



Ensuring Educationally Sufficient Facilities

Measuring and Calculating a Deficiency Score for a Facility



In preparation for the
Workgroup on
Assessment & Funding
of School Facilities

School Facility's Purpose

To support teaching and learning.

Facility Condition



Educational Sufficiency

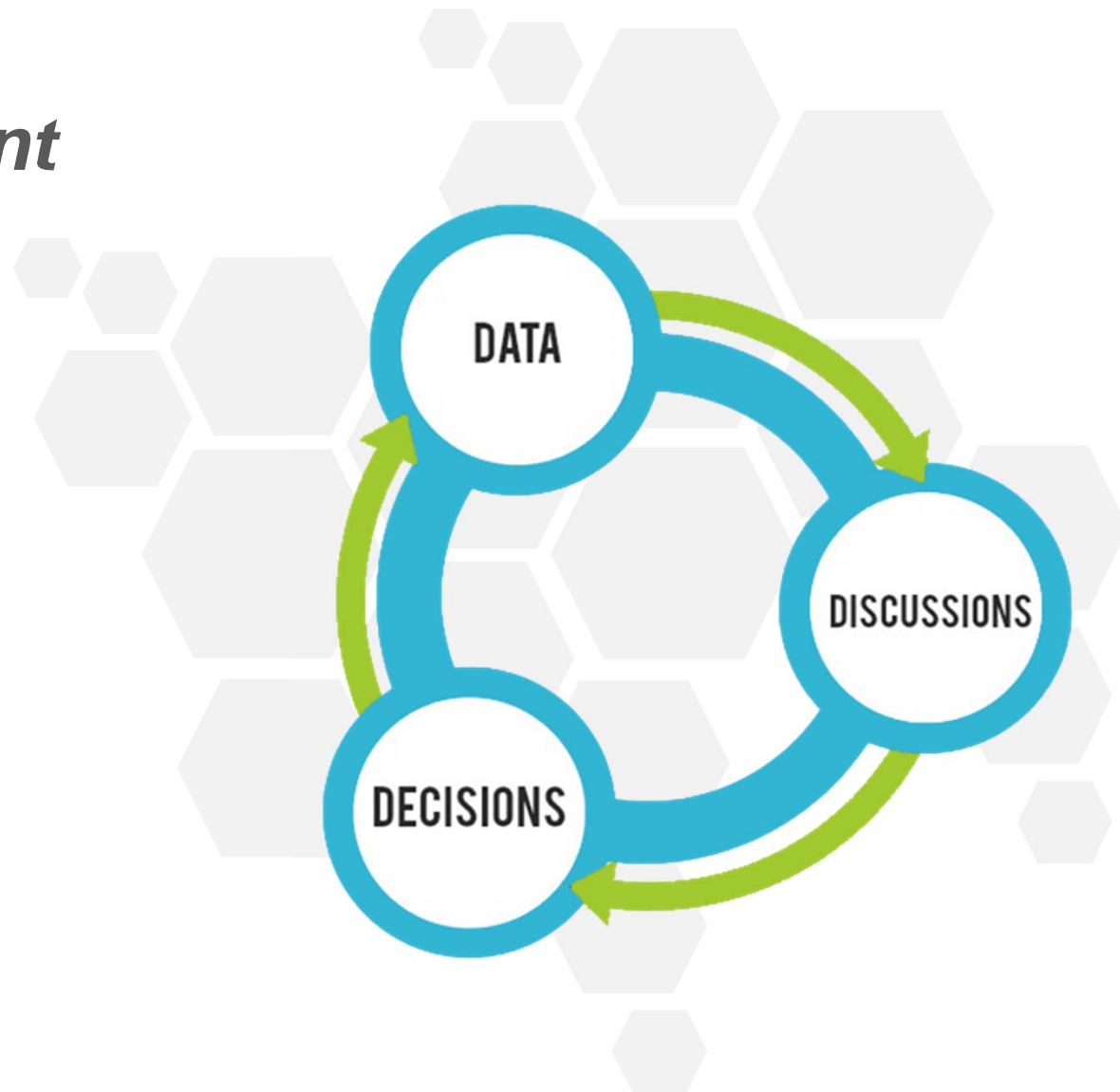


Both are essential for teaching
and learning



Efficient Management Requires Good Data

- Sustaining safety and functionality over time can be difficult.
- Good efficient management does not happen on its own. It requires people, a plan, resources, and expected outcomes that are measurable and comparable.
- Investment in facilities management is a decision that should be based on need and return-on-investment.



Defining Key Measurements



Condition

Facility Condition Index



Educational Sufficiency

Facility deficiencies as measured against the sufficiency standards



Combined Deficiency Score

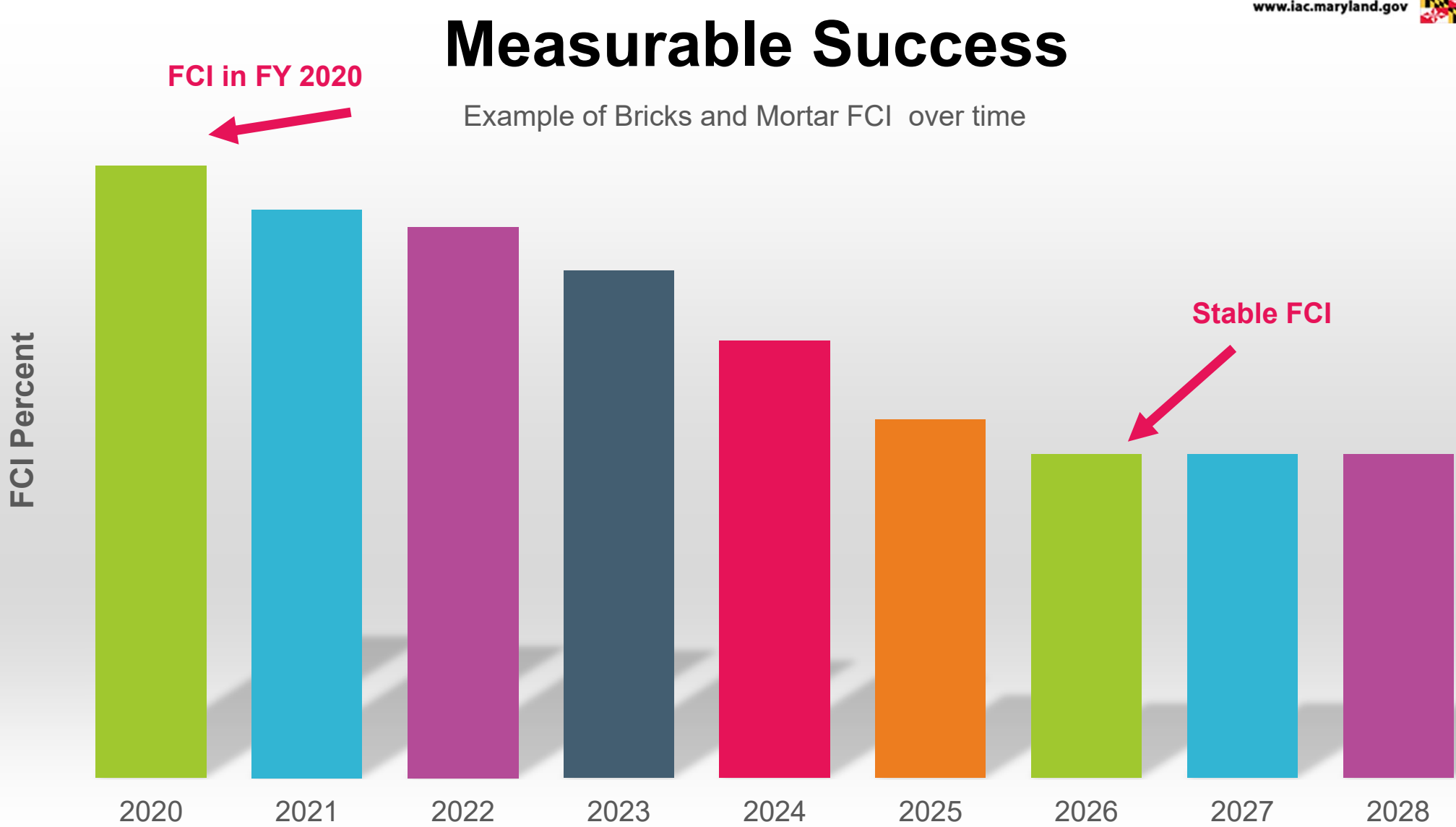
Single score for the facility that reflects both types of deficiencies





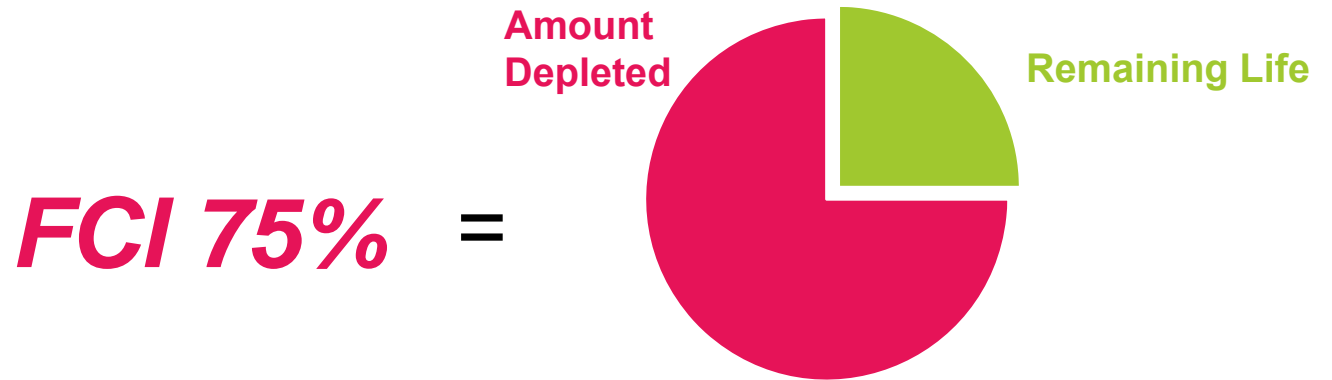
Measurable Success

Example of Bricks and Mortar FCI over time



Using Life-span Depletion (%) to Quantify Physical Condition

Building-System Level



Facility Level

$$\text{FCI \%} = \frac{\text{Depleted Value}}{\text{Replacement Value}}$$

Depleted Value: HVAC (FCI %) + Roof (FCI %) + Foundation (FCI %) + etc.
 Replacement Value: HVAC + Roof + Foundation + etc.

EDUCATIONAL SUFFICIENCY

Maryland Educational Facilities Sufficiency Standards

Mandated by 2018's House Bill 1783 –
Md. Code Educ. Article § 5-310(c)

Adopted May 31, 2018



WHAT

Non-mandatory qualitative & quantitative standards describing the minimum facility attributes needed to deliver the educational programs and services required by the State

PURPOSE

Identify deficiencies in **existing** facilities that **substantially inhibit** the delivery of educational programs and services required by the State



EDUCATIONAL FACILITIES SUFFICIENCY STANDARDS

IAC Gross Area Baselines
“An educational facility that works”



IAC Sufficiency Standards
“The bare minimums”



Reasonable School Size

Area of Design
Flexibility for LEAs

SUFFICIENCY



EDUCATIONAL FACILITIES SUFFICIENCY STANDARDS

Qualitative Example

A School Facility must be safe (COMAR 13A.01.04.03) and capable of being maintained.

An **exterior envelope** is safe and capable of being maintained if walls and roof are weather tight under normal conditions with routine upkeep.



EDUCATIONAL FACILITIES SUFFICIENCY STANDARDS

Quantitative Example

Cumulative classroom net square foot (sf) requirements, excluding in-classroom storage space and any in-classroom toilet rooms, shall be at least:

Prekindergarten	50 net sf/student
Kindergarten	50 net sf/student
Grades 1-8	32 net sf/student
Grades 9-12	25 net sf/student



EDUCATIONAL FACILITIES SUFFICIENCY STANDARDS

**Problem:
Inadequate
Facility
Condition**

**Problem:
Inadequate
Educational
Sufficiency**

***The assessment of
school facilities
against the
Educational Facilities
Sufficiency Standards
identifies the problem,
not the solution.***

Solutions (to be
determined by the
LEA):

Repair, renovation,
replacement,
addition...

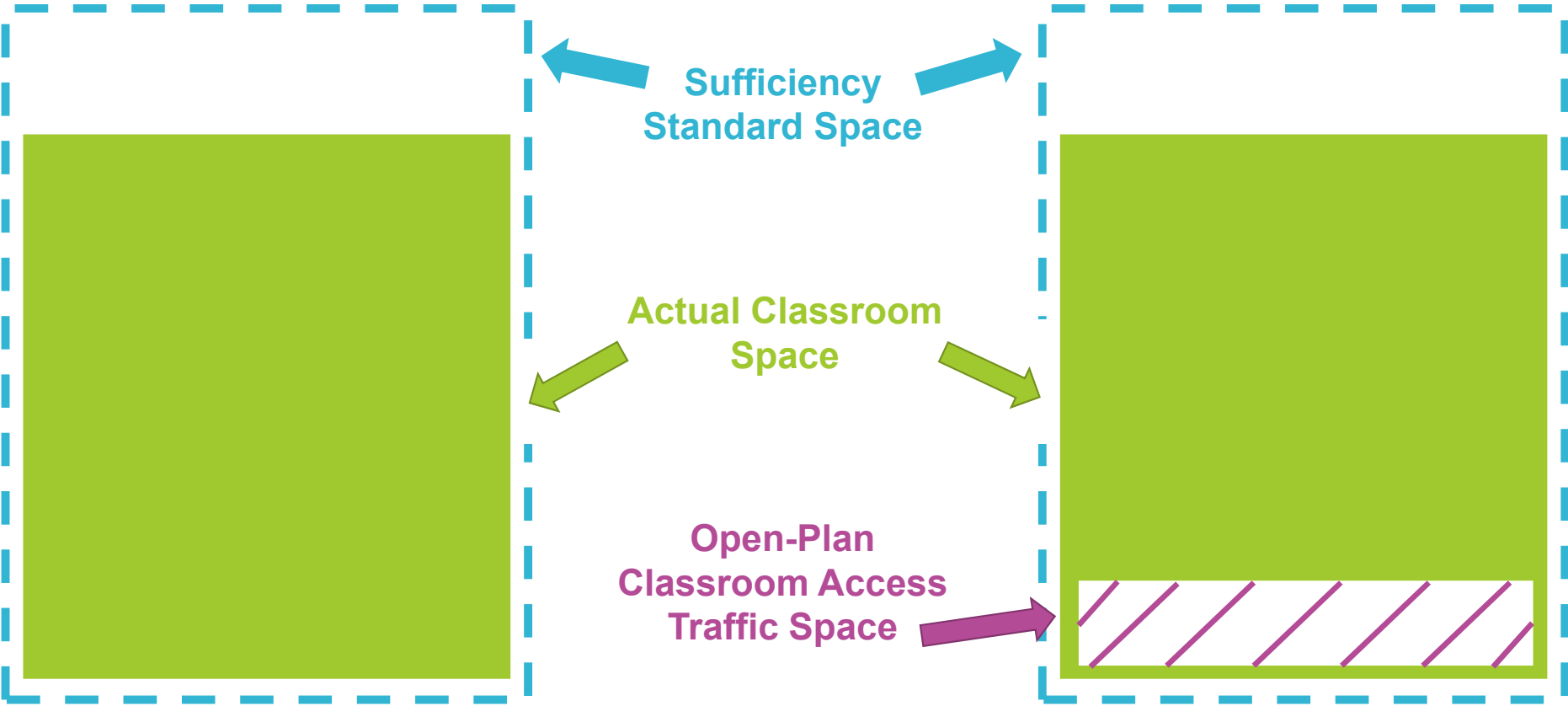
After LEA determines solutions, the
State reviews the proposed project,
provides technical review assistance,
and may provide funding through the
CIP or other IAC program.



Measuring Deficiencies in Sufficiency




School A: Traditional Classrooms

School B: Open-Plan Classrooms






Examples of Deficiencies in Sufficiency





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

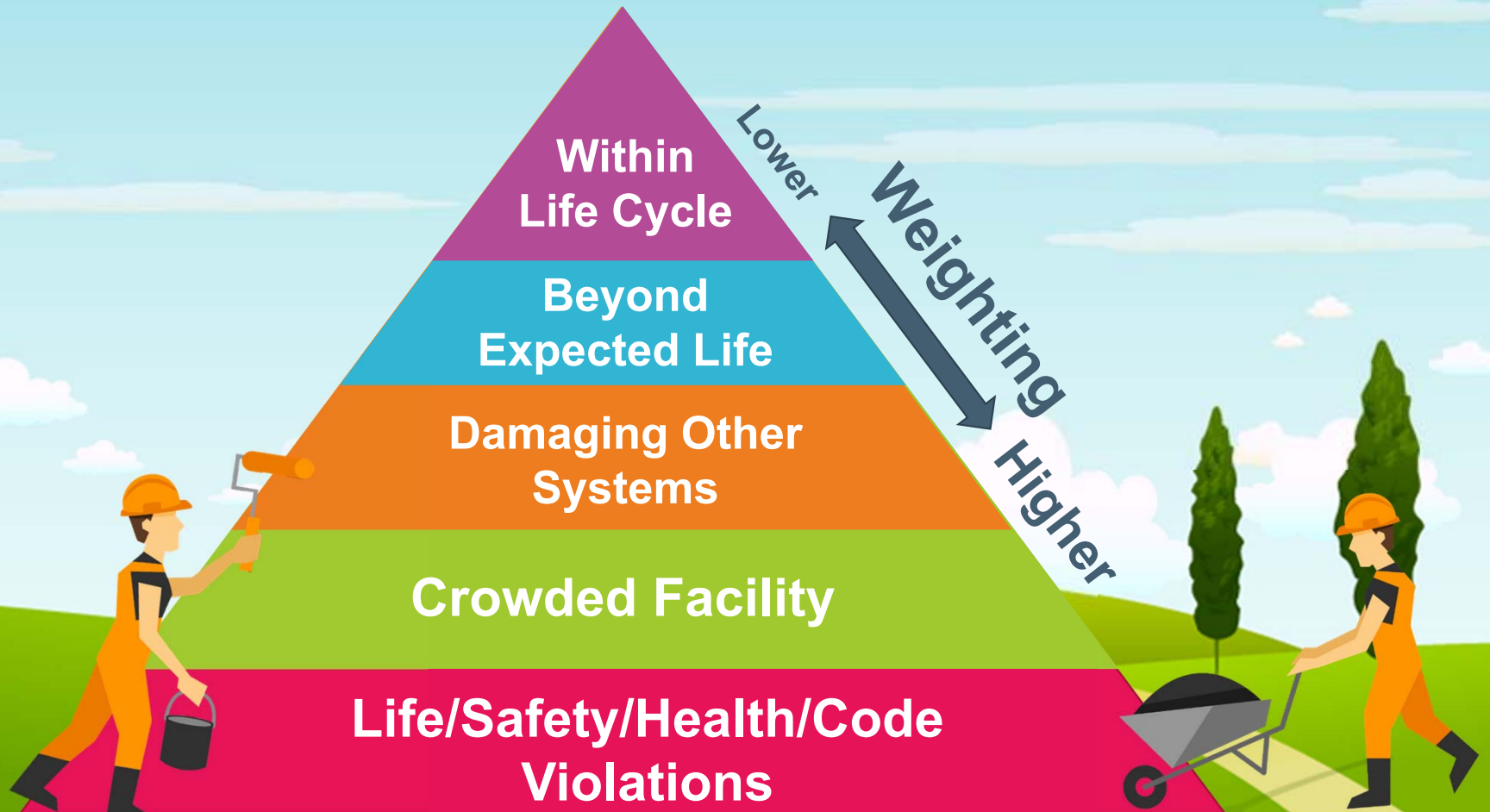


***Common Deficiencies that
Could Inhibit Teaching &
Learning***

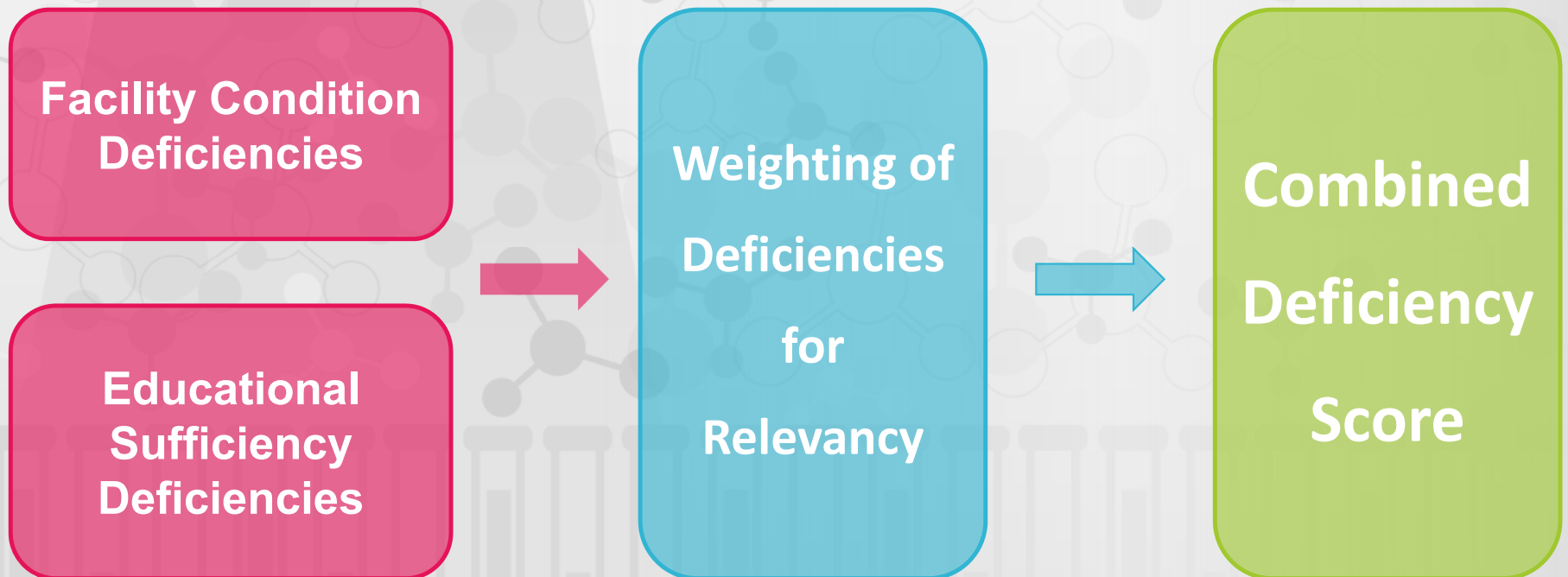




Educational Facilities Deficiencies



Creating a Deficiency Score



A Deficiency Score Reflects...



- **No Air Conditioning**
- **Overcrowded**
- **Building Systems not maintainable**



- **Air Conditioned**
- **At Capacity**
- **Facility generally operates as needed**



Empowering LEAs

Facilities are a collaborative process...

- Community involvement to empower
- Design to function
- Measure to improve





... A healthy, safe, and educationally sufficient learning environment for every child in every seat in Maryland.



Questions?

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Up next...

Workgroup on the Assessment and Funding of School Facilities Meeting



**In preparation for the
Workgroup on
Assessment & Funding
of School Facilities**

Workgroup Meeting
August 28th, 2019
9:00 – 1:00 PM

www.iac.maryland.gov