



# Draft Maryland Condition Index (MDCI)

## Summary of Needs Weighting



Workgroup on the  
Assessment & Funding  
of School Facilities

9/25/19

# Examples of School Facilities Needs <sup>2</sup>

## Code Violation/Immediate Threat to Life, Safety or Health

-  Serious violations of fire, safety or building code
-  Lack of air conditioning
-  Asbestos in air

## Space Related (insufficient for number of students)

-  Not enough general classroom space
-  Not enough specialty classroom space
-  Not enough cafeteria space

## Facility Related

-  Heating/air equipment not maintainable
-  Not enough parking/driveways
-  Roof nearing end-of-life failure
-  Classroom lighting levels below standards

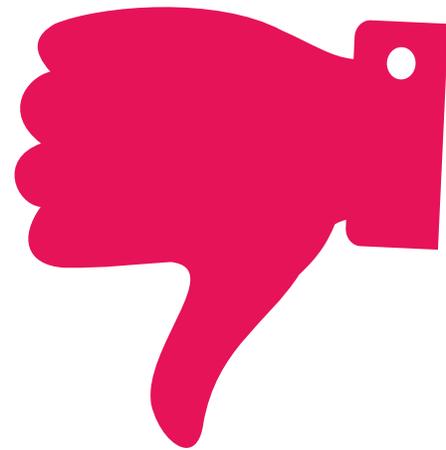


***Common Deficiencies that  
Could Inhibit Teaching &  
Learning***





- No air conditioning
- Overcrowded
- Building systems not maintainable



# *Weighting Differentiates Needs*



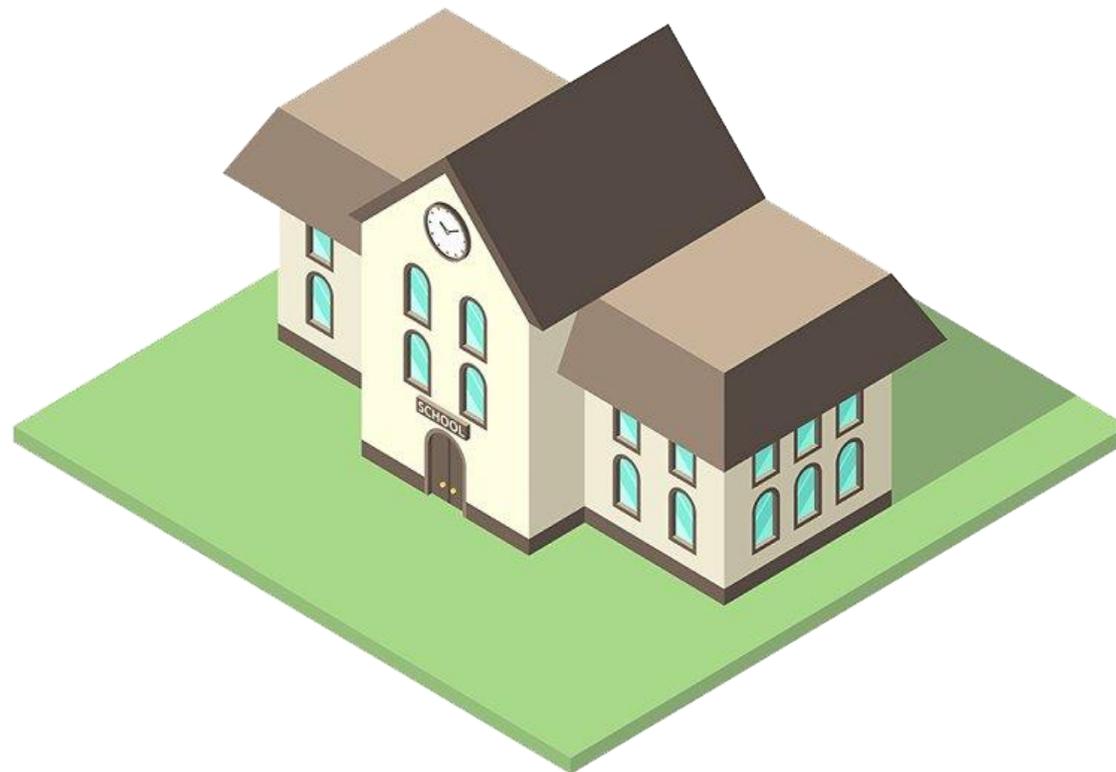
- Air conditioned
- At capacity
- Facility generally operates as needed



# Understanding the Formula: A Simplified Example



***This 40 year old facility is made up of only three components: a roof, exterior walls, and a foundation, and lacks sufficient classroom space.***

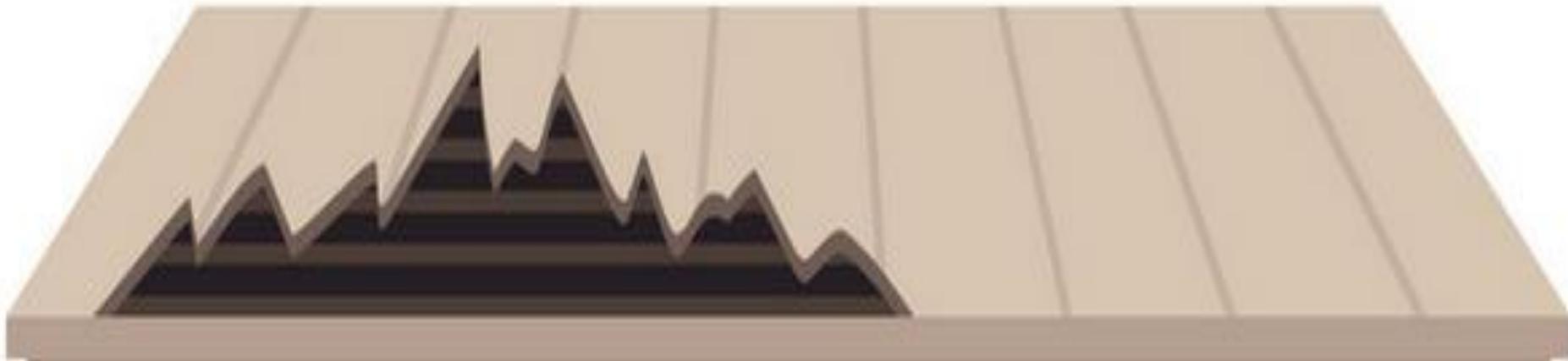


# Component 1

*The roof costs **\$200 to replace**, and is **50% degraded**.*

*Therefore, its **repair value is \$100**.*

*The roof is within its expected life cycle, so it is assigned to **Category 9**, with a **weight of .25**.*



## Component 2

*The exterior walls cost **\$100 to replace**, and are **80% degraded**.*

*Therefore, its **repair value is \$80**.*

*The walls' original expected life of 60 years has been reduced, because there are indicators that additional failure is imminent.*

*Therefore, it is assigned to **Category 3**, mitigate additional damage, with a **weight of 2**.*



# Component 3

*The foundation costs **\$300 to replace**, and is **40% degraded**.*

*Therefore, its **repair value is \$120**.*

*The foundation is within its 100 year expected life cycle, so it is assigned to **Category 9**, with a **weight of .25**.*



# Space Need

*According to the Enrollment Growth Statistics and the Sufficiency Standards, in 5 years, our school enrollment will require **500 total square feet of classroom space**. Currently only **400 total square feet exist**.*

*Therefore, our deficiency is **100 square feet**, or **25%** of the **400 square feet**, with a **repair value of \$150**.\**

*This is a space-related deficiency, so it is assigned to **Category 2**, which carries a **weight of 3.0**.*

*\*( $\$600/400 \text{ SF} = \$1.50 \text{ a square foot}$ )*



1) *Our roof's repair value is **weighted by .25.**  
.25 weight x \$100 repair value = \$25*

2) *Our walls' repair value is **weighted by 1.5.**  
1.5 weight x \$80 repair value = \$120*

3) *Our foundation's repair value is **weighted by .25.**  
.25 weight x \$120 repair value = \$30*

SN) *Our general classroom square footage deficiency is  
**weighted by 3.0.**  
3.0 weight x \$150 repair value = \$450*



***Our combined weighted repair value is \$625.***  
***\$25 roof + \$120 walls + \$30 foundation + \$450 sf  
deficiency = \$625***

***Our combined replacement value is \$600.***  
***\$200 roof + \$100 walls + \$300 foundation = \$600***

***Therefore, our total MDCl is 104%.***  
***625 ÷ 600 = 1.04***



# Proposed Needs Categories

Category #	Description	Weight
<b>1</b>	<b>Immediate Code/Life/Health Threat</b> Used only for critical issues that pose immediate threats to the life, health, or safety of persons within the facility. <ul style="list-style-type: none"> <li>• Obvious friable asbestos</li> <li>• Unprotected exit corridors</li> <li>• Electrical hazards</li> </ul>	<b>3.5</b>
<b>2</b>	<b>Sufficiency Deficiency – Space</b> Deficiencies that are related to sufficiency standards for inherent space-based issues in the facility. <ul style="list-style-type: none"> <li>• Not enough classrooms</li> <li>• Lacking square-footage requirements</li> <li>• Missing mission-critical space</li> </ul>	<b>3.0</b>
<b>3</b>	<b>Mitigate Additional Damage:</b> Systems or deficiencies that require repairs to mitigate additional damage. <ul style="list-style-type: none"> <li>• Leaking roof</li> <li>• Poor ventilation causing moisture leaks</li> </ul>	<b>2.0</b>
<b>4</b>	<b>Degraded w/ Potential Mission Impact</b> Systems or deficiencies that are mission critical and beyond useful life, or most systems beyond 200% expected life. <ul style="list-style-type: none"> <li>• Fire alarm system beyond 200%</li> <li>• Severely damaged walls</li> <li>• Systems past 200% life expectancy</li> </ul>	<b>1.5</b>
<b>5</b>	<b>Beyond Expected Life:</b> Systems or deficiencies that are 100% to 200% beyond expected life and show no signs of required repairs. <ul style="list-style-type: none"> <li>• Expired portable buildings</li> <li>• Many interior finishes without damages</li> </ul>	<b>.25 to 1.5</b>

Category #	Description	Weight
<b>6</b>	<b>Grandfathered or State/District Standards:</b> Systems or deficiencies that are “grandfathered” code issues or specific to the local agency. <ul style="list-style-type: none"> <li>• Fire Sprinklers</li> <li>• Flooring consistent with local architectural standards</li> </ul>	<b>.5</b>
<b>7</b>	<b>Sufficiency Deficiency – Facility</b> Deficiencies that are related to sufficiency standards for inherent parts of the facility. <ul style="list-style-type: none"> <li>• ADA Issues</li> <li>• Insufficient Parking</li> <li>• Fixed Equipment (such as serving kitchens)</li> </ul>	<b>1.0</b>
<b>8</b>	<b>Sufficiency Deficiency – Equipment</b> Deficiencies that a related to sufficiency standards for non-fixed equipment. <ul style="list-style-type: none"> <li>• Missing playgroup equipment</li> </ul>	<b>.5</b>
<b>9</b>	<b>Normal/Within Life Cycle</b> Systems that are within the expected life cycle and do not require replacement. <ul style="list-style-type: none"> <li>• Functioning, new lighting</li> <li>• A 20 year old system with a 25 year life cycle</li> </ul>	<b>.25</b>