

Methodology for Computing FSS Achievement Metrics (“FAM”) Scores

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This methodology describes how HUD computes the FAM Scores for FSS programs run by Public Housing Agencies (PHAs) and other awardees of FSS coordinator funding (other than the initial 39 Moving to Work [MTW] agencies¹). It is based on HUD-50058 form data that PHAs submit to the PIH Information Center (PIC), or any subsequent system such as the Housing Information Portal (HIP), and the results of FSS coordinator funding competitions.

A PHA’s FAM Score is calculated based on three measures, weighted as follows:

- A. Earnings Performance Measure (50%)
- B. Graduation Rate (30%)
- C. Participation Rate (20%)

Together, the Earnings Performance Measure, Graduation Rate, and Participation Rate provide a balanced measurement of the performance of an individual FSS program. The three measures are calculated as follows:

A. Earnings Performance Measure Calculation

The Earnings Performance Measure gauges the extent to which the earnings² of FSS participants increase over time after joining the FSS program. In developing the methodology for this measure, HUD has been sensitive to the fact that some FSS programs encourage FSS participants to immediately increase their earnings while others encourage FSS participants to first build human capital through education and training in order to qualify for higher paying

¹ Initial MTW PHAs are those that received MTW Demonstration designation prior to December 15, 2015. Expansion MTW PHAs were brought onto the Demonstration after December 15, 2015 and this notice applies to those PHAs.

² For the purposes of the FSS program and these FSS measures, earnings are defined as annual earnings from all wage sources, as recorded on the HUD-50058 form. These include the following form 50058 income codes: B-Own Business, F-Federal Wages, HA-PHA Wage, M-Military Wage or W-Other Wage.

jobs. The methodology is also sensitive to the fact that the earnings of low-income workers are often volatile, and that the economic conditions in which different FSS programs are operating vary from community to community.

To accommodate these different factors and control for variations among FSS programs, HUD calculates the Earnings Performance Measure for each FSS program using the process outlined below. HUD applies this process to the population of FSS participants who enrolled in the FSS program 3.5 to 7.5 years prior to the quarter of data being used from PIC to calculate the Earnings Performance Measure for each year. In the final step, HUD averages the Earnings Performance Measure for each PHA for each of the three most recent years to determine a PHA's three-year average Earnings Performance Measure.

Controlling for Variations in the Composition of Local FSS Programs: While households with elderly heads or heads who are a person with disabilities may participate in FSS, such households are not included in the calculation of a PHA's earnings performance measure. This ensures that PHAs that serve larger shares of such households are not disadvantaged in the performance measurement process as compared to PHAs that serve smaller shares of such households.

Specifically, in calculating the earnings performance measure, HUD excludes FSS participants who become classified as disabled at any point during their participation. HUD includes within the measure FSS participants that begin the FSS contract below age 62, even if they reach or exceed the age of 62 during their Contract of Participation.

Controlling for FSS Program Model and Earnings Fluctuations: To calculate an Earnings Performance Measure for a PHA for a given year, HUD first measures the growth in annual household earnings of each household enrolled in FSS at the PHA in two ways and selects the higher of the two measures for each household:

1. *Earnings Growth Since Enrollment*: the difference between (i) annual earnings upon enrollment in FSS and (ii) the most recent earnings estimate available in PIC for that household from an annual reexamination.

2. *Average Annual Earnings While in FSS*: the difference between (i) earnings upon enrollment in FSS and (ii) the household's average annual earnings during the time period between enrollment in FSS and the most recent annual reexamination of income available in PIC.

Controlling for FSS Program Model and Earnings Fluctuations: HUD selects the higher of the two measures for each household in order to accommodate different approaches to implementing FSS while also correcting for variations in year-to-year earnings, which can be volatile for low-income households. Some PHAs encourage FSS participants to focus immediately on increasing their earnings, while others encourage FSS participants to focus on obtaining education and building skills first and then seek a higher paying job once they have stronger credentials. Other agencies use both approaches, tailoring the approach to each individual. Measure 1, *Earnings Growth Since Enrollment*, accommodates programs that encourage participants to focus first on education and training, while both measures work acceptably for programs that encourage individuals to increase their earnings immediately. Measure 2, *Average Annual Earnings While in FSS*, focuses on the difference between starting and average annual earnings, which ensures that an FSS participant who has made good progress in increasing earnings while in FSS, but who nevertheless has experienced a temporary setback of job loss as of the most recent annual reexamination, nevertheless has his or her progress recognized. For each household, the Earnings Performance Measure focuses on the higher of the two measures, maximizing HUD's ability to recognize households' progress toward increased earnings while participating in FSS.

Controlling for Local Economic Conditions: Because economic conditions vary from one community to the next, HUD has built in mechanisms to control for these differences. HUD adjusts for local economic conditions in two ways. First, HUD compares the average earnings growth of FSS participants at a PHA to the average earnings growth for nonparticipants with similar characteristics at the same PHA. The difference in performance between the two groups represents the “unadjusted” Earnings Performance Measure for that PHA. Since the earnings of non-FSS participants would be expected to grow faster at PHAs located in stronger job markets than in PHAs located in weaker job markets, this comparison helps to account for differences in local economic conditions, which facilitates a meaningful comparison of earnings growth across FSS programs. Second, HUD adjusts the Earnings Performance Measure for each PHA using statistical techniques described below to account for any residual effects of local economic conditions to compute the final Earnings Performance Measure for each PHA in a given year.

Specifically, to calculate an Earnings Performance Measure for each PHA in a given year, HUD:

- Selects three comparison households for each FSS household based on the extent to which the comparison households are similar to the FSS household on the following characteristics: earnings as of the time of the FSS household’s entry into FSS, age of head of household, length of time in the voucher or public housing program, number of adults in the household, number of children in the household, presence of a child with a disability, and presence of a non-head of household adult with a disability. In the event that the number of comparison households cannot be narrowed to three based solely on their similarity to the FSS household, all households that are equally similar to the FSS

household as any of the three most similar comparison households will be included as comparison households.

- Calculates the earnings growth for all of the comparison households using the same approach used to calculate the earnings growth for FSS households, with the FSS household's enrollment date being applied to its comparison households for purposes of calculating the comparison households' initial earnings.
- Calculates the difference between the average earnings growth for all FSS participants and the average earnings growth for all comparison households at each PHA. The difference between the two represents the unadjusted earnings performance measure for that PHA.

HUD applies this measure to all FSS participants with a head of household who is neither elderly nor a person with disabilities who joined FSS between 3.5 and 7.5 years prior to the end of the quarter of the PIC extract used to calculate the score for a given year. For example, if the PIC data extract being used ended in March 31, 2017, HUD's calculation of earnings performance measures would focus on FSS participants who joined the FSS program between October 1, 2009 and September 30, 2013. This methodology aggregates information for four years of FSS data in order to generate a large enough sample to analyze. The methodology does not examine data for participants that have entered the FSS program more recently than 3.5 years ago to allow sufficient time to have passed for FSS participants to have benefitted from the program. At the same time, the methodology does not focus only on an older sample of FSS participants to ensure that the results reflect recent FSS program performance to the maximum extent practicable.

Finally, HUD adjusts for local economic conditions. To illustrate why this is important, consider that New York City offers a higher minimum wage than Toledo, Ohio. The FSS programs in both cities may be equally successful at motivating clients to join the workforce (perhaps in both areas the same percentage of FSS clients return to work), but the FSS program in New York City would likely produce a higher Earnings Performance Measure because FSS clients can command higher wages in New York City compared to Toledo. To adjust for this, HUD first uses a linear regression model to examine the relationship between the Earnings Performance Measures across PHAs and the median incomes of the counties in which each PHA serves clients. On average, unadjusted Earnings Performance Measures tend to be higher in counties with high median incomes, and lower in counties with low median incomes. HUD adjusts for the variation by using the relationship estimated in the linear regression, and applies this adjustment factor to the earnings performance measure for each PHA, resulting in an adjusted Earnings Performance Measure that is used to determine the PHA's score for the earnings component of the performance measurement system. HUD implements this adjustment in a way that ensures the average of the adjusted Earnings Performance Measure is the same as the average of the unadjusted measure.

Computing the three-year average. As a final step, HUD averages the Earnings Performance Measures for each of the past three years to construct the three-year average Earnings Performance Measure. This is analogous to using three years of grades to calculate a student's grade point average rather than relying solely on one year of grades. The three-year average provides a more comprehensive measure of performance and helps correct for any significant impact in one year (e.g. the closing of a nearby factory or the impact of COVID-19). For example, if the PIC data being used go through December 31, 2019, HUD would determine the Earnings Performance Measure for each PHA for three periods: the periods ending December

31, 2017, December 31, 2018 and December 31, 2019. HUD would then compute the average of these three measures to determine the three-year average Earnings Performance Measure. HUD uses the three-year average Earnings Performance Measure to determine the PHA's Earnings Performance Score by applying the applicable thresholds described below.

If sufficient data are not available to calculate one or more years of Earnings Performance Measures, HUD uses an average of the Earning Performance Measures for the years for which a measure can be calculated.

Technical notes:

1. In measuring earnings growth, the methodology focuses solely on earnings determined through annual reexaminations, disregarding the results of any interim reexaminations. The reason for doing this is that not all PHAs require interim reexaminations of income when earnings rise in between annual reexaminations. To ensure an apples-to-apples comparison of earnings growth across PHAs, HUD focuses only on annual reexaminations. An annual progress report is required for every FSS participant regardless of the spacing of rental re-examinations, so PHAs involved in rent reform demonstrations (but not the initial 39 MTW PHAs) would be included in this scoring.
2. Under certain circumstances, HUD will require that comparison households be in the same county and PHA as the FSS participants to which they are being compared. HUD will apply this protocol to all state PHAs and to any additional PHAs where three or more counties are each home to at least 10 percent of households receiving housing assistance from the PHA (through HCV or public housing). To ensure this approach does not unduly dilute the ability to find

comparable households, HUD will require that FSS participants be matched to comparison households in the same county only in counties where there are at least 4 times as many non-FSS households as FSS households being served by the PHA.

B. Graduation Rate Calculation

This measure examines the share of FSS participants at each PHA who have “graduated” from the FSS program. It is calculated based on the Graduation Rate of FSS participants who entered each PHA’s FSS program 5 to 8 years before the end of the quarter of PIC data being used. The methodology focuses on these households to allow sufficient time for most of the FSS participants who will graduate to have done so. HUD considered focusing on an older cohort to capture 100% of the FSS participants who will graduate, but HUD determined that it was more advantageous for the period analyzed to include more recent performance by the PHA.

Controlling for Turnover Rates: Turnover rates at PHAs can vary significantly for reasons unrelated to FSS. To avoid penalizing programs with higher turnover, HUD excludes non-graduating FSS participants who exited the Housing Choice Voucher (HCV) or Public Housing programs before the end of the analysis period from both the numerator and the denominator in calculating the Graduation Rate.

Computing the three-year average. As a final step, HUD averages the Graduation Rate for each of the past three years to construct the three-year average Graduation Rate. For example, if the data being used go through December 31, 2019, HUD would compute the Graduation Rate for each PHA for the periods ending December 31, 2017, December 31, 2018, and December 31, 2019 and then the average of these three measures to produce the three-year average Graduation Rate. HUD uses the three-year average Graduation Rate to determine the PHA’s Graduation Score by applying the thresholds described below.

If insufficient data are available to produce a Graduation Rate across all three years, HUD averages the Graduation Rates for the years for which a Graduation Rate can be calculated.

C. Participation Rate Calculation

The Participation Rate is the ratio of the number of FSS participants being served to the minimum number expected to be served under the standards used for awarding funding under the FSS Notice of Funding Opportunity (NOFO). Agencies that exactly meet the standard will have a ratio of 1.0. Agencies that serve more than the required number will have a ratio above 1.0. Agencies that serve fewer than the required number will have a ratio below 1.0.

To calculate the Participation Rate, HUD first calculates the minimum number of FSS participants that HUD expects each PHA to serve for each of the most recent three (3) fiscal years for which both funding award and number served data are available. HUD calculates this number based on the guidelines in the NOFO and the number of coordinators funded in each agency during each year. HUD then sums the number of FSS participants actually served in each of the three years based on PIC data. Finally, HUD divides the total number of FSS participants served in each PHA by the total minimum number expected for the PHA's HUD-funded coordinator positions to determine the Participation Rate. If funding is only awarded to the PHA in one or two of the three years, the measure only uses data for the years for which funding was awarded. Note that this metric, while similar, is different from the "number of participants served," which has been used in NOFO competitions and assesses only the most recent period of performance.

Controlling for Annual Variation and PIC Reporting: HUD also separately calculates the Participation Rate for the most recent year and then grades a PHA's Participation Rate based on the higher of: (a) the PHA's three-year average and (b) the most recent year. Looking at the higher of these two values allows HUD to use the most recent available data for PHAs that have

made progress in increasing the number served while avoiding penalizing PHAs for the results of an atypical year. It also ensures that PHAs that have improved the quality of their PIC reporting on FSS participation can be judged based on the FSS participant counts derived from recent PIC reports, rather than from reports submitted in earlier years. Given the guidance that HUD issued on PIC reporting for FSS on May 16, 2016 (PIH Notice 2016-08), HUD expects the quality of FSS reporting to PIC to have improved in recent years and reminds PHAs of the importance of ensuring accurate and timely submissions of FSS Addendums to PIC.

As calculated using the procedures described above, the Participation Rate is higher if the PHA has served more participants relative to its funding level. The ratio required in the NOFO is 25 for one full-time coordinator and 50 for each additional full-time coordinator. For example, a PHA with 1 funded full-time coordinator is expected to serve at least 25 participants during the year, while a PHA with 3 funded full-time coordinators is expected to serve at least 125 participants. If the PHA with 1 coordinator serves 40 FSS participants (much more than the minimum required) and the PHA with 3 coordinators serves 130 participants (only slightly more than the minimum expected), the PHA with the smaller number of coordinators and participants will have a higher Participation Rate ($40/25 = 1.60$ versus $130/125 = 1.04$).

D. How does HUD convert the measures into a FAM Score?

After making the calculations described above, HUD develops a FAM Score for each PHA using a two-step process.

1. Step One: Assigning scores to each of the three measures

In Step One, HUD assigns a score of 0 to 10 to each PHA's FSS program for each of the three measures. HUD assigns the scores using the procedures described below. The ranges for awarding points between two values include those values as well as all intermediary values.

For the three measures, HUD has selected criteria for evaluating PHA performance. For the Earnings Performance and Graduation Rate measures, the highest performers are assigned a score of 10, the next-highest performers are assigned a score of 7.5, and low performers are assigned a score of 0. HUD awards a score of 5 to PHAs whose performance does not satisfy the criteria for highest, next-highest, or low performance for that measure. Participation Rates are assigned a score of 0, 5, 6, 7, 8, 9 or 10.

a. Earnings Performance Measure (50% of final score):

- 10 points: three-year average Earnings Performance Measure of \$6,315 or higher
- 7.5 points: three-year average Earnings Performance Measure between \$4,795 and \$6,314.99
- 0 points: three-year average Earnings Performance Measure below \$2,283 and a p-value of $<.10$ on a statistical test measuring the likelihood that a PHA's three-year average Earnings Performance Measure is significantly lower than the median measure of \$4,247 (see below for a full explanation of this statistical test)
- 5 points: All PHAs that do not qualify for a 10, 7.5, or a 0

As described above, a PHA's Earnings Performance Measure for a given year represents the difference between: (a) the average earnings growth for FSS participants and (b) the average earnings growth for comparison households at the same PHA, as adjusted to account for the residual effects of local economic conditions. A PHA's Earnings Performance Measure is not simply a measure of the extent to which FSS participants increased their earnings. Instead, a PHA's Earnings Performance Measure reflects the relative growth of earnings of FSS participants relative to a matched set of non-participants at that PHA. HUD assigns a higher score to FSS programs that achieve a higher three-year average Earnings Performance Measure.

In addition to focusing on the size of the three-year average Earnings Performance Measure, the scoring for this measure applies a one-tailed test of statistical significance, designed to protect FSS programs from being scored “low performer” due to random variation and low sample size. For example, without this protection, an individual FSS program may include several anomalous participants or control households that skew research results. The statistical test measures the likelihood that a PHA’s three-year Earnings Performance Measure is significantly lower than the median measure. The lower the p-value, the less likely it is that a PHA received a below-median Earnings Performance Measure due to random variation. To receive 0 points, a PHA must not only have a three-year average Earnings Performance Measure below \$2,283 but also a p-value on this test of less than .10, which means there is at least a 90% probability that the three-year average Earnings Performance Measure is truly below the median value of \$4,247.

While a similar statistical test could theoretically be applied to help identify high performing programs, such a test would make it harder for small FSS programs to qualify. To avoid disadvantaging smaller FSS programs, p-values are not considered in determining whether to award 10 or 7.5 points.

Finally, the thresholds used to convert Earnings Performance Measures into scores are updated annually for inflation, using a custom inflation index based on wage growth data from the Federal Reserve Bank of Atlanta: specifically, the weighted hourly series for the first (lowest) quartile of wage earners (<https://www.atlantafed.org/chcs/wage-growth-tracker?panel=1>). The thresholds provided in this document reflect the audit year ending December 31, 2019. In the Federal Reserve’s data, wage growth is defined as: $100 \cdot \ln(\text{Wage}(t)/\text{Wage}(t-12))$ where "t" is time, measured in months. To obtain a yearly inflation

index, the growth rate is averaged across a year. To facilitate analysis, the growth rate is converted to an index, using the national median income in 2016 (\$57,617). Since each audit year uses information from the last three years to compute FAM Scores, the inflation index from the audit year as well as the inflation indices from the two prior years are relevant. Thus, a “3-year average index” is constructed to determine the amount by which the audit year’s Earnings Performance Score thresholds are increased over the prior year. For example, the 3-year average index for audit year 2020 is the average of the inflation indices for 2018, 2019, and 2020.

b. Graduation Rate (30% of final score):

- 10 points: three-year average Graduation Rate of 42% or higher
- 7.5 points: three-year average Graduation Rate between 32% and 41.99%
- 0 points: three-year average Graduation Rate below 15%
- 5 points: All PHAs that do not qualify for a 10, 7.5, or a 0.

Under this approach, a higher three-year average Graduation Rate results in a higher score.

c. Participation Rate (20% of final score):

- 10 points: Participation Rate of 2.20 or higher
- 9 points: Participation Rate between 1.95 and 2.19
- 8 points: Participation Rate between 1.7 and 1.94
- 7 points: Participation Rate between 1.45 and 1.69
- 6 points: Participation Rate between 1.2 and 1.44
- 5 points: Participation Rate between .95 and 1.19
- 0 points: Participation Rate of lower than .95

Under this approach, a higher Participation Rate results in a higher score.

2. Step Two: Developing the final FAM Score and grade

After computing individual scores for each of the three measures, HUD aggregates each PHA's scores using the weights noted above to develop a final FAM Score from 0 to 10. Based on this score, HUD assigns the following ranking to the PHA's performance:

- Category 1: FAM Score of 7.9 or higher
- Category 2: FAM Score between 4.0 and 7.89
- Category 3: FAM Score between 3.5 and 3.99
- Category 4: FAM Score lower than 3.5.

E. How were these thresholds selected?

With the exception of the inflation adjustment noted below for adjusting the thresholds used to convert Earning Performance Measures to scores, the thresholds for converting the three performance measures into scores in step one are fixed and will now apply to all future years until HUD revises the methodology. These thresholds were selected by applying the FAM Score methodology to PIC data for the audit year ending December 31, 2019, and thus reflect a three-year average of the Earnings Performance Measures and graduation rates computed for the years ending December 31, 2017, December 31, 2018 and December 31, 2019, as well as corresponding FSS participation data for that three-year period. The thresholds were selected as follows:

1. Earnings Performance Measure (50% of final score):

- The threshold for awarding a score of 10 points (an Earnings Performance Measure of \$6,315) represents approximately the 80th percentile of the distribution of three-year average Earnings Performance Measures for all PHAs.

- The threshold for awarding a score of 7.5 points (\$4,795) represents approximately the 60th percentile of the distribution of results of three-year average Earnings Performance Measures for all PHAs.
- The threshold for awarding a score of 0 points (\$2,283) represents approximately the 20th percentile of the distribution of three-year average Earnings Performance Measures for all PHAs.

Inflation-adjustment. To keep pace with inflation, HUD will adjust the thresholds used to compute Earnings Performance Scores annually to reflect changes in wages for the 1st (lowest) quartile of wage earners published by the Federal Reserve Bank of Atlanta.

2. Graduation Rate (30% of final score):

- The threshold for awarding a score of 10 points represents approximately the 80th percentile of the distribution of three-year average Graduation Rates.
- The threshold for awarding a score of 7.5 points represents approximately the 60th percentile of the distribution of three-year average Graduation Rates.
- The threshold for awarding a score of 0 points represents approximately the 20th percentile of the distribution of three-year average Graduation Rates.

3. Participation Rate (20% of final score):

- The threshold for awarding a score of 10 points represents approximately the 80th percentile of the distribution of Participation Rates.
- The threshold for awarding a score of 0 points is 0.95, which falls below the minimum standard established by HUD. A PHA serving the minimum number of FSS participants required to obtain FSS funding would normally have a Participation Rate of 1.0. However, this methodology uses a score of 0.95 (i.e., PHAs with a lower ratio

than 0.95 awarded a Participation Score of 0) to give PHAs the benefit of the doubt and account for any temporary vacancies in the FSS program.

- HUD spaced the thresholds for receiving 5 to 9 points roughly evenly between .95 and 2.20.

4.FAM Scores and Ranking

- The threshold for awarding a ranking of Category 1 represents approximately the 80th percentile of the distribution of FAM Scores.
- The range for awarding a ranking of Category 3 represents approximately the 10th through the 20th percentiles in the distribution of FAM Scores.
- Programs falling below approximately the 10th percentile in the distribution of FAM Scores are classified as Category 4.
- All other FSS programs are classified as Category 2. The range for awarding a ranking of Category 2 represents approximately the 20th through the 80th percentiles of the distribution of FAM Scores.

As noted above, with the exception of the inflation adjustment for the Earnings Performance Score, all thresholds are now fixed and will not be recalculated each year. This will facilitate the tracking of progress of both individual PHAs and the entire FSS program over time. Further, this framework does not limit how many programs can receive any particular ranking. The thresholds are absolute, not relative.

What else do PHAs need to know about the FAM Score Methodology?

The following is additional information about how HUD calculates FAM Scores:

1. For households entering FSS more than one time during the analysis period, the methodology focuses only on the FSS Contract of Participation that began 5 to 8 years before the end of the quarter of available PIC data being used to calculate

the FAM Score. This facilitates appropriate evaluation of each program's graduation rate, which focuses on the same group of households. If a participant entered more than once during that period, the methodology focuses on the older entry.

2. Where a family ports, each PHA (the receiving and the initial PHA) will benefit from the family's FSS enrollment as it relates to the PHA's participation measure. For the Earnings Performance and FSS Graduation Rate measures, HUD will include the family for the PHA who currently administers the FSS contract.
3. HUD will treat joint applicants for FSS coordinator funding as a single PHA for purposes of computing all three components of the FAM Score and then will award the same score to each of the included PHAs within a single calculation year. Where the joint applicant status (or the composition of a joint applicant group) of a PHA differs across the three years in which average scores are being computed, the PHA may have different three-year average scores from those with which they are joined in only some years.
4. FAM Scores are calculated for any PHA that has sufficient data in PIC to calculate at least one of the three measures used to calculate the score. If there are insufficient data to calculate one or two of the measures, that PHA will receive a middle (standard) score of "5" for the missing measure(s) before calculating the FAM Score.
5. A PHA for which none of the three scores are available will not receive a score.
6. Because the Earnings Performance Measure and the Graduation Rate are calculated using data that spans a range of years, it will take time for a PHA to improve its FAM Score through improvements in earnings and graduation

outcomes. However, improvements in these areas will eventually become apparent in a PHA's FAM Score. It is important for PHAs with low scores to begin implementing improvements as quickly as possible. PHAs with Participation Rates below 0.95 can quickly improve their FAM Scores by increasing Participation Rates to meet HUD's minimum requirements.