5,750	4.0	2.0
Valley Oaks Elementary	Elementary	2015	32,281	\$	4,600	4.0	3.0
SBEC - Academy of Choice HS (New)	High High	1974	32,281	\$	2,300	4.0	3.0 N/A
Stratford High	High	1974	21.260	\$	32,200	3.0	N/A N/A
SBEC - DAEP	High	1950 / 1990	30,000	\$	49,450	N/A	N/A N/A
SBEC - Gymnasiums (2 Facilities)	Support	1967	34,100	\$	34,500	2.5	1.0
Buildings and Grounds/Facility Services	Support	1976	21,525	\$	74,175	2.0	1.0
Natatorium	Support	1976	3,136	•	11,500	3.0	1.0
Tax Office	Support	2012	9,222	\$	31,050	3.0	1.0
Technology Training Center	Support	1968	10.469	\$	40,250	1.5	1.0
Textbook Warehouse Transportation	Support	1967	12,965	\$	62,675 49.450	2.0	1.0
Transportation Vines Science Center	Support	1967	18,917	\$	49,450 25,300	2.0	1.0
	Support	1967	59.334			2.0	1.0
West Support Center	Support	1965	59,334	\$	215,625	3.0	2.0
Administration Building	Support	2007	16.195	\$	95,450	3.0	2.0
Security Services/Police Department	,,,	1952	10,195	\$	10,350	3.0	3.0
Grob Stadium	Support	1952 2007	59,523	\$	1,150	3.0	3.0 N/A
Don Coleman Coliseum	Support	2007	23,262	\$	108,675	3.0	N/A N/A
Tully Stadium & Press Box (2 Facilities)		2007	-, -	\$	115,000	3.0	N/A
Technology Training Center Transportation	Support	1967	9,222 12,965	\$	-		
ransportation	Support	196/	12,965	Ľ.	-		
				\$	5,069,775		

Technology Cabling Assessment Scoring Legend

Technology Cabling Closets

ASSESSMENT RESULTS	SCORING CRITERIA					
Inadequate	1					
Marginal	2					
Adequate	3					
Well-positioned	4					

Cable Infrastructure

ASSESSMENT RESULTS	SCORING CRITERIA
Inadequate	1
Adequate	3
Well-positioned	4

Dedicated HVAC

ASSESSMENT RESULTS	SCORING CRITERIA
Inadequate	1
Adequate	3

UPS +/or Generator

ASSESSMENT RESULTS	SCORING CRITERIA
Inadequate	1
Adequate	3

The Technology Cabling Assessment provides an overview of basic system infrastructure status and needs, and is organized in two tables – Data Closets and Cable Instructure; and [Dedicated] HVAC and Uninterruptable Power Supply (UPS) and/or Generator availability. Implementation may proceed independently of the Proposed 10-Year Plan and on a more aggressive schedule with consideration for evolution of end-user needs and demand.

Child Nutrition Services Track

Child Nutrition Services Track Year 5 Facility Type Year Built Area (SF) Elementary 1958 38,830 575,000 Bendwood Campus Elementary 1997 172,017 Buffalo Creek Elementary 172,017 Elementary 1956 58,385 edar Brook Elementary Elementary 1954 Hunters Creek Elementary 575,000 Elementary 1949 58,965 Nottingham Elementary 575,000 575,000 575,000 herwood Elementary 575,000 \$ Elementary 1968 83,904 Spring Shadows Elementary 575,000 \$ 575,000 575,000 hornwood Elementary 575,000 \$ 575,000 Elementary 1996 82,149 reasure Forest Elementary 205,617 Voodview Elementary Elementary 1958 70,508 575,000 Elementary 2010 111,352 Hollibrook Elementary Elementary 2010 Ridgecrest Elementary Edgewood Elementary Elementary 2011 118,314 Spring Branch Elementary Elementary 2011 123,253 Vilchester Elementary Elementary 2012 97,749 leadow Wood Elementary Elementary 2012 118,167 Elementary 2013 109,422 usman Elementary Elementary 2014 110,145 twood Elementary Elementary 2015 117,872 Elementary 2016 106,260 ummel Creek Elementary Middle 1956 177,665 Middle 1963 188,852 750,000 Middle 1973 203,020 Northbrook Middle 750,000 750,000 Middle 1953 226,208 750,000 Spring Branch Middle Spring Forest Middle Middle 1967 192,559 Spring Oaks Middle 750,000 Middle 1961 200,616 750,000 Spring Woods Middle High 1960 68,978 High 1962 311,115 Memorial High 1,200,000 1,200,000 1,100,000 Northbrook High Spring Woods High High 1964 336,366 High 1974 320,000 Stratford High 1.100.000 High 1967 294,963 Westchester Academy 554,079 High 1961 High 1972 Guthrie Center (CTE) SBEC - Academy of Choice HS (New) High 21,260 SBEC - Gymnasiums (2 Facilities) High 245,529 Bear Boulevard 245,529 Pre-K Center 2001 26,000 Pre-K Center 2001 Tiger Trail 237,893 237,893 255,197 Wildcat Way 255,197 Support 1965 59.125 Buildings and Grounds/Facility Services Support 2007 360,000 Don Coleman Coliseum 360,000 Support 1952 Support 1976 Support 2007 Security Services/Police Department Support 1996 Support 2012 Technology Training Center Technology Training Center Support 1968 Support 1967 ansportation Tully Stadium & Press Box (2 Facilities) Support 2007 23,262 Support 1967 18,917

Child Nutrition Services

Food-service facility and equipment readiness is of primary importance to parents and students, and is also subject to ongoing government inspections and statutory requirements. Therefore, implementation of Child Nutrition Services system improvements are likely to proceed independently of the 10-Year Plan on an accelerated schedule.

Portables

Facility Name	Number of Portables	Year(s) Installed						
Ag Farm	2	1964	1964					
Buffalo Creek ES	2	1964	1964					
Cedar Brook ES	6	1964	1964	1964	1964			
East Transition Campus	5	1989	1964	1964	1964	1964		
Landrum MS	3	1981	1964	1964				
Spring Forest MS	5	1991	1992	1964	1964	1964		
Spring Oaks MS	2	1964	1964					
Spring Branch ES	3	1989	1964	1964				
Spring Branch MS	4	tbd						
Spring Woods MS	3	1989	1964	1964				
Spring Woods HS	4	1989	1989	1964	1964	1964		
Terrace ES	3	1989	1989	1964				
Transportation	1	1964						
Treasure Forest ES	2	1964						
Woodview ES	4	1964	1964	1964	1964	0		
	53	14	12	9	5	4		

Portables

The LRFPC believes that SBISD Leadership recognizes retirement of portable buildings as a very important initiative, and, accordingly, recommends re-evaluatation of the utilization and the disposition of current inventory, giving all due consideration to the recommended priorities in the 10-Year Plan.

Summary Schedule and Costs

Proposed 10-Year Plan (with Data Overlay)

Facility / Campus		Facility Type	Year Built	Area (SF)	LRFPC Weighted Ranking	Total Estimated Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
SBEC - DAEP	1	High	1980	21,260	41	\$ 6,664,640	\$ 6,664,640									
Terrace Elementary	2	Elementary	1973	74,349	43	\$ 18,250,055	\$ 18,250,055									
Spring Woods Middle	3	Middle	1961	200,616	43	\$ 59,926,041	\$ 59,926,041									
Spring Woods High	4	High	1964	336,366	43	\$ 110,522,932	\$ 110,522,932									
Memorial High	5	High	1962	311,115	44	\$ 101,520,062		\$ 101,520,062								
Sherwood Elementary	6	Elementary	1968	69,371	45	\$ 14,899,260	\$ 14,899,260									
Bendwood Campus	7	Elementary	1958	38,830	46	\$ 13,331,513	\$ 13,331,513									
Noodview Elementary	8	Elementary	1958	70,508	46	\$ 20,515,549	\$ 20,515,549									
Northbrook High	9	High	1974	394,609	46	\$ 94,275,559		\$ 94,275,559								
Memorial Middle	10	Middle	1963	188,852	46	\$ 51,569,352		\$ 51,569,352								
Hunters Creek Elementary	11	Elementary	1954	61,937	47	\$ 18,957,694		\$ 18,957,694								
Landrum Middle	12	Middle	1956	177,665	47	\$ 52,062,456			\$ 52,062,456							
East Transition Campus	13	Transition	1960	68,978	48	\$ 22,358,085			\$ 22,358,085							
Bunker Hill Elementary	14	Elementary	1956	58,385	49	\$ 17,755,567		\$ 17,755,567								
Spring Branch Middle	15	Middle	1953	226,208	49	\$ 62,928,124			\$ 62,928,124							
Spring Oaks Middle	16	Middle	1967	189,660	49	\$ 54,804,143				\$ 54,804,143						
Thornwood Elementary	17	Elementary	1973	69,038	50	\$ 13,999,951			\$ 13,999,951							
Ag Farm	18	High	1961	28,300	50	\$ 7,315,598				\$ 7,315,598						
Cedar Brook Elementary	19	Elementary	1993	82,179	51	\$ 16,417,288			\$ 16,417,288							
Spring Shadows Elementary	20	Elementary	1968	83,904	51	\$ 17,687,958			\$ 17,687,958							
Spring Forest Middle	21	Middle	1967	192,559	51	\$ 51,808,263				\$ 51,808,263						
Westchester Academy	22	High	1967	294,963	51	\$ 89,081,550						\$ 89,081,550				
Guthrie Center (CTE)	23	High	1972	83,614	51	\$ 20,328,659					\$ 20,328,659					
Stratford High	24	High	1974	320,000	51	\$ 65,539,268					\$ 65,539,268					
Nottingham Elementary	25	Elementary	1969	66,393	52	\$ 12,548,943				\$ 12,548,943						
Memorial Drive Elementary	26	Elementary	1949	58,965	53	\$ 17,171,302				\$ 17,171,302						
Lion Lane	27	Pre-K Center	2001	26,000	53	\$ 5,966,445					\$ 5,966,445					
Wildcat Way	28	Pre-K Center	2002	26,000	54	\$ 6,278,764					\$ 6,278,764					
Bear Boulevard	29	Pre-K Center	2001	26,000	54	\$ 5,505,847					\$ 5,505,847	ć 20.204.204				
Northbrook Middle	30	Middle	1973	203,020	54	\$ 38,284,391						\$ 38,284,391				
Treasure Forest Elementary Tiger Trail	31	Elementary	1996	82,149	55 56	\$ 16,155,732 \$ 5,323,443					\$ 16,155,732 \$ 5,323,443					
Buffalo Creek Elementary	32 33	Pre-K Center	2001 1997	26,000 82,179	57	\$ 11,882,365					\$ 11,882,365					
Hollibrook Elementary	34	Elementary Elementary	2010	111,352	58	\$ 4,602,331					7 11,882,303		\$ 4,602,331			
Westwood Elementary	35	Elementary	2010	98,264	59	\$ 3,602,202							\$ 3,602,202			
Spring Branch Elementary	36	Elementary	2010	101,897	59	\$ 3,804,516							\$ 3,804,516			
Ridgecrest Elementary	37	Elementary	2010	112,095	59	\$ 4,384,287							\$ 4,384,287			
Shadow Oaks Elementary	38	Elementary	2011	118,314	59	\$ 4,649,638							\$ 4,649,638			
Edgewood Elementary	39	Elementary	2011	109,000	59	\$ 4,566,070							\$ 4,566,070			
Meadow Wood Elementary	40	Elementary	2012	97,749	59	\$ 5,357,415							\$ 5,357,415			
Wilchester Elementary	41	Elementary	2011	123,253	59	\$ 3,886,628							, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 3,886,628		
Pine Shadows Elementary	42	Elementary	2012	118,167	60	\$ 4,216,684								\$ 4,216,684		
Housman Elementary	43	Elementary	2013	109,422	60	\$ 3,340,348								\$ 3,340,348		
rostwood Elementary	44	Elementary	2014	110,145	61	\$ 4,705,170								\$ 4,705,170		İ
/alley Oaks Elementary	45	Elementary	2015	117,872	61	\$ 3,530,851								\$ 3,530,851		
Rummel Creek Elementary	46	Elementary	2016	106,260	62	\$ 3,400,426								\$ 3,400,426		
BEC - Academy of Choice HS (New)	47	High	2016	32,281	Pending	\$ 2,300									\$ 2,300	
BEC - Gymnasiums (Rubber)	48	High	1990	30,000	Pending	\$ 2,810,260									\$ 2,810,260	
BEC - Gymnasiums (Wood)	49	High	1950	30,000	Pending	\$ 7,833,169			\$ 7,833,169							
Administration Building	50	Support	1965	59,125	Pending	\$ 21,970,242							\$ 21,970,242			
Buildings and Grounds/Facility Services	51	Support	1967	34,100	Pending	\$ 20,488,433								\$ 20,488,433		
Central Warehouse	52	Support	1976	53,945	Pending	\$ 7,804,230									\$ 7,804,230	
Oon Coleman Coliseum	53	Support	2007	59,523	Pending	\$ 8,776,427									\$ 8,776,427	
Grob Stadium	54	Support	1952	10,950	Pending	\$ 8,623,961									\$ 8,623,961	
latatorium	55	Support	1976	21,525	Pending	\$ 6,235,031									\$ 6,235,031	
ecurity Services/Police Department	56	Support	2007	16,195	Pending	\$ 2,563,938									\$ 2,563,938	
ax Office	57	Support	1996	3,136	Pending	\$ 1,355,303									\$ 1,355,303	
echnology Training Center	58	Support	2012	9,222	Pending	\$ 2,130,965										\$ 2,13
extbook Warehouse	59	Support	1968	10,469	Pending	\$ 6,178,543										\$ 6,17
ransportation	60	Support	1967	12,965	Pending	\$ 7,738,306										\$ 7,73
ully Stadium & Press Box (2 Facilities)	61	Support	2007	23,262	Pending	\$ 11,512,228										\$ 11,51
/ines Science Center	62	Support	1967	18,917	Pending	\$ 5,886,651										\$ 5,88
Vest Support Center	63	Support	1963	59,334	Pending	18,042,936	<u>\$</u> -	\$ -	\$ -	\$ -	<u>\$</u> -	\$ -	\$ 18,042,936	\$ -	<u>\$</u> -	\$
	64					\$ 1,315,636,289	\$244,109,990	\$284,078,235	\$193,287,031	\$143,648,249	\$136,980,522	\$127,365,941	\$70,979,638	\$43,568,540	\$38,171,450	\$33,44
							\$ 1,315,636,289		· · · · · ·							

Summary Schedule and Costs

The recommended Summary Schedule identifies and focuses on facilities with the greatest needs, as expressed and reflecting the priorities and relative weights that the LRFPC ultimately approved, in a Proposed 10-Year Plan.

Facilities with building systems in 'Critical' condition are addressed in an initial grouping in a logical sequence; note that the FCI rankings and Educational Suitability scores are key components of the analysis and output.

Roofing systems, Technology Cabling systems, and Child Nutrition Services facilities and equipment are organized and reported on parallel tracks.

Summary Schedule and Costs (continued)

Level B - by FCA Category

LRFPC Weights: 0.48 0.50 0.00 0.02

Facility / Campus	Facility Type	Year Built	FCI Score	Educational Suitability Score	Child Nutrition Services Ranking	Technology Ranking	Total Cost	Level E Weighte Ranking
pring Woods High	High	1964	0	4	30	44	\$ 110,522,932	3
endwood Campus	Elementary	1958	0	5	4	41	\$ 13,331,513	3
Memorial High	High	1962	0	8	28	38	\$ 101,520,062	5
ast Transition Campus	Transition	1960	1	10	11	11	\$ 22,358,085	6
andrum Middle	Middle	1956	0	12	23	37	\$ 52,062,456	7
Memorial Middle	Middle	1963	1	12	20	43	\$ 51,569,352	7
Voodview Elementary	Elementary	1958	0	14	17	23	\$ 20,515,549	7
pring Woods Middle	Middle	1961	0	14	26	40	\$ 59,926,041	8
pring Oaks Middle	Middle	1967	0	17	24	45	\$ 54,804,143	9
errace Elementary	Elementary	1973	16	4	15	34	\$ 18,250,055	10
unker Hill Elementary	Elementary	1956	0	21	14	22	\$ 17,755,567	11
Vestchester Academy	High	1967	0	22	32	57	\$ 89,081,550	12
BEC - DAEP	High	1980	21	5	34	17	\$ 6,664,640	13
lunters Creek Elementary	Elementary	1954	0	27	16	14	\$ 18,957,694	14
pring Branch Middle	Middle	1953	0	27	27	55	\$ 62,928,124	15
Memorial Drive Elementary	Elementary	1949	0	32	12	31	\$ 17,171,302	17
pring Forest Middle	Middle	1967	1	32	22	46	\$ 51,808,263	17
herwood Elementary	Elementary	1968	33	3	9	28	\$ 14,899,260	18
hornwood Elementary	Elementary	1973	37	3	6	26	\$ 13,999,951	20
lorthbrook High	High	1974	28	13	29	36	\$ 94,275,559	21
edar Brook Elementary	Elementary	1993	32	12	31	29	\$ 16,417,288	22
pring Shadows Elementary	Elementary	1968	36	11	13	8	\$ 17,687,958	23
reasure Forest Elementary	Elementary	1996	28	23	25	30	\$ 16,155,732	26
ear Boulevard	Pre-K Center	2001	37	16	3	12	\$ 5,505,847	26
ion Lane	Pre-K Center	2001	30	26	5	13	\$ 5,966,445	28
tratford High	High	1974	45	10	19	59	\$ 65,539,268	28
outhrie Center (CTE)	High	1972	38	19	34	15	\$ 20,328,659	28
iger Trail	Pre-K Center	2001	38	24	2	10	\$ 5,323,443	30
lottingham Elementary	Elementary	1969	40	27	1	21	\$ 12,548,943	33
Jorthbrook Middle	Middle	1973	41	25	18	61	\$ 38,284,391	33
Vildcat Way	Pre-K Center	2002	41	28	8	16	\$ 6,278,764	34
uffalo Creek Elementary	Elementary	1997	53	23	21	18	\$ 11,882,365	37
ng Farm	High	1961	69	16	34	24	\$ 7,315,598	42
ummel Creek Elementary	Elementary	2016	88	33	34	60	\$ 3,400,426	60
dgewood Elementary	Elementary	2011	89	90	34	52	\$ 4,566,070	89
rostwood Elementary	Elementary	2014	87	93	34	54	\$ 4,705,170	89
Iollibrook Elementary	Elementary	2010	88	89	34	2	\$ 4,602,331	87
lousman Elementary	Elementary	2013	89	92	34	56	\$ 3,340,348	90
Meadow Wood Elementary	Elementary	2012	82	91	34	27	\$ 5,357,415	85
ine Shadows Elementary	Elementary	2012	90	91	34	42	\$ 4,216,684	90
lidgecrest Elementary	Elementary	2010	90	89	34	51	\$ 4,384,287	89
hadow Oaks Elementary	Elementary	2011	88	90	34	47	\$ 4,649,638	88
pring Branch Elementary	Elementary	2011 2015	87 88	90	34 34	25	\$ 3,804,516 \$ 3,530,851	87 90
Vasty and Elementary	Elementary			94		53		
Vestwood Elementary	Elementary	2010	89	89	34	49	7 0,000,000	88
Vilchester Elementary	Elementary	2011	89	90	34	58	\$ 3,886,628	89
dministration Building	Support	1965	0	-	34	32 39	\$ 21,970,242	-
uildings and Grounds/Facility Services entral Warehouse	Support	1967	29	-	34		\$ 20,488,433 \$ 7,804,230	-
entrai warenouse Ion Coleman Coliseum	Support	1976 2007	59 59	-	34 7	63 5	\$ 7,804,230	-
Grob Stadium	Support Support	1952	61	-	33	62	\$ 8,776,427	-
latatorium	Support	1952	17	-	34	50	\$ 6,235,031	-
BEC - Academy of Choice HS (New)	High	2016	88		34	1	\$ 0,233,031	
BEC - Gymnasiums (Rubber)		1990	65	-	34	20	\$ 2,810,260	-
	High			-				-
BEC - Gymnasiums (Wood) ecurity Services/Police Department	High	1950 2007	2 61	-	34 34	48 35	\$ 7,833,169 \$ 2,563,938	-
ax Office	Support	1996	22	-	34 34	35	\$ 2,563,938	-
	Support		78	-				-
echnology Training Center	Support	2012		-	34	4	\$ 2,130,965	-
extbook Warehouse	Support	1968	20	-	34	7	\$ 6,178,543	
ransportation	Support	1967	2	-	34	19	\$ 7,738,306	-
ully Stadium & Press Box (2 Facilities)	Support	2007 1967	26 2	-	10 34	9 33	\$ 11,512,228 \$ 5,886,651	-
'ines Science Center	Support							

EDUCATIONAL SUITABILITY - Critical Element: ENVIRONMENT

Name	Grade Config	GSF	Suitability Score	Environment Average %	Size Average %	Location Average %	Storage/ Fixed Equip. Average %	Budget Estimate
Sherwood Elementary	PK-5	69,371	67	53%	81%	81%	83%	\$1,972,900
Thornwood Elementary	PK-5	69,038	76	56%	80%	84%	69%	\$1,462,300
Spring Wood High	9-12	336,366	67	57%	75%	75%	58%	\$11,265,500
Terrace Elementary	K-5	74,349	69	59%	55%	87%	61%	\$2,010,700
SBEC - DAEP	9-12	21,260	63	62%	57%	79%	50%	\$801,200
Bendwood Campus	PK-K, 3-5	38,830	74	63%	31%	43%	31%	\$864,700
Stratford High	9-12	320,000	76	64%	90%	84%	63%	\$7,681,800
Landrum Middle	5-8	177,665	76	65%	93%	95%	76%	\$3,959,900
Memorial High	9-12	311,115	71	67%	73%	74%	67%	\$9,201,400
East Transition Campus	ES - TBD	68,978	81	67%	85%	88%	68%	\$1,347,500
Memorial Middle	6-8	188,852	78	68%	88%	87%	75%	\$3,850,900
Northbrook High	9-12	394,609	78	69%	88%	91%	72%	\$8,723,000
Cedar Brook Elementary	PK-5	82,179	77	71%	80%	79%	68%	\$1,651,200
Woodview Elementary	PK-5	70,508	78	71%	89%	88%	84%	\$1,322,900
Bear Boulevard	PK	26,000	81	71%	93%	100%	70%	\$433,000
Spring Woods Middle	6-8	200,616	72	71%	90%	77%	68%	\$5,275,900
Spring Shadows Elementary	K-5	83,904	82	71%	70%	98%	96%	\$1,314,700
Spring Oaks Middle	6-8	189,660	80	72%	82%	91%	77%	\$3,500,200
Ag Farm	9-12	28,300	72	73%	79%	72%	48%	\$809,000
Guthrie Center (CTE)	9-12	83,614	79	74%	87%	80%	83%	\$1,763,900
Westchester Academy	6-12	294,963	84	75%	93%	86%	88%	\$4,811,200
Bunker Hill Elementary	K-5	58,385	82	75%	90%	97%	84%	\$927,600
Tiger Trail	PK	26,000	85	76%	94%	100%	67%	\$343,300
Treasure Forest Elementary	K-5	82,149	85	76%	92%	94%	73%	\$1,046,300
Nottingham Elementary	PK-5	66,393	82	77%	99%	88%	89%	\$1,056,900
Buffalo Creek Elementary	K-5	82,179	89	79%	87%	90%	94%	\$754,000
Wildcat Way	PK	26,000	80	79%	100%	82%	65%	\$456,800
Hunters Creek Elementary	K-5	61,937	80	80%	91%	85%	72%	\$1,067,300
Spring Branch Middle	6-8	226,208	82	81%	90%	91%	84%	\$3,833,700
Lion Lane	PK	26,000	80	82%	86%	86%	73%	\$454,000
Northbrook Middle	6-8	203,020	84	82%	81%	89%	86%	\$3,031,300
Memorial Drive Elementary	PK-5	58,965	88	86%	98%	95%	77%	\$596,300
Spring Forest Middle	6-8	192,559	90	92%	94%	99%	79%	\$1,711,800
Rummel Creek Elementary	PK-5	106,260	95	99%	96%	97%	97%	\$463,400
Other Educational Total/Average		68,978	81	67%	85%	88%	68%	\$1,347,500
Assessment Total		5,350,679	79	73%	86%	87%	76%	\$89,766,500



SPRING BRANCH INDEPENDENT SCHOOL DISTRICT

District Wide Comprehensive Facilities Assessment

Educational Suitability,
Child Nutrition Services &
Technology Assessments

FINAL SUBMISSION

April 28, 2017





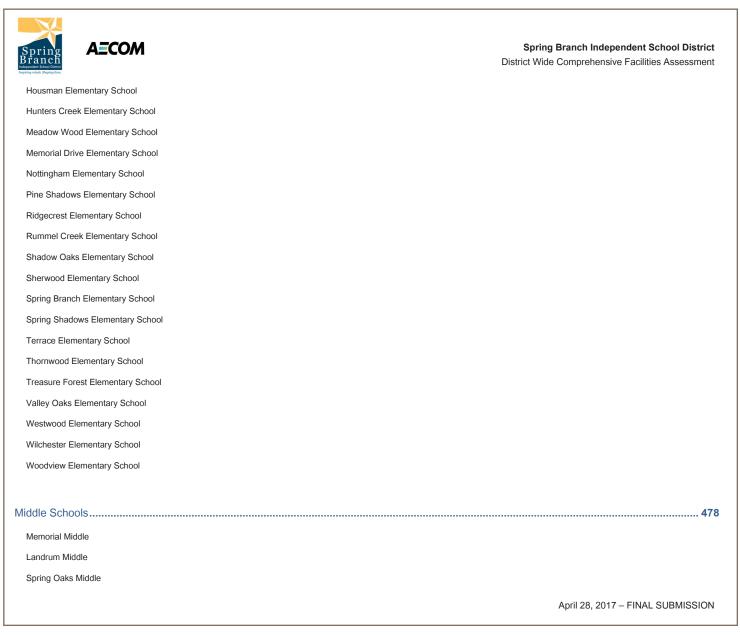


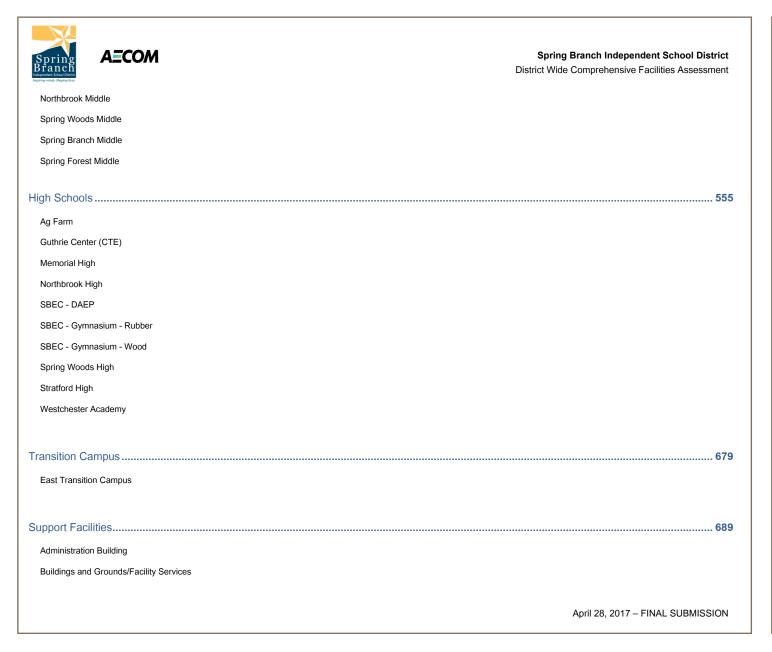


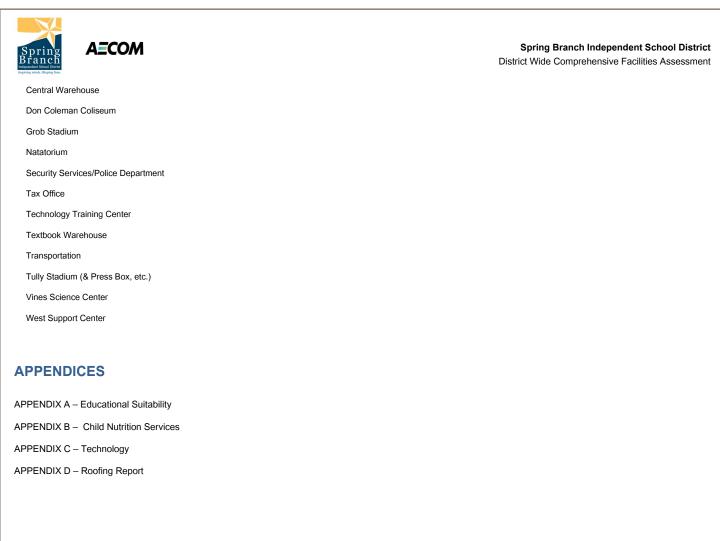


SBISD Project No. 10772









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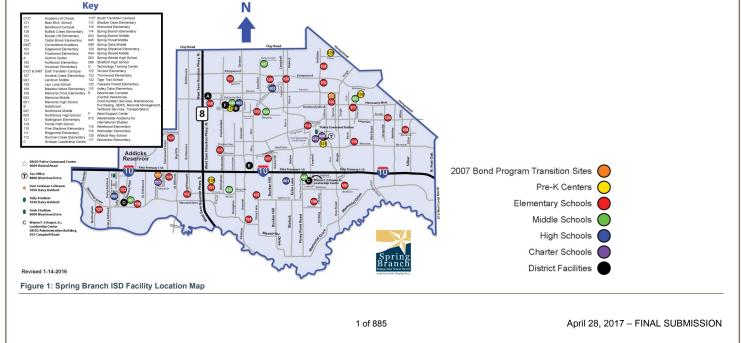


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Spring Branch Independent School District
District Wide Comprehensive Facilities Assessment

Introduction & Project Background

The Spring Branch Independent School District (SBISD) owns, maintains, and operates a 6,155,442 gross square foot portfolio of buildings located within a 43 square mile area whose ultimate goal is to support the mission of providing excellence in education to residents of the Spring Branch community. "The Spring Branch Way" communicates a single-focused goal (T-2-4), four belief statements and five core values that articulate the District's educational philosophy and a promise to each other and the community. With an enrollment of more than 35,000 students and 4,800 employees district-wide, SBISD operates twenty six (26) elementary schools, seven (7) regular middle schools, one (1) charter middle school, four (4) traditional high schools and three (3) special purpose campuses, and various support and administrative facilities. This diverse collection of facilities requires a comprehensive plan of strategic investments to maintain, renew, replace, and modernize the existing structures and infrastructure to continue to support the mission of delivering the highest quality education to its community. To establish these future investment requirements, a facility condition assessment (FCA) was conducted for 60 SBISD campuses to identify the physical condition of the building systems and determine existing deficiencies within those systems. The information collected during the FCA supports the development of a sound capital plan by providing baseline data to advocate for the strategic recommendations founded on the assessment findings. This fundamental step addresses the identifying, quantifying, and prioritizing of the maintenance and capital needs to minimize costs, manage risk, and enable SBISD facilities to provide their required level of service by utilizing the knowledge developed by the project team. The goal is to deliver a holistic understanding of each facility's systems enabling SBISD decision makers to make informed investment decisions within their capital plan.





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District Wide Comprehensive Facilities Assessment

AECOM executed the field assessments and cost estimating services with experienced technical and financial experts. The assessment consisted of visual assessments by a multi-disciplinary team of engineers and architects to evaluate existing deficiencies of key building systems. SBISD provided District personnel knowledgeable about existing building systems and deficiencies to ensure the field assessment teams could access areas of the facility, identify systems with major maintenance concerns and observe conditions reported within an online questionnaire completed by District staff. The key components of the facility assessment project include the following:

- Architectural Systems
- Plumbing Systems
- Mechanical Systems
- Electrical Systems
- Site/Civil Systems

This effort relies on the knowledge of District personnel, visual observation of the facilities under study, and AECOM's professional judgment to evaluate the deficiencies of the facilities studied. Contained within this report is a general description of each facility assessed, identified deficiencies, recommendations for corrective measures, and budgetary cost estimates to remedy or replace system deficiencies. Findings and recommendations are based on field work performed between January 9th and March 3rd 2017, as well as collaborative discussions with SBISD campus and District personnel.

Concurrent with the FCA implementation by AECOM, three additional assessments were conducted at the SBISD educational facilities focusing on the specific areas of Educational Suitability (MGT Consulting Group), Child Nutrition Services (FDP), and Technology (Tech Knowledge). The findings and results of those studies are located in Appendix A-C of this report. A separate roofing study was conducted by SBISD in 2016 and the information from that report is found in Appendix D.

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Spring Branch Independent School District
District Wide Comprehensive Facilities Assessment

Facility Condition Assessment Process

According to the American Society for Testing and Materials (ASTM) guidelines, a condition assessment is intended to reduce the risk regarding potential building system and asset failure. Our approach, used to execute required facility condition assessments at the locations under study, follows standard principles outlined by ASTM general guidance. This condition assessment process is intended to describe each facility's prominent systems deficiencies, and to determine associated budgetary costs to correct

The facility condition assessment process involved several phases in order to provide a complete and accurate picture of the existing SBISD campuses/facilities. The phases included initial data gathering & document review, deployment and review of a pre-survey online questionnaire, on-site surveying & stakeholder discussions, data & deficiency analysis, cost estimation, and development of recommendations & reporting of findings. The following diagram represents this approach for performance of condition assessments with a description of each phase's requirements. The defined process explains the consistent and sequential major tasks we complete to confirm that the comprehensive FCA effort is successfully completed.

Data Gathering & Review

The objective of the data gathering & document review is to augment the survey, to assist the field teams understanding of the subject property, and to support the identification and collection of physical deficiencies. Initial data collection and review allowed the AECOM teams to become more familiar with the facilities prior to visiting each site in person. The information provided by SBISD included previous assessment reports, floor plans, and equipment/system information. This early data gathering and review allows assessment team members to develop a baseline understanding of the sites and the range of conditions and known issues, fostering more informed and efficient site visits. Pertinent information is integrated into findings and recommendations as applicable.



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District Wide Comprehensive Facilities Assessment

Pre-Survey Questionnaire

To gather more detailed information specific to each building, AECOM deployed an online questionnaire completed by SBISD District staff knowledgeable of the facility operations and building conditions. District personnel employed the survey to pre-report known deficient conditions or identified problem areas at each building. Our assessment teams review results from the pre-survey questionnaire in advance of fieldwork. The questionnaire provides critical information on the facility's historical repairs, replacements, and pending repairs and improvements. In connection with the team's research and survey, our field assessors engage with District personnel who are knowledgeable of the facility's physical condition and operation. Placing appropriate emphasis on the collection and review of historical facility information augments data collected in the field and improves associated findings and recommendations.

On-Site Surveying & Stakeholder Discussions

The objective of the field survey work is to visually assess each facility to obtain information on the current condition of systems and required assets. During the site visit, the field teams conduct a walk-through assessment to observe and identify physical defects and notate any unusual features and major safety concerns.

AECOM utilized architects and engineers to ensure accuracy and efficiency during this FCA process. The teams captured their physical assessment findings in the field using electronic tablets pre-populated with data collection forms. Systems in need of repair or replacement were noted. Key findings corresponding to the condition rating were documented via digital photographs, and severely deficient systems were noted with comments and/or photographs. Any major safety concerns discovered were immediately reported to District personnel for action.

While on site, the AECOM assessment teams also validated and further investigated the pre-reported deficient conditions identified in the online survey by gathering photographs and more detailed descriptions of the existing found conditions. The assessment data provides a snapshot of deficiencies on the day of fieldwork. The data was collected via visual inspection without intrusion, relocation or removal of materials, destructive testing, use of special protective clothing, or use of any special equipment (lifts, fall protection, etc.) and did not necessitate lockout / tag out procedures.

The level of assessment was a visual assessment of reported deficiencies intended to collect and develop recommendations. The specifics of the reported deficiencies were clarified by dialogue with facility maintenance and District planning and maintenance leads.





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AECOM personnel evaluated each facility deficiency reported to determine if there is sufficient physical evidence to warrant complete replacement of the system versus repairing only portions of the system. Our evaluation was inclusive of the following facility systems (per Uniformat II breakdown structure):

- Superstructure
- Exterior Enclosure
- Interior Construction
- Stairs
- Interior Finishes
- Conveying
- Plumbing
- HVAC

- Fire Protection
- Electrical
- Equipment (Athletic/Theater)
- Furnishings (Fixed Furnishings/Casework)
- Sitework and Utilities

Data & Deficiency Analysis

After collecting existing deficiency information in the field, the AECOM assessment teams performed data analysis, finalized deficiencies, and summarized recommendations. The assessors evaluated each facility surveyed to determine if there is sufficient physical evidence to warrant complete replacement of the system versus repairing only portions of the system. Factors considered include age and expected design life of the system, and severity and degree of observed deficient conditions. If complete system replacement was not deemed warranted given the information at hand, the assessors developed recommendations to remedy the observed deficiencies. The results of the analysis were provided to cost estimators to prepare program level opinions of costs for the suggested remedy of the physical deficiencies that were observed. Cost estimates were then generated to correspond to an entire system replacement (where recommended) or to address the specific recommendations developed to remedy the deficiencies. The methodology for budgetary cost determination is contained in the subsequent Cost Estimation Approach section.

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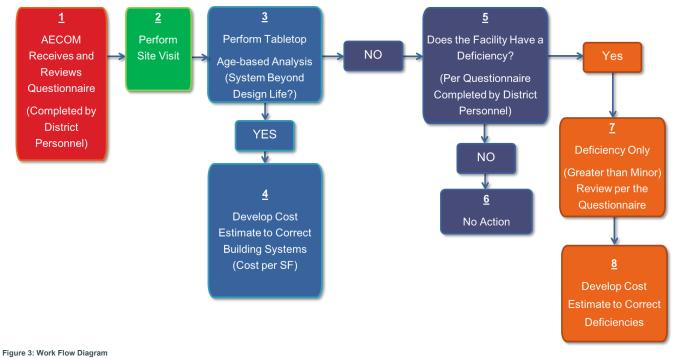
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District Wide Comprehensive Facilities Assessment

Assessment Criteria

Each team member used identical condition assessment criteria to assess the condition of building systems in order to ensure consistency in the data collection. The condition assessment criteria provided guidance for the assessment of each facility system and major assets. Team members utilized the pre-reported questionnaire responses, system age, and observed deficient conditions to assess the building systems. The use of a predefined condition assessment work flow translates into consistent results that serve as a solid foundation for future facility planning. The following diagram provides a general description of the assessment process with criteria.

SBISD Facility Condition Assessment Work Flow



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District Wide Comprehensive Facilities Assessment

Cost Estimation Approach

Once the facility condition assessments were completed, cost estimation experts estimated costs for the resolution of identified system deficiencies. The approach used for estimate development is intended for budgetary planning and future project prioritization. Our cost data is obtained through AECOM's partnership with RSMeans, which keeps the data up-to-date and adjusted to changing market conditions. The budgetary cost estimates for facility system deficiencies were developed using RSMeans 2017 Online Cost Data with standard Union labor rates.

Once it was determined if a system would be recommended to be replaced in total or recommendations would be developed to repair the system deficiencies, the cost estimation experts developed estimates for the resolution of identified deficiencies. Special consideration was made to ensure estimates included the best approach to resolving identified deficiencies. As part of AECOM's assessment process, estimators worked with field teams to properly identify and price recommendations. The need to obtain maximum benefit from available funds is understood and the methodology focuses attention on cost to benefit ratios for proposed projects. This ensures that required corrective actions remedy the situation for an appropriate length of time and cost.

Rough Order of Magnitude Estimation

The cost estimates provided within this report should only be construed as preliminary, rough order of magnitude budgets. Actual costs will vary from the assessor's opinions of costs depending on considerations such as the type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work, quality of contractor, market conditions, and whether competitive pricing is solicited, etc. These costs do not include unknown hazardous materials removal or evaluation of other costs that were not a part of this study.

Rough order of magnitude estimation takes into consideration top-level general estimates and is provided when scope and specific requirements have not been defined. All planning-level estimates included within the report were based on zero percent design. The correlation of the accuracy of an estimate is directly proportional to the level of project definition. As such, preliminary ROM estimates based on little to no scope definition have a wider range of projected accuracy. The table below identifies typical expectations for the accuracy of ROM estimates.

ROM Estimate Characteristic	Planning Expectation				
Level of Scope Definition	0 to 10%				
Accuracy Range Goal	- 25% to +50%				

Table 1: ROM Estimating Guidelines

As projects are further planned, it is highly recommended that detailed feasibility and design efforts be completed to specifically identify required actions, determine scope and necessary code compliance requirements, as well as identify the most efficient implementation approach. These actions will better inform projected project costs and greatly increase the viability of projected funding requirements.

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Markups

Published RSMeans Area Cost Factors were used to localize the unit prices for materials, labor, equipment, and subcontracted services specific to Houston. The RSMeans overall cost factor of 0.852 for the Houston area is built into the cost estimates. The unit rates used for deficiency pricing are inclusive of Overhead and Profit. The markups typical to contractor overhead and profit, mobilization, and contingency were also applied at the summary level. The additional markups for supervision, inspection and overhead, and project risk cost are placed for each Facility Total Cost. The table below identifies the markups used to develop the 72.95% compounded total markup applied to RSMeans costs.

Markups	Percent (%)				
Construction Contingency	5%				
Design Contingency	15%				
A&E, Permit, Testing, Etc.	10%				
GC Overhead and Profit	12%				
Renovation Factor	10%				
Additional Markups					
Supervision, Inspection, Overhead	5.7%				

Table 2: Applied Markups and Additional Markups

Current Facility Replacement Value

The Current Facility Replacement Value (CRV) for the facility is developed using the Square Foot Estimation method and presents the cost required to construct a replacement facility. This method allocates SBISD costs per square foot for each building system to develop a current replacement value for that particular building. The RSMeans Square Foot Estimator has preloaded Building Types (elementary, middle and high schools) and Building Parameters that define percentage of the costs allocated for each facility system used in the CRV. The CRV's are inclusive of building costs only and do not account for site costs or utilities from the right of way to the structures. The table below identifies the standard cost per square foot.

Building Type	Cost Per SF
Elementary School	\$225
Middle School	\$240
High School	\$265

Table 3: Replacement Value Cost Per Square Foot

(Sources: AGC Houston & Gulf Coast A4LE Newsletter, Spring 2017; 2017 AGC/A4LE Cost Update Presentation by Durotech)

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The cost per square foot figure includes building costs only. Site costs are not included in this figure. The example table below shows the various building systems that are included in the cost per square foot and the associated design life for each system.

		Elementary				Middle				High		
System	Design Life (Years)	% of Cost/SF	Cost	t Per SF	Design Life (Years)	% of Cost/SF	Cos	st Per SF	Design Life (Years)	% of Cost/SF	Cos	t Per SF
Foundations	50	6.33%	\$	14.24	50	3.35%	\$	8.03	50	3.04%	\$	8.06
Basement Construction	50	2.28%	\$	5.12	50	1.16%	\$	2.77	50	1.11%	\$	2.94
Superstructure	50	8.93%	\$	20.09	50	12.98%	\$	31.15	50	13.95%	\$	36.97
Exterior Walls	35	5.22%	\$	11.75	35	6.07%	\$	14.56	35	9.24%	\$	24.49
Exterior Windows	25	2.21%	\$	4.98	25	5.66%	\$	13.59	25	6.79%	\$	18.00
Exterior Doors	20	0.53%	\$	1.19	20	0.55%	\$	1.32	20	0.41%	\$	1.10
Roofing	20	7.23%	\$	16.27	20	5.64%	\$	13.53	20	5.36%	\$	14.21
Interior Construction	40	6.27%	\$	14.10	40	8.06%	\$	19.36	40	7.44%	\$	19.71
Stairs	40	0.85%	\$	1.90	40	0.82%	\$	1.98	40	0.67%	\$	1.77
Interior Finishes	20	12.29%	\$	27.65	20	14.73%	\$	35.34	20	11.70%	\$	30.99
Conveying	25	0.78%	\$	1.76	25	0.71%	\$	1.71	25	0.58%	\$	1.53
Plumbing	30	13.59%	\$	30.57	30	6.11%	\$	14.67	30	5.74%	\$	15.21
HVAC (Heat Generating System)	30	6.13%	\$	13.79	30	6.46%	\$	15.50	30	6.20%	\$	16.42
HVAC (Cooling Generating System)	30	9.20%	\$	20.69	30	9.69%	\$	23.25	30	9.29%	\$	24.63
HVAC (Distribution System)	30	0.24%	\$	0.55	30	0.62%	\$	1.49	30	0.62%	\$	1.65
Fire Protection	30	2.37%	\$	5.33	30	2.21%	\$	5.30	30	2.06%	\$	5.47
Electrical	30	15.56%	\$	35.02	30	15.19%	\$	36.47	30	15.79%	\$	41.85
FF&E	30	0.00%	\$	-	30	0.00%	\$	-	30	0.00%	\$	-
Furnishings	30	0.00%	\$	-	30	0.00%	\$	-	30	0.00%	\$	-
		100.00%	\$	225.00		100.00%	\$	240.00		100.00%	\$	265.00

Table 4: System Costs Included in Cost Per Square Foot

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Facility Condition Index (FCI)

The Facilities Condition Index (FCI) can serve as the basis of a strategic facilities capital plan. It is a standardized scale utilized by the federal government. It results in a benchmark to analyze the effect of investing in facility improvements. The FCI is calculated using the data gathered in facility condition assessments.

Metrics such as the FCI give District stakeholders the ability to compare the condition of similar buildings to each other, as well as to establish target condition ratings. Comparing buildings analytically also rapidly highlights the buildings that are in the greatest need for updates, repairs, or replacements. FCI analysis provides the true cause and effect of investment decisions.

The Facility Condition Index (FCI) is a metric that objectively measures the current condition of a facility by assigning it a numerical value. The number reflects a grading system where a low FCI percentage means that the facility is in poor condition, and a high FCI percentage means that the facility is in good condition. Percentage values may range from 0%-100%. FCI values are typically calculated using the following formula:

FCI = Cost to Correct Identified Deficiencies ÷ Current Facility Replacement Value (CRV)*

*Note: The CRV is based on cost figures derived from industry standards.

The lower the FCI score, the greater the need for remedial or renewal funding relative to the facility's value. For example, an FCI of 15% signifies that a building is in "Critical" condition with extensive deficient systems. An FCI of 80% means that a building is in "Good" condition and needs only minor repair. The scale below shows the FCI grading scale used for this effort.

FCI	FCI Metric
76%-100%	GOOD
51%-75%	FAIR
26%-50%	POOR
0-25%	CRITICAL

Table 5: FCI Grading Scale

This analysis is valuable because it provides a delineation of the general quantity of improvement needs by building to show which require the most investment and which should be 'fixed' versus replaced. The conclusions from the FCI rating and this subsequent analysis can be used to see trends of whether needs are short-term and lower budget repairs, or mid- to long-term and higher cost significant overhauls and rehabilitations, or complete replacements. The rehabilitations and replacements often require more significant strategy and investment that take place over the long-term. However, operations and maintenance (O&M), repair, and smaller rehabilitations can be used to extend asset and building lives, resulting in cost savings over the long-term, up to a threshold of where O&M costs outweigh capital investment in replacing an asset or building. This threshold will differ by each organization's strategies, constraints and drivers, and capabilities. This analysis and its findings provide the information on which to base investment decisions in these contexts.

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There are several important points to consider when understanding and using an FCI for comparative purposes:

- 1. The FCI calculation is based on physical deficiencies observed or reported in the field and does not incorporate space use changes, layout adjustments, or desired building additions. The FCI value is a summary of the condition of the facility assuming an in-kind replacement of the existing system / asset infrastructure based on a zero level of design or scope definition. The FCI does not include Educational Suitability, Child Nutrition or Technology Assessment cost figures except for when a suitability recommendation overlaps with a condition assessment item (such as in the case of replacing lighting fixtures).
- 2. The FCI does not include site work or other civil infrastructure costs.
- 3. The Cost to Correct Identified System Deficiencies used in the FCI equation should only be construed as preliminary, rough order of magnitude budgets. This cost is derived from industry standards (RSMeans) projected cost per square foot values broken down by major system. The square footage allocation by system is scaled based on the assessment summary at the system level. If the Cost to Correct Identified System Deficiencies exceeded the replacement new cost of a building, the replacement new cost was used as the original Cost to Correct Identified System Deficiencies.



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Summary of Findings

The following table (Table 6) provides an overall comparison of facility condition indexes. Each facility's FCI value is based on physical observations of systems and asset deficiencies to determine an overall condition index. The FCI is calculated using the sum of System Deficiencies and Asset Deficiencies.

The System Deficiency is defined as a "system" which has sufficient physical evidence to warrant complete replacement of the system. This type of deficiency can be characterized by systems that are beyond their useful life, have failed or they can no longer be maintained properly.

Factors in determining a System Deficiency include:

- Age
- Expected Design Life of the System
- Severity and degree of observed conditions within the System

An Asset Deficiency is defined as an asset which needs to be repaired or replaced within a complete system that does not meet the System Deficiency definition. This type of deficiency can be characterized by assets which are in need of repair, replacement, refurbishment or renovation.

Factors in determining an Asset Deficiency include:

- Age
- Expected Design Life of the Asset
- Severity and degree of observed conditions of the Asset
- Does not meet the facility needs or requirements

The FCI summary table includes a percentage of the Asset Deficiencies relative to the total deficiency costs, illustrating its overall impact on the FCI. Asset Deficiency Percentages that are 100% indicate there are no full system replacements for the facility.

The FCI summary table serves as a high-level mechanism for relative facility condition analysis and comparison. The table can be utilized to support prioritized investments decisions. To maximize the usefulness of the facility condition index, the analysis should not be based off the FCI category of 'Good', 'Fair', 'Poor', or 'Critical,' but rather utilize the specific FCI value. This helps delineate the facilities from one another. The asset (non-system) deficiency percentage of total deficiency costs is shown in the table below for buildings constructed between 1990 and 2015, where most systems have not failed and asset deficiencies highly influence the FCI.

A further detail of costs can be found in the file SBISD Assessment Summary Costs Excel spreadsheet, which is provided in addition to this report.

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Facility Name	Year Built	Square Feet	FCI	FCI Category	Asset (Non-System) Deficiency Percentage of Total Deficiency Costs
Pre-K Facilities					
Bear Boulevard	2001	26,000	37%	POOR	Asset (non-system) deficiencies comprise 84% of total deficiency costs
Lion Lane	2001	26,000	30%	POOR	Asset (non-system) deficiencies comprise 85% of total deficiency costs
Tiger Trail	2001	26,000	38%	POOR	Asset (non-system) deficiencies comprise 83% of total deficiency costs
Wildcat Way	2002	26,000	41%	POOR	Asset (non-system) deficiencies comprise 83% of total deficiency costs
Elementary School Facilities					
Bendwood Campus	1958	38,830	0%	CRITICAL	
Buffalo Creek Elementary	1997	82,179	53%	FAIR	Asset (non-system) deficiencies comprise 83% of total deficiency costs
Bunker Hill Elementary	1956	58,385	0%	CRITICAL	
Cedar Brook Elementary	1993	82,179	32%	POOR	Asset (non-system) deficiencies comprise 64% of total deficiency costs
Edgewood Elementary	2011	109,000	89%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Frostwood Elementary 2014		110,145	87%	GOOD	Asset (non-system) deficiencies comprise 84% of total deficiency costs
Hollibrook Elementary	2010	111,352	88%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Housman Elementary	2013	109,422	89%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Hunters Creek Elementary	1954	61,937	0%	CRITICAL	
Meadow Wood Elementary	2012	97,749	82%	GOOD	Asset (non-system) deficiencies comprise 67% of total deficiency costs
Memorial Drive Elementary	1949	58,965	0%	CRITICAL	
Nottingham Elementary	1969	66,393	40%	POOR	
Pine Shadows Elementary	2012	118,167	90%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Ridgecrest Elementary	2010	112,095	90%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Rummel Creek Elementary	2016	106,260	88%	GOOD	Asset (non-system) deficiencies comprise 83% of total deficiency costs
Shadow Oaks Elementary	2011	118,314	88%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Sherwood Elementary	1968	69,371	33%	POOR	
Spring Branch Elementary	2011	101,897	87%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Spring Shadows Elementary	1968	83,904	36%	POOR	
Terrace Elementary	1973	74,349	16%	CRITICAL	
Thornwood Elementary	1973	69,038	37%	POOR	
Treasure Forest Elementary	1996	82,149	28%	POOR	Asset (non-system) deficiencies comprise 67% of total deficiency costs
Valley Oaks Elementary	2015	117,872	88%	GOOD	Asset (non-system) deficiencies comprise 85% of total deficiency costs

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Facility Name	Year Built	Square	FCI	FCI	Asset (Non-System) Deficiency Percentage		
	Tear Bank	Feet	1 01	Category	of Total Deficiency Costs		
Westwood Elementary	2010	98,264	89%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs		
Wilchester Elementary	2011	123,253	89%	GOOD	Asset (non-system) deficiencies comprise 100% of total deficiency costs		
Woodview Elementary	1958	70,508	0%	CRITICAL			
Middle School Facilities							
Landrum Middle	1956	177,665	0%	CRITICAL			
Memorial Middle	1963	188,852	1%	CRITICAL			
Northbrook Middle	1973	203,020	41%	POOR			
Spring Branch Middle	1953	226,208	0%	CRITICAL			
Spring Forest Middle	1967	192,559	1%	CRITICAL			
Spring Oaks Middle	1967	189,660	0%	CRITICAL			
Spring Woods Middle	1961	200,616	0%	CRITICAL			
High School Facilities							
Ag Farm	1961	28,300	69%	FAIR			
Guthrie Center (CTE)	1972	83,614	38%	POOR			
Memorial High	1962	311,115	0%	CRITICAL			
Northbrook High	1974	394,609	28%	POOR			
SBEC - DAEP	1980	21,260	21%	CRITICAL			
SBEC - Gymnasiums	1990	30,000	65%	FAIR	Asset (non-system) deficiencies comprise 46% of total deficiency costs		
(Rubber)	1330	30,000	0070	17411			
SBEC - Gymnasiums	1950	30,000	2%	CRITICAL			
(Wood) Spring Woods High	1964	336,366	0%	CRITICAL			
Stratford High	1974	320,000	45%	POOR			
Westchester Academy	1967	294,963	0%	CRITICAL			
Transition Facilities	1907	294,903	0 /6	CRITICAL			
	1960	69.079	1%	CRITICAL			
East Transition Campus	1900	68,978	1 70	CRITICAL			
Support Facilities	4005	50.405	00/	ODITIOAL			
Administration Building	1965	59,125	0%	CRITICAL			
Buildings and Grounds/Facility Services	1967	34,100	0%	CRITICAL			

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Facility Name	Year Built	Square Feet	FCI	FCI Category	Asset (Non-System) Deficiency Percentage of Total Deficiency Costs
Central Warehouse	1976	21,525	29%	POOR	·
Don Coleman Coliseum	2007	59,523	59%	FAIR	Asset (non-system) deficiencies comprise 77% of total deficiency costs
Grob Stadium	1952	10,950	61%	FAIR	
Natatorium	1976	21,525	17%	CRITICAL	
Security Services/Police Department	2007	16,195	61%	FAIR	Asset (non-system) deficiencies comprise 100% of total deficiency costs
Tax Office	1996	3,136	22%	CRITICAL	Asset (non-system) deficiencies comprise 93% of total deficiency costs
Technology Training Center	2012	9,222	78%	GOOD	Asset (non-system) deficiencies comprise 82% of total deficiency costs
Textbook Warehouse	1968	10,469	20%	CRITICAL	
Transportation	1967	12,965	2%	CRITICAL	
Tully Stadium & Press Box (2 Facilities)	2007	23,262	26%	POOR	Asset (non-system) deficiencies comprise 97% of total deficiency costs
Vines Science Center	1967	18,917	2%	CRITICAL	
West Support Center	1963	59,334	13%	CRITICAL	

Table 6: FCI Summary Table

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Facility Condition Reports

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SPRING BRANCH INDEPENDENT SCHOOL DISTRICT

District Wide Comprehensive Facilities Assessment

Educational Suitability, Child Nutrition Services & Technology Assessments

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APPENDIX A – Educational Suitability

April 28, 2017





SBISD Project No. 10772

I.0 EDUCATIONAL SUITABILITY ASSESSMENTS

1.0 EDUCATIONAL SUITABILITY ASSESSMENTS

This section presents the results of the educational suitability assessments that were conducted by MGT Consulting Group (MGT) in Spring Branch Independent School District (SBISD). The assessments were conducted by trained MGT evaluators using BASYS®, MGT's facility assessment software

MGT conducted an educational suitability assessment for each school identified as Tier 2 in SBISD. Tier 1 schools included those constructed in the last ten years and, except for Rummel Creek Elementary School, were not included in the suitability assessments. Rummel Creek was included in the assessments as an example of a school built to the new standards and to ensure alignment between the standards used for the assessments and the district's goals for future schools.

At each site, the evaluator met with the principal and other building staff to initially review the floor plan of the building and understand the program at the site, and verify enrollment and grade levels served. Following the initial meeting, MGT staff walked each facility with the principal/designee, visiting instructional and support spaces. The review also included interior security issues like signage and security vestibules as well as exterior issues, like traffic, parking, and fencing.

EDUCATIONAL SUITABILITY / FUNCTIONALITY ASSESSMENT

The educational suitability or functionality assessment evaluates how well the facility supports the educational program that it houses. It is important to evaluate all schools compared to a "standard" that defines what is expected. In SBISD, the standards used were based on those available from the Texas Education Agency (TEA). Many of the TEA standards define the size of spaces – SF per student in a given type of space or GSF for a given type of space. In order to have a more comprehensive assessment, MGT used national programmatic standards to define each type of space and created a DRAFT Educational Suitability Reference Guide for use by the evaluators (see next document). This Guide was used to train the site assessment staff to ensure inter-rater reliability across all schools.

Simultaneous to the assessment period, SBISD was working to finalize the district's educational specifications for elementary, middle, and high school. Once adopted, these specifications should serve as the district's "standards" into the future.



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I.0 EDUCATIONAL SUITABILITY ASSESSMENTS

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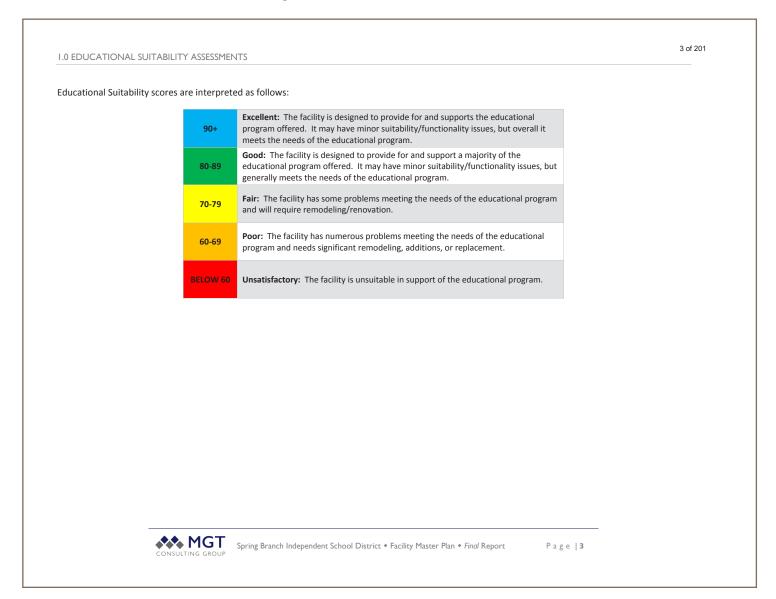
For this assessment, each site receives one suitability score which applies to all the buildings at the facility. The educational suitability functionality of each facility was assessed with BASYS®, using the following categories:

ENVIRONMENT	The overall environment of the facility with respect to creating a safe and positive working/learning environment.
CIRCULATION	Pedestrian/vehicular circulation and the appropriateness of site facilities and signage.
SUPPORT SPACE	The existence of facilities and spaces to support the educational/governmental program being offered. These include offices, general classrooms, special learning spaces (e.g. music rooms, libraries, science labs), and support spaces (e.g. administrative offices, counseling offices, reception areas, kitchens, health clinics).
SIZE	The adequacy of the size of the program spaces.
LOCATION	The appropriateness of adjacencies (e.g., PE space separated from quiet spaces).
STORAGE & FIXED EQUIPMENT	The appropriateness of utilities, fixed equipment, storage, and room surfaces (e.g. flooring, ceiling materials, and wall coverings).

The BASYS® score for each school is on a 100-point scale, making it possible to compare across all schools or among schools of a similar age or grade configuration. Although the reasons for a score will vary, scores within a given range provide insight into how well a school is generally functioning relative to the educational program offered there. Suitability report results for each assessed school can be found in the following Educational Suitability Report.



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I.0 EDUCATIONAL SUITABILITY ASSESSMENTS

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Exhibit 1-1 presents the range and average of suitability/functionality scores by facility type. The suitability/functionality scores range from 63 to 95. The average scores fall within the "Good" to "Fair" range. The district has no schools that fall within the "Unsatisfactory" range.

EXHIBIT 1-1 SPRING BRANCH ISD SUITABILITY SCORE RANGES

SITE TYPE	SUITA SCORE	AVERAGE SUITABILITY SCORE		
	LOW	HIGH	3011ABILITY 3COKE	
Pre-Kindergarten	80	85	81	
Elementary Schools	67	95	80	
Middle Schools	72	90	80	
High Schools	63	84	74	
Other Educational	81	81	81	

Source: MGT of America Consulting, LLC, 2016.

BUDGET CALCULATIONS

Budgets for correcting the suitability deficiencies at a given school were developed using a methodology applied to similar assessments conducted nationally by MGT. The amount calculated is intended to be used as a budget for correcting the overall educational suitability needs of a facility and not as cost estimates for individual deficiencies.

Experience has shown that it is difficult to calculate the cost of correcting items such as classrooms that are sized incorrectly, have inappropriate adjacencies, or lack of a variety of teaching/learning spaces, etc., prior to developing a specific design solution. The remediation of these deficiencies can take a variety of forms and requires a design study before accurate cost calculations can be made. We can, however, develop a budget for suitability improvements based on the overall suitability score of a school and our experience in correcting the overall deficiencies based on that score. Budget estimates for each facility are included in this report and should be used as a starting place for long-range planning.



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To develop the budgets, each assessment item is weighted based on its relative importance in developing the overall cost of the building(s). The suitability score is a measure of that portion of the facility that is serving the school well. The overall level of deficiencies is then multiplied by the gross square footage (GSF) in the facility and the suitability cost per square foot to renovate the facility.

This calculation produces a budget for correcting the educational suitability deficiencies specific to the individual school.

Exhibit 1-2 presents the educational suitability/functionality score and a budget estimate for each facility. As the scores indicate, a few facilities have significant suitability/functionality deficiencies. The facility scores have been color-coded based on the key provided previously.

EXHIBIT 1-23 SPRING BRANCH ISD SUITABILITY SCORES AND BUDGET ESTIMATES

SITE NAME	GRADE CONFIG.	GSF	SUITABILITY SCORE	BUDGET ESTIMATE					
PreK Schools									
Bear Boulevard	PK	26,000	81	\$433,000					
Lion Lane	PK	26,000	80	\$454,000					
Tiger Trail	PK	26,000	85	\$343,300					
Wildcat Way	PK	26,000	80	\$456,800					
PreK Total/Average		104,000	81	\$1,687,100					
Ele	mentary Scho	ools							
Bendwood Campus	PK-K, 3-5	38,830	74	\$864,700					
Buffalo Creek Elementary	K-5	82,179	89	\$754,000					
Bunker Hill Elementary	K-5	58,385	82	\$927,600					
Cedar Brook Elementary	PK-5	82,179	77	\$1,651,200					
Hunters Creek Elementary	K-5	61,937	80	\$1,067,300					
Memorial Drive Elementary	PK-5	58,965	88	\$596,300					
Nottingham Elementary	PK-5	66,393	82	\$1,056,900					



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I.0 EDUCATIONAL SUITABILITY ASSESSMENTS

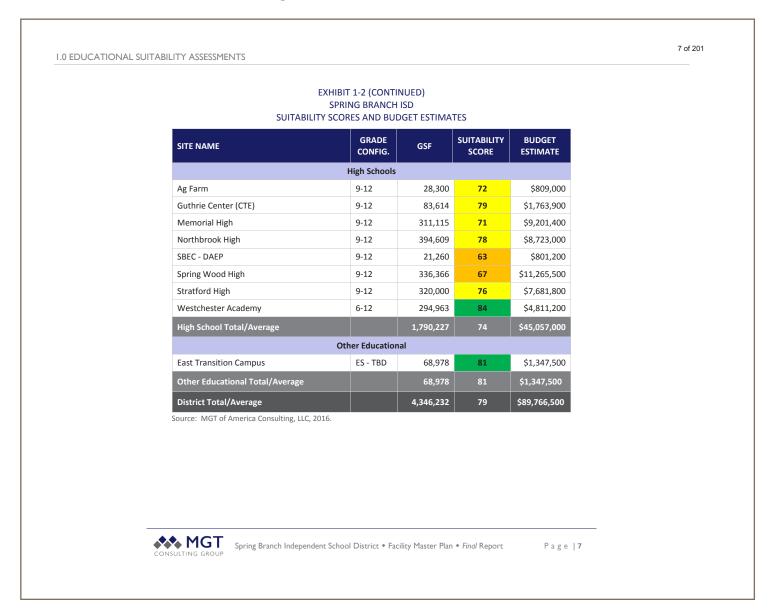
EXHIBIT 1-2 (CONTINUED) SPRING BRANCH ISD SUITABILITY SCORES AND BUDGET ESTIMATES

SITE NAME	GRADE CONFIG.	GSF	SUITABILITY SCORE	BUDGET ESTIMATE				
Elementary Schools								
Rummel Creek Elementary	PK-5	106,260	95	\$463,400				
Sherwood Elementary	PK-5	69,371	67	\$1,972,900				
Spring Shadows Elementary	K-5	83,904	82	\$1,314,700				
Terrace Elementary	K-5	74,349	69	\$2,010,700				
Thornwood Elementary	PK-5	69,038	76	\$1,462,300				
Treasure Forest Elementary	K-5	82,149	85	\$1,046,300				
Woodview Elementary	PK-5	70,508	78	\$1,322,900				
Elementary Total/Average		1,004,447	80	\$16,511,200				
N	liddle School	s						
Landrum Middle	5-8	177,665	76	\$3,959,900				
Memorial Middle	6-8	188,852	78	\$3,850,900				
Northbrook Middle	6-8	203,020	84	\$3,031,300				
Spring Branch Middle	6-8	226,208	82	\$3,833,700				
Spring Forest Middle	6-8	192,559	90	\$1,711,800				
Spring Oaks Middle	6-8	189,660	80	\$3,500,200				
Spring Woods Middle	6-8	200,616	72	\$5,275,900				
Middle School Total/Average		1,378,580	80	\$25,163,700				



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I.0 EDUCATIONAL SUITABILITY ASSESSMENTS

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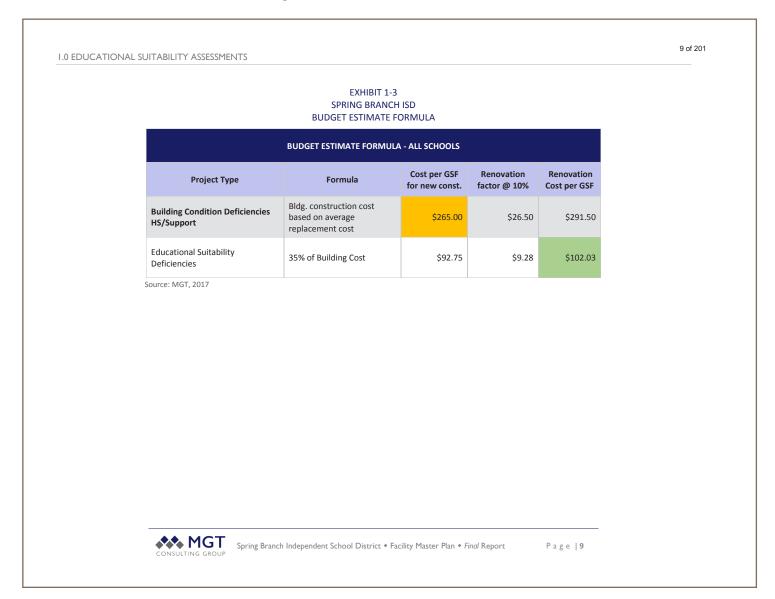
Construction costs for new construction were provided by Spring Branch using current construction data from the region for the three types of facilities; elementary schools, middle schools and high schools. The average construction costs, in dollars per gross square foot, were adjusted by adding an additional 10% renovation factor to achieve a "Renovation Cost", as shown in **Exhibit 1-3**. Thirty-five percent of the renovation cost is applied to calculate the suitability cost per gross square foot. The key below explains the color-coding.

> KEY Average Cost/Gross Square Foot for New Construction Educational Suitability Deficiency Cost/Gross Square Foot

EXHIBIT 1-3 SPRING BRANCH ISD **BUDGET ESTIMATE FORMULA**

BUDGET ESTIMATE FORMULA - ALL SCHOOLS				
Project Type	Formula	Cost per GSF for new const.	Renovation factor @ 10%	Renovation Cost per GSF
Building Condition Deficiencies ES/PK	Bldg. construction cost based on average replacement cost	\$225.00	\$22.50	\$247.50
Educational Suitability Deficiencies	35% of Building Cost	\$78.75	\$7.88	\$86.63
Building Condition Deficiencies MS	Bldg. construction cost based on average replacement cost	\$240.00	\$24.00	\$264.00
Educational Suitability Deficiencies	35% of Building Cost	\$84.00	\$8.40	\$92.40

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FINDINGS / CONCLUSIONS

The suitability assessments showed that the elementary schools across the district tended to meet the standards more closely than did the schools in other levels. The range of scores for elementary schools was from 67 ("Poor") to 95 ("Excellent"), including the one new elementary that scored 95. The data also show that high schools in the district tend to have a lower alignment to the standards, with a range of scores from 63 ("Poor") to 84 ("Good"). Both the elementary and the high school levels show two schools in the "Poor" range. The majority of all schools are in the "Fair" and "Good" range.

These data are helpful in understanding the suitability needs and issues for both individual schools and for the district as a whole, but are only one piece of the data that are needed to provide a complete picture of the district's facility needs in order to develop a long-range plan.



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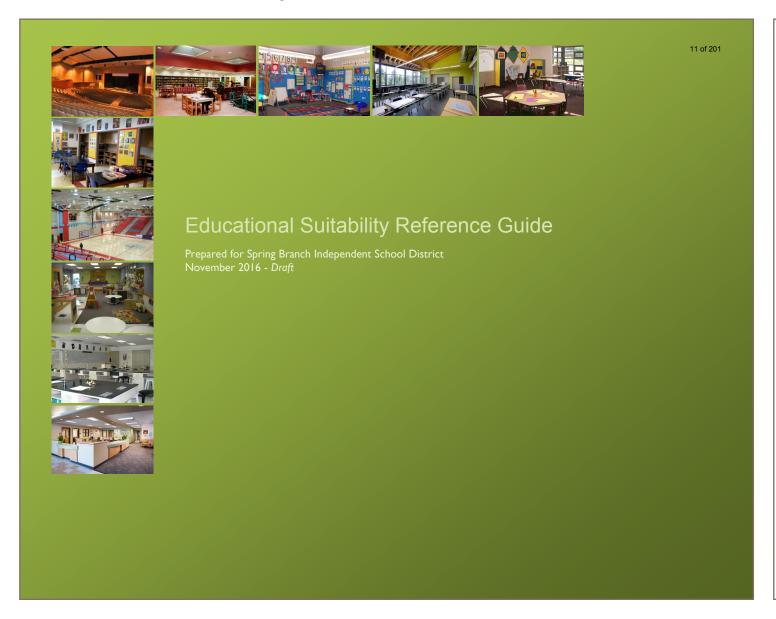


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ART CLASSROOMS — Required space at all levels. If there is no space, score all components *Unsatisfactory*. For educational suitability purposes, if the art room is located in a portable, all four components should be scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting and stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Art	Size	The room should meet the square footage standards. All levels: 1200 SF	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards or is a portable
	Location	The room should be appropriately located for the program.	Rooms should be located appropriately for the instructional program.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Room(s) have adequate permanent casework, appropriate materials and project storage Fixed Equipment: There should be at least 2 sinks w/clay traps, kiln w/appropriate ventilation, display space, hard surfaced flooring, easily cleanable surfaces, and technology equipment. Room(s) should have the capacity to be darkened to display projected imagery.

Examples of art classrooms:









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CAREER & TECHNICAL EDUCATION - Scores are based on the programs available in each building. Space is provided for various simulations of job-related experiences and laboratory work stations. For educational suitability purposes, if some CTE rooms are located in a portable building, the comment for all four components should include this information and scores lowered based on the percent that are located in portable buildings. If all CTE rooms are in portables, all components are scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting/stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Career Tech Ed	Size	The room should meet the square footage appropriate for the program. There is room for a lecture area and for movement of students. Middle school CTE will include a tech lab.	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	The classrooms(s) should be shielded from noise-producing activities and functions and there should be appropriate material delivery areas.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: There should be storage for student projects and supplies and secured storage areas for volatile, flammable and corrosive chemicals and cleaning agents, if needed for the program. In addition, there should be proper storage and removal access for hazardous waste materials is provided in each laboratory using such materials. Fixed Equipment: As appropriate to the program, including any necessary safety equipment.







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COMPUTER LABS — Computer labs should be scored if they exist. If a school has no computer lab, it should be scored "N/A". For educational suitability purposes, if the computer lab is located in a portable, all four components should be scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting and stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Lighting should minimize screen glare and eye strain. Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Computer Labs	Size	The room should meet the square footage standards and should accommodate movement of students around learning stations. 900 SF all levels – 36 SF/student	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	A room that is close to classroom areas and shielded from noise-producing activities or functions.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program. Computer labs should have both hard connections and wireless availability.	Storage: Is there adequate permanent casework and enough storage for teaching materials and records? Fixed Equipment: There should be sufficient outlets, power sources, and network links for the amount of equipment provided. Equipment should be properly secured and appropriate for the program.

Examples of computer labs:







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EARLY CHILDHOOD EDUCATION — For suitability purposes, if some early childhood classrooms are located in a portable building, the comment for all four components should include this information and the scores should be lowered based on the percent of classrooms in that category that are located in portable buildings. If all ECE classrooms are in portables, all components should be scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting and stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
ECE	Size	The room should meet the square footage standards (including restrooms, storage, teacher preparation, wet and dry areas). 800 SF	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	A room that is appropriately located and shielded from noise- producing activities or functions and has <u>access</u> to a fenced outdoor play area. (Play area is scored under <i>Outside Spaces</i> .)
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Room(s) have adequate, age-appropriate casework and storage. Fixed Equipment: There should be a restroom in the classroom. If the room is used for special education preschool, add a changing area in the restroom and access to a washer and dryer. Fixtures include sink with bubbler, wall of cabinets, age-appropriate fixtures, and technology equipment. Some flooring is a "wet area". In ECE Centers, space should include a shared kitchenette.

Examples of ECE classrooms:







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GENERAL CLASSROOMS - For suitability purposes, if some general classrooms are located in a portable building, the comment for all four components should include this information and scores lowered based on the percent that are located in portable buildings. If <u>all</u> general classrooms are in portables, all four components are scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The rooms should provide an inviting and stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Clerestory windows OK. Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
General Classrooms	Size	The rooms should meet the square footage standards. PK-1: 800 SF Grades 2 – 12: 700 SF	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The rooms should be appropriately located for the program.	A room that is appropriately located and shielded from noise- producing activities or functions.
	Storage/Fixed Equip	The rooms should have adequate storage space and fixed equipment appropriate to the program.	Storage: Permanent casework and space for teaching materials and records. Fixed Equipment: Grades 1-6: one wall of cabinets, counters at age-appropriate height, and sink with fountain. Grades 7-12: locked wardrobe cabinet. Classrooms should have flexible spaces for group learning. There should be technology equipment appropriate to the program at all levels.

Examples of general classrooms:









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INSTRUCTIONAL RESOURCE ROOMS - There should be space(s) for resource specialist, speech therapist, psychologists, itinerant teachers, bilingual specialists, migrant services and other services. For educational suitability purposes, if some instructional resource rooms are located in a portable building, the comment for all four components should include this information and scores lowered based on the percent that are located in portable buildings. If <u>all</u> resource rooms are in portables, all components are scored *Unsatisfactory*.

System	Component	Description	What to Look For
Instructional Resource Rooms Size	Environment	The room should provide an inviting and stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program and allow for collaborative learning opportunities? Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
	Size	The room should meet the square footage standards. 450 SF	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	The room should be near other classrooms and shielded from noise-producing activities or functions.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Room(s) have adequate permanent casework; teacher, and student storage. Fixed Equipment: Room(s) have program/technology equipment appropriate to the program.

Examples of instructional resource rooms:







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KINDERGARTEN - If some kindergarten classrooms are located in a portable building, the comment for all four components should include this information and scores lowered based on the percent that are located in portable buildings. For educational suitability purposes, if <u>all</u> kindergarten classrooms are in portables, all components are scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting and stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? . Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Kindergarten	Size	The room should meet the square footage standards (including restrooms, storage, teacher preparation, wet and dry areas). 800 SF	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
Killucigarten	Location	The room should be appropriately located for the program.	The room should be appropriately located, shielded from noise-producing activities or functions, and located close to parent drop-off and bus loading areas. Kindergarten is to be located on the ground floor.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Storage space for teaching materials and records; and for children's clothing and personal items. Storage, casework, and learning stations are functionally designed for use in free play and structured activities; e.g., shelves are deep and open for frequent use of manipulative materials. Fixed Equipment: There should be a wet area with sink. Room(s) have program/technology equipment appropriate to the program. A restroom should be located within kindergarten classrooms. Counters, furniture, etc. should be appropriate heights for kindergarten-aged students.

Examples of kindergarten classrooms:







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LEARNING ENVIRONMENT

System	Component	Description	What to Look For	
	Learning Style Variety	The school should have flexible learning spaces.	Space is provided to allow for various group sizes, projects, individual workstations, as well as general classrooms. Spaces are flexible, allowing for differentiated instruction to accommodate multiple teaching and learning styles.	
Learning Environment	Interior Environment	The school should provide an inviting and stimulating environment for learning.	multiple teaching and learning styles. Spatial Configuration (immovable): Does it support the instructional program or are there oddly-placed posts, difficult angles to navigate or awkward spaces to use? Lighting: Is there appropriate natural light (windows with views) and adequate artificial lighting levels? Acoustics: Are there impediments to hearing the teacher? Is then noise transfer between classrooms or from traffic or play areas in the classrooms? HVAC/Temperature: Is there proper ventilation and consistent an adequate climate control? Aesthetics: Is it an inviting learning environment?	
	Exterior Environment	Schools should have outdoor areas for learning opportunities.	Examples include: Outdoor science/nature learning labs, art patios, covered or open instructional areas, and social gathering spaces.	

Examples of learning environments:







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MEDIA CENTER — All schools are expected to have a media center. For educational suitability purposes, if the media center is in a portable, all components are

System	Component	Description	What to Look For
Media Center	Environment	The room should provide an inviting/stimulating environment for learning. There should be space for instruction, research, and quiet reading.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Acoustics: Are acoustic materials in place to allow different activities to occur at the same time without interference? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
	Size	Based on enrollment 400 SF minimum + 4 SF for student count > 100 3,000 SF +3 SF for student count > 500 7,500 SF + 2 SF for student count > 2,000 TV Studio 200 SF	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	The media center should be centrally located to support access of all students and away from noisy parts of the building.
	Storage/Fixed Equip	30% reading/instructional space 45% stacks, circulation, online resources 25% necessary ancillary spaces The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Adequate permanent casework and enough storage for materials and technology. Fixed Equipment: Space and capability for computer terminals for student use, research and report writing. Equipment should be properly secured. Bookcases are ideally located on the perimeter or are low enough to allow supervision. The space should include an office, work room with sink, high ceilings, flexible spaces, and window coverings.

Examples of Media Centers:







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MUSIC — Required space at all levels. If no music room exists, all four components should be scored *Unsatisfactory*. For educational suitability purposes, if the music room is located in a portable, all four components should be scored *Unsatisfactory*. All secondary schools should have separate choir and band space. High schools also have separate orchestral space.

System	Component	Description	What to Look For
Music	Environment	The room should provide an inviting/stimulating environment for learning.	Spatial Configuration (immovable): Size and height of instrumental and choral rehearsal rooms should be sufficient to allow for movement of students and instruments and various presentation arrangements Lighting: Appropriate natural light/lighting levels? Acoustics: Size and height of instrumental and choral rehearsal rooms should be sufficient to allow for acoustic quality. Flooring should be hard surface. HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
	Size	The rooms should meet the square footage standards. 1,200 SF (ES) 1,200 SF (MS) 2 rooms minimum standard 1,500 SF (HS) 3 rooms minimum standard	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	All music rooms shall be located remotely from other classrooms to minimize sound transmission, should have convenient access to the auditorium, and practice rooms should have easy supervision.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Room(s) have adequate casework (cabinets and bookshelves), and appropriate storage. Fixed Equipment: There should be sinks, 200-500 sf storage, depending on type of program. High ceilings, acoustical wall coverings, technology equipment appropriate to the program. ES: 200-500 SF storage, depending on type of program. MS: 200-500 SF storage per program (choir, band, etc.). There should be a conducting podium, 2 rooms, plus space for practice rooms, office and storage. HS: 200-500 SF storage per program (choir, band, etc.). There should be a conducting podium, 2 rooms with 3-4 practice rooms, storage spaces, and offices.

Examples of music classrooms:







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23 of 201 NON-INSTRUCTIONAL SPACES What to Look For Administrative office/clerical space appropriate for the school size. with adequate reception space for parents and visitors. Storage Administrative spaces should be configured and equipped area for consumable materials. Adult restrooms. Principal's office appropriately. There should be active control of the front with space for meetings of four people. Small meeting space for meetings of up to 10 people. Faculty mailboxes should not be accessed through the public space. Administrative areas to include locked storage. There is good circulation and routing. The cafeteria is acoustically isolated, has appropriate storage and seating. At the ES, there needs to be a space to store all the tables and chairs for multipurpose usage. The area for the cafeteria line is designed for Cafeteria A multi-use room or rooms capable of seating one-third of Nonthe flow of traffic for each lunch period and should allow all the capacity of the school for dining. students adequate eating time during each lunch period. Tables and benches or seats are designed to maximize space and allow flexibility in the use of the space. Design of kitchen reflects its planned function; e.g., whether for food preparation or warming only. Space is available for refrigeration and preparation of foods to accommodate maximum Food service and prep spaces (kitchen, freezer, cooler, number of students planned for the school. Office, changing, and Food Service and office, restrooms, etc.) are sized and located appropriately. restroom area for food preparation staff is available and shall The kitchen area should have separate areas for pickup and comply with local department of health requirements. Safety delivery, have adequate storage, and fixed equipment. equipment is available. The delivery area is separate from other traffic and does not provide an unsecured access point into the **Educational Suitability Guide** | 12 MGT for Spring Branch Independent School District

NON-INSTRUCTIONAL SPACES (CONTINUED)

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System	Component	Description	What to Look For		
	Clinic	Each school should have a health clinic.	There should be a health service area with space for nurse desk, patient beds (2), filing cabinets, and both dry (locked) and refrigerated medication storage. There should also be an ADA accessible restroom. Cot area should be supervised by office		
	Counseling	There should be office area for the psychologist/counseling program which provides for confidentiality and may be shared with other support service programs.	There should be a reception/waiting area. The space should be located adjacent to the fireproof records storage. Component requirements Guidance Office = 150 SF Reception = 150 SF Records Room = 150 SF		
Non- Instructional	Custodial and Maintenance	There should be a custodial receiving area (250 SF) and custodial closets with floor mop sink in each major building area.	The receiving area should be on the ground floor with direct acces from delivery truck loading/unloading area and should have shelving for bulk storage of equipment and supplies.		
mstructional	Student Restrooms	Restroom stalls shall be sufficient to accommodate the maximum planned enrollment and shall be located on campus to allow for supervision.	Restrooms are appropriately located and adequate in number, well-ventilated, and the fixtures are appropriate. Floor and wall surfaces are washable. Toilet partitions and urinal privacy partitions are in place.		
	Faculty Lounge/Work Space	The faculty should have a space for dining and a work area.	The faculty lounge should be sized appropriately for the school. There should also be work space equipped for copying and other instructional materials preparation. Restrooms should be nearby and/or conveniently located in various parts of the school.		
	Book or Resource Storage	The school should have storage for texts and other resources	Textbook storage room(s) should be on the first floor of the school and have adequate fixed casework with adjustable shelving to allow convenient access and use. Score with administration.		

Examples of non-instructional spaces:









OUTSIDE SPACES

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PERFORMING ARTS — All schools are required to have a performing arts space. HS Dance is included in performing arts.

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System	Component	Description	What to Look For
	Environment	The room should provide an inviting/stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate lighting levels? Acoustics: Are there impediments to hearing? Is there noise transfer between spaces? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Performing Arts	· · ·	ES: Can be with the cafetorium but should have a stage with curtains and lights. Combination cafeteria and performing arts space is the standard for elementary schools. MS/HS: The auditorium should have fixed seating for one grade level. HS: three spaces minimum - auditorium, small theater, black box. Dance room 1,500 SF.	Performing arts spaces including auditorium, stage, seating, green room, dressing rooms, sound booth, lighting booth, etc. meet instructional space guidelines/standards. EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	The performing arts space should be located on the ground floor and acoustically isolated from the quiet spaces. There should be convenient public & after-school access with the means to restrict access to other spaces and easy access to restrooms and water fountains.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	MS/HS: The performing arts space should have adequate and appropriate storage, curtain, lighting, sound system, and technology equipment appropriate to the program. HS Dance: wooden floor and mirrored wall, storage for costumes, clothing.

Examples of performing arts spaces:







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PHYSICAL EDUCATION - All schools - ES, MS, and HS - are expected to have a P.E. space, with one gym at the ES, 2 for MS, and 3 for HS. If no space exists, all four components should be scored *Unsatisfactory*.

System	Component	Des	scription	What to Look For
	Environment	The room should provide an ir for learning.	nviting/stimulating environment	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between programs? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
P.E.	Size	ES: Gym	ES: 3,000 SF MS: 4,800 SF HS: 7,500 SF	
		MS: Competition court, 2 regulation cross-courts, seating for entire student body. Competition gym Practice gym Boys/girls lockers 2,000 SF each Storage/Office 600 SF	HS: Competition court, 3 regulation cross courts, seating for entire student body. Competition and practice gym Weight room; multi-purpose (wrestling/dance/gymnastics) Boys/girls lockers 2,000 SF each Storage/Office 600 SF, training room, concession and ticket space.	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.		The gymnasium is secured from other parts of the campus for evening and weekend events or for public use purposes. Access to public restrooms.
	Storage/Fixed Equip	The room should have adequate equipment appropriate to the	0 1	Storage: There should be adequate and appropriate storage. Fixed Equipment - water fountains and fixed equipment (backboards, safety padding, MS: bleachers down one side as a minimum.

Examples of physical education spaces:









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SAFETY & SECURITY

The school site is appropriately fenced. Entrances and egresses are limited, where appropriate. Preschool/kindergarten playgrounds are fenced separately from other play areas, which should also be Fencing The school site should be appropriately fenced. completely fenced. Some schools have a "Spark park". This is a park that is open to the community adjacent to the school playground. For these cases, it is required to have a fence separating the playground from the Spark park. Adequate signage or graphics direct the public to major spaces (e.g. Signage & Way Interior and exterior signage should be adequate for the entrance, office, gym, auditorium, etc.) of the school and grounds. Finding needs of the school. Traffic and parking signs are adequate to direct visitors. All rooms Safety and are identified with numbers/signs. Supervision is enhanced through proper sightlines, few or no Security "hiding areas," appropriate interior/exterior lighting, good direct visibility or via security cameras both inside and outside the The building layout and equipment should enhance building building. PK/Kindergarten classrooms should be designed to allow Ease of Supervision supervision of play yards (unless prevented by site shape or size) and all areas of the classroom. Outdoor restrooms having direct outside access are located in areas that are visible from playground and are easily supervised. School design or configuration allows for control of entrances to the Controlled Points of entry should be controlled for student and staff school. Public entrances are easily supervised and controlled with a Entrances

Examples of safety & security:







security vestibule.

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SELF-CONTAINED SPECIAL EDUCATION — Required space where program exists, score *N/A* if program does not exist. For educational suitability purposes, if some self-contained rooms are located in a portable building, the comment for all four components should include this information and scores lowered based on the percent that are located in portable buildings. If all self-contained rooms are in portables, all components are scored *Unsatisfactory*.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting/stimulating environment for learning.	Spatial Configuration (immovable): Does it support the instructional program? Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Self- Contained	Size	The room should meet the square footage standards. 400 SF minimum; 40 SF/student	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
Special Ed	Location	The room should be appropriately located for the program.	The classroom(s) should be shielded from noise-producing activities and located centrally.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Room(s) have adequate permanent casework and teacher and student storage. Fixed Equipment: The classrooms should have special needs equipment and technology equipment appropriate to the program. Each room should have a restroom with hot water, shower, and changing area. Lifeskills (Severe SC) 300 SF storage room with sensory breakout room, washer/dryer, and teaching kitchenette (MS/HS only); Comprehensive Learning Center (Moderate) should have a sensory breakout room. HS only: Transition room for 18-21 year olds.

Examples of self-contained special education classrooms:







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SCIENCE - Required space at every level, score all four components *Unsatisfactory* if none exists. For educational suitability purposes, if all the science rooms are located in a portable, all four components should be scored *Unsatisfactory*. The secondary schools should include both classrooms and lab spaces.

System	Component	Description	What to Look For
	Environment	The room should provide an inviting/stimulating environment for learning.	Spatial Configuration (immovable): Classrooms are flexibly designed to insure full student access to laboratory stations and lecture areas. Lighting: Appropriate natural light/lighting levels? Acoustics: Are there impediments to hearing the teacher? Is there noise transfer between classrooms? HVAC/Temperature: Is there proper ventilation and consistent and adequate climate control? Aesthetics: Is it an inviting learning environment?
Science	Size	The room should meet the square footage standards. 800 SF (ES) 900 SF (MS) 1,000 SF (HS)	EXCEL: 90-100% of the room(s) meet standards GOOD: 80-89% of the room(s) meet standards FAIR: 65-79% of the room(s) meet standards POOR: 50-64% of the room(s) meet standards UNSAT: <50% of the room(s) meet standards
	Location	The room should be appropriately located for the program.	The science classroom should be shielded from noise-producing activities or functions. Lab should be located near the classroom(s) it serves. Shared labs meet the standard.
	Storage/Fixed Equip	The room should have adequate storage space and fixed equipment appropriate to the program.	Storage: Space for teaching materials and adequate permanent casework. There should be separate secured storage areas area provided for volatile, flammable, and corrosive chemicals and cleaning agents. Fixed Equipment – There should be a science classroom with wet flooring, appropriate science storage and extra sinks as well as safety equipment. MS/HS only: A separate 100 SF room for storage and prep area. Fume hoods in all chemistry or integrated physics/chemistry rooms, water and gas in all spaces (no gas at MS level), chemical storage, prep room. FE, shower – chemistry only; eyewash – chemistry and biology only.

Examples of science classrooms & labs







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Spring Branch ISD Basys Suitability Report

School Name: Bear Boulevard

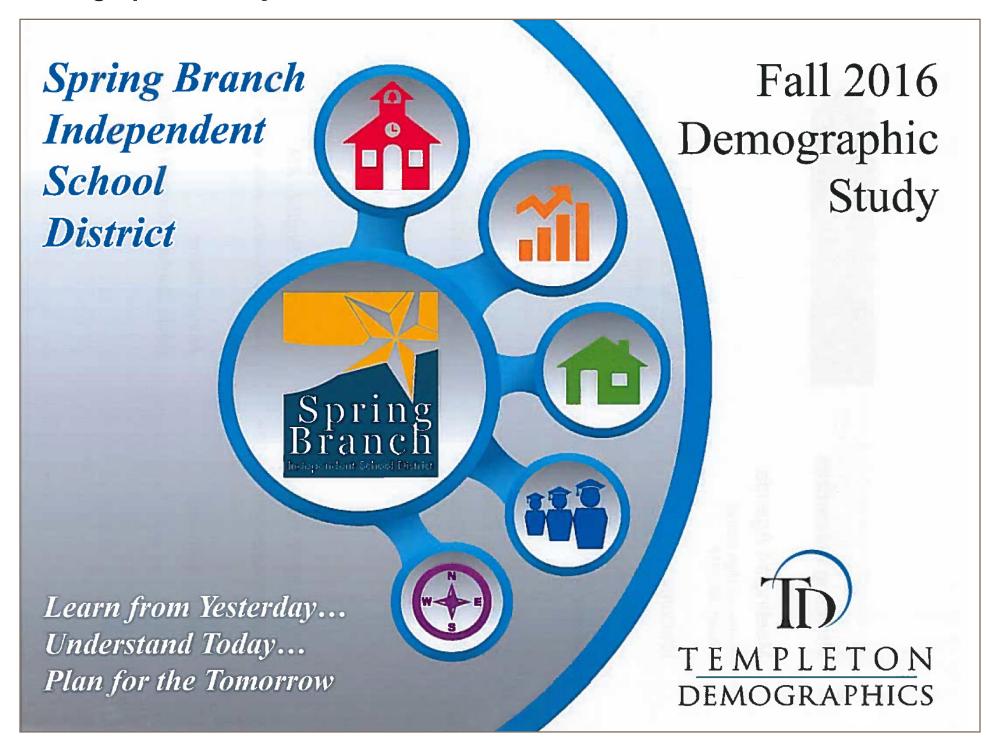
Score: 80.78

Grade Configuration: PK GSF: 26,000

Bear Boulevard ECE school serves PK students including bout 40 children in the day care program. There are not any special education students at this time. After school child care is also provided. There are nine bilingual classrooms, five ESL classrooms, and a bilingual Vietnamese classroom.

Category	Points Earned	Possible Points	Rating	Comment
Learning Environment				
Learning Style Variety	3.292	4.115	Good	Classrooms are somewhat congested from equipment and supplies for program needs.
Interior Environment	1.300	2.000	Fair	There are HVAC issues in classrooms when the weather changes, with some too cool and others too warm. Required window shades are in classrooms with south facing windows, which makes the wet area lighting somewhat dark.
Exterior Environment	1.500	1.500	Excel	
Kindergarten				
Environment			N/A	
Size			N/A	
Location			N/A	
Storage/Fixed Equip			N/A	
ECE				
Environment	3.047	4.687	Fair	There are HVAC issues in classrooms when the weather changes, with some too cool and others too warm. Required window shades are in classrooms with south facing windows, which makes the wet area lighting somewhat dark.
Size	11.718	11.718	Excel	
Location	3.515	3.515	Excel	
Storage/Fixed Equip	2.285	3.515	Fair	There is inadequate storage for program needs.
Self-Contained Special Education				
Environment			N/A	
4/18/2017				Page 1 o

Demographics Study



Roofing Assessment

SPRING BRANCH INDEPENDENT SCHOOL DISTRICT

District Wide Comprehensive Facilities Assessment

Educational Suitability,
Child Nutrition Services &
Technology Assessments

FINAL SUBMISSION

APPENDIX D – Roofing Report

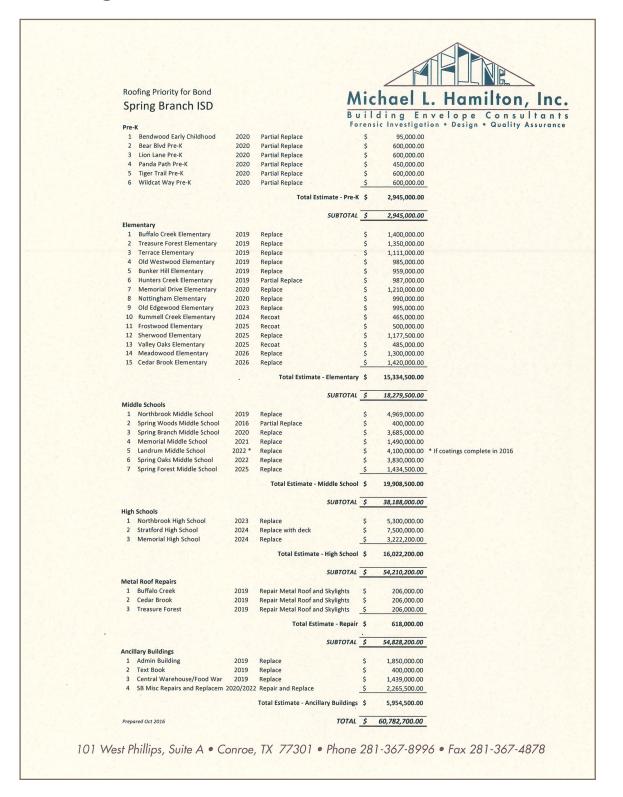
April 28, 2017





SBISD Project No. 10772

Roofing Assessment



SPRING BRANCH INDEPENDENT SCHOOL DISTRICT

District Wide Comprehensive Facilities Assessment

Educational Suitability, Child Nutrition Services & Technology Assessments

FINAL SUBMISSION

APPENDIX C – Technology

April 28, 2017





SBISD Project No. 10772



Technology Audit SM Report Sprin	g Branch ISD
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Technology AuditSM Report Spring Branch ISD

EXECUTIVE SUMMARY

TechKnowledge Consulting Corporation was retained by AECOM to evaluate the current technology infrastructure deployment for Spring Branch ISD and determine its suitability for the district's long term use. The objectives of this engagement are:

- o To understand Spring Branch ISD's long-term technology plan with an emphasis on short and long term deployment of IP network connected devices across the district.
- o To inspect 60 Spring Branch ISD Properties, reviewing the existing conditions of technology closets, cabling, optical fiber, and inter-building conduits and connectivity.
- o To review and evaluate all client-provided documentation regarding the current environment, including products present, configuration/models of hardware, costs, applications, dependencies, and the IP network.
- o To provide an assessment of the current environment, identifying potential challenges that would impede full implementation of the district's technology vision, exploring potential opportunities for improvement, risk reduction or change.

TechKnowledge conducted a detailed document review, inspected the campuses, and interviewed with those knowledgeable on the assets currently in place. Where possible, we conduct interviews with faculty in order to understand their perceptions of the district's technology deployment and functionality.

TECHKNOWLEDGE

Technology AuditSM Report **Spring Branch ISD**

In addition, our firm will apply the standards set forth by ANSI (American National Standards Institute), TIA (Telecommunications Industry Alliance), and BICSI (Building Industry Consulting Services International), to establish "Industry Standards" for the campus infrastructure and server rooms.

Our findings, assessment, conclusions and recommendations to date are presented in this report. In summary, we have found:

Item	Assessment
Technology Closets	Marginal/Adequate
Wireless	Well-Positioned
Cable Infrastructure	Adequate

Recommend actions include:

Campus	CAT 6e Copper Upgrade	CAT 5e Copper Patch Cleanup	OM4 Fiber Upgrade	MDF/IDF Re-Build or General Cleanup	Dedicated HVAC*	Building UPS and Generator*	Total Cabling/ Hardware Costs excluding HVAC and UPS
Bear Boulevard	\$23,000	\$3,450	\$5,750	\$17,250	Inadequate	Inadequate	\$49,450
Lion Lane	\$23,000	\$3,450	\$5,750	\$17,250	Inadequate	Inadequate	\$49,450
Tiger Trail	\$23,000	\$3,450	\$5,750	\$17,250	Inadequate	Inadequate	\$49,450
Wildcat Way	\$23,000	\$3,450	\$5,750	\$17,250	Inadequate	Inadequate	\$49,450
Bendwood Campus	\$17,250	\$3,450	\$5,750	\$19,550	Inadequate	Inadequate	\$46,000
Buffalo Creek Elementary	\$46,000	\$5,175	\$23,000	\$13,800	Inadequate	Inadequate	\$87,975
Bunker Hill Elementary	\$40,250	\$5,175	\$17,250	\$42,550	Inadequate	Inadequate	\$105,225
Cedar Brook Elementary	\$0	\$2,300	\$0	\$80,500	Inadequate	Inadequate	\$82,800
Edgewood Elementary	\$0	\$2,300	\$0	\$4,600	Inadequate	Inadequate	\$6,900



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Campus	CAT 6e Copper Upgrade	CAT 5e Copper Patch Cleanup	OM4 Fiber Upgrade	MDF/IDF Re-Build or General Cleanup	Dedicated HVAC*	Building UPS and Generator*	Total Cabling/ Hardware Costs excluding HVAC and UPS
Frostwood Elementary	\$0	N/A	\$0	\$5,750	Adequate	Inadequate	\$5,750
Hollibrook Elementary	\$86,250	\$5,175	\$17,250	\$11,500	Inadequate	Inadequate	\$120,175
Housman Elementary	\$0	N/A	\$0	\$2,300	Inadequate	Inadequate	\$2,300
Hunters Creek Elementary	\$57,500	\$6,900	\$17,250	\$74,750	Inadequate	Inadequate	\$156,400
Meadow Wood Elementary	\$0	\$2,300	\$17,250	\$9,200	Inadequate	Inadequate	\$28,750
Memorial Drive Elementary	\$46,000	\$6,900	\$17,250	\$11,500	Inadequate	Inadequate	\$81,650
Nottingham Elementary	\$34,500	\$5,175	\$11,500	\$25,300	Inadequate	Inadequate	\$76,475
Pine Shadows Elementary	\$0	\$2,300	\$0	\$11,500	Adequate	Inadequate	\$13,800
Ridgecrest Elementary	\$0	\$2,300	\$0	\$4,600	Inadequate	Inadequate	\$6,900
Rummel Creek Elementary	\$0	N/A	\$0	\$1,150	Inadequate	Inadequate	\$1,150
Shadow Oaks Elementary	\$0	\$3,450	\$0.00	\$9,200	Inadequate	Inadequate	\$12,650
Sherwood Elementary	\$46,000	\$5,175	\$17,250	\$9,200	Inadequate	Inadequate	\$77,625
Spring Branch Elementary	\$0	\$2,300	\$17,250	\$2,300	Adequate	Inadequate	\$21,850

Technology AuditSM Report Spring Branch ISD

Campus	CAT 6e Copper Upgrade	CAT 5e Copper Patch Cleanup	OM4 Fiber Upgrade	MDF/IDF Re-Build or General Cleanup	Dedicated HVAC*	Building UPS and Generator*	Total Cabling/ Hardware Costs excluding HVAC and UPS
Spring Shadows Elementary	\$51,750	\$6,900	\$34,500	\$86,250	Inadequate	Inadequate	\$179,400
Terrace Elementary	\$46,000	\$5,175	\$17,250	\$6,900	Inadequate	Inadequate	\$75,325
Thornwood Elementary	\$28,750	\$5,175	\$17,250	\$24,150	Inadequate	Inadequate	\$75,325
Treasure Forest Elementary	\$46,000	\$5,175	\$17,250	\$11,500	Inadequate	Inadequate	\$79,925
Valley Oaks Elementary	\$0	\$2,300	\$0	\$2,300	Inadequate	Adequate	\$4,600
Westwood Elementary	\$0	\$2,300	\$0	\$4,600	Inadequate	Inadequate	\$6,900
Wilchester Elementary	\$0	N/A	\$0	\$2,300	Adequate	Inadequate	\$2,300
Woodview Elementary	\$28,750	\$5,175	\$17,250	\$69,000	Inadequate	Inadequate	\$120,175
Landrum Middle	\$74,750	\$5,750	\$28,750	\$86,250	Inadequate	Inadequate	\$195,500
Memorial Middle	\$86,250	\$8,625	\$23,000	\$34,500	Inadequate	Inadequate	\$152,375
Northbrook Middle	\$0	\$5,750	\$0	\$3,450	Inadequate	Inadequate	\$9,200
Spring Branch Middle	\$5,750	\$5,750	\$23,000	\$11,500	Inadequate	Inadequate	\$46,000
Spring Forest Middle	\$57,500	\$8,625	\$23,000	\$57,500	Inadequate	Inadequate	\$146,625
Spring Oaks Middle	\$63,250	\$5,750	\$28,750	\$57,500	Inadequate	Inadequate	\$155,250

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Campus	CAT 6e Copper Upgrade	CAT 5e Copper Patch Cleanup	OM4 Fiber Upgrade	MDF/IDF Re-Build or General Cleanup	Dedicated HVAC*	Building UPS and Generator*	Total Cabling/ Hardware Costs excluding HVAG and UPS
Spring Woods Middle	\$74,750	\$5,750	\$34,500	\$97,750	Inadequate	Inadequate	\$212,750
Ag Farm	\$5,750	\$2,300	\$5,750	\$28,750	Inadequate	Inadequate	\$42,550
DAEP	\$46,000	\$3,450	\$17,250	\$17,250	Inadequate	Inadequate	\$83,950
Guthrie Center (CTE)	\$40,250	\$5,750	\$28,750	\$86,250	Inadequate	Inadequate	\$161,000
Memorial High	\$138,000	\$11,500	\$80,500	\$143,750	Inadequate	Inadequate	\$373,750
Northbrook High	\$178,250	\$11,500	\$46,000	\$120,750	Inadequate	Inadequate	\$356,500
Spring Branch Education Center	\$0	N/A	N/A	\$2,300	Adequate	Adequate	\$2,300
Spring Woods High	\$143,750	\$17,250	\$46,000	\$115,000	Inadequate	Inadequate	\$322,000
Stratford High	\$0	\$2,300	\$0	\$29,900			\$32,200
Westchester Academy	\$0	\$5,750	\$28,750	\$23,000	Inadequate	Inadequate	\$57,500
East Transition Campus	\$69,000	\$8,050	\$28,750	\$97,750	Inadequate	Inadequate	\$203,550
Administration Building	\$57,500	\$6,900	\$8,050	\$23,000	Inadequate	Adequate	\$95,450
Athletics Complex	\$69,000	\$5,175	\$57,500	\$92,000	Inadequate	Adequate	\$223,675
Buildings and Grounds/Facility Services	\$57,500	\$5,750	\$2,300	\$8,625	Inadequate	Inadequate	\$74,175
Grob Stadium	\$0	N/A	\$0	\$1,150	N/A	Adequate	\$1,150
Natatorium	\$0	N/A	\$0	\$11,500	Inadequate	Inadequate	\$11,500

Technology AuditSM Report **Spring Branch ISD** MDF/IDF Re-Build or Total Cabling/ Hardware Costs CAT 5e CAT 6e **Building UPS** Copper OM4 Fiber Dedicated Copper Campus and Patch Upgrade General **HVAC*** excluding HVAC Upgrade Generator* and UPS Cleanup Cleanup Security \$0 Services/Police \$5,750 \$2,300 \$2,300 Inadequate \$10,350 Adequate Department \$5,750 \$2,300 \$5,750 \$17,250 \$31,050 Tax Office Inadequate Inadequate Technology \$34,500 \$3,450 N/A \$40,250 \$2,300 Inadequate Inadequate Training Center Textbook Warehouse/ Purchasing/ \$28,750 \$5,175 \$0 \$62,675 \$28,750 Inadequate Inadequate Central Warehouse/ Child Nutrition \$28,750 \$3,450 \$17,250 N/A \$49,450 Transportation Inadequate Inadequate Vines Science \$5,750 \$2,300 \$5,750 \$11,500 \$25,300 Inadequate Inadequate Center West Support \$115,000 \$8,625 \$28,750 \$63,250 \$215,625 Inadequate Inadequate Center \$5,069,775 **TOTALS** \$265,650 \$2,058,500 \$855,600 \$1,890,025

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Technology AuditSM Report Spring Branch ISD

Notes:

- 1. <u>Cat 6 Copper Upgrade</u>: Replacing the current Cat5 or Cat5e copper horizontal cabling in the facility to standard. Estimates are based on \$350/400 per data connection following the district standard for 2 data connections per classroom/office.
- Cat5e Copper Patch Cleanup: Maintenance in Network closets to for the patch panels using proper length cables. May include some of the following: vertical/horizontal wire management; clean-up of trunking/patching; grounding/bonding; fire-seal; labeling of cables; painted plywood backboards; anchoring of ladder rack/rack). Estimates are based on \$1000 per cable cabinet/rack for new, specific length patch cables.
- 3. <u>OM4 Fiber Upgrade</u>: Upgrade for 62.5 micron cabling and copper backbone cabling to standard. Estimates are based on an approximate \$5k per fiber run and supports between MDF and IDFs. Factors such as type distances will affect cost.
- 4. MDF/IDF Rebuild or General Cleanup: Remediation of network rooms which are inadequate. Materials and labor coring/sleeves; grounding/bonding; racks; vertical wire management; horizontal wire management; ladder rack and associated components; fire-retardant painted plywood backboards. Rebuild costs are estimated at \$15k per MDF and \$10k per IDF. General clean up where a space functions, but should be improved, is estimated to cost \$1-2k per closet.
- 5. Dedicated HVAC: Remediating network rooms that do not have dedicated/independent climate control.
- 6. Building UPS and Generator: Installation for commercial power to insure reliable operations of network in the facility.

ASSESSMENT CRITERIA

Technology AuditSM Report

TechKnowledge assigns a rating to various systems or items as to their ability to support Spring Branch ISD's long term IT infrastructure needs. These are:

Well Positioned – Th3 item is well positioned to support Spring Branch ISD's technology needs for the next thirty-six to forty-eight months, without significant change or investment.

Adequate – The item is fulfilling its intended purpose and will likely continue to do so for 12 to 18 months, but will be inadequate beyond that timeframe. Additional investment within 12 to 18 months is considered likely.

Marginal – The item is minimal and barely fulfilling its intended purpose. Additional investment within 6 to 12 months is considered likely.

Inadequate – The item is not fulfilling its intended purpose and prompt action is necessary. Immediate investment is required.

Additionally, TechKnowledge will utilize the following industry wide standards and best practices during the evaluation:

Technology Rooms:

Standards suggest a purpose built, dedicated room, usually at least 80 square feet in size. Standards require one (1) Technology Room per floor, and the room must be within 300 cable feet of the most distant device. From most schools, this equates to one closet per 20,000 square feet. Additionally, the use of floor mounted cabinets or open racks with 3' of clearance both in the rear and the front is highly recommended. All room penetrations should be properly sealed to prevent dust contamination and meet local fire code. Any grounding/bonding and UPS deficiencies lend to a high potential of power surges, network switch damage and network outages. Lastly, standards require proper cable labeling to aid in moves, adds, and changes or troubleshooting of technical issues.

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Spring Branch ISD

^{*} Cost estimates are for technology related equipment and infrastructure only.

Technology AuditSM Report Spring Branch ISD

Cable Infrastructure:

Category 5e cable and components are currently at end of life and industry standards recommend the utilization of Category 6 and/or Category 6A cabling. 10/100 (62.5) fiber is also at end of life and current industry standards recommend a minimum of 10 Gigabit (OM4) fiber cable when being utilized for backbone purposes.

Technology AuditSM Report Spring Branch ISD

USER PERCEPTION AND END USER DEVICES

At the request of the SBISD Technology Department, while conducting onsite assessments of the SBISD facilities infrastructure, the TechKnowledge team also informally spoke to the Administrative Leadership, some available teachers, and/or Librarians at each location. During these conversations, our goal was to get the user perception of how technology is performing and what issues are being experienced. This helps gauge the impact of proposed changes and recommendations.

Due to recent upgrade performed by the SBISD Technology department which updated the core network, including core switches, WAN connectivity, and the Wireless Network, the overall perception of the network is positive. Many of those interviewed specifically noted how much faster and more stable it seems since the upgrades. Performance issues have been traced back to the outdated devices being used, which are unable to take advantage of the new infrastructure.

In each conversation, we asked each person to name one technology wish for their campus that would enhance their technology experience. The responses were consistently the same:

- 1. New Devices for schools and the administrative office:
 - a. Chromebooks were the most frequently requested device at schools
 - b. Preferably one per student, but at least a full classroom set for instruction.
 - c. One (1) complete class set of devices in the library for instruction and testing

2. Replacement Equipment

- a. ActiveBoards: These should be brought up to the current standard of the large dry erase boards with BrightLink devices
- 3. Training for teachers
 - a. Practical training in the use of the technology instructionally to insure the maximum impact in the classroom.
 - b. Alternate times for training so as not to further overload the teachers time in class time or after school time. Most prefer a set aside time during the day, when a teacher's class could be covered for them while they are training.

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Child Nutrition Services Assessment

SPRING BRANCH INDEPENDENT SCHOOL DISTRICT

District Wide Comprehensive Facilities Assessment

Educational Suitability, Child Nutrition Services & Technology Assessments

FINAL SUBMISSION

APPENDIX B – Child Nutrition Services

April 28, 2017





SBISD Project No. 10772

Child Nutrition Assessment

Facility Type	Option 1	Option 2	Op	ption 3
Pre-K	Overall is in poor condition and equipment has reached it's life expectancy. Recommend complete renovation and expanding the entire kitchen space to 2400 square feet. \$450,000 foodservice equipment cost.	Overall in fair condition, recomn priority 1 & 2 equipment. Consi footage expansion.	der 700 square Ov	verall all in good condition, recommend placing all Priority 1 equipment.
Bear Boulevard PRE-K			\$245,529	
ion Lane PRE-K			\$246,552	
Figer Trail PRE-K			\$237,893	
Wildcat Way PRE-K			\$255,197	
	Option 1	Option 2	Oį	ption 3
Elementary School	Overall is in poor condition and equipment has reached it's life expectancy. Recommend complete renovation and expanding the entire kitchen space to 3100 square feet. \$575,000 foodservice equipment cost.	Overall in fair condition, recomn Priority 1 & 2 equipment.		verall all in good condition, recommend placing all Priority 1 equipment.
Bendwood ES	\$575,0	000		
Buffalo Creek ES			\$172,017	
Bunker Hill ES	\$575,0	000		
Cedar Brook ES			\$103,849	
Hunters Creek ES	\$575,0	000		
Memorial ES	\$575,0	000		
Nottingham ES	\$575,0	000		
Sherwood ES	\$575,0	000		
Spring Shadows ES	\$575,0	000		
Terrace ES	\$575,0	000		
Thornwood ES	\$575,0	000		
Treasure Forest ES			\$205,617	

Child Nutrition Assessment

Facility Type	Option 1		Option 2	Option 3	
Middle School	Overall is in poor condition a reached it's life expectancy. complete renovation and exkitchen space to 5500 squar foodservice equipment cost.	Recommend panding the entire e feet. \$750,000	Overall in fair condition, recommend replacing al Priority 1 & 2 equipment.	Overall all in good condition, recommend replacing all Priority 1 equipment.	
Landrum MS		\$750,000]		
Memorial MS		\$750,000]		
Northbrook MS		\$750,000]		
Spring Branch MS		\$750,000]		
Spring Forest MS		\$750,000]		
Spring Oaks MS		\$750,000]		
Spring Woods MS		\$750,000]		
East Transition Campus		\$750,000]		
High School	Option 1 Overall is in poor condition a reached it's life expectancy, complete renovation and expectation are space to 7800 / 8500 \$1,100,000 / \$1,200,000 foo cost.	Recommend panding the entire square feet.	Option 2 Overall in fair condition, recommend replacing al Priority 1 & 2 equipment. Consider 600 sq. ft. expansion.	Option 3 Overall all in good condition, recommend replacing all Priority 1 equipment.	
Memorial HS		\$1,200,000]		
Northbrook HS		\$1,100,000]		
Spring Woods HS		\$1,100,000]		
Stratford HS		\$1,100,000]		
Westchester Academy			\$554,07	9	

FOOM

Child Nutrition Assessment

Facility Type	Recommendation	Recommendation	Recommendation
Stadium	Provide dedicated hand lavatory. Provide small three compartment sink. Replace backcounters with open base s/s counters Provide additional drawer warmers under new back counters Provide small ice merchandiser (holding unit) Provide additional glass door refrigerators Incorporate additional electrical outlets for counter top equipment. Provide power and data below front counter. Provide dedicated hand lavatory. Provide additional glass door refrigerators Provide half-size heated cabinet.	The concessions have functional deficiencies. Provide dedicated hand lavatory. Provide small three compartment sink. Replace/Increase depth of counter to 42" Provide additional drawer warmers beneath front counter Provide small ice merchandiser (holding unit) Replace millwork back counters with stainless steel units Provide additional glass door refrigerators Incorporate additional electrical outlets for counter top equipment.	Provide dedicated hand lavatory. Provide additional drawer warmers Provide small ice merchandiser (holding unit) Provide additional glass door refrigerators Provide mobile heated cabinet
Grob Stadium			\$40,000
Fully Stadium & Press Box	\$430,00	0	
Oon Coleman Coliseum		\$360,000]

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