

ATTACHMENT H

2016 Facilities Condition Index, General Environment Scoring Rubric

2016 FCI Scoring Methodology

The FCI score is comprised of two (2) sections: Site-Level and Building-Level Components

Site-level Components are evaluated from a single rating provided for each system at a School (Campus)

Building-level scores are determined by averaging the system scores from multiple buildings (where applicable). The individual building system scores are based on the individual ratings for each applicable building at a School (Campus)*

Overall Campus (School) FCI is calculated by summing the resulting score for each system.

Each system evaluated carries a weighting, which when added together, should equal 100%

Scoring for each question (System) was based on the following rating for each:

Rating	Weight	Description
N/A	0.0	Not Applicable - When a question is answered "NA", its possible weighting is re-distributed back over the remaining questions for a particular school
GMO	0.0	General Maintenance Only - The "0.0" will contribute to the overall FCI score, as opposed to "NA", where the "0.0" is ignored
Minor	0.2	Evaluated system requires Minor repairs
Moderate	0.5	Evaluated system requires Moderate repairs
Major	0.9	Evaluated system requires Major repairs, but is still functional
Replace	1.1	System requires replacement. "1.1" was chosen to exceed the typical "1.0" assigned to this level to provide a "boost" to the FCI for all systems marked as "replace" (NOTE: If all systems are marked as "Replace" and FCI would exceed 100%)

* Since overall building SF was reported at the School (Campus) level, it was not possible to determine the SF for each building to effectively provide a "weighted" rating for each building. Thus, ratings for schools that included multiple buildings contributing to the FCI used an equal weighting for each building, regardless of its individual SF.

Building Condition Ratings	
Score	FCI
1	0% - 24.4%
2	24.5% - 39.4%
3	39.5% - 58.9%
4	59% +

Criteria Description	Criteria Percent Weight	Group Description	Group Percent Weight	Line Item Description	Line Item Weight	% of Total Score	Score Determination Description
School Rating FCI	100.00%	Site	8.00%	Park Drives	10.00%	0.80%	*Rating
				Walkways	10.00%	0.80%	*Rating
				Playground	0.00%	0.00%	*Rating
				Drainage	20.00%	1.60%	*Rating
				Site Lighting	20.00%	1.60%	*Rating
				Water Supply	20.00%	1.60%	*Rating
				Septic/Sewer	20.00%	1.60%	*Rating
		Building	92.00%	Roof, oldest, 2nd oldest	8.70%	8.28%	The weighted average of the ratings for the Oldest and 2nd Oldest roof section. Weight is based on the SF of roofing recorded for Oldest and 2nd Oldest
				Ext Windows, oldest, 2nd oldest	7.61%	7.24%	The weighted average of the ratings for the Oldest and 2nd Oldest windows. Weight is based on the percentage recorded for Oldest and 2nd Oldest windows
				Boilers, oldest, 2nd oldest	6.52%	6.21%	The weighted average of the ratings for the Oldest and 2nd Oldest Boilers. Weight is distributed 50/50 when 2nd Oldest is specified, or 100% when only oldest boiler specified
				HVAC	7.61%	7.24%	*Rating
				Structure	7.61%	7.24%	*Rating
				Ext Doors	5.43%	5.17%	*Rating
				Ext Walls	7.61%	7.24%	*Rating
				Floors	5.43%	5.17%	*Rating
				Int Walls	5.43%	5.17%	*Rating
				Ceilings	5.43%	5.17%	*Rating
				Int Other	5.43%	5.17%	*Rating
				Elec Svcs	8.70%	8.28%	*Rating
				Lighting	4.35%	4.14%	*Rating
Plumbing	6.52%	6.21%	*Rating				
Fire Alarms	2.18%	2.08%	*Rating				
Fire Suppression	2.18%	2.08%	*Rating				
Specialties	2.17%	2.07%	*Rating				
Elevators	1.09%	1.04%	*Rating				

*Rating = The Score for this System is based solely on rating recorded from assessor for the individual line-item. See Ratings and associated values on Assumptions Tab

Criteria Description	Criteria Percent Weight	Group Description	Group Percent Weight	Line Item Description	Weight	Rating from DB	Item Rating Score	FCI Score
	A		B		C		D	E=D*C*B
School Rating FCI	100.00%	Site	8.00%	Park Drives	0.1	Minor	20.00	0.16
				Walkways	0.1	Minor	20.00	0.16
				Playground	0	Minor	20.00	0.00
				Drainage	0.2	Replace	110.00	1.76
				Site Lighting	0.2	Minor	20.00	0.32
				Water Supply	0.2	Minor	20.00	0.32
				Septic/Sewer	0.2	Minor	20.00	0.32
				Roof, oldest, 2nd oldest	0.087	See Below*	41.67	3.34
		Ext Windows, oldest, 2nd oldest	0.0761	See Below**	20.00	1.40		
		Boilers, oldest, 2nd oldest	0.0652	See Below***	20.00	1.20		
		HVAC	0.0761	Minor	20.00	1.40		
		Structure	0.0761	Minor	20.00	1.40		
		Ext Doors	0.0543	Minor	20.00	1.00		
		Ext Walls	0.0761	Minor	20.00	1.40		
		Floors	0.0543	Minor	20.00	1.00		
		Int Walls	0.0543	Minor	20.00	1.00		
		Ceilings	0.0543	Minor	20.00	1.00		
		Int Other	0.0543	Minor	20.00	1.00		
		Elec Svcs	0.087	Minor	20.00	1.60		
		Lighting	0.0435	Minor	20.00	0.80		
		Plumbing	0.0652	Minor	20.00	1.20		
		Fire Alarms	0.0218	Minor	20.00	0.40		
		Fire Suppression	0.0218	Minor	20.00	0.40		
Specialties	0.0217	Minor	20.00	0.40				
Elevators	0.0109	N/A	0.00	0.00				
								22.97 (Sum)

D = Based on the following

Rating	Weight
N/A	0.0
GMO	0.0
Minor	0.2
Moderate	0.5
Major	0.9
Replace	1.1

Except for Roofs, Windows and Boilers (See Calculation Below)

Roof*	Rating	Score	SqFt	Raw Score	Score
	A	B		C=A*B	C/Total Roof SF
RooOldestSection	Moderate	0.5	34774	17387	0.361228263
SecondOldestSection	Minor	0.2	13359	2671.8	0.055508695
	Total		48133		0.416736958 (Sum)
					41.6736958 (Sum * 100)
Windows**	Rating	Score	Window %	Raw Score	Score
	A	B		C=A*B	C/Total Window %
RooOldestSection	Minor	0.2	100	20	0.2
SecondOldestSection	N/A	0	0	0	0
	Total		100		0.2 (Sum)
					20 (Sum * 100)
Boilers**	Rating	Score	Window %	Raw Score	Score
	A	B		C=A*B	C/Total Window %
RooOldestSection	Minor	0.2	50	10	0.1
SecondOldestSection	Minor	0.2	50	10	0.1
	Total		100		0.2 (Sum)
					20 (Sum * 100)

MSBA School Facility General Environment Rating Calculations 2016

Scores - [1 (0-25), 2 (25-40), 3 (40-60), 4 (60+)]

a	b	c	d	e = b x d	f	g	h	i = e x h	Example: [District] / [School]	Line item score	Category Score
GE Category	overall weight	GE Sub Category	tier weight	overall weight	GE Assessment Measure	Calculation logic	tier weight	overall weight	Survey data and calculation		
Learning Environment	10.0%	Suitable spaces	40%	4.0%	Natural Light Score	% rooms w/o natural light (Classrooms Lacking Daylight / Total Physical Classrooms)	40%	1.6%	0/29 x 1.6%	0	3.7
					Open Floorplan	Yes: 1, No: 0	40%	1.6%			
		Restroom on every floor	Yes: 0, No: 1	20%	0.8%	No, 1 x 1.6%	1.6				
		Building Condition Rating	50%	5.0%	Building Condition Rating	Total FCI Score (0.00-1.00)	100%	5%			
Cleanliness and Maintenance	10%	1.0%	General Cleanliness/Routine Maint/Captial Maint Rating	**See Maintenance Score Table	100%	1%	0.32 x 5%	1.6	0.50 x 1%	0.5	
											0.50 x 1%
Building Safety	12.5%	School Security	80%	10.0%	Surveillance Camera - exterior	Full: 0, Partial: 0.5, None: 1	5%	0.5%	Partial, 0.5 x 0.5%	0.25	4.519
					Surveillance Camera - main entrance	Full: 0, Partial: 0.5, None: 1	5%	0.5%	Partial, 0.5 x 0.5%	0.25	
					Surveillance Camera - interior	Full: 0, Partial: 0.5, None: 1	5%	0.5%	Partial, 0.5 x 0.5%	0.25	
					Intrusion Alarm	Full: 0, Partial: 0.5, None: 1	15%	1.5%	None, 1 x 1.5%	1.5	
					Metal Detector	Full: 0, Partial: 0.5, None: 1	5%	0.5%	None, 1 x 0.5%	0.5	
					Secure Entry	Yes: 0, No: 1	20%	2%	Yes, 0 x 2%	0	
					FT Security Staff	Yes: 0, No: 1	5%	0.5%	Yes, 0 x 0.5%	0	
					Visible site approach	Yes: 0, No: 1	5%	0.5%	No, 1 x 0.5%	0.5	
					Credentials/ID system	Yes: 0, No: 1	5%	0.5%	No, 1 x 0.5%	0.5	
					Two-way communication	% of classrooms without 2-way (TwoWay Classroom Count / Total Tech Classrooms)	20%	2%	1/29 x 2%	0.069	
					Site Lighting Condition Rating	Site Lighting Score (NA/GMO = 0.0, Min = 0.2, Mod = 0.5, Maj = 0.9, Rep = 1.1)	10%	1%	Minor, 0.2 x 1%	0.2	
					Fire/Life Safety	20%	2.5%	Fire Alarm, Egress Condition Rating	Fire Alarm Score (NA/GMO = 0.0, Min = 0.2, Mod = 0.5, Maj = 0.9, Rep = 1.1)	75%	
		Fire Suppression Condition Rating	Fire Suppression Score (NA/GMO = 0.0, Min = 0.2, Mod = 0.5, Maj = 0.9, Rep = 1.1)	25%	0.625%	Minor, 0.2 x 0.625%	0.125				
		Universal Accessibility	12.5%	Site Accessibility	50%	6.3%	Designated accessible parking	Yes: 0, No: 1	50%	3.125%	
Accessible site and playgrounds	Yes: 0, No: 1						50%	3.125%	Yes, 0 x 3.125%	0	
Building Accessibility	50%			6.3%	Accessible primary/secondary entrance	Main & Second: 0, Main Only: 0.1, Second Only: 0.25, Neither: 1	35%	2.1875%	Both, 0 x 2.1875%	0	
					All floors accessible	Yes: 0, No: 1	30%	1.875%	Yes, 0 x 1.875%	0	
Academic Sufficiency	30.0%	Capacity Score	65%	19.5%	Capacity Score	Capacity Score (<110% = 0, 110-130% = interpolate from 0-1, >130% = 1)*** confirm	100%	19.5%	527 / 557 = 0.95 util; 0 x 19.5%	0	0
					Classrooms in Modularity	35%	10.5%	Classrooms in Modularity / Physical Room Count	100%	10.5%	
Program Sufficiency	25.0%	Specialized Classrooms	40%	10.0%	Science lab/demo count satisfies enrollment standard	=1 - Actual Sci Demo lab count / Required count(Enrollment in Grades 5-12 / (23 students/classroom * .85 utilization factor) * (5/30 periods per week); (0 if Actual >= Required)	25%	2.5%	(1 - (3 / ROUND((527 / (23 x .85) x (5/30)))) * 2.5%	0.625	11.624
					Science gas/water	(Sci Labs with Water / Rqd Count(SciDemoLab)) * .5 + (Sci Labs with Gas / Rqd Count(SciDemoLab)) * .5	5%	0.5%	W/Water: 3, Rqd: 1, Score 0; W/Gas: 3, Rqd:1, Score:0 (0 x .5 + 0 x .5) * .5%	0	
					Computer Lab Present	(Comp Lab Count / Rqd Count(CompLab))	10%	1%	1-(1/1) x 1%	0	
					Art Present	(Art Room Count / Rqd Count(Art))	20%	2%	1-(1/1) x 2%	0	
					Music Present	(Music Room Count / Rqd Count(Music))	20%	2%	Rqd: 0, then Score=0; 1-(0/0) x 2%	0	
					Voc Classroom Present	(Voc Room Count / Rqd Count(VocClass))	10%	1%	1-(0/1) x 1%	1	
		Core Spaces	60%	15.0%	Voc Shop Present	(Voc Shop Count / Rqd Count(VocShop))	10%	1%	Rqd: 0, then Score=0; 1-(0/0) x 1%	0	
					Library Present	Yes: 0, No: 1	33%	5%	No; 1 x 5%	5.0	
					Cafeteria dining SF vs enrollment	Min lunch seatings (Enrollment / Cafeteria SF / 15): 0-3 = 0.00, 4 = 0.25, 5 = 0.50, 6 = 0.75, 7+ = 1.00	33%	5%	Score= 527/0/15 = 0; 0 x 5%	0	
					Gymnasium Present	Yes: 0, No: 1	33%	5%	No; 1 x 5%	5.0	
Instructional Technology	10.0%	Internet Access	30%	3.0%	1Gbps WAN, 1Gbps LAN	(LAN: Yes: 0, No:0.5)+(WAN: Yes:0, No:0.5)	15%	0.45%	WAN Yes, LAN No; 0+0.5 x 0.45%	0.225	3.275
					Fiber connection	Yes: 0, No: 1	55%	1.65%	Yes, 0 x 1.65%	0	
					100 Kbps/student, 1 Mbps/student	HundredKBSPerStudent&MBSPerStudent:0, HundredKBSPerStudent Only:0.25, MBSPerStudent Only:0, Niether:1	15%	0.45%	0 x 0.45%	0	
		Cable/Wifi Extent	30%	3.0%	Affordable broadband	Yes: 0, No: 1	15%	0.45%	Yes, 0 x 0.45%	0	
					% of Classrooms w/ Network Cabling	WiredClassroomCount / Required Tech Classrooms	30%	0.9%	28/29 x 0.9%	0	
					% of Classrooms w/ Wireless Network	Placeholder, not scoring	35%	1.05%	Not scored	0	
					Library Wireless Access	Yes: 0, No: 1	20%	0.6%	No, 1 x 0.6%	0.6	
					Cafeteria Wireless Access	Yes: 0, No: 1	5%	0.15%	No, 1 x 0.15%	0.15	
					Gymnasium Wireless Access	Yes: 0, No: 1	5%	0.15%	No, 1 x 0.15%	0.15	
		Power Infrastructure	20%	2.0%	75%+ Classrooms w/ Sufficient Power	Yes: 0, No: 1	50%	1%	Yes, 0 x 1%	0	
					Electrical Distribution Condition Rating	Electrical Score (NA/GMO = 0.0, Min = 0.2, Mod = 0.5, Maj = 0.9, Rep = 1.1)	50%	1%	Minor, 0.2 x 1%	0.2	
					Device to Student Ratio	1=0, 2=5, 3=75, 4=9, 5+=1	40%	0.8%	5+; 1 x 0.8%	0.8	
Classroom Technology	20%	2.0%	Infrastructure impact assessments	Yes: 0, No: 1	10%	0.2%	No, 1 x 0.2%	0.2			
			% of Classrooms w/ Display Technology	ComputerDisplayCount / Required Tech Classrooms	40%	0.8%	29/29 x 0.8%	0.8			
			Sufficient devices for assessments	Yes: 0, No: 1	10%	0.2%	Yes, 0 x 0.2%	0			

100.0%

100.0%

100.0%

SAMPLE GE SCORE: 23.1