



[Docket No. FR-6086-N-06]

National Standards for the Physical Inspection of Real Estate and Associated Protocols, Scoring Notice

AGENCY: Office of the Assistant Secretary for Housing—Federal Housing Commissioner, Office of the Assistant Secretary for Public and Indian Housing, U.S. Department of Housing and Urban Development (HUD).

ACTION: Final notice.

SUMMARY: This notice serves as a complementary document to the Economic Growth Regulatory Relief and Consumer Protection Act: Implementation of National Standards for the Physical Inspection of Real Estate (NSPIRE) rule published May 11, 2023. The NSPIRE rule provides that HUD will publish in the Federal Register the NSPIRE inspection standards and scoring methodology to assess the overall condition, health, and safety of properties and units assisted or insured by HUD. The NSPIRE Standards were published for public comment on June 17, 2022 and posted as final on June 22, 2023. On March 28, 2023, HUD published a proposed scoring methodology for public comment. HUD establishes with this notice the NSPIRE physical inspection scoring and ranking methodology to implement HUD's NSPIRE rule for Public Housing and Multifamily Housing programs, including Section 8 Project-Based Rental Assistance (PBRA) and other Multifamily assisted housing, Section 202/811 programs, and HUD-insured Multifamily as described in the NSPIRE rule. The scoring methodology converts observed defects into a numerical score and sets a threshold for HUD to perform additional administrative oversight by establishing a level for when a property fails an inspection (less than 60 points) and when an enforcement referral is automatic or required (less than or equal to 30 points).

DATES: July 1, 2023.

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SUPPLEMENTARY INFORMATION:

I. Background

A. UPCS Standards and Scoring

Prior to the implementation of NSPIRE, HUD used two assessment methodologies to ascertain the quality and health and safety of HUD-assisted and insured properties and units: (1) Pass/Fail, used for the Housing Quality Standards (HQS) for the Housing Choice Voucher (HCV) and Project-based Voucher (PBV) programs; and (2) a zero to 100-point (0-100) scale used for properties inspected under the Uniform Physical Condition Standards (UPCS) for public housing and properties managed by HUD's Office of Multifamily Housing Programs.¹

B. NSPIRE Final Rule and Implementation Timeline

On May 11, 2023, HUD published the NSPIRE Rule² to implement one of NSPIRE's core objectives—the formal alignment of expectations of housing quality and consolidation of inspection standards across HUD programs. The final rule is effective July 1, 2023, for public housing and Multifamily Housing programs. HUD's Real Estate Assessment Center (REAC) intends to commence scored inspections using the NSPIRE standards for public housing and Multifamily NSPIRE Demonstration participants that did not opt for a Uniform Physical

¹ "Uniform Physical Condition Standards and Physical Inspection Requirements for Certain HUD Housing," Final Rule, 63 FR 46565 (Sept. 1, 1998).

² 88 FR 30442 (May 11, 2023)

Condition Standard inspection after this date pursuant to the Notice of Modifications to the Demonstration to Assess the National Standards for the Physical Inspection of Real Estate and Associated Protocols cited below.³ NSPIRE inspection scores will be included in future Public Housing Assessment System (PHAS) scores after July 1, 2023 once every public housing asset management project (AMP) has been inspected under the final NSPIRE standards. For example, if a PHA has ten asset management projects, the physical condition portion of the PHAS score will not be issued until a sample of all units at each of those ten public housing asset management projects have received a NSPIRE inspection.

In the NSPIRE rule, HUD stated its intent to publish updates to the NSPIRE standards and scoring methodology through future Federal Register notices at least once every three years with an opportunity for public comment. The NSPIRE Standards were published for comment in the Federal Register on June 17, 2022,⁴ and published as final on June 22, 2023].⁵

On April 21, 2023, HUD published an NSPIRE Scoring Calculator⁶ to estimate a potential NSPIRE score based on the types and locations of deficiencies identified during an NSPIRE inspection. This calculator was based on the NSPIRE Standards 2.2 proposed for comment on June 17, 2022. It will be updated for the most recent NSPIRE Standards 3.0 and this scoring model and remain available on the REAC NSPIRE website at www.hud.gov/program_offices/public_indian_housing/reac/nspire.

C. HCV and PBV Assessment

Consistent with existing practice and with the NSPIRE proposed rule, NSPIRE retains a pass/fail indicator for the HCV and PBV programs and uses a 0-100-point scale for public housing and properties previously inspected under UPCS. This Scoring notice does not apply to

³ “Notice of Modification to the Demonstration to Assess the National Standards for the Physical Inspection of Real Estate and Associated Protocols,” 88 FR 4727, January 25, 2023.

⁴ 87 FR 36426 (June 17, 2022).

⁵ 88 FR 40832 (June 22, 2023)

⁶ National Standards for the Physical Inspection of Real Estate (NSPIRE) | HUD.gov / U.S. Department of Housing and Urban Development (HUD), available at: https://www.hud.gov/program_offices/public_indian_housing/reac/nspire

the HCV and PBV programs and does not revise the inspection frequencies established under the applicable program regulations. The individual NSPIRE Standards include an indication of whether defects in the standard would result in an HCV fail for the unit or property.⁷

D. Comments on UPCS Scoring and Changes from the Proposed NSPIRE Scoring

Methodology

To develop a new scoring methodology for comment, HUD reviewed its current scoring model under UPCS and solicited feedback from the public, including residents, housing industry groups, and housing professionals within and outside of HUD through the NSPIRE proposed rule.⁸ HUD also considered feedback on the UPCS inspection and scoring process received from industry, residents, advocacy groups, and Congress, and acknowledges concerns about consistency and subjectivity, including the disproportionate impact of certain defects based on item weighting and disproportionate impact of certain non-unit observed defects in smaller properties. The final Scoring methodology considered public comment on the draft methodology, the results of the NSPIRE Demonstration, and user acceptance/pilot testing with volunteer PHA and owners.

HUD received 97 public comments on the NSPIRE proposed Scoring notice. Below, HUD discusses these comments and the major changes from the proposed Scoring methodology.

Letter Grades

HUD proposed the use of letter grades in conjunction with inspection scores in the NSPIRE proposed Scoring notice. The rationale for using letter grades was rooted in making property inspection scores easy to interpret for HUD-assisted housing residents. Several public comments underscored how such letter grading might lead to misinterpreting the inspection outcomes, or possibly “stigmatize” affordable housing. In line with these potential concerns, letter grading has been removed from the final Scoring notice. HUD may decide to use letter

⁷ 88 FR 40832 (June 22, 2023)

⁸ Public comments can be reviewed in the rulemaking docket at: <https://www.regulations.gov/docket/HUD-2021-0005>.

grades in the future, and if so, will announce that decision via notice before implementing. Until such time, HUD will continue to only issue scores on the 0-100 point scale. An alternative suggestion was to adopt Management and Occupancy Review (MOR) terminology to eliminate the risk of misinterpretations in the public eye: superior, above average, satisfactory, below average, and unsatisfactory. REAC will share comments on the MOR process with the Office of Housing; that is not in the NSPIRE rulemaking.

Unit Threshold of Performance

In the NSPIRE final rule and proposed Scoring notice, HUD identified three inspectable areas: Unit, Inside, and Outside. For scoring, HUD proposed that properties be rated against two performance thresholds: 1) Properties need to score 60 or above in all inspectable areas (“Property Threshold of Performance”), and 2) a “Unit Threshold of Performance”; where a loss of 30 points or more in the Unit portion of the inspection will result in a score adjustment to 59 or failing, even if the Inside and Outside portions of the inspection allowed it to score over 60. The establishment of the Unit Threshold of Performance reflects HUD’s concern with resident health and safety in its inspection protocols. Several public comments misinterpreted the Unit Threshold of Performance to suggest that the deduction of 30 points or more in a single inspected unit could fail an entire property. This interpretation does not reflect the intended goal or application of this policy. This final Scoring notice clarifies that the Unit Threshold of Performance applies to all the inspected units in a property collectively (e.g., Unit Defection Deduction Value divided by the number of inspected units). Additionally, HUD will only lower the score to 59 if it was previously 60 or above. HUD will not further adjust scores that were already below 60.

Duplicate Defects

In the proposed NSPIRE Scoring notice, HUD scored all deficiencies, even repeated instances of the same deficiency. Public comments raised important considerations about certain

types of deficiencies; for example, some deficiencies can be observed in multiple rooms or inspectable items even if they are the same deficiency. Examples include pest infestation, blocked egress, sharp edges, and damaged walls. To estimate the scoring impact of scoring every deficiency cited versus the overall condition, HUD conducted a statistical analysis of how scoring the same deficiency multiple times affects overall property scores, using data gathered from the NSPIRE Demonstration. The analysis showed that the difference between point deductions for each instance of deficiencies and point deductions in only the first observation of the deficiency is small and might lead to a negligible increase in the inspection failure rate. In other cases – such as pest infestation – the final NSPIRE Standard will not require that the inspector count each piece of evidence of a pest as an individual deficiency and will, instead, characterize the infestation severity at the overall unit level. In view of the public comments and pilot testing results- and the minimal impact on overall inspection score - HUD will continue citing a deficiency multiple times in all inspectable areas (i.e., Unit, Inside, Outside) but will deduct points once per inspected unit, inspected building, or Outside area, for the Unit, Inside, and Outside areas, respectively. Examples of deficiencies that will be cited for each instance but scored only once in the same inspectable area include blocked egress, damaged doors, damaged walls, sharp edges, and infestation. This revision takes into consideration concerns expressed in public comments while upholding HUD’s focus on resident health and safety as standards for acceptable living conditions.

Comparison between UPCS and NSPIRE Standards and Scoring

Several public comments requested a comparison between UPCS and NSPIRE scoring methodologies. HUD is still considering publishing a crosswalk analysis of UPCS and final NSPIRE standards and scores. However, the two scoring methodologies are fundamentally different from each other in several ways, rendering a direct comparison uninformative. The two methodologies differ in what is inspected (e.g., new affirmative requirements) and the approach to assessment – determining health and safety impact rather than identifying the broken

component. Additionally, they differ in the scoring calculations, the weights assigned to each inspected item, how inspectable areas are structured, the weight of each inspectable area, and how individual inspectable area point deductions are aggregated. Some UPCS standards, such as overgrown vegetation, erosion, and graffiti are no longer standards, but related health and safety conditions are included as new defects under different standards and condensed to new thresholds that capture the most important adverse conditions.

Additionally, the number of inspectable areas under NSPIRE has been reduced for the purposes of protocols and scoring, but NSPIRE has not reduced the inspection footprint in the inside area. The outside areas assessed will be reduced with new inspection protocols and the number of inspectable items have been marginally reduced to capture the most critical health and safety conditions. The focus of the NSPIRE inspection will continue to be on the units and the places where residents spend time. These differences between UPCS and NSPIRE reflect HUD's renewed emphasis on resident health and safety.

Property Size

HUD's focus on units as the most important element of resident health and safety drives the NSPIRE scoring methodology. As part of this emphasis, the NSPIRE Scoring methodology no longer requires every building of the property to be inspected; instead, only those buildings that contain a unit in the inspection sample are to be inspected. The inspection will also include at least two non-dwelling area spaces, with a priority on spaces that residents can access or will spend time in, in addition to those common areas within a building that includes sampled units. For example, residents are more likely to spend time in a community room as compared to a basement storage area or the management office. Public comments expressed concerns about how this new approach might disadvantage properties of certain sizes or configurations, simultaneously. However, the comments appear to be based on an incorrect reading of the scoring formula. The NSPIRE scoring methodology controls for property size by dividing Defect Deduction Value for all three areas: Unit, Inside, and Outside portions of the inspection by the

number of units inspected. HUD's assertion is that number of units inspected is a simple and easy-to-measure proxy value for number of items inspected at a property. For large properties, there is a chance that the numerator, or number of total defects in each area will be larger because they will have more and larger common areas. Units inspected acts as a simple and easy-to-measure proxy value for number of items inspected at a property. For smaller properties, the concern is that the denominator will be smaller due to smaller number of units in the property, so every defect counts "more." By using the total number of units inspected as the denominator in the scoring formula, HUD controls for the effect of the property size on the overall score for both small and large properties. Dividing the Defect Deduction Value by the total number of units inspected normalizes the impact of deficiencies on the property score, thereby eliminating a potential source of bias in the scoring due to property size. Alternative measures to control for property size yielded inconclusive results. Further, HUD's systems of record do not include building square footage by inspectable area, so the number of units inspected acts as a simple and easy-to-measure proxy value for number of items inspected at a property. HUD will use its inspector protocols and the individual NSPIRE Standard to define what is inspected, by inspectable item. Further, not all non-dwelling or other inside areas will be inspected. By limiting the score deductions for repeated Life-threatening (LT) conditions, the size of the inspectable area or building will have less of an impact on the overall score..

II. The NSPIRE Scoring Model

A. Applicability of the NSPIRE Scoring Notice

The NSPIRE Scoring notice applies to all HUD housing currently inspected by REAC, including public housing and Multifamily Housing programs such as Project-based Rental Assistance, FHA Insured, and Sections 202 and 811 as described in the NSPIRE proposed rule at § 5.701.⁹

B. NSPIRE Scoring Format

⁹ 86 FR 2582 (Jan. 13, 2021).

NSPIRE will retain a 0-100 score for properties inspected by REAC. Any score under 60 is considered a failing score, and properties that score 30 or less will be automatically referred to HUD's Departmental Enforcement Center (DEC) for administrative review as provided in § 5.711(i).

C. Scoring Methodology

The NSPIRE scoring methodology converts observed defects into a numerical score. It implements the NSPIRE rule's intent to provide reliable evaluations of health and safety conditions in housing. In evaluating the UPCS inspection standards and scoring, HUD identified a disproportionate emphasis around the appearance of items that are otherwise safe and functional and that the inspection standards paid inadequate attention to the health and safety conditions within the inside and outside areas and housing units. To best protect residents, the NSPIRE inspections will prioritize conditions that are most likely to impact residents in the places where they spend the most time: in their units. Thus, standards which are categorized as more severe should have a greater impact on a property's score when deficiencies exist in the unit, and a property with a high number of observed health and safety defects in its units is more likely to fail an inspection than a comparable property with a lower number of health and safety defects.

HUD therefore scores deficiencies based on two factors: severity and location. The categories of severity, as provided in the proposed NSPIRE Standards Notice, are Life-Threatening, Severe, Moderate, and Low. As described in NSPIRE Standards, defect severity levels include the following characteristics:

- *Life-Threatening (LT)*. The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to a resident.
- *Severe*. The Severe category includes deficiencies that, if evident in the home or on the property, present a high risk of permanent disability, or serious injury or illness, to a

resident; or the physical security or safety of a resident or their property would be seriously compromised.

- *Moderate.* The Moderate health and safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.
- *Low.* Deficiencies critical to habitability but not presenting a substantive health or safety risk to resident.

The location categories provided in § 5.703 of the NSPIRE Rule are the unit, inside, and outside. Under the NSPIRE scoring methodology, in-unit deficiencies are weighted more heavily; properties with in-unit deficiencies are more likely to fail inspections. HUD weighs deficiencies using a Defect Severity Value. Under the Defect Severity Value methodology, the weight of the deduction for a given deficiency changes depending on both the location and the severity of the deficiency such that a LT deficiency inside a unit will lead to the largest deduction and a Low deficiency observed outside the property will lead to the smallest deduction of points. To determine the point deduction of a given deficiency, HUD uses the Defect Severity Values by Inspectable Area as shown in Table 1, based on the rates of change described more in Tables 2 and 3.

Table 1: Defect Severity Values

Defect Severity Category	Inspectable Area*		
	Outside	Inside	Unit
Life-Threatening (most severe)	49.6	54.5	60.0
Severe	12.2	13.4	14.8
Moderate	4.5	5.0	5.5
Low (least severe)	2.0	2.2	2.4

Based on the Defect Severity Values in Table 1, the sum of individual defect point deductions would be divided by the number of units inspected. If, for example, only one LT defect in a unit was observed during an inspection sample size of 10 units, and no other defects

were observed, the total deduction from the score would be 6 points (60.0 points divided by 10 units). See section D for additional details on property size adjustment. The survey referenced in Section I (Background) of the Proposed NSPIRE Scoring notice informed HUD’s determination of the Defect Severity Values in Table 1. On average, most respondents indicated that the difference between a LT and a Severe deficiency should be greater than the difference between a Severe and a Moderate deficiency. Accordingly, the Defect Severity Values translate to the following rates of change by defect severity category (shown only for the Outside inspectable area):

Table 2: Defect Severity Values and Rates of Change by Defect Severity Category

Defect Severity Category	Severity Value (Outside)	Severity Rate of Change*
Life-Threatening (most severe)	49.6	4.1 x Severe
Severe	12.2	2.7 x Moderate
Moderate	4.5	2.3 x Low
Low (least severe)	2.0	N/A

* Severity rate of change is rounded to the tenths decimal place.

Consistent with HUD’s goal of prioritizing the health and safety of residents, Table 2 illustrates that LT deficiencies affect inspection scores 4.1 times more than Severe deficiencies whereas the rate of change drops to 2.7 times from Severe to Moderate deficiencies and to 2.0 from Moderate to Low deficiencies. The rate of change at increasing severity levels is the same for all three inspectable areas; however, the following paragraph explains the defect value rate of change across inspectable areas.

Similarly, the Defect Severity Values increase by a factor of 1.1 from Outside to Inside and from Inside to Unit inspectable areas. For example, multiplying a Low defect located in an Outside inspectable area (with a severity value of 2.0) by 1.1 yields the Defect Severity Value for a Low Defect located in an Inside inspectable area with a value of 2.2. Similarly, when a Low defect located in an Inside inspectable area (with a severity value of 2.2) is multiplied by the rounded value of 1.1, it yields the Defect Severity Value of 2.4 for a Low defect located in a Unit

inspectable area. Table 3 illustrates the increase in Defect Severity Values by inspectable area (Note: The same rate of change by inspectable area applies to all Defect Severity Categories).

Table 3: Defect Severity Values and Rates of Change by Inspectable Area

Defect Severity Category	Inspectable Area		
	Outside	Inside	Unit
Low	2.0	2.2	2.4
Rate of Change	N/A	1.1 x Outside	1.1 x Inside

* Area rate of change is rounded to the tenths place.

According to the NSPIRE rule, the inspectable areas are described as follows:

Outside of HUD housing (or “outside areas”) refers to the building site, building exterior components, and any building systems located outside of the building or unit. Examples of “outside” components may include fencing, retaining walls, grounds, lighting, mailboxes, project signs, parking lots, detached garage or carport, driveways, play areas and equipment, refuse disposal, roads, storm drainage, non-dwelling buildings, and walkways. Components found on the exterior of the building are also considered outside areas, and examples may include doors, attached porches, attached patios, balconies, car ports, fire escapes, foundations, lighting, roofs, walls, and windows.

Inside of HUD housing (or “inside areas”) refers to the common areas and building systems that can be generally found within the building interior and are not inside a unit. Examples of “inside” common areas may include, basements, interior or attached garages, enclosed carports, restrooms, closets, utility rooms, mechanical rooms, community rooms, day care rooms, halls, corridors, stairs, shared kitchens, laundry rooms, offices, enclosed porches, enclosed patios, enclosed balconies,¹⁰ and trash collection areas. Examples of building systems include those components that provide domestic water, electricity, elevators, emergency power, fire protection, HVAC, and sanitary services.

¹⁰ Enclosed porches, enclosed patios, and enclosed balconies in the Inside inspectable area are available for the use of multiple tenants and are not accessible solely from a unit. By comparison, porches, patios, and balconies in the Unit inspectable area are intended for the sole use of the unit and only accessible from the unit.

Unit (or “dwelling unit”) of HUD housing refers to the interior components of an individual unit. Examples of components included in the interior of a unit may include the bathroom, call-for-aid (if applicable), carbon monoxide devices, ceiling, doors, electrical systems, enclosed patio, floors, HVAC (where individual units are provided), kitchen, lighting, outlets, smoke detectors, stairs, switches, walls, water heater, and windows.

D. Final Scoring Conversion

Property size can affect the number of defects observed during inspections; in properties where HUD inspects a larger number of units, the total number of defects observed can be expected to be higher compared to properties where HUD inspects a small number of units. In the absence of controls for property size, larger properties can face a higher point deduction simply because they have a higher number of units inspected, which can result in a higher number of deficiencies. Not taking property size into consideration in scoring is likely to severely disadvantage larger properties. The NSPIRE scoring methodology normalizes the Total Defect Deduction Value by dividing it by the total number of units inspected. This normalization allows the calculation to minimize the effect of property size on inspection scores and aligns with NSPIRE’s emphasis on protecting residents’ health and safety by focusing on areas where residents spend most of their time. The number of units inspected is a simple and easy-to-measure proxy value for number of items inspected at a property. To obtain Defect Deduction Value Per Unit, the Defect Deduction Values for all three inspectable areas are summed to yield Total Defect Deduction All Areas, which is then divided by the number of units inspected. The formula is represented below:

$$\text{Total Defect Deduction Value All Areas} / \text{Number of Units Inspected} = \text{Defect Deduction Value Per Unit}$$

To determine the final property score on a 100-point scale, the Defect Deduction Value Per Unit is subtracted from 100:

$$100 - (\text{Defect Deduction Value Per Unit}) = \text{Final Score}$$

Note: Inspection scores cannot go below zero; if the calculation yields a result below 0, the score is set to 0.

E. Fail Thresholds

This Scoring notice retains the provisions from UCPS to consider a score below 60 as failing and adds a new Unit Threshold Fail. Administrative review of properties that fail in § 5.711(i):

- *Scores below 60 (Property Threshold Fail)*. Consistent with existing policy and practice, the Property Threshold of Performance is defined as properties that achieve a score of 60 or above. Failure to achieve a score of 60 or above is considered a failing score.
- *Unit Point Deduction 30 or above (Unit Threshold Fail)*. Consistent with HUD's goal of maximizing the health and safety of a unit for residents, HUD has determined that the properties for which a substantial proportion of point deductions are from Unit deficiencies should be considered failures even if the rest of the property is in pristine condition. Therefore, regardless of the overall property score, if 30 points or more are deducted due to Unit deficiencies, HUD considers the property to have failed the inspection and deems the result of the inspection to be a score of 59. The Unit Point Deduction of 30 points applies to the Unit inspectable area at the aggregate level only; it does not refer to an individual unit's loss of 30 points in the inspection, thereby leading to a failing score for the entire property. Properties are evaluated at the Unit portion of the inspection collectively.

Properties that received a score under 60 are required to perform an additional survey as described at 5.711(c)(2); properties that receive two successive scores under 60 on its inspection may be referred for administrative review as described at § 5.711(i).

III. Examples

Example 1: A Property where HUD Inspects 10 Units as Part of its Inspection Sample

The following example demonstrates a 10-unit inspection in which the property passes the inspection with a score of 80. In this example, an Inspector conducted an inspection of Property L and observed various deficiencies in all three inspectable areas (Unit, Inside, and Outside) inspected under the NSPIRE Standards. The following defects in the corresponding Defect Severity Value categories were recorded by the inspector:

Table 4: Example 1 - Defects Observed During an Inspection of 10 Sampled Units in Property L

Defect Severity Category	Outside	Inside	Unit
Life-Threatening	0	0	2
Severe	0	2	1
Moderate	0	3	0
Low	1	10	0
Total by Inspectable Area	1	15	3

Under the NSPIRE scoring methodology, each defect is multiplied by the corresponding Defect Severity Value to calculate the Defect Deduction Values (Inspectable Area), which are then added to calculate the Total Property Defect Deduction Value. Table 5 shows the calculations for Defect Deduction Values (Inspectable Area):

Table 5: Example 1 – Total Property Defect Deduction Value Calculation

Defect Severity Category	Outside	Inside	Unit
Life-Threatening	$0 \times 49.6 = 0$	$0 \times 54.5 = 0$	$2 \times 60 = 120$
Severe	$0 \times 12.2 = 0$	$2 \times 13.4 = 26.8$	$1 \times 14.8 = 14.8$
Moderate	$0 \times 4.5 = 0$	$3 \times 5 = 15.0$	$0 \times 5.5 = 0$
Low	$1 \times 2.0 = 2.0$	$10 \times 2.2 = 22.0$	$0 \times 2.4 = 0$
Defect Deduction Values (Inspectable Area)	2.0	63.8	134.8
Total Property Defect Deduction Value (All Inspectable Areas)	$2.0 + 63.8 + 134.8 = 200.6$		

The Defect Deduction Value Per Unit is calculated by dividing the Total Property Defect Deduction Value (200.6) by the number of units inspected of 10 for a value of 20.06 (values and calculations in parentheses):

$$\text{Total Defect Deduction Value (200.6) / Number of Units Inspected (10) = Defect Deduction Value Per Unit (20.06)}$$

The property’s raw score, before rounding, on the 100-point scale is then calculated as follows:

$$100 - \text{Defect Deduction Value Per Unit (20.06)} = \text{Raw Score (79.94)}$$

This score is rounded up to 80.

Example 2: A Property where HUD inspects 10 units and the Unit Defect Deduction Value is above 30

Table 6: Example 2 - Defects Observed During an Inspection of 10 Sampled Units in Property

Defect Severity Category	Outside	Inside	Unit
Life-Threatening	0	0	4
Severe	0	2	4
Moderate	0	3	2
Low	2	10	0
Total by Inspectable Area	2	15	10

The following is another example that demonstrates a 10-unit inspection of Property T that would receive a score above 60 but ultimately fails the NSPIRE inspection based on Unit Point Deduction threshold. In this example, the following defects and the corresponding Defect Severity Value categories are recorded by the inspector:

Table 7: Example 2 – Total Defect Deduction Values (Inspectable Area)

Defect Severity Category	Outside	Inside	Unit
Life-Threatening	0 x 49.6 = 0	0 x 54.5 = 0	4 x 60 = 240
Severe	0 x 12.2 = 0	2 x 13.4 = 26.8	4 x 14.8 = 59.2
Moderate	0 x 4.5 = 0	3 x 5 = 15	2 x 5.5 = 11
Low	1 x 2 = 2	10 x 2.2 = 22	0 x 2.4 = 0

Defect Deduction Values (Inspectable Area)	2	63.8	310.2
Total Property Defect Deduction Value	2 + 63.8 + 310.2 = 376		

In this example, defects were observed in all three Inspectable Areas. The Total Defect Deduction Value for All Inspectable Areas equals to 376; adjusting for the sample size of 10 units as follows (values and calculations in parentheses), yields a Defect Deduction Value Per Unit of 37.6:

$$\text{Total Defect Deduction Value All Areas (376) / Number of Units Inspected (10) = Defect Deduction Value Per Unit (37.6)}$$

The property's inspection score is calculated as follows:

$$100 - \text{Total Defect Deduction Value All Areas Per Unit (37.6)} = \text{Final Score (62.4)}$$

Property T's overall inspection result would be considered passing under UPCS scoring, as the final score would be rounded to 62. However, under NSPIRE, the Unit Defect Deduction needs to be considered before determining the final inspection score for the property. Using the Defect Deduction Value (Unit Area) of 310.2, the Unit Threshold of Performance is calculated as follows (values and calculations in parentheses):

$$\text{Total Defect Deduction Value per Unit (Inspectable Area) (379) / Sample Size (10) = Final Unit Defect Deduction (31.02)}$$

Based on the Unit Threshold of Performance, the property would fail the inspection because the Final Unit Defect Deduction is over 30 (31.02), leading to an automatic adjustment to a failing score of 59 despite the fact that the overall score is greater than 60. The reason for the property's failure to pass the inspection is the property's aggregate poor performance in the Unit portion of the inspection, which represents the entirety of the units included in the inspection and not any individual unit.

The table below provides a summary of the Property and Unit Thresholds of Performance and details the circumstances in which a property passes an inspection based on the examples of Property L and Property Y above.

Table 8: Summary of Property and Unit Thresholds of Performance and Inspection Outcomes

Inspection Results	Property L	Property T
Property Score ≥ 60	Yes	Yes
Final Unit Defect Deduction ≤ 30	Yes	No
Overall Inspection Result	PASS	FAIL

IV. Administrative Details

A. Rounding

Calculated scores will be rounded to the nearest whole number with one exception. For properties that score between 59 and 60, the score will be considered failing or properties that score between 59 and 60, the score will be considered failing and automatically rounded down to a 59. This reflects HUD’s concern that properties must surpass these scoring thresholds to be considered at or above those scores which may dictate HUD’s administrative, oversight, monitoring, and enforcement approach for poorly scoring properties.

B. Inspection Report

In the inspection report provided to property ownership and/or management, HUD will provide the overall score and indicate the numerical results for each of the two types of inspection evaluations that determine whether the property passes or fails the inspection:

- Property Threshold Fail: Property Score on the zero to 100-point scale
- Unit Threshold Fail: Defect Deduction Value (Inspectable Area) Per Unit

C. HUD’s Use of NSPIRE Inspection Data and Scores

HUD uses property scores to support monitoring and enforcement of HUD’s physical condition requirements. Property scores give HUD, the owner or PHA, and any other relevant parties an evaluation of the overall physical condition of the property. A high or low score does

not change the obligation that a participant is required to repair all deficiencies identified in the inspection, including repairing similar deficiencies that may not have been included in the sampled units as required by § 5.711. As provided in § 5.705(e), HUD retains the ability to inspect any unit at any property and requires that the owner or PHA corrects the same deficiencies in units that may not have been included in the sample of units for that particular inspection. Further, under § 5.711(j), HUD may take additional administrative action which may be necessary and as authorized under existing statutes, regulations, contracts, grant agreements or other documents, to protect HUD's interests in HUD housing properties and to protect the residents of these properties.

As provided in the NSPIRE final rule, property scores will determine:

- *Frequency of Inspections:* Properties that score higher are inspected less frequently (§5.705(c));
- *Enforcement:* Properties that fail or score below certain thresholds may be subject to HUD enforcement actions, including referral to the DEC (§5.711(i));
- *Completion of a Post-report Survey:* At the completion of a REAC inspection, the owner or PHA must review the inspection report and perform a survey of units not inspected and provide that information to HUD. For properties that scored at or above 60, the survey may be limited to inspecting for deficiencies based on the inspecting entity's inspection findings. For properties that scored below 60, the owner or PHA must conduct a survey of the entire project, including all units, inside areas, and outside areas, for any deficiency, and must electronically submit a copy of the results of the survey to HUD. (§ 5.711(c)(2));
- *Public Housing Assessment System (PHAS) Designations:* Average weighted inspection scores comprise forty (40) points of a public housing agency's PHAS designation. Properties that are Physically Substandard or Troubled are subject to additional requirements at § 902.73 and § 902.75;

- *Participant Evaluation:* Inspection scores are considered when determining whether a potential or existing HUD Multifamily business stakeholder may expand its involvement in HUD housing; and
- *Risk Assessment:* HUD's Offices of Multifamily Housing and Public Housing use inspection scores and pass/fail designations to assess the risk of owners/agents and public housing agencies.
- *Research:* HUD may use data gathered from physical inspection for research purposes and to improve its programs.

D. Non-Scored Defects and New Affirmative Requirements

In recognition of its long-standing practice of not scoring smoke detector defects under the UPCS scoring methodology, HUD continues to not score smoke detector defects and uses an asterisk (*) to denote identified smoke detector defects. The asterisk is appended to the numerical property score, and it is critical to note that these defects are classified as LT defects and must be corrected within 24-hours even though these defects are not scored. HUD follows the same policy for carbon monoxide devices and will use a plus (+) sign to denote carbon monoxide device defects. These devices are critical to safety and must be maintained and corrected within 24 hours, but are often disabled or removed by residents, and scoring them would result in many properties failing or scored at 0. HUD may further assess and work with PHAs and property owners that have ongoing deficiencies related to either smoke detectors or carbon monoxide detectors to remediate these issues through available funding, including using newer technologies that are more tamper-resistant. Further, some items, such as call-for-aid systems may be present in units but not currently used by the building management and have been modified or damaged by the tenant or their cat, for example, and will also not be scored. Otherwise, call-for-aid systems that are in use by the building management will continue to be scored. A quick list of these items is below:

Not Scored

1. Carbon Monoxide Device
 - a. All Defects
2. Smoke Alarm
 - a. All Defects (including the new “Smoke Alarm is Obstructed” defect)
3. Call-for-Aid
 - a. System is blocked, or pull cord is higher than 6 inches off the floor.
 - i. All locations
4. Handrail
 - a. Handrail is missing.
 - i. All locations
 - b. Handrail is not installed where required.
 - i. All locations

Similarly, HUD recognizes that the NSPIRE Standards include new affirmative requirements defined generally as property attributes or requirements that must be met. The lack of these property attributes, which may include the quantity and location of these items (e.g., GFCI outlets) constitutes a defect and result in a deduction from the property’s inspection score. HUD understands that it may take properties’ ownership and management some time to comply with these new affirmative requirements; hence, HUD will not score new affirmative requirements, which are defined as those standards that were expressly not in the UPCS or in any way covered by those standards, in at least first 12 months of NSPIRE inspections for the program from the later effective date, ending October 1, 2024 for public and Multifamily Housing programs. HUD will also not score fire doors during this period, since the Fire Door NSPIRE Standard is new and properties may need to replace doors to meet the standard. Otherwise, call-for-aid systems that are in use by the building management will continue to be scored. Items that will not be scored until at least October 1, 2024, include:

1. Fire Labeled Doors
 - a. All Defects
 - i. All locations
2. Electrical – GFCI
 - a. An unprotected outlet is present within six feet of a water source.
 - i. All locations
3. Guardrail
 - a. All Defects
 - i. All locations
4. HVAC

- a. The inspection date is on or between **October 1 and March 31** and the permanently installed heating source is working and the interior temperature is **64 to 67.9** degrees Fahrenheit.
 - i. All locations
 - b. The inspection date is on or between **October 1 and March 31** and the permanently installed heating source is not working or the permanently installed heating source is working and the interior temperature is **below 64 degrees** Fahrenheit.
 - i. All locations
 - c. The inspection date is on or between **April 1 and September 30** and a permanently installed heating source is damaged, inoperable, missing, or not installed.
 - i. All locations
5. Interior Lighting
- a. At least one (1) permanently installed light fixture is not present in the kitchen and bathroom.
 - i. All locations
6. Minimum Electrical and Lighting
- a. At least two (2) working outlets are not present within each habitable room. OR

At least one (1) working outlet and one (1) permanently installed light fixture is not present within each habitable room.

During this initial period of implementation until October 1, 2024, HUD will provide additional information to help PHAs and POAs estimate their score if all the new requirements were scored, to see the potential impact in future inspection and scoring. The Final score report will be provided within 90 days of the inspection and prior to the property's next inspection in most cases, unless HUD needs to conduct a risk-based inspection more immediately. The deadlines in this section may be revised if the inspection is subject to a technical review.

E. Scoring Designations

HUD supplements a property's zero to 100-point score with the following designations that provide property ownership and/or management, residents, and other stakeholders with information important to understanding the overall inspection results. These designations include:

- **Smoke Detectors:** An asterisk (*) next to the property's zero to 100-point score indicates whether an inspector observed a smoke detector defect during an inspection.

- **Carbon Monoxide Detectors:** A plus sign (+) next to the property's zero to 100-point score indicates whether the inspector observed a carbon monoxide detector defect during an inspection.
- **Presence of Certain Defect Severity Levels:** HUD previously provided a letter designation (e.g., a, b, c) to indicate the presence of exigent health and safety defects; NSPIRE does not use such letter designations. HUD instead provides a summary table of the defect observations by Defect Severity Category, e.g., Life-threatening, Severe, Moderate, and Low. At the conclusion of the inspection, the PHA or Owner will receive a list of Life-threatening and Severe items that must be corrected within 24 hours of the inspection.
- **Certain New Requirements:** Until at least October 1, 2024, new requirements that were not scored will be flagged with a caret (^) symbol. Standards that may need more calibration through field testing, such as a minimum temperature standard, may be not scored for more than a year. In at least the initial year of NSPIRE, HUD will also provide two scores; one that shows the potential score if new requirements were scored, and the official score for that inspection.

F. Defect Remediation and Pass/Fail Status

As provided in § 5.711(c), HUD will evaluate the extent to which property ownership and/or management complies with its requirements to submit documentation indicating certain more severe defects have been remediated or are at least in the process of being remediated (e.g., the property implemented an integrated pest management plan to address infestation). HUD will use its administrative authority in its regulations to compel compliance. More information is provided in the NSPIRE Administrative notice.

G. Draft and Final Inspection Reports, Preliminary and Final Scores

After July 1, 2023, REAC will issue a draft inspection report with a Draft Inspection Score and a recordation of all defects including those that must be addressed within certain

timeframes following an inspection. HUD will issue a Final Inspection report with a final score and a recordation of all defects following the technical review process specified in the NSPIRE Administrative Procedures Notice. Further, under § 5.711(j), HUD may take additional administrative action which may be necessary and as authorized under existing statutes, regulations, contracts, grant agreements or other documents, to protect HUD's interests in HUD housing properties and to protect the residents of these properties. Both the draft and final reports will also provide summaries of the inspection results.

H. Unit Sampling

HUD's inspection program and scoring methodology under NSPIRE relies on inspecting a statistically significant sample of units to achieve a 90 percent confidence level with a 6 percent margin of error for its inspections. HUD employed the same confidence level and a similar margin of error under UPCS, but had a maximum number of units inspected of 27 under UPCS. Under the NSPIRE scoring and sampling methodology, HUD changed the process to align with NSPIRE goals and the resultant increased the maximum number of units included in the scoring sample to 32 units. This sampling methodology with the corresponding assumptions allows HUD to balance between conducting physical inspections of HUD-assisted property for oversight and avoiding a major time burden on residents through additional inspections. HUD established in the NSPIRE Rule other mechanisms for oversight of housing conditions through PHA self-inspections and post-inspection activities. This increase in sample sizes helps achieve consistency in inspection results across all sizes of properties.

Under the UPCS scoring and sampling methodology, many inspections required that every residence building be inspected regardless of whether any units within that building were subject to inspection. HUD is eliminating that requirement, and only buildings in the sample will be inspected. Further, HUD is limiting the number of non-dwelling spaces inspected to those where residents spend more time. Under the NSPIRE scoring and sampling methodology,

building-level sampling is driven by units. For any building that contains a unit in the inspection sample, the building will also be inspected.

Achieving a uniform confidence level is critical to the overall accuracy of HUD inspections and benefits residents and property ownership and/or management by reducing the number of re-inspections due to inspections that do not meet HUD's standards for accuracy. Under current HUD regulations, as affirmed in the NSPIRE rule, and HUD's contracts with owners and operators of HUD-assisted and insured housing, units should meet HUD's physical condition standards 365 days a year.

The inspection sample sizes adopted under the NSPIRE sampling methodology are provided in Table 9. The sample sizes were developed to consider the desired confidence interval (90 percent), margin of error (6 percent), and expected defect population proportion (3.97 percent).¹¹ HUD calculated the sample size for every possible population of units by solving for the lowest possible minimum sample size in the following equation:¹²

$$\varepsilon < z * \frac{\sqrt{\frac{(N - s) * p * (1 - p)}{N * (s - 1)}}}{(1 - p)}$$

Where:

- ε = margin of error
 - In this case, 6 percent
- z = z-score corresponding to confidence interval
 - In this case, ~1.65 corresponds to 90 percent two-sided confidence interval
- p = expected defect population proportion
 - In this case, HUD used a proportion of 3.97 percent
- N = unit population

¹¹ Based on an analysis of historical UPCS data, this is the estimate of the percentage of units with more than 3 unique NSPIRE defects.

¹² Cochran, William G., Sampling Techniques, New York: John Wiley & Sons, Inc., 1977

- s = minimum sample size

[Note: For comparison purposes, the UPCS sampling methodology is also provided in Table 9, although the unit grouping does not fully align.]

V. Inspection Sample Sizes

Table 9: Number of Units Sampled under NSPIRE Scoring and Sampling Methodology Based on Property Size

Units in Property	UPCS Sample	NSPIRE Sample
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	5	6
7	6	6
8	7	7
9	7	8
10	8	8
11-12	8	9
13-14	9	10
15-16	10	11
17-18	11	12
19-21	12	13
22-24	13	14
25-27	14	15
28-30	14	16
31-35	15	17
36-39	16	18
40-45	17	19
46-51	18	20
52-59	18	21
60-67	19	22
68-78	20	23
79-92	21	24
93-110	21-22	25
111-132	22-23	26
133-166	23-24	27
167-214	24-25	28
215-295	25	29
296-455	25-26	30
456-920	26	31
921+	27	32

VI. NSPIRE and the Public Housing Assessment System (PHAS)

For Public Housing properties subject to the Public Housing Assessment System, HUD will use the NSPIRE scoring methodology and associated property inspection scores to calculate the PHAS Physical Condition Indicator component of PHAS once a PHA's entire portfolio has been inspected under NSPIRE. This indicator, also known as the Physical Assessment Sub-system (PASS) indicator, comprises 40 points of the 100-point PHAS score, except for Small and Rural PHAs, which are subject to 24 CFR 902 Subpart H. HUD will employ the same unit-weighted average score methodology under § 902.22 to calculate the PASS indicator score for PHAs subject to PHAS in calendar year 2023 using NSPIRE property inspection scores. Until all properties with public housing units are inspected under NSPIRE, a PHA's physical condition indicator will continue to be based on the most recent UPCS scoring and unit-weighted average.

Adrienne Todman,
Deputy Secretary.

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