Assessing Physical Condition

An Overview of the Scoring Process

HUD Real Estate Assessment Center

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The Purpose of this Overview 1

REAC created this guide to present general information about HUD's process for issuing scores for REAC's assessments of the physical condition of HUD—assisted properties.
For assessment of public housing properties in particular, the scoring process is presented for the Physical Condition Indicator of the Public Housing Assessment System (PHAS).

We have designed this guide with these audiences in mind:

- HUD employees
- public housing officials and employees
- multifamily owners and agents
- housing industry representatives
- congressional members and staff
- the public at large

REAC's Mission 2

Under the HUD 2020 Management Reform Plan, HUD created the Real Estate Assessment Center (REAC). Part of REAC's mission is to capture, standardize, improve, and evaluate data about the properties that HUD monitors. REAC collects and scores data on:

- physical condition of HUD—assisted properties
- financial condition of the entities that manage the properties
- management capabilities of the entities
- satisfaction of the residents who reside in the properties

3 The REAC Physical Inspection

Assessing the Physical Condition of HUD–assisted Properties

One of REAC's most important functions is to ensure that public housing properties and HUD—assisted multifamily properties are decent, safe, sanitary, and in good repair. Assessing the physical condition of HUD—assisted properties begins with the REAC Physical Inspection. Applying HUD's uniform, consistent standards, REAC inspects a property and uses the results to develop a score for the property's physical condition. The process works for all types and configurations of property.

Multifamily properties scoring below 60 receive structured administrative oversight from either HUD field offices or the Departmental Enforcement Center (DEC).

For public housing agencies (PHAs), the physical inspection score is just one part of the total PHAS score—30 of the possible 100 points. If a property scores less than 60% of the 30 points for physical condition, it is considered "sub-standard for physical condition". (For HUD–assisted multifamily properties, there is no PHAS score.)

The REAC physical inspection emphasizes health and safety (H & S) deficiencies because H & S deficiencies are crucial to the well-being of residents.

The Results of the Inspection

The REAC physical inspection report generates this information:

- scores for each of the five REAC physical inspection areas:
  - site
  - building exterior
  - building systems
  - common areas (if present)
  - units
- an overall score for the property (a weighted average of the area scores minus deductions for H & S deficiencies)
- all of the deficiencies recorded by the inspector, their severity level, and the points deducted for each deficiency
- the estimated number of H & S deficiencies that would have been found if all buildings and units had been inspected

The inspection report clearly shows the property owner:

- the magnitude of the points lost by inspectable area
- the impact of H & S deficiencies on the score

4 What the Inspector Does

During a physical inspection, the inspector carries out these important functions:

- observes deficiencies
- classifies them based on the severity of the problem (Level 1, Level 2, and Level 3)
- records each deficiency and the level of severity electronically while on site

5 Deficiencies

Deficiencies are the specific problems that the inspector observes for inspectable items — a hole in a wall, a damaged refrigerator, etc., for example—

Item	Deficiency
wall	**hole**
kitchen	**damaged refrigerator**

REAC gives inspectors clear definitions of each deficiency. On site, inspectors use a hand-held computer to read the definitions and record deficiencies.

How Critical is the Deficiency?

Each deficiency has a specified criticality level — how important is the deficiency for this inspectable item?

There are five levels of criticality:

Chart 1 CRITICALITY LEVEL

Level	How Critical	Value
5	Critical	5.00
4	Very Important	3.00
3	Important	2.25
2	Contributes	1.25
1	Slight Contribution	0.50

Among deficiencies for a given item, the more critical the deficiency, the more impact it has on the score.
For example, if the severity level is the same, a clogged drain in the kitchen is more critical than a missing or damaged cabinet. In this example, the drain reduces the score more than the cabinet.

The full impact of the criticality level on the score depends on the severity level and the item weight.

How Severe is the Deficiency?

The inspector determines the severity of the deficiency—the extent of damage involved.

REAC gives inspectors clear definitions of the relative severity levels of each deficiency. Using these definitions, the inspector assigns one of three severity levels:

Chart 2 SEVERITY LEVEL

Level	How Severe	Value
3	Most Severe	1.00
2	Severe	.50
1	Least Severe	.25

For a given deficiency, Level 3 severity has more impact on the score than Level 1. The full impact of a severity level depends on the item weight and criticality level for a given deficiency. (Level 3 deficiencies deduct twice as much as Level 2 deficiencies and four times as much as Level 1 deficiencies.)

6 How the Process Works

REAC takes the information from the inspection and applies a specially designed scoring system to assess the physical condition of the property.

Property scores come from area points; the numbers of possible points in the five areas add up to 100. In the example in Chart 3, all inspectable items are present on the site and in each inspected building and dwelling unit:

Chart 3 PROPERTY SCORES

Area	Points
Site	15
Building Exteriors	15
Building Systems	20
Common Areas	15
Dwelling Units	35
Total	100

Each area contributes to the property score based on what is there to inspect. If, for example, there are no common areas, the points would be reallocated to add up to 100 in the following way:

Area	Unallocated Points	Reallocation Formula		Reallocated Points
Site	**15**	**15 ÷ 85 x 100**	**=**	**17.6**
Building Exteriors	**15**	**15 ÷ 85 x 100**	**=**	**17.6**
Building Systems	**20**	**20 ÷ 85 x 100**	**=**	**23.5**
Common Areas	**0**			**0**
Dwelling Units	**35**	**35 ÷ 85 x 100**	**=**	**41.2**
Total	**85**			**100**

Chart 4, below, shows the reallocated property scores.

Chart 4 PROPERTY SCORES

No Common Areas

Area	Reallocated Points
Site	**17.6**
Building Exteriors	**17.6**
Building Systems	**23.5**
Common Areas	**0**
Dwelling Units	**41.2**
Total	**100.0**

The "Weights"

To generate accurate scores, it is crucial to determine the relative importance of the various components of the inspection—which components are the most important, the next most important, and so on. The scoring system reflects the appropriate relative importance—*the "weights"*—of each area, item, and deficiency.

HUD developed the weights based on the valuable advice and comments from a wide spectrum of knowledgeable people, including:

- professionals who have experience assessing the physical condition of properties
- representatives from the housing and public housing industries
- HUD professionals

7 Calculating the Score

REAC combines the weights and inspection data to compute the score on a 100–point scale. Scoring a property's physical condition depends on:

- the weights for inspectable areas (5 areas)
- the weights for inspectable items (8-17 per area)
- the criticality levels of the deficiencies
- the severity levels of the deficiencies

These are the steps in the process REAC uses to come up with the overall property score:

1 Determine how many points are possible for each area to be inspected.

2 For each area, deduct points for the observed deficiencies.

3 Add up the area scores.

4 Deduct points for H & S deficiencies.

5 For H & S deficiencies, add either a, b, or c to the score:

- If there are no H & S deficiencies, add a.
- If there are H & S deficiencies but none are life–threatening (NLT), add b.
- If there is a life-threatening (LT) H & S deficiency, add c.

Note: These are also known as “exigent” or “fire safety” deficiencies and require immediate attention and correction.

6 If there is a smoke detector deficiency, add an asterisk * to the score.

Please see Example 3 on page 13.

Here are some examples of scores and what they mean:

Chart 5 PROPERTY SCORES DEFINED

Scores	What They Mean
95c	■ **at least one exigent/fire safety H & S deficiency** ■ **otherwise excellent condition**
55b*	■ **an H & S deficiency that is not life-threatening** ■ **a smoke detector deficiency** ■ **poor condition**
90a*	■ **a smoke detector deficiency** ■ **no H & S deficiency** ■ **generally excellent condition**

8 Calculating Deductions for Deficiencies

If all the items are there to be inspected and all inspected buildings have the same number of units, we follow these steps:

1 Multiply the area points, item weight, criticality, and severity.

2 For a building deficiency, divide by the total number of buildings inspected. For a dwelling unit deficiency, divide by the number of units inspected.

The result is the deduction for that deficiency. You also need to account for the items that were there to be inspected. For more on this, see chapter 9, page 14.

Here are three examples where all items are there to be inspected:

EXAMPLE 1

In this example, **a deficiency in a ceiling will have a different impact on the score based on the number of inspected units.**

AREA: Dwelling Unit

ITEM: Ceiling

DEFICIENCY: Holes/Missing Tiles/Panels/Cracks

Criticality Level 4, Severity Level 3

250 units (24 inspected units)

THE ELEMENTS	THEIR VALUES
Area Points	35.0
Item Weight	0.04
Criticality	3.0
Severity	1.0
Number of Units	24.0

First, multiply: 35 x 0.04 x 3.0 x 1.0 = 4.2
Then divide: 4.2/24 = 0.175 point deduction

15 units (10 inspected units)

THE ELEMENTS	THEIR VALUES
Area Points	35.0
Item Weight	0.04
Criticality	3.0
Severity	1.0
Number of Units	10.0

First, multiply: 35 x 0.04 x 3.0 x 1.0 = 4.2
Then divide: 4.2/10 = 0.42 point deduction

In this example, **the impact of a misaligned ventilation system varies based on the number of buildings.**

AREA: Building System

ITEM: Domestic Water

DEFICIENCY: Misaligned Chimney/Ventilation System

Criticality Level 5, Severity Level 3

10 buildings

THE ELEMENTS	THEIR VALUES
Area Points	20.0
Item Weight	0.155
Criticality	5.0
Severity	1.0
Number of Units	10.0

First, multiply: 20 x 0.155 x 5.0 x 1.0 = 15.5
Then divide: 15.5/10 = 1.55 point deduction

5 buildings

THE ELEMENTS	THEIR VALUES
Area Points	20.0
Item Weight	0.155
Criticality	5.0
Severity	1.0
Number of Units	5.0

First, multiply: 20 x 0.155 x 5.0 x 1.0 = 15.5
Then divide: 15.5/5 = 3.10 point deduction

EXAMPLE 3

In this example, **a smoke detector deficiency has no impact on the score no matter how many units are in the property, because the item weight is zero.**

AREA: Dwelling Units

ITEM: Smoke Detector

DEFICIENCY: Missing/Inoperative

Criticality Level 5, Severity Level 3

250 units (24 inspected units)

THE ELEMENTS	THEIR VALUES
Area Points	35.0
Item Weight	0.0
Criticality	5.0
Severity	1.0
Number of Units	24.0

First, multiply: 35 x 0 x 5.0 x 1.0 = 0*
Then divide: 0/24 = no point deduction

15 units (10 inspected units)

THE ELEMENTS	THEIR VALUES
Area Points	35.0
Item Weight	0.0
Criticality	5.0
Severity	1.0
Number of Units	10.0

First, multiply: 35 x 0 x 5.0 x 1.0 = 0*
Then divide: 0/10 = no point deduction

See Chapter 6, pages 6—8.

9 A Technical Look at the Scoring Process

The physical condition scoring process is based on three elements:

- inspectable area
- inspectable items
- observed deficiencies

The score for a property is the weighted average of area scores, with the area weights adjusted to take into account how many of an area's inspectable items are actually present to be inspected.

- The *area scores* are calculated by deriving weighted averages of sub-area scores over buildings or dwelling units as appropriate.
- The *sub-area scores* are calculated by deducting points for deficiencies, based on criticality and severity levels. (Points also deducted for H & S deficiencies in the same manner.)

Normalized Area Weights

A property's overall physical condition score is a weighted average of area scores. These are the approximate relative weights:

Chart 6 RELATIVE WEIGHTS

Area	Points
Site	**15**
Building Exteriors	**15**
Building Systems	**20**
Common Areas	**15**
Dwelling Units	**35**
Total	**100**

These weights are assigned if all inspectable items are present for the site, each inspected building, and each inspected unit. When items are missing, the area weights are modified to reflect the missing items. If all of the inspectable items are missing—in a common area, for example—the weight of the common area is 0.

For example, if *half of the common area items* are there to inspect, 7.5 points must be reallocated to the areas—including the common areas. The relative weights are reallocated or modified in the following way.

Area	Relative Weighted Points	Modification Formula		Reallocated Points
Site	**15**	**15 ÷ 92.5 x 100**	**=**	**16.2**
Building Exteriors	**15**	**15 ÷ 92.5 x 100**	**=**	**16.2**
Building Systems	**20**	**20 ÷ 92.5 x 100**	**=**	**21.6**
Common Areas	**7.5**	**7.5 ÷ 92.5 x 100**	**=**	**8.1**
Dwelling Units	**35**	**35 ÷ 92.5 x 100**	**=**	**37.8**
Total	**92.5**			**100**

Chart 7, below, shows the modified relative weights.

Chart 7 MODIFIED RELATIVE WEIGHTS

Area	Reallocated Points
Site	**16.2**
Building Exteriors	**16.2**
Building Systems	**21.6**
Common Areas	**8.1**
Dwelling Units	**37.8**
Total	**100.0**

Special Considerations

The scoring methodology takes a number of issues into consideration:

- The scoring does not allow the site score or any sub-area scores for individual buildings or units to be negative. If they would have been negative, they are set to zero. This ensures that no single building or dwelling unit can affect the overall score more than its proportionate share of the whole.

- Buildings have different numbers of dwelling units. Buildings with more units have more impact on an area score than smaller buildings.

- Buildings and dwelling units have different features and amenities. The area scores and the overall score reflect only items that are present to be inspected. (The weights to calculate area and property scores are adjusted based on what is there to be inspected.) Buildings or units with more items present contribute more to area points.

For example, two buildings have the same number of units. The building systems in one include an exhaust system with an item weight of 15.5. the other building does not have an exhaust system. Consequently, the building without an exhaust system contributes 15.5 fewer points to the overall building systems area score.

Computing the PHA's Overall Physical Inspection Score

Throughout this guide, we have been looking at scores for a single property. For public housing, the physical inspection score for a PHA is the weighted average of the PHA's individual project physical inspection scores. The weights are the number of units in each project divided by the total number of units in all projects for the PHA.

For example,

- Project 1 has a score of 60 and has 100 units.
- Project 2 has a score of 80 and has 900 units.

This is how you would compute the overall PHAS score:

Score = [60 x 100 / (100 + 900)] +
[80 x 900 / (100 + 900)]

= 6 + 72

= 78

Technical Review 10

Under certain circumstances, REAC will conduct a technical review of the results of a property inspection or grant an appeal of a PHA's score. If a PHA believes that there was an objectively verifiable and material error in an inspection, the PHA may request a technical review of the inspection results for that property.

The request must include clear and convincing evidence of an error that is both objectively verifiable and material. The evidence must be more than a disagreement with the inspector's observations or findings on the severity of the deficiency.

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How the Process Works

Before submitting your request, REAC strongly urges you to visit our website (www.hud.gov/reac) and review the guidance for submitting technical reviews.

At the REAC home page, make these choices:

1 Products

2 Physical Inspection

3 Document Guidance

4 Technical Review—General Information

To request a technical review of a physical inspection:

- Send your request in writing to:

  Director,
  Real Estate Assessment Center
  Suite 800
  1280 Maryland Avenue SW
  Washington, DC 20024

- REAC must receive your request no later than 15 days after the results of the physical inspection were issued.

- Include supporting documents with your request. Some examples include photographs and certifications from local officials.

REAC then reviews your file and the evidence produced. If we determine that an objectively verifiable and material error has been documented, we may take one or more of the following actions:

- conduct a new inspection
- correct the physical inspection report
- issue a corrected physical condition score
- issue a corrected PHAs score

After evaluating your review and taking any corrective actions that are necessary, HUD will notify you in writing of the decision.

FOR MORE INFORMATION

To learn more about the technical review and appeals process, visit the REAC Internet site:

1. To get to the REAC Internet Site, type www.hud.gov/reac.
2. Choose Products, PHAS, and Reading Room.
3. Under Federal Register Notices, choose *Public Housing Assessment System Amendments to the PHAS; Information about PHAs Scoring.*
4. Choose Technical Review.

TO LEARN MORE

For more information on REAC physical inspection scores, see these sources on our Internet Site, **http://www.hud.gov/reac**:

- *Public Housing Assessment System, Physical Condition Scoring Process* gives you a non-technical overview and details in the Federal Register, due in Fall 2000.

  This updates Appendix 1, Federal Register 6/28/2000, pg. 3998 ff. (To see this overview, choose Products, PHAS, Reading Room, and Federal Register Notices, Rules, and Regulations.)

- *Physical Inspection Scoring* 2.1 is a technical guide to the scoring system. This still applies to version 2.3 of the scoring software.

  (To see this guide, choose Tools, Reading Room, Physical Inspection, Handbooks and Guidance, and Physical Inspection.)

You may also call the
REAC Technical Assistance Center:
1-888-245-4860

www.hud.gov/reac

HUD Real Estate Assessment Center

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1280 Maryland Avenue SW
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