

Spatial and Programming Analysis of 7-12 Jr/Sr High School

Presentation for the

Huntingdon Area School District

June 19, 2018



Our Charge

Provide Huntingdon School District with an analysis of existing building utilization patterns.

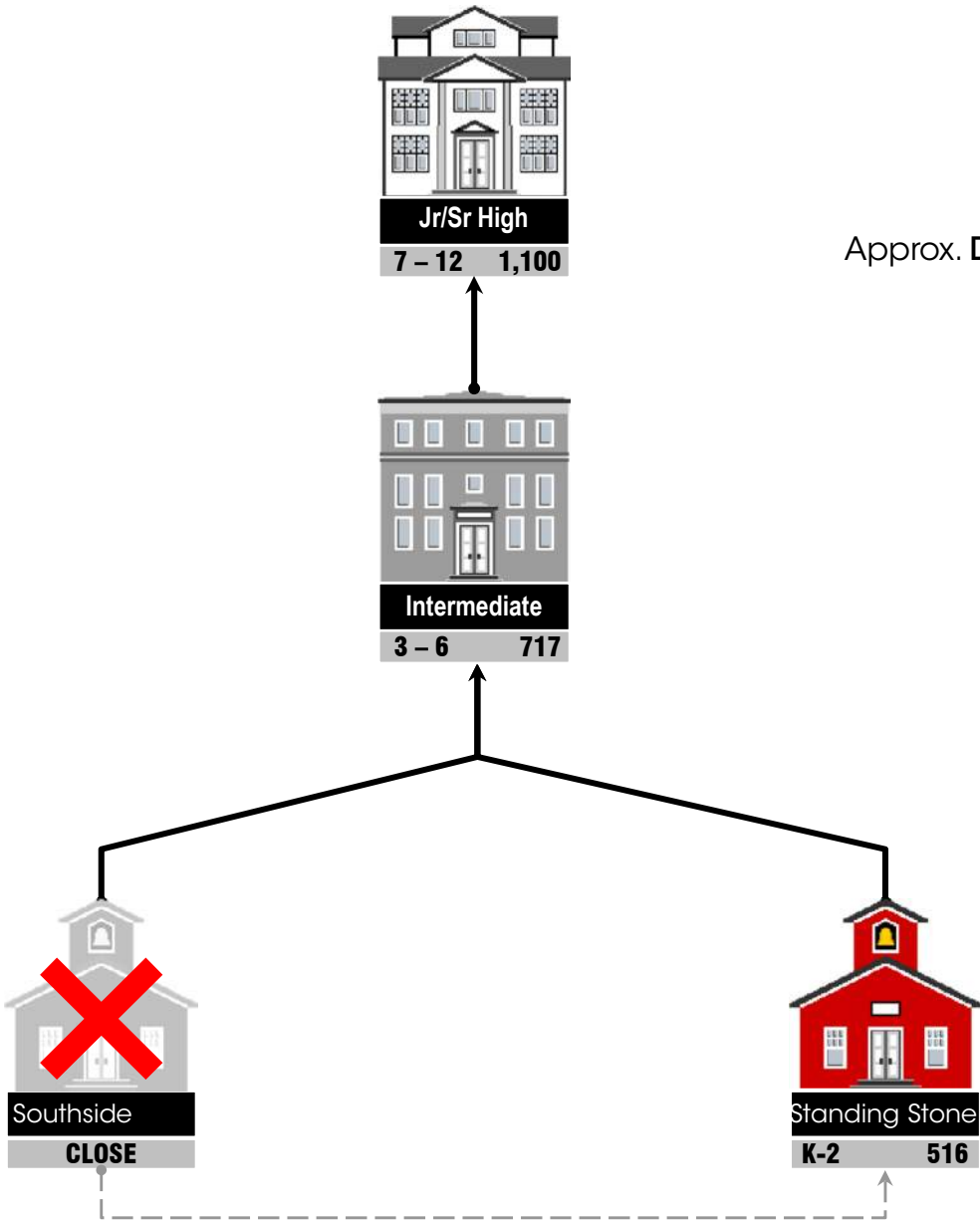
Assist with development of desired educational specification.

Establish baseline 7-12 scenario within existing high school building.

Consider opportunities to repurpose and reconfigure limited areas as a way to enhance the district's ability to foster 21st century learning and provide areas for collaboration.

Provide a final presentation and provide support for ongoing discussions.

Option #3A: Close Southside and Re-align Grades to K-2, 3-6, 7-12



Approx. District-wide Practical Capacity: 2,333

Projection 2019/20
 7-12: 839
 3-6: 576
 K-2: 390

Current High School Use

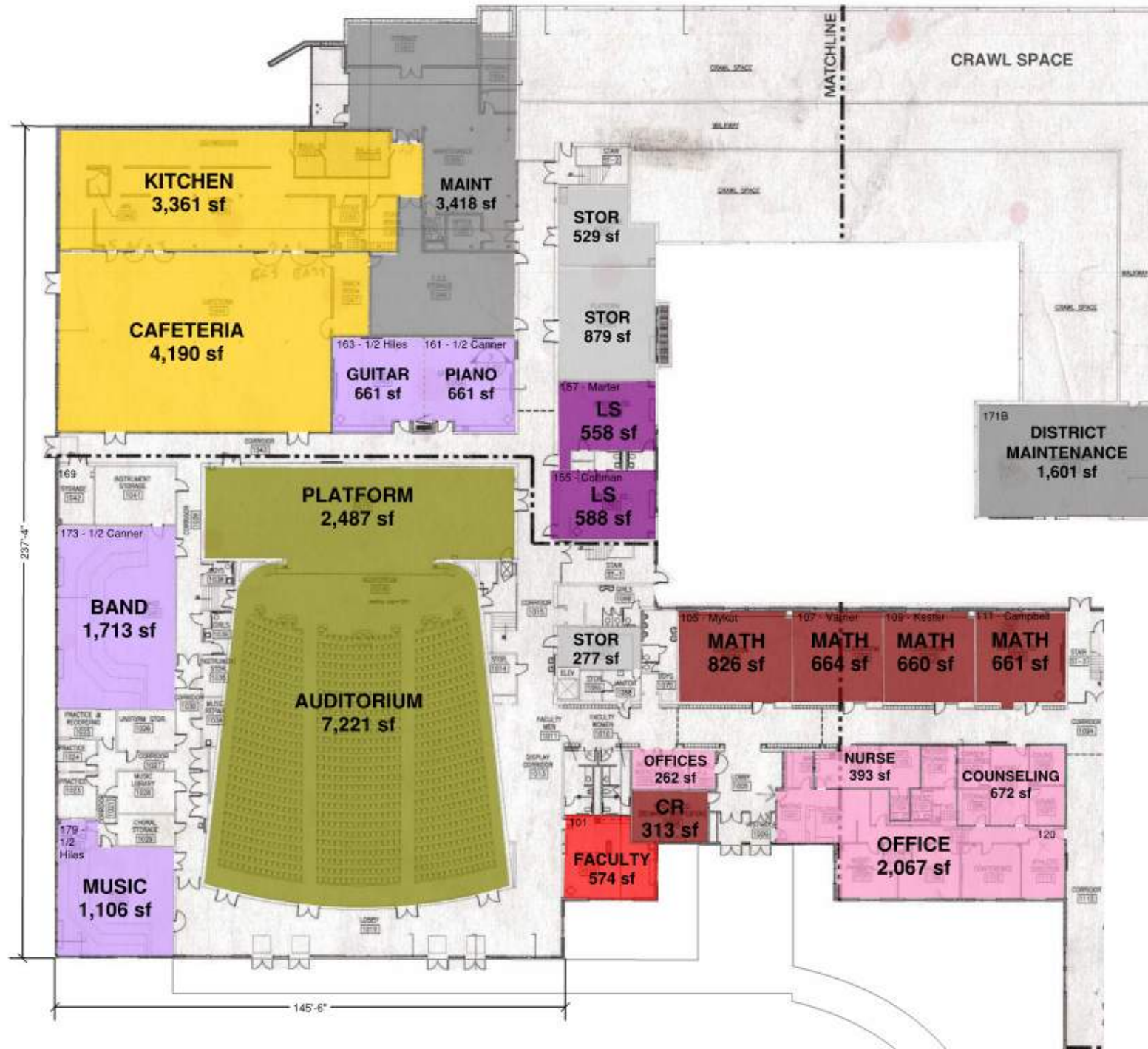
Existing Use Profile 9-12

First Floor



Existing Use Profile 9-12

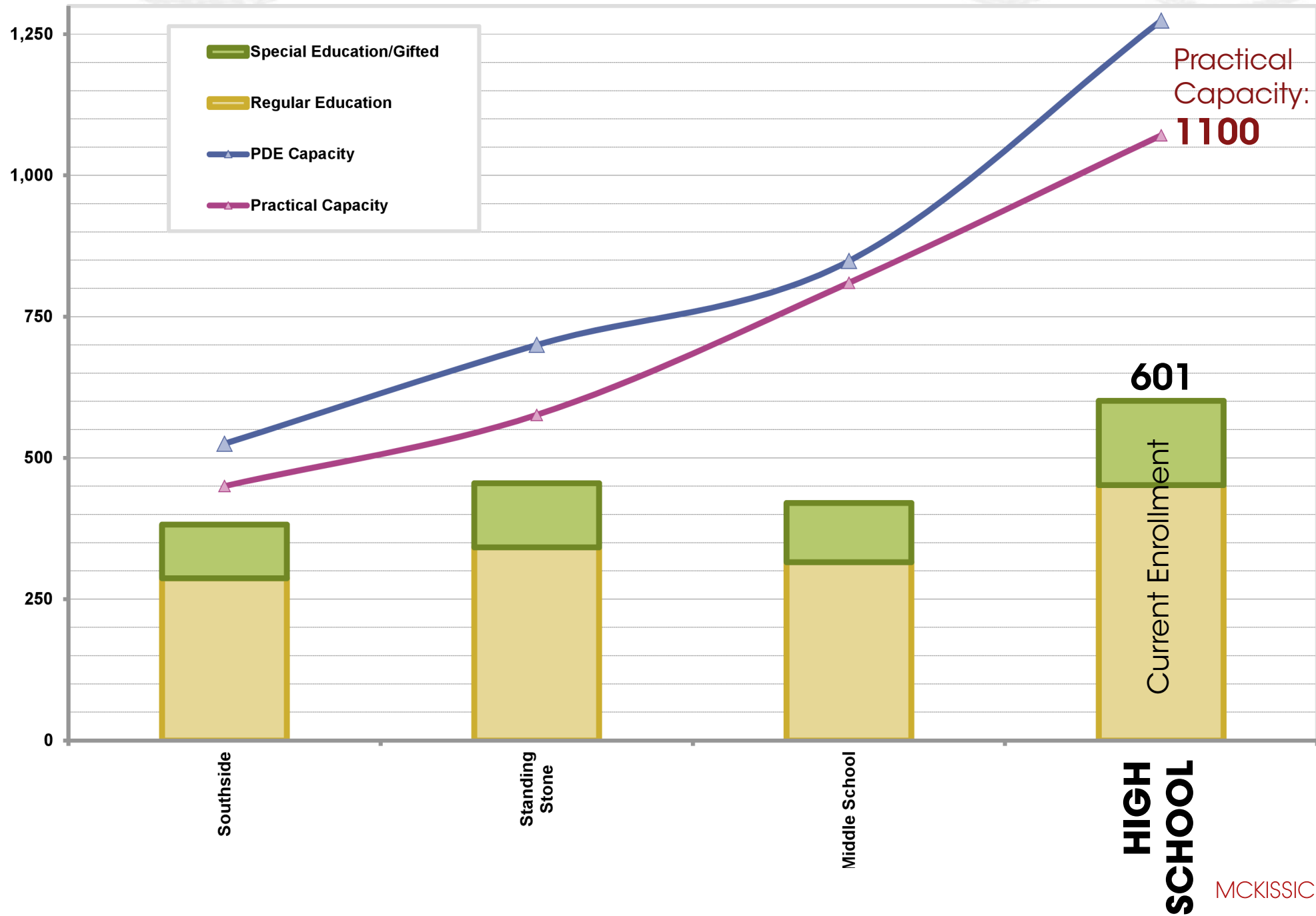
Partial First Floor, Auditorium Wing

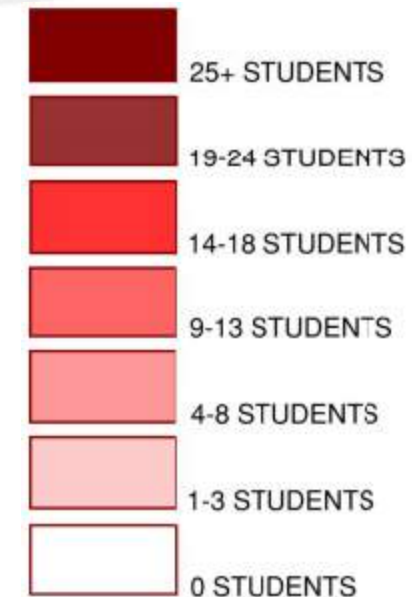


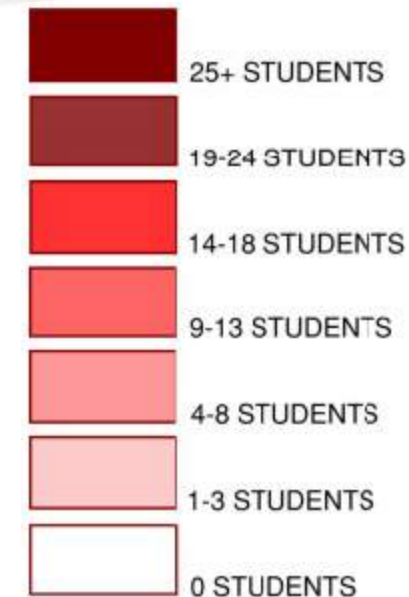




Capacity Versus Enrollment Graph



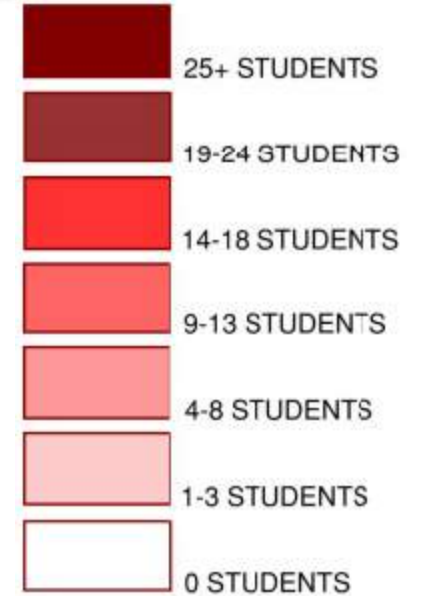
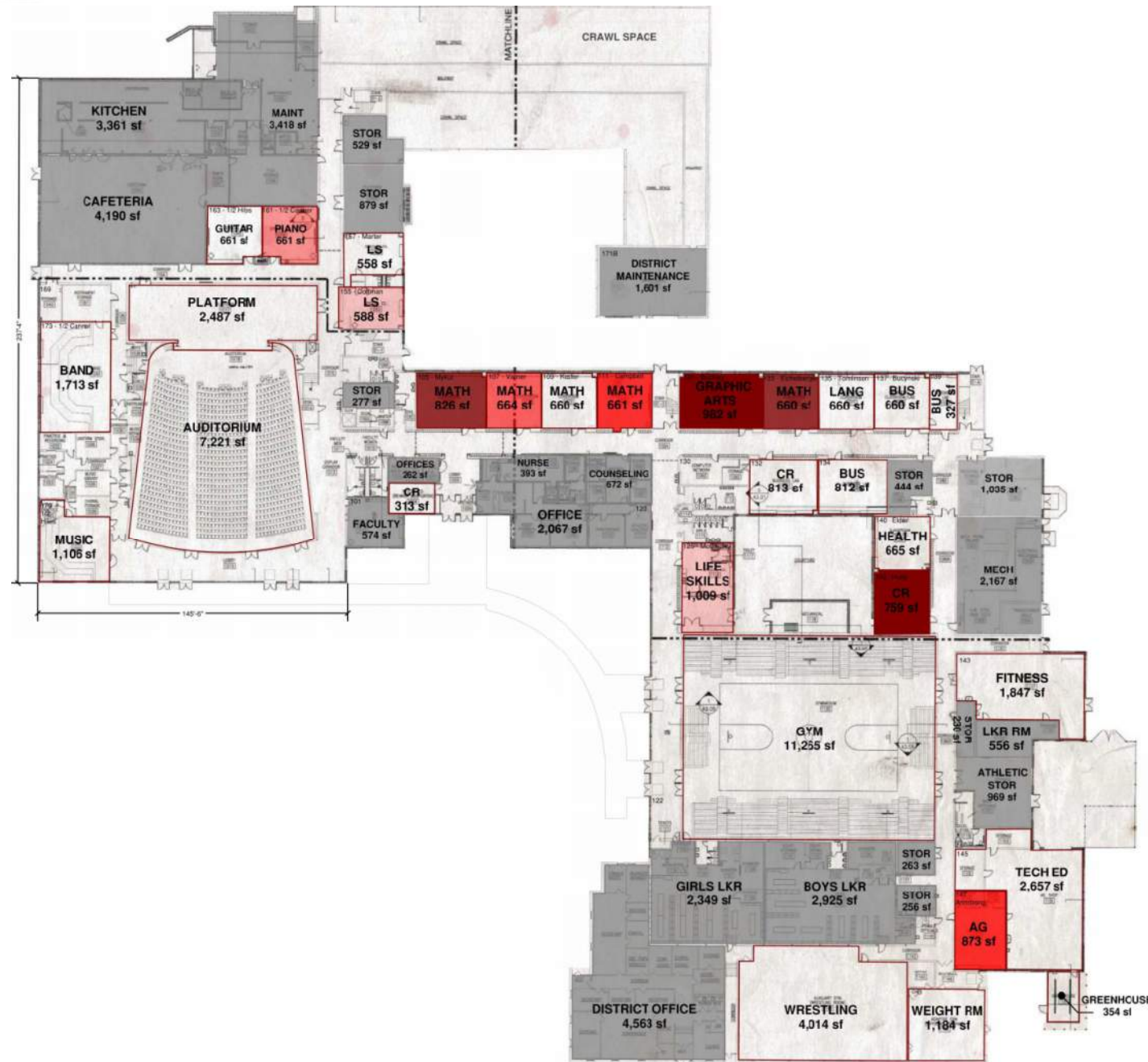






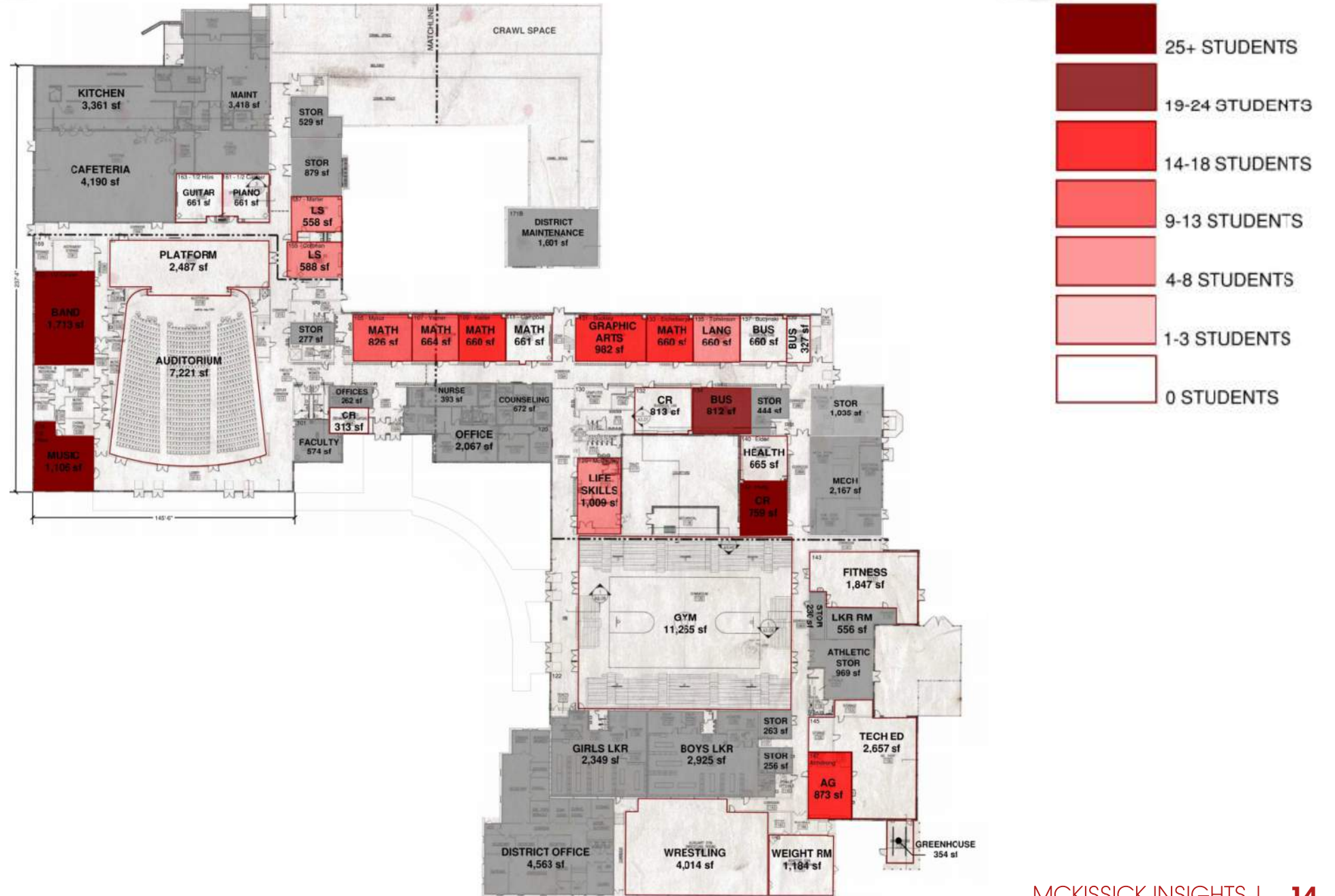
Existing Utilization - Semester 1, Day 1

First Floor, Period 3



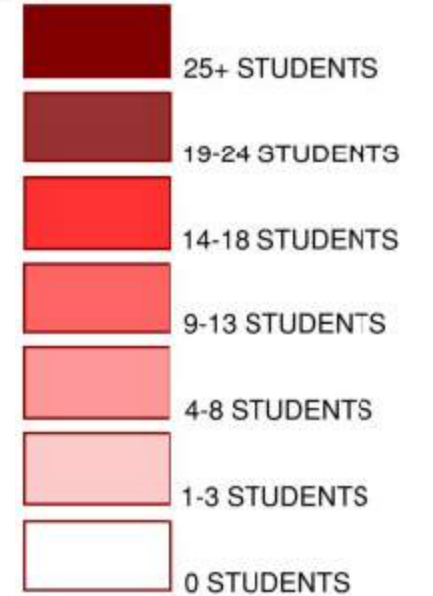
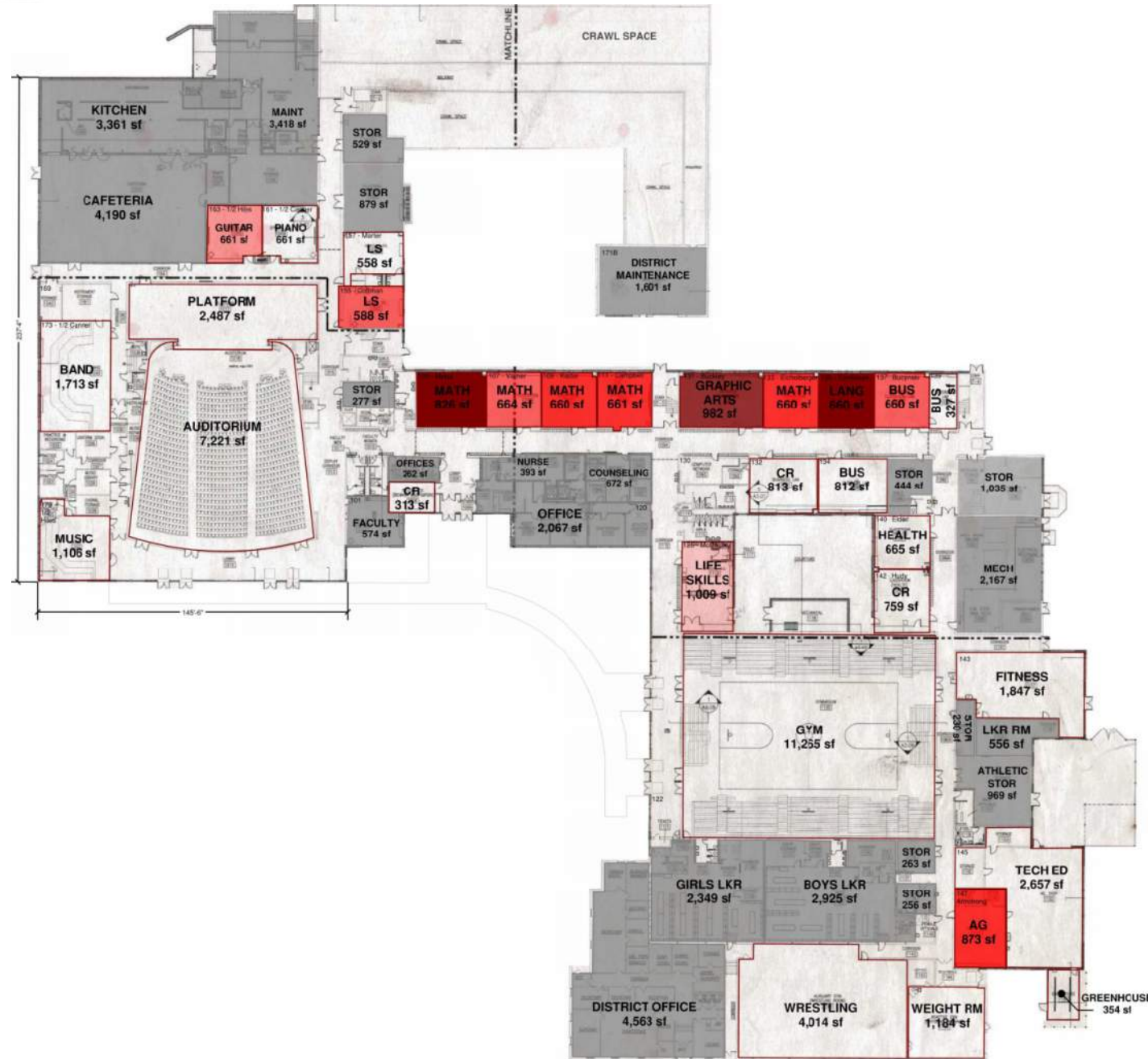
Existing Utilization - Semester 1, Day 1

First Floor, Period 4



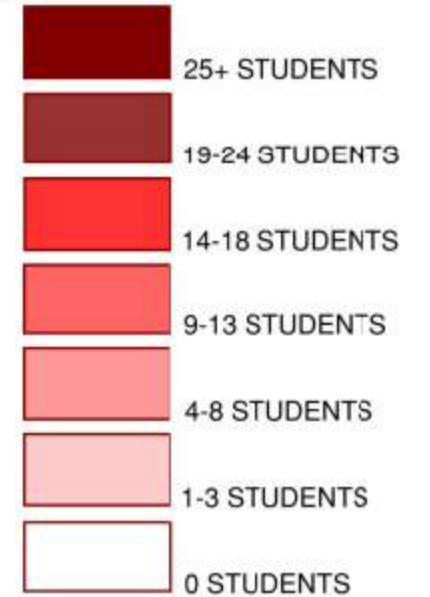
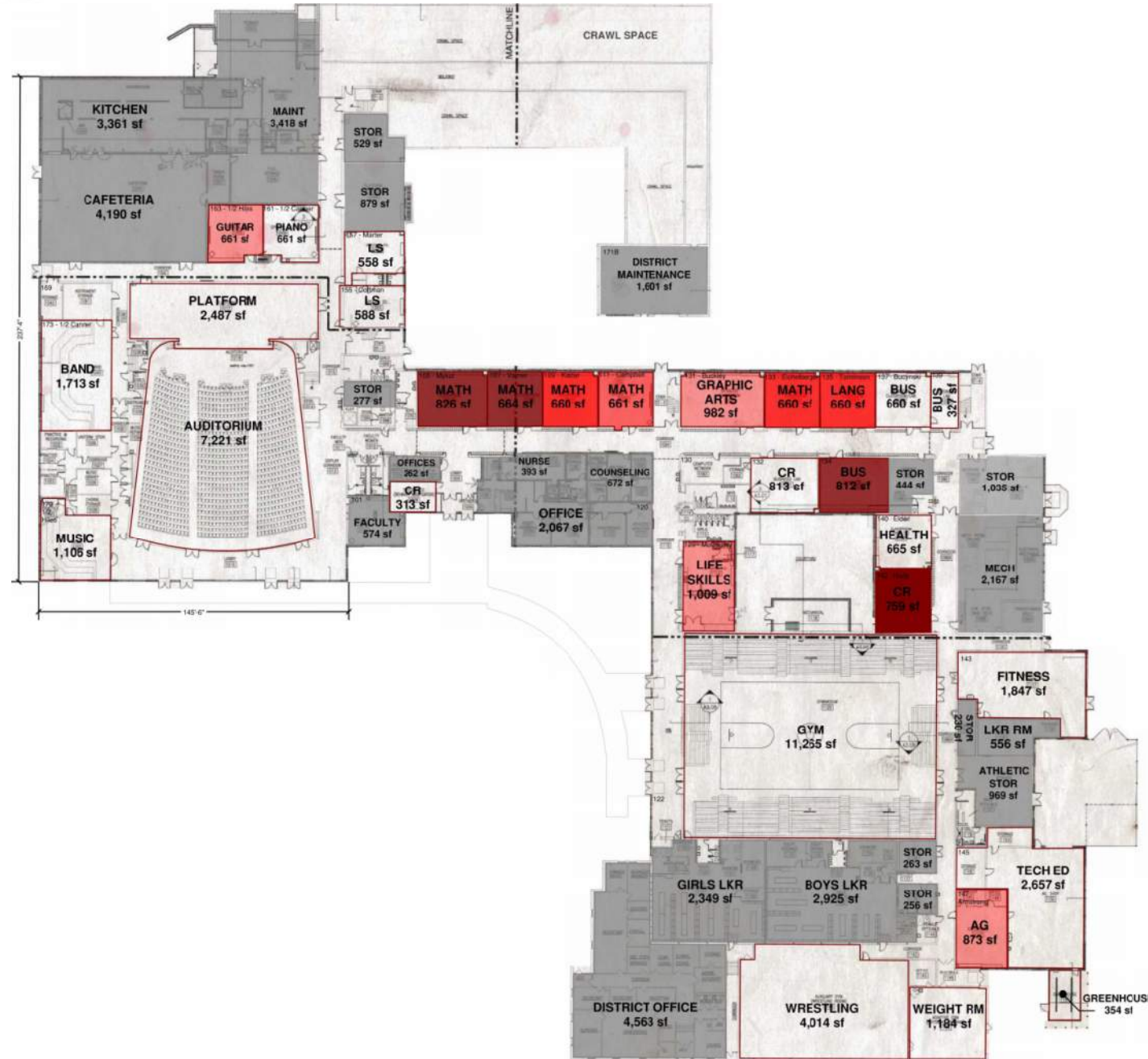
Existing Utilization - Semester 1, Day 1

First Floor, Period 5



Existing Utilization - Semester 1, Day 1

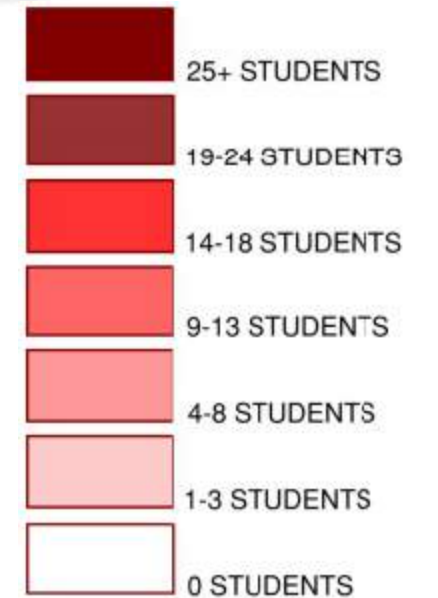
First Floor, Period 6





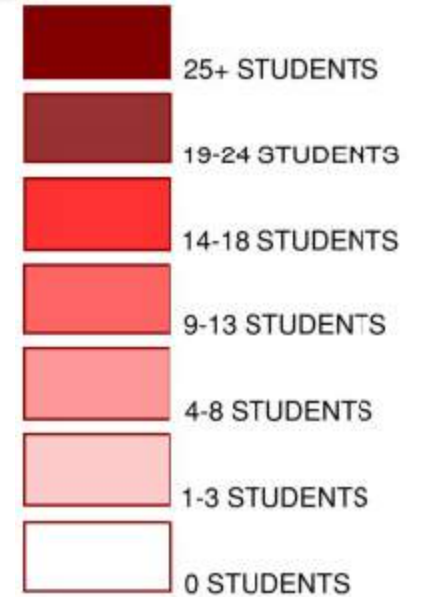
Existing Utilization - Semester 1, Day 1

Second Floor, Homeroom



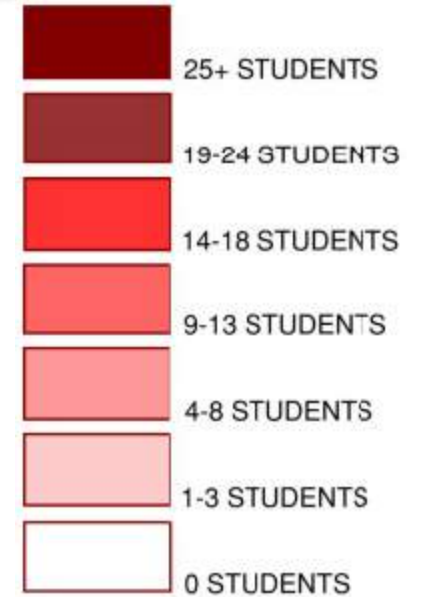
Existing Utilization - Semester 1, Day 1

Second Floor, Period 1



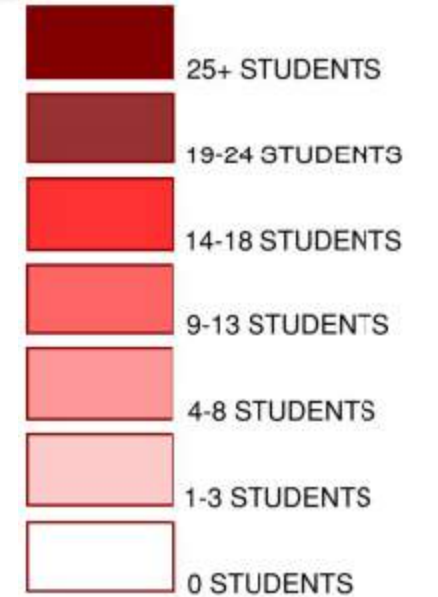
Existing Utilization - Semester 1, Day 1

Second Floor, Period 2



Existing Utilization - Semester 1, Day 1

Second Floor, Period 3



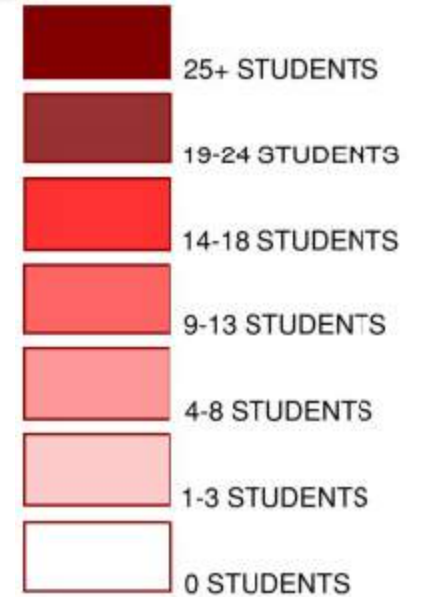
Existing Utilization - Semester 1, Day 1

Second Floor, Period 4



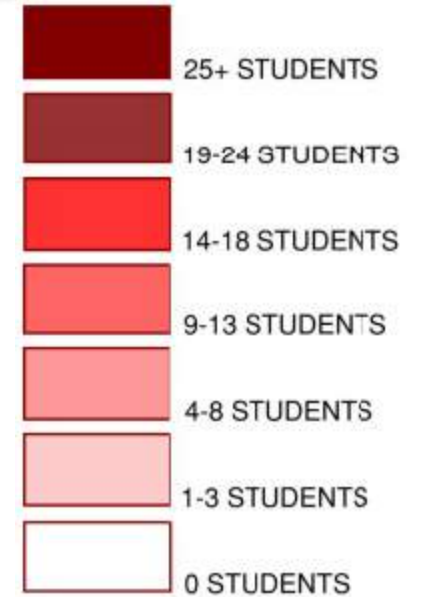
Existing Utilization - Semester 1, Day 1

Second Floor, Period 5



Existing Utilization - Semester 1, Day 1

Second Floor, Period 6

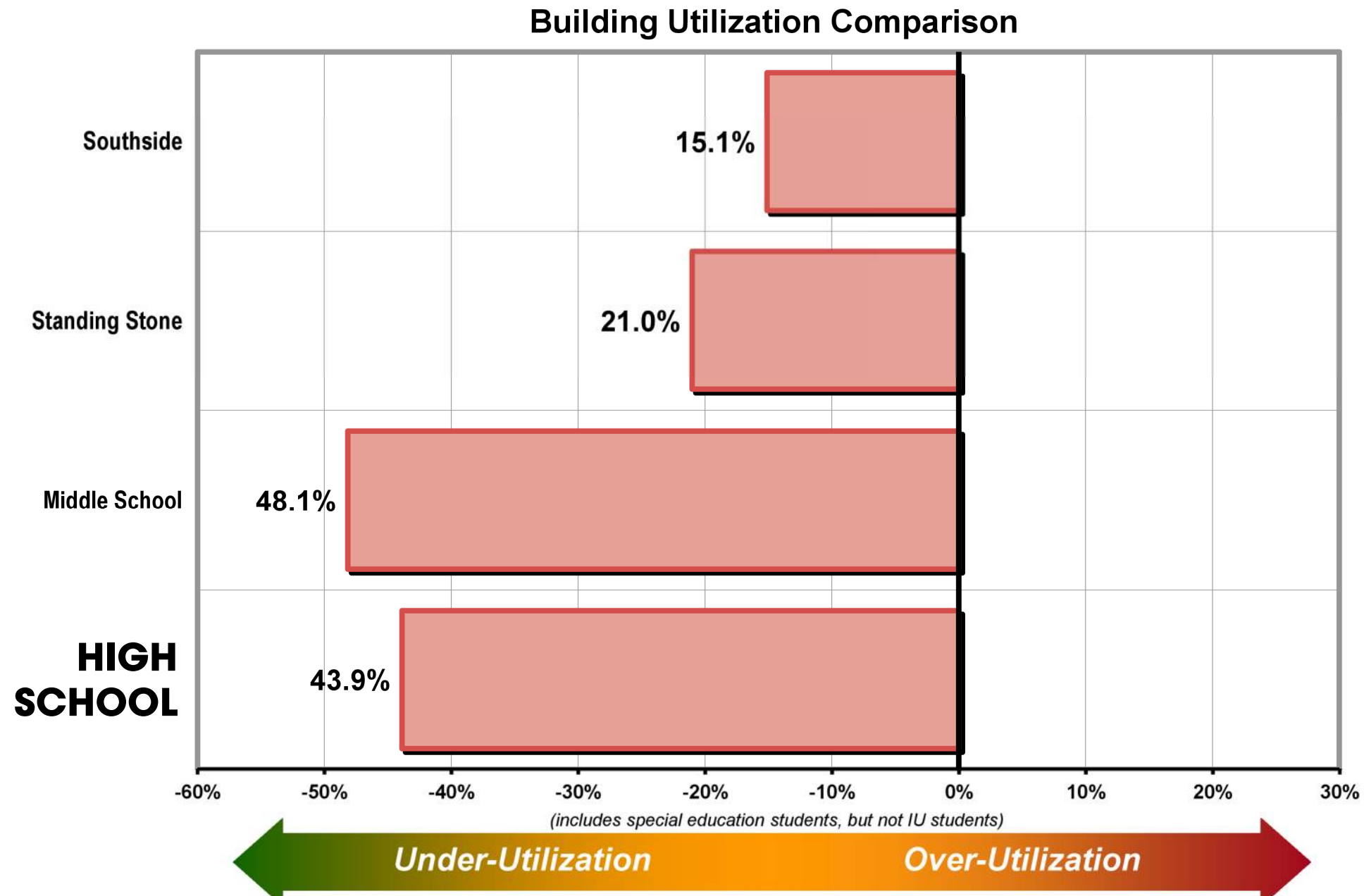


Existing Utilization - Semester 1, Day 1

Second Floor, Period 7



Utilization Graph



Analysis of Jr. / Sr. High Building for Grades 7-12

Multiple solutions developed.

Existing Use Profile 9-12

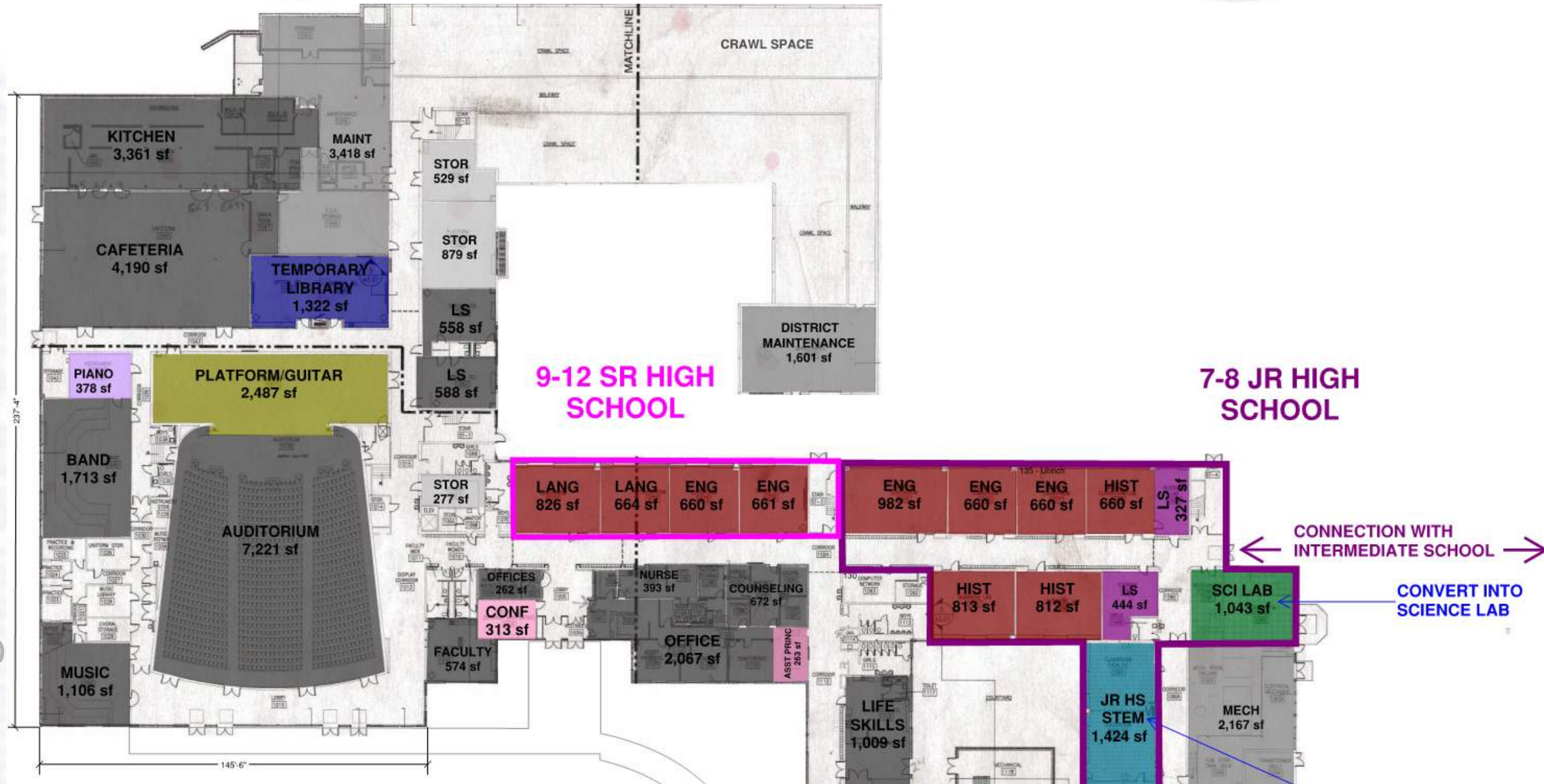
First Floor

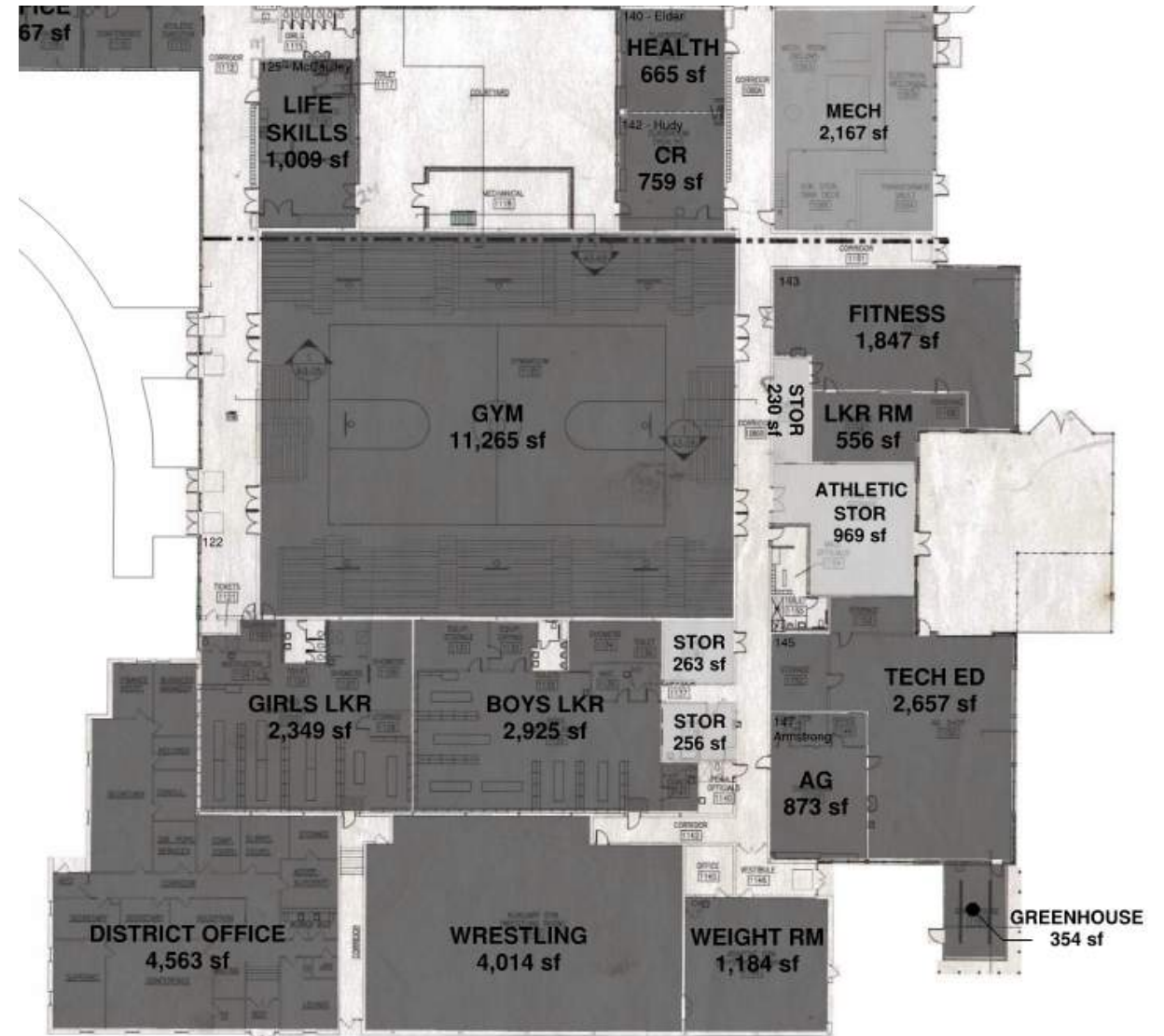




Future Use Profile 7-12 - Initial Phase

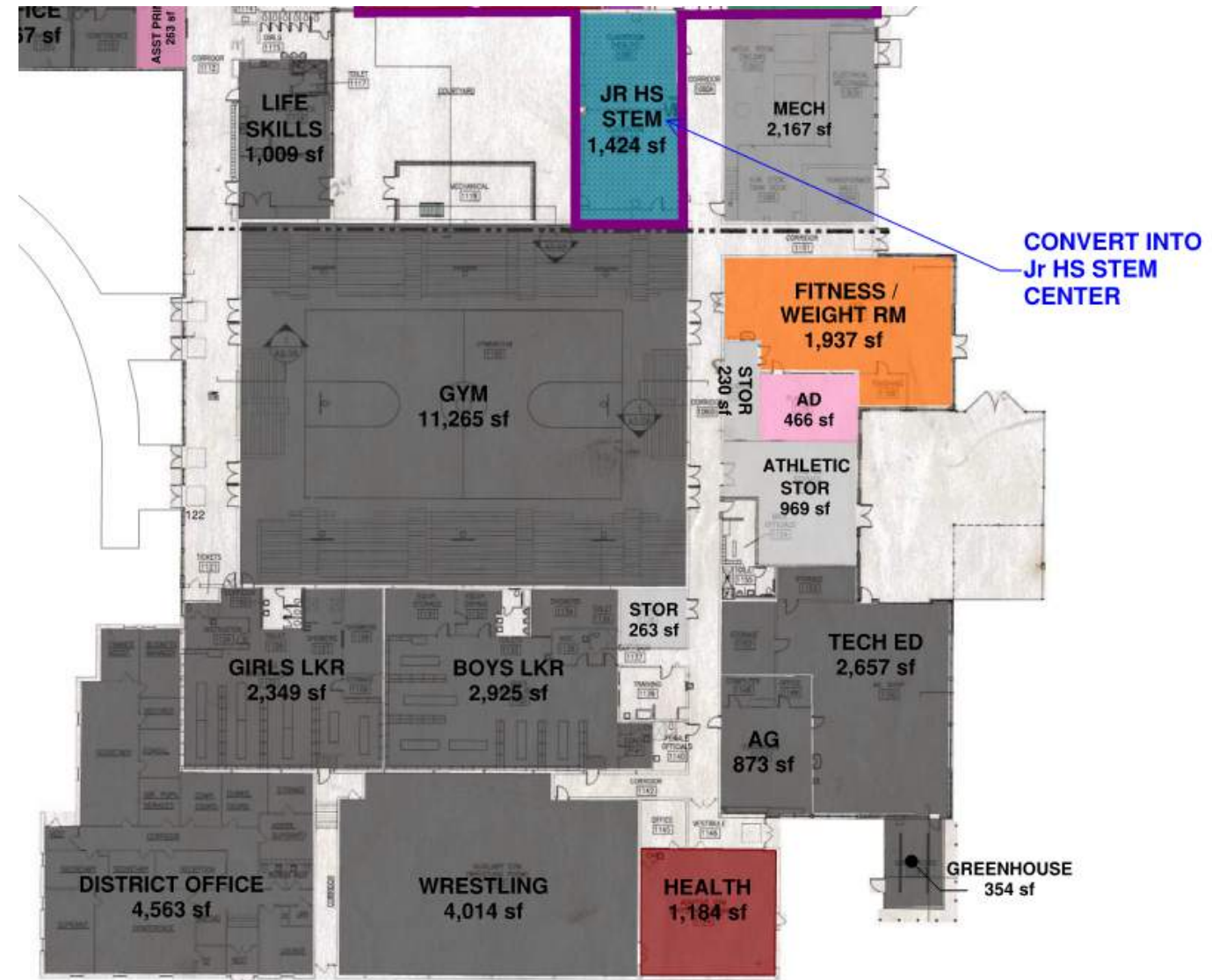
Partial First Floor, Auditorium Wing

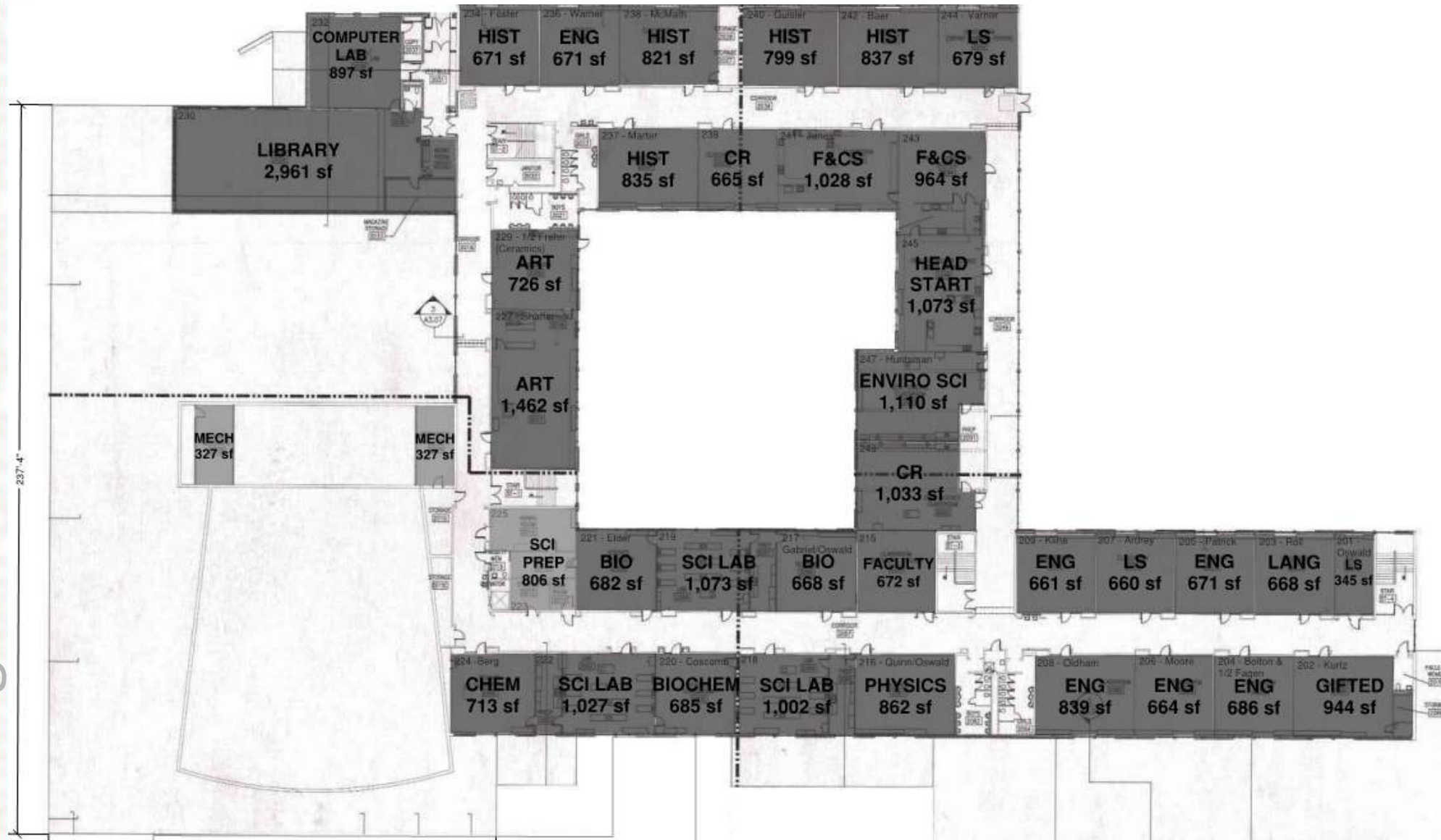




Future Use Profile 7-12 - Initial Phase

Partial First Floor, Gymnasium Wing



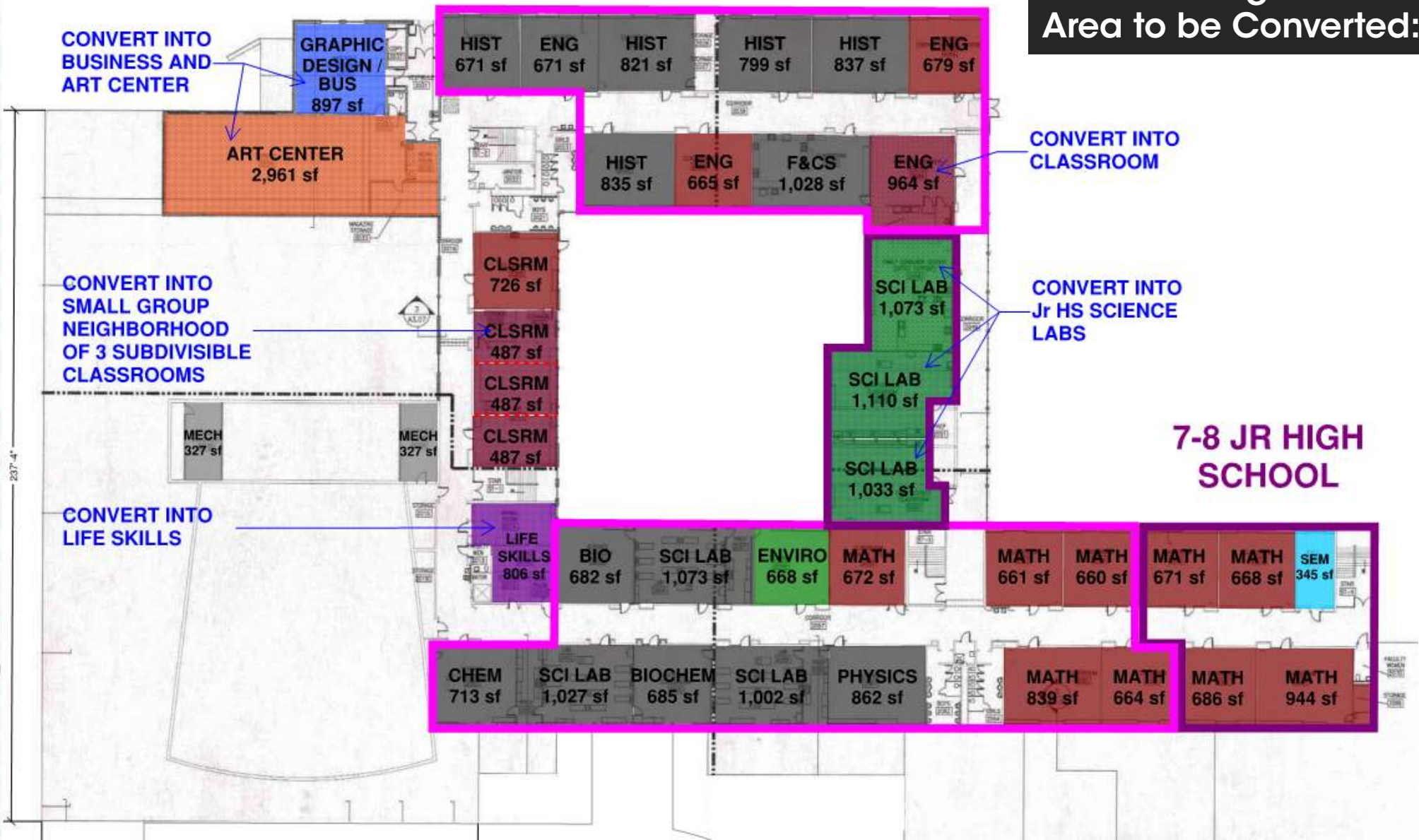


Future Use Profile 7-12 - Initial Phase

Second Floor

9-12 SR HIGH SCHOOL

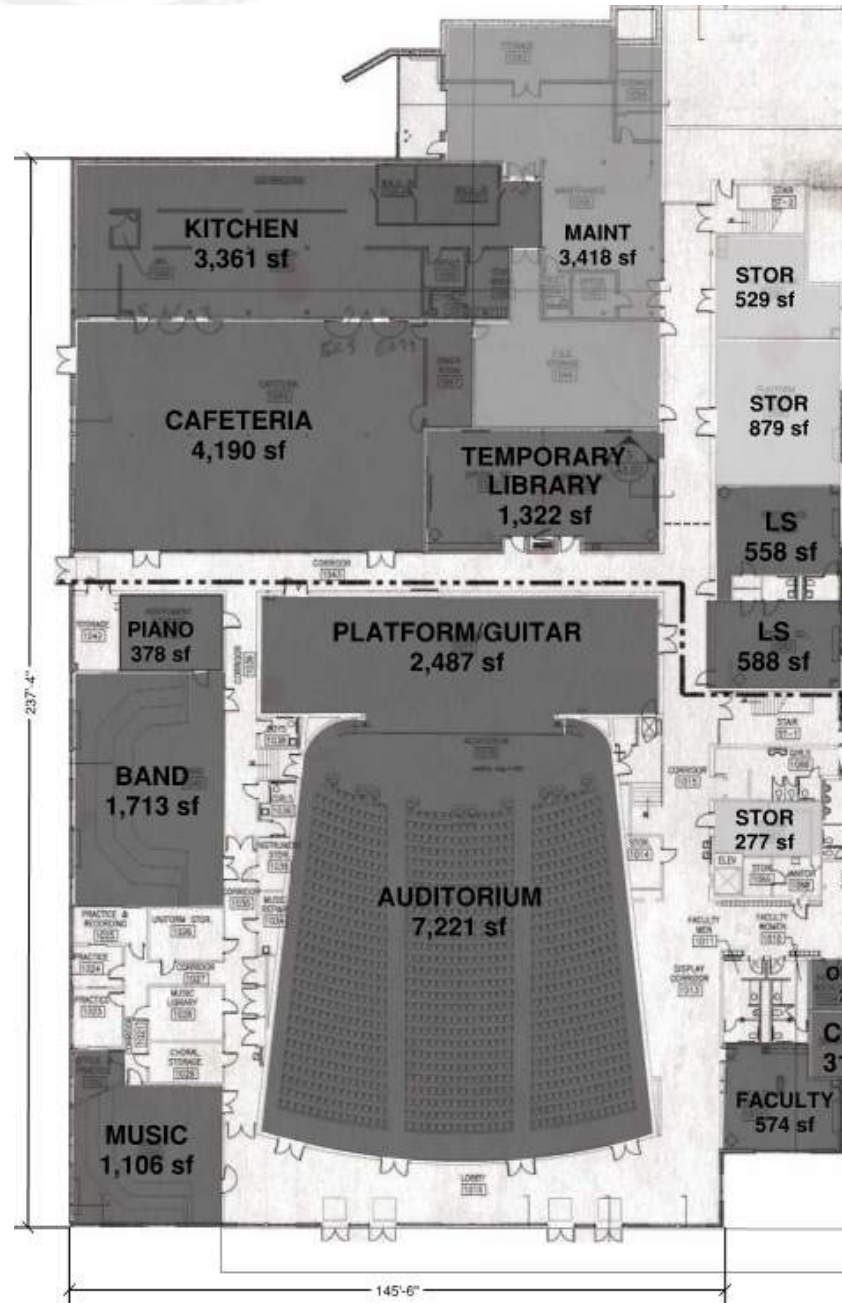
Total Building Area: 141,380 sf
Area to be Converted: 11,315 sf, or 8%



7-8 JR HIGH SCHOOL

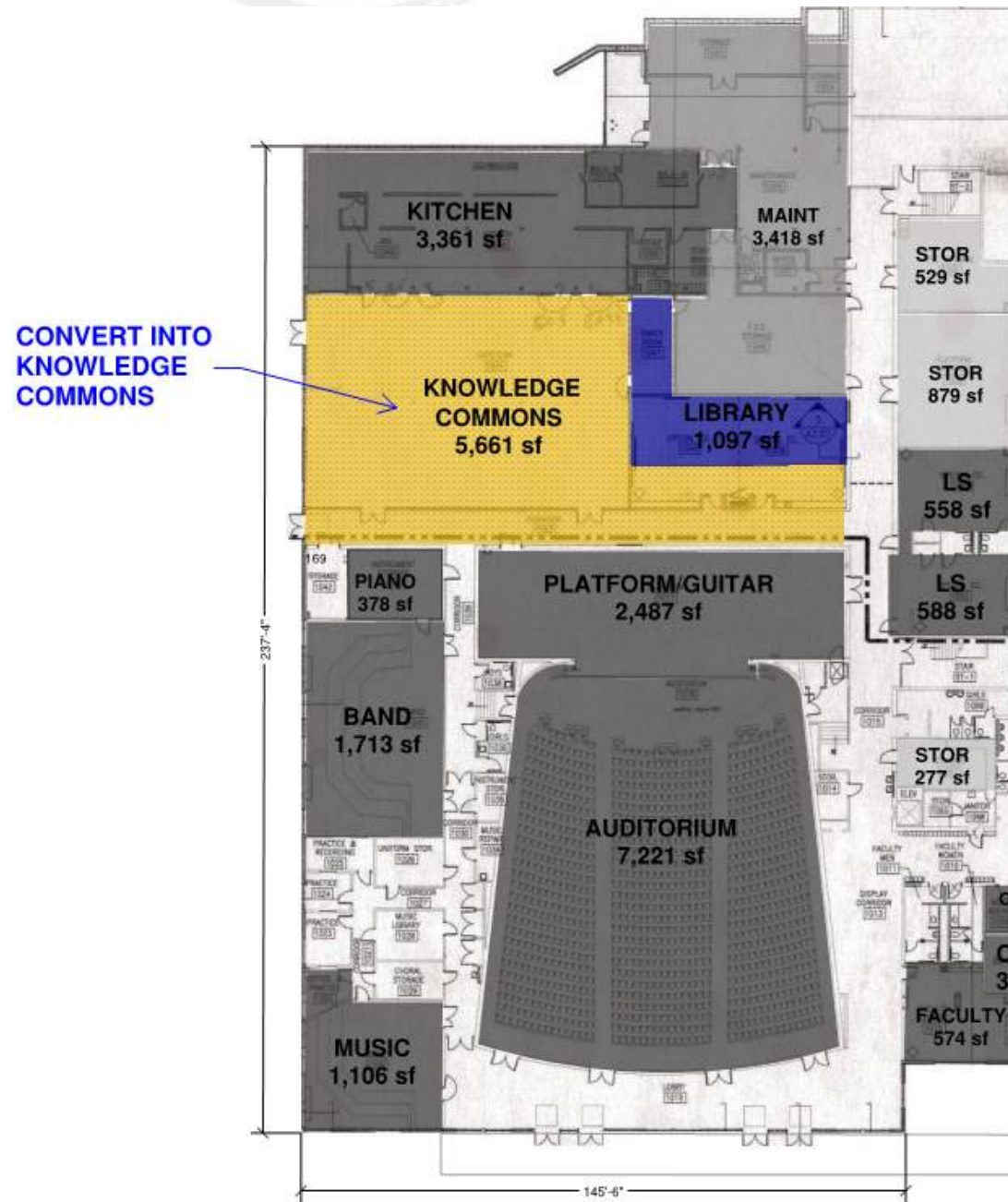
Future Use Profile 7-12 - Second Phase Considerations

Initial Phase Completed



Future Use Profile 7-12 - Second Phase Considerations

Knowledge Commons



Total Building Area: 141,380 sf
Area to be Converted: 6,758 sf, or 5%





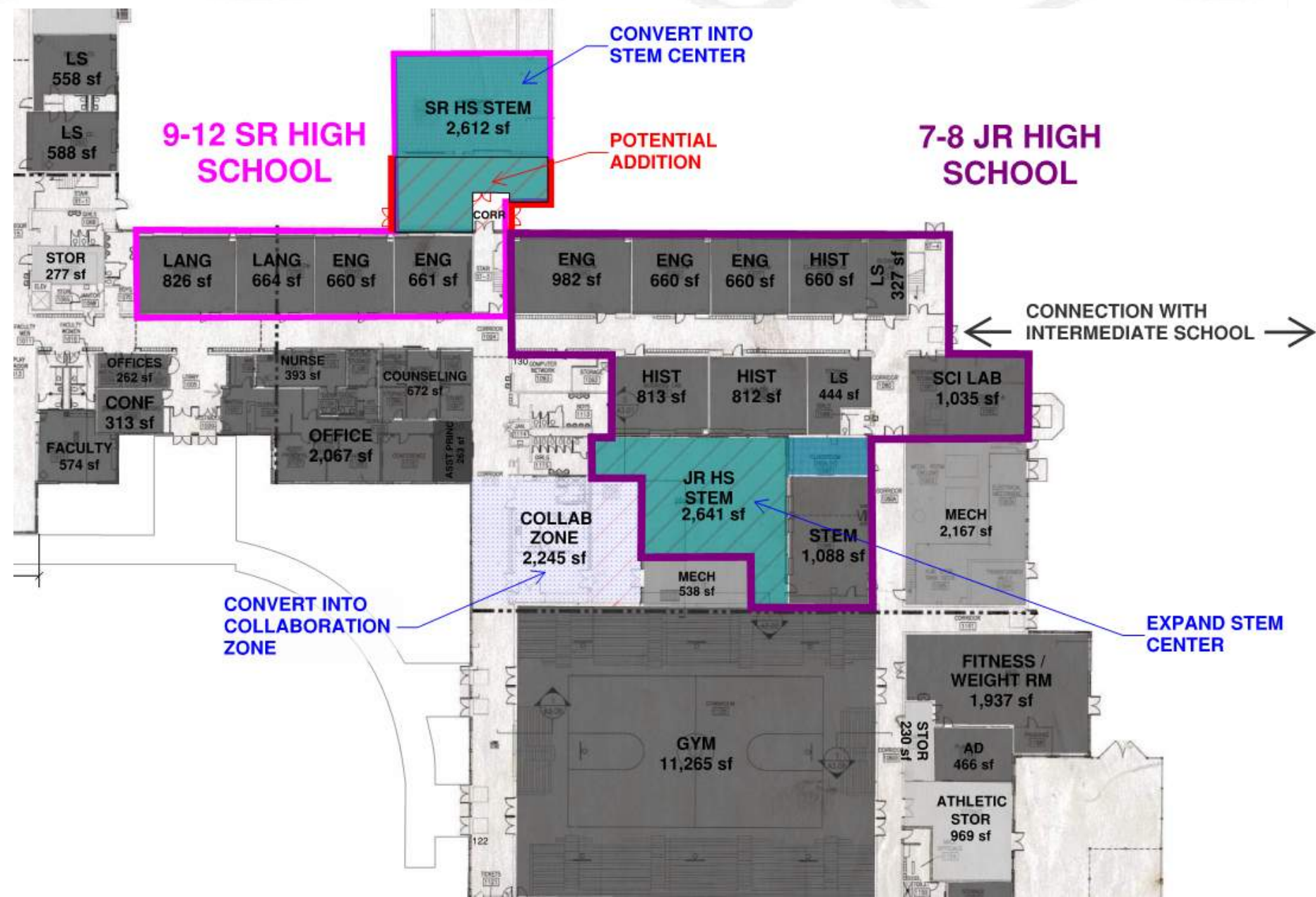






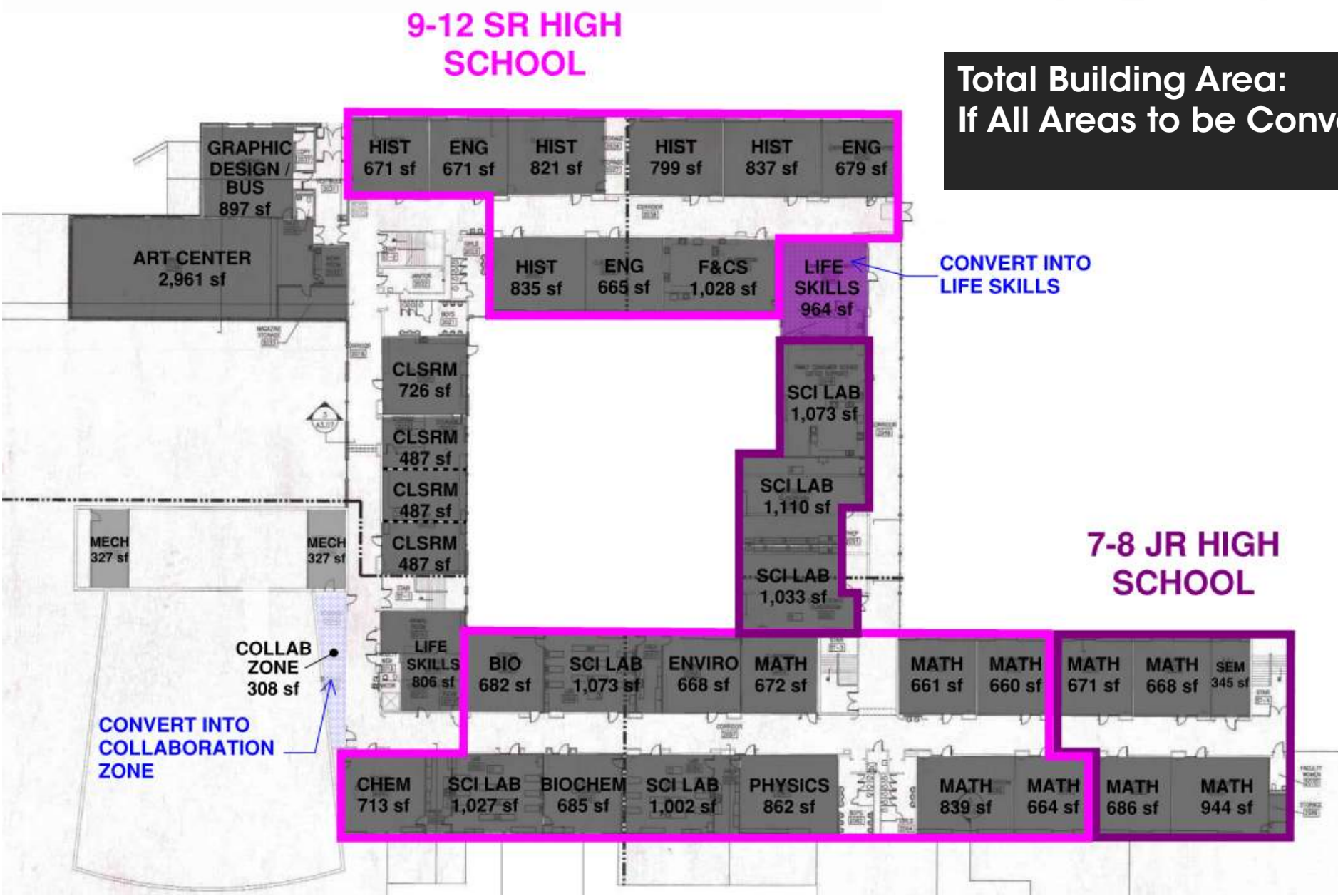
Future Use Profile 7-12 - Other Opportunities

Partial First Floor, Gymnasium Wing



Future Use Profile 7-12 - Other Opportunities

Second Floor



Total Building Area: 141,380 sf
If All Areas to be Converted/Added: 8,530 sf, or 6%

Budgetary Considerations

Establishing Attributes & Weighing per Option

First and Annual Cost

HASD ATTRIBUTES CONSIDERED			OPTIONS										OPTIONS	
			1	2A	2B	3A	3B	4A	4B	5	6A	6B		6C
			Status Quo	Realign Grades	Realign Grades and add CTC to HS	Close Southside & Realign Grades	Close St Stone, Add SS & Realign Grades	Close Southside & Realign Grades	Close St Stone, Add SS & Realign Grades	Close Southside & Add to St Stone	Close Southside and Standing Stone. Re-align Grades	Close Southside and Standing Stone. Re-align Grades		Close Southside and Standing Stone. Re-align Grades
FEATURES	Grade Structure		K-5,6-8,9-12	K-2, 3-5, 6-8, 9-12	K-2, 3-5, 6-8, 9-12	K-2, 3-6,7-12	K-2, 3-6,7-12	K-3, 4-6,7-12	K-3, 4-6,7-12	K-4, 5-8,9-12	K-6, 7-12	K-5, 6-12		K-4, 5-12
	Existing Building Area Remaining		381,016 SF	381,016 SF	381,016 SF	320,745 SF	302,500 SF	320,745 SF	302,500 SF	320,745 SF	242,229 SF	242,229 SF		242,229 SF
	New Building Area						4,740 SF		14,220 SF	12,640 SF	22,120 SF	12,640 SF		6,320 SF
	Total Building Area		381,016 SF	381,016 SF	381,016 SF	320,745 SF	307,240 SF	320,745 SF	316,720 SF	333,385 SF	264,349 SF	254,869 SF		248,549 SF
	Total Area Change		---	---	---	- 60,271 SF	- 73,776 SF	- 60,271 SF	- 64,296 SF	- 47,631 SF	- 116,667 SF	- 126,147 SF		- 132,467 SF
BUILDINGS USED			MAINTENANCE											
Avoided Capital Maintenance			---	---	---	- \$ 1,040,505	- \$ 782,608	- \$ 1,040,505	- \$ 782,608	- \$ 1,040,505	- \$ 1,823,113	- \$ 1,823,113		- \$ 1,823,113
Total Number of Buildings			4	4	4	3	3	3	3	3				
FIRST COST														
FIRST COST	Elementary Cost						\$ 1,272,216		\$ 3,469,680	\$ 3,084,160	\$ 4,912,000	\$ 3,016,000	\$ 488,000	
	Secondary Cost				\$ 540,000								\$ 1,542,080	
	Vocational Cost		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	
	Total Project Cost		\$ 0	\$ 0	\$ 540,000	\$ 0	\$ 1,272,216	\$ 0	\$ 3,469,680	\$ 3,084,160	\$ 4,912,000	\$ 3,016,000	\$ 2,030,080	
	State Aid	\$	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	
		%	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	
	Local Effort		\$ 0	\$ 0	\$ 540,000	\$ 0	\$ 1,272,216	\$ 0	\$ 3,469,680	\$ 3,084,160	\$ 4,912,000	\$ 3,016,000	\$ 2,030,080	
	Annual Debt Recovery Rate 7.2%		\$ 0	\$ 0	\$ 38,880	\$ 0	\$ 91,600	\$ 0	\$ 249,817	\$ 222,060	\$ 353,664	\$ 217,152	\$ 146,166	
	AVERAGE SCORE:		4	4	3.56	4	2.96	4	1.17	1.49	0	1.54	2.35	
WEIGHTED SCORE: 8.6%		0.34	0.34	0.31	0.34	0.25	0.34	0.1	0.13	0	0.13	0.2		
ANNUAL COST														
ANNUAL COST	Avoided Debt on Capital Maintenance		---	---	---	- \$ 74,916	- \$ 56,348	- \$ 74,916	- \$ 56,348	- \$ 74,916	- \$ 131,264	- \$ 131,264	- \$ 131,264	
	Professional Staff Savings		---	---	\$ 203,002	- \$ 321,304	- \$ 321,304	- \$ 321,304	- \$ 321,304	- \$ 321,304	- \$ 321,304	- \$ 321,304	- \$ 321,304	
	Support Staff Savings		---	---	---	- \$ 121,887	- \$ 121,887	- \$ 121,887	- \$ 121,887	- \$ 121,887	- \$ 121,887	- \$ 121,887	- \$ 121,887	
	Food Service Impact		---	---	---	- \$ 35,661	- \$ 35,661	- \$ 35,661	- \$ 35,661	- \$ 35,661	- \$ 35,661	- \$ 35,661	- \$ 35,661	
	Transportation Cost Impact		---	---	---	---	---	---	---	---	---	---	---	
	Curricular Cost Impact - TBD		---	---	\$ 60,000	---	---	---	---	---	---	---	---	
	Operations/Maint. Existing \$ 6.53/sf		---	---	---	- \$ 393,515	- \$ 512,639	- \$ 393,515	- \$ 512,639	- \$ 393,515	- \$ 906,154	- \$ 906,154	- \$ 906,154	
	Operations/Maint. New \$ 5.65/sf		---	---	---	---	\$ 26,799	---	\$ 80,398	\$ 71,464	\$ 125,063	\$ 71,464	\$ 35,732	
	Total Indirect Cost Impact		---	---	\$ 263,002	- \$ 947,284	- \$ 1,021,040	- \$ 947,284	- \$ 967,442	- \$ 875,820	- \$ 1,391,208	- \$ 1,444,806	- \$ 1,480,539	
	Debt Less Indirect Costs/Savings		---	---	\$ 301,882	- \$ 947,284	- \$ 929,440	- \$ 947,284	- \$ 717,625	- \$ 653,760	- \$ 1,037,544	- \$ 1,227,654	- \$ 1,334,373	
	Annual Impact Year 20 3.0%/yr		---	---	\$ 529,352	- \$ 1,661,069	- \$ 1,629,779	- \$ 1,661,069	- \$ 1,258,359	- \$ 1,146,373	- \$ 1,819,340	- \$ 2,152,700	- \$ 2,339,831	
	Difference from Current Plan		---	---	---	---	---	---	---	---	---	---	---	
	AVERAGE SCORE:		0.74	0.74	0	3.05	3.01	3.05	2.49	2.34	3.27	3.74	4	
	WEIGHTED SCORE: 12.5%		0.09	0.09	0	0.38	0.38	0.38	0.31	0.29	0.41	0.47	0.5	

Option Attributes, Option 3A

Cost/Savings

HASD ATTRIBUTES CONSIDERED	
3A	
Close Southside & Realign Grades	
FEATURES	Grade Structure
	K-2, 3-6,7-12
	Existing Building Area Remaining
	320,745 SF
	New Building Area
Total Building Area	
320,745 SF	
Total Area Change	
- 60,271 SF	

Projected First Costs, Option 3A Refined

Initial Phase

<u>Description of Work</u>	<u>Cost</u>	<u>Construction Cost</u>	<u>Project Cost*</u>
INITIAL PHASE			
First Floor			
Convert Storage into JrHS Science Lab	146,020		
Convert 2 Classrooms into JrHS STEM	128,160		
Miscellaneous	70,000		
Repurpose Weight Room as Health Classroom			
Relocate Weight Room			
Move language, english, history, LS classes			
Move Piano Guitar			
Temporary relocation of Library			
Second Floor			
Repurpose Library as Art Center	325,710		
Repurpose Computer Lab as Graphic Design/Business	8,970		
Convert F&CS sewing room into Classroom	14,460		
Repurpose Head Start Classroom as JrHS Science Lab	53,650		
Recreate 2 Science Labs for JrHS	53,575		
Convert Science Prep into Life Skills Classroom	68,510		
Convert 1 Classroom into Small Group Neighborhood of 3	68,000		
Miscellaneous	25,000		
Move english, math, science, gifted classes			
		\$ 962,055	\$ 1,183,328

Projected First Costs, Option 3A Refined

Second Phase

Description of Work		Cost	Construction Cost	Project Cost*
PHASE 2				
First Floor				
Convert Cafeteria into Knowledge Commons		\$ 642,010	\$ 642,010	\$ 789,672
*Includes \$200,000 for furnishings				

ESTIMATED TOTAL \$ 1,604,065 \$ 1,973,000 +/- 10%

Costs are in current dollars and do not include inflation

Project Annual Costs, Option 3A

Estimated Savings

ANNUAL COST		
Avoided Debt on Capital Maintenance		- \$ 74,916
Professional Staff Savings		- \$ 321,304
Support Staff Savings		- \$ 121,887
Food Service Impact		- \$ 35,661
Transportation Cost Impact		---
Curricular Cost Impact - TBD		---
Operations/Maint. Existing	\$ 6.53/sf	- \$ 393,515
Operations/Maint. New	\$ 5.65/sf	---
Total Indirect Cost Impact		- \$ 947,284
Debt Less Indirect Costs/Savings		- \$ 947,284
Annual Impact Year 20	3.0%/yr	- \$ 1,661,069

Funding**Cash Basis**

Estimated Project Cost (Initial phase and phase 2) \$ 1,973,000

Indirect Savings, First Year (\$ 947,284)

Avoided Capital Costs (\$ 1,032,881)

Southside Avoidance

'19-20 Shingle Roof \$ 357,369

Front Entrance \$ 50,000

Metal Wall Panels \$ 108,076

Cameras \$ 30,000

Window Hardware Repair \$ 10,000

'20-21 Flat Roof \$ 292,436

Fire Alarm \$ 25,000

'23-24 RTU Replacement \$ 160,000

Total Cash Available (\$ 1,980,165)

Funding

Financing Option

Estimated Project Cost (Initial phase and phase 2)

\$ 1,973,000

Indirect Savings, over 10 years

(\$ 10,859,549)

Year 1

\$ 947,284

Year 2

\$ 975,703

Year 3

\$ 1,004,974

Year 4

\$ 1,035,123

Year 5

\$ 1,066,176

Year 6

\$ 1,098,162

Year 7

\$ 1,098,162

Year 8

\$ 1,131,107

Year 9

\$ 1,199,991

Year 10

\$ 1,235,991

Based on 3% inflation

Project Payback Period for Cash project no borrowing

2.1 years

Estimated annual debt service if financed for 20 years

\$135,150

Resulting 2019-2020 annual savings if financed

(\$812,134)

Conclusions

\$812,000 to \$947,000 annual savings

Provides opportunities with “found” space to improve learning environments for the students for minimal cost.

Spatial and Programming Analysis of 7-12 Jr/Sr High School

Presentation for the

Huntingdon Area School District

June 19, 2018

