Calculation of HUD Fair Market Rents

Updated July 2025

I. Introduction

Fair Market Rents (FMRs) are operating parameters used within a variety of HUD housing assistance programs. They represent HUD's best estimate of the 40th percentile of rents paid by recent movers within various housing markets. They are calculated annually,[1] as required by 42 USC 1437f, and based on the most recent available data.

FMRs are most notably used to establish the payment standards for the Section 8 Housing Choice Voucher (HCV) program, where public housing agency (PHAs) may set payment standards between 90 percent and 110 percent of FMRs. However, FMRs are also used for a variety of other HUD programs to determine assistance payments, and contract and award amounts. These include:

- public housing flat rents, which must be at least 80 percent of FMRs (or Small Area FMRs),
- renewal funding inflation factors (RFIFs), which use the annual change in two-bedroom FMRs to calculate inflation factors,
- the Moderate Rehabilitation Single Room Occupancy program (Mod Rehab), which uses FMRs to set initial rents for housing assistance payment (HAP) contracts,
- Section 8 project-based rental assistance administrative fees,
- rent limits for the Emergency Solutions Grant (ESG) program and the Home Investment Partnerships Program (HOME), and
- the Continuum of Care (CoC) program, where FMRs are used to determine the maximum award amounts and the maximum rents for grantees.

The remainder of this paper discusses the various steps of the FMR methodology, beginning with the areas for which FMRs are developed (Section II). An appendix at the end of the paper (Section XI) outlines the methodological changes that have occurred since FMRs were first implemented in fiscal year (FY) 1975. Additionally, there is an appendix listing the acronyms used throughout the paper in Section XII.

II. FMR Area Definitions

FMR areas are based in part on the metropolitan statistical areas (MSAs – a sub type of "Core Based Statistical Areas" or CBSAs) determined by the Office of Management and Budget (OMB). In metropolitan areas, one FMR is calculated and used for all constituent counties within the metropolitan area. For example, in FY 2026, the Abilene, Texas (TX) MSA consisted of: Callahan County, TX; Jones County, TX; and Taylor County, TX.

Counties not in metropolitan areas receive one FMR for each county, except in Virginia where independent cities have county-equivalent status. HUD groups these non-metropolitan cities with their surrounding or adjacent counties. For example, HUD groups Buena Vista city, Virginia (VA) and Lexington city, VA with Rockbridge County to form the Rockbridge County-Buena Vista city-Lexington city, VA HUD Nonmetro FMR Area.

[1] Except, as noted in Section XI, for FY 1984.

In the six New England States (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), the primary unit of geography is the town level for historical reasons, instead of the county. These towns are equivalent to "county subdivisions" used by the Census Bureau.

HUD occasionally deviates from the metropolitan areas delineated by OMB and creates its own area definitions within metropolitan areas, called HUD Metro FMR Areas (HMFAs), also referred to as subareas or CBSAsubs (the codes for which are called "hud_area_codes" in the publicly available datasets). For example, the Washington-Arlington-Alexandria, DC-VA-MD HUD Metro FMR Area consists of the District of Columbia (DC) and the various nearby counties of Maryland (MD) and Northern VA, but it does not include Jefferson County, West Virginia (WV) and Warren County, VA – counties which are included in the OMB definition of the Washington-Arlington-Alexandria, DC-VA-MD-WV MSA. Since the 2006 FMRs, when OMB has added new counties to MSAs, HUD has created HMFAs whenever the county has its own usable data. This addresses concerns about over-large MSAs and preserves local variation in FMRs that helps facilitate housing choice. When counties have been removed from the definition of MSAs, HUD has followed suit.[2]

Additionally, HUD has maintained the town-based metro area definitions that existed in New England before 2000 to prevent large changes in FMRs.[3] However, Connecticut's switch from towns to planning areas as their official county-equivalent geographic units required unique changes to the FY 2026 FMR geography.[4] Specifically, because the planning regions do not match the boundaries of the former counties, HUD must adopt the new MSA definitions for Connecticut rather than maintaining its previous HMFA definitions. Additionally, a few exception areas were created in Puerto Rico (PR) when newly designated non-metropolitan municipios would have violated the floor on FMR declines.

CBSASUB Codes

All areas have a HUD-specific 16-character CBSAsub code. There are six general constructs of this value:[5]

1. METROCCCCCMCCCCC where METRO indicates a metro area and the CCCCC indicates the OMB assigned CBSA area code. The middle "M" and the second "CCCCC" are included to make the code conform with the other CBSAsub values discussed below.
2. METROCCCCCMMOOOO where again METRO indicates a metro area and the CCCCC indicates the OMB assigned CBSA area code. The "MM" indicates that the area was formed as a part of prior (1990s) vintage metropolitan area and OOOO is the 4-digit metro area code from the prior vintage (typically its old MSA code).

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[2] The HMFAs were originally created based on a desire to prevent counties that are only marginally part of an MSA and not integral to its housing market from being added to the MSA. In making MSA exception determinations, HUD wanted to take into account whether the new county would be considered part of a "single housing market/commuting area," as well as whether "a peripheral county had normal rent-to-income patterns and a range of housing opportunities" available using the county-level FMRs. HMFAs were created for areas with rent or income limits that would increase the OMB-defined MSA FMRs or income limits by more than five percent. However, HUD has not performed the five percent test since the 2006 FMRs.

[3] HUD's Program Parameters and Research Division, Office of Economic Affairs, "Fair Market Rents: Introductory Overview" p. 4.

[4] This change was first captured in the ACS 2023 data, published in 2025.

[5] The CBSAsub code constructs 2, 3, 5, and 6 indicate areas that are currently part of an OMB-delineated MSA but are being treated as a separate HMFA for the purposes of calculating FMRs, as well as income limits and median family incomes.

3. METROCCCCCNSSCCC where again METRO indicates a metro area and the CCCCC indicates the OMB assigned CBSA area code. The "N" indicates that this is a former non-metropolitan county, where SS is the 2-digit state Federal Information Processing Standard (FIPS) code and CCC is the 3-digit county code.
4. NCNTYSSCCCNSSCCC where NCNTY indicates that the area is a non-metropolitan county, and the SS is the 2-digit state FIPS code and the CCC is the 3-digit county code. The "N," "SS," and "CCC" ate the end are included to make the code conform with the CBSAsub values discussed above.
5. METROCCCCCMSSCCC where METRO indicates a metro area and the CCCCC indicates the OMB assigned CBSA area code. The middle "M" indicates metro, the SS is the 2-digit state FIPS code, and the CCC is the 3-digit county code.
6. METROCCCCCMQQQQQ where METRO indicates a metro area and the CCCCC indicates the OMB assigned CBSA area code. The middle "M" indicates metro, and QQQQQ is the 5-digit metro code of its old MSA.[6]

Westchester County, NY

Starting in FY 2025 FMRs, HUD began adding Westchester County, New York (NY) to the New York, NY HUD Metro FMR Area. In prior years, a separate FMR was calculated for Westchester County, but its data was also used when computing the FMR for the New York, NY HUD Metro Area. Westchester County continues to receive a separate estimate for median family income and income limits.

Sullivan City portion of Crawford County, Missouri

A 1987 statute[7] requires the Sullivan City portion of Crawford County, Missouri (MO) to be included in the St. Louis MSA. HUD includes the Sullivan City portion in the St. Louis, MO-IL HUD Metro FMR Area. Note the Census Bureau does not appear to follow this practice in its statistics for the St. Louis MSA.

III. Base Rents

ACS Adjusted Standard Quality Gross Rents

Each year, HUD procures special tabulations of the American Community Survey (ACS) from the Census Bureau.[8] Special tabulations are required for several reasons. For one, FMRs are used to rent "standard quality" units – those with cash rent; those sited on 10 acres or less; with full plumbing; with a complete kitchen; and meals not included in rent.[9]

[6] These are the CBSAsub code constructs used today, although it is possible that there may have been some past inconsistencies. For example, with Case 6, 'QQQQQ' should be the old code when a CBSA changes its name and code. However, with multiple rounds of CBSA changes, there has not been a rule about how long to keep the old code.

[7] Treasury, Postal Service and General Government Appropriations Act, 1988, Pub. L. No. 100-202, § 530, 101 Stat. 1329-419 (1987).

[8] The source of the data for Puerto Rico (PR) is the Puerto Rico Community Survey (PRCS). It is compiled by the Census Bureau, along with the ACS data, as part of HUD's special tabulations.

[9] Prior to the special tabulations for the FY 2026 FMRs, there was an additional standard quality element "not constructed within the last two years." This was eliminated as a result of the promulgation of the final rule for implementing sections 102, 103, and 104 of the Housing Opportunity Through Modernization Act (HOTMA).

Units not meeting these "standard quality" criteria are excluded from the ACS universe. Additionally, because voucher holders rent their units on the private rental market, HUD attempts to remove publicly assisted units from the ACS universe. HUD calculates the 75th percentile rent paid by public housing units by HUD region from the Office of Public and Indian Housing (PIH) Information Center (PIC) and passes these floor values to the Census Bureau.[10] Units with cash rent below these public housing cutoff rents are eliminated from the ACS universe. Once these adjustments have been made, ACS staff calculate 40th percentile[11] "adjusted standard quality" (ASQ) gross rents.

Base Rent Selection

5-year ACS estimates of two-bedroom ASQ gross rents calculated for each FMR area are used as the new basis for FMRs. Base rents are built on two-bedroom units because they are generally the most common rental unit size and, therefore, the most reliable to survey and analyze. There is a 3-year lag in the current fiscal year FMRs and the "end year" of the ACS estimates used in the calculation. For example, in FY 2026, the FMRs were calculated using ACS_{2023} data.

HUD performs two statistical quality checks on each ACS base rent estimate to determine whether to use it in calculating FMRs. First, the estimate must have a margin of error that is less than half (50 percent) of the estimate itself. Dividing the margin of error by the estimate produces the margin of error ratio. Second, the estimate must be produced from at least 100 survey cases. HUD does not receive the actual counts of survey cases, but rather an indicator variable which must be 4 or greater to represent at least 100 survey cases.

For example, in FY 2026, the Baltimore-Columbia-Towson, MD MSA had a 5-year ASQ two-bedroom 40th percentile rent estimate of $1,504, with a margin of error of $18 and a count indicator of 6. Therefore, $1,504 is the base rent. See here.

If a base rent estimate does not meet both these criteria, HUD additionally examines the past two ACS five-year estimates, alongside the current five-year estimate. HUD uses the margin of error test on each estimate as described above, but *not* the survey case count test. If two or three of the estimates pass the margin of error test, HUD uses their average as the current fiscal year base rent. Each past year estimate is inflated using the gross rent Consumer Price Index (CPI) adjustment factor (described below) prior to taking the average.

For example, in FY 2026, the Oldham County, TX HMFA had a 5-year 2023 ACS ASQ two-bedroom 40th percentile rent estimate of $896, with a margin of error of $229 and a count indicator of 1. The count indicator is too low, so HUD examines the 2021 and 2022 ACS estimates and their margins of error (but not their count indicators). Oldham County had an estimate of $845 in 2021 and $913 in 2022. Each of those estimates had a margin of error that is less than half of the estimate, so HUD uses the average of the three estimates (first inflating the prior years' estimates to 2023 dollars) as the base rent. For Oldham, County, that is $963. See here.

If an area's past estimates fail to meet the margin of error test in two or three years, the area is given the base rent for its larger containing geographic area. For metropolitan areas, the order of geographies examined is: FMR Area, Entire Metropolitan Area (for Metropolitan Sub-Areas), State Metropolitan

[10] The selection of the 75th percentile of public housing rents was based on research summarized in "FMR Adjustments for Non-Market Units."

[11] FMRs were set at the 45th percentile from 1983 to 1994. After 1994, HUD set FMRs at the 40th percentile in most areas. The relevant regulation is CFR 888.113.

Portion, Entire State, and Entire U.S.; for non-metropolitan areas, the order of geographies examined is: FMR Area, State Non-Metropolitan Portion, Entire State, and Entire U.S.

For example, in FY 2026, Sterling County, TX had a 5-year 2023 ACS ASQ two-bedroom 40th percentile rent estimate of $991. However, the count indicator was too low for the estimate to be used alone. Additionally, the area did not have publication data for ACS_{2022} or ACS_{2021}. Therefore, an average of the 5-year estimates cannot be used either. Therefore, HUD uses the ACS_{2023} 5-year ASQ rent estimate for Sterling County's larger containing area – the nonmetropolitan portion of Texas ($881).[12] See here.

The U.S. Island Territories

The U.S. Island Territories (hereinafter referred to as the Islands) include American Samoa (AS), Guam (GU), Northern Mariana Islands (MP), and the Virgin Islands (VI): St. Croix, St. John, and St. Thomas.[13] Unlike the FMRs for other areas, the FMRs for the Islands are based on special tabulations of decennial island area census data. Although their source differs, the filters used for the special tabulation requests are identical for ACS and decennial census data: 40th percentile ASQ gross rents, where adjustments are made to exclude units below the 75th percentile rent paid by public housing units and units not of standard quality, as described above, with the same data collected for recent movers.

However, not all the calculation steps for the Islands are the same as for other FMR areas. The base rent calculation is an example of that. While base rents for other FMRs are simply based on the 40th percentile ASQ gross rents (with the appropriate source selection made based on statistical quality), the base rent for each Island Territory (Island) is the larger of the 40th percentile ASQ gross rents or the 40th percentile ASQ gross rents for recent movers. For example, step 1 of the FMR calculation for St. Croix Island, VI selects the 40th percentile ASQ gross rents for recent movers as the initial base rent, as it is higher than the 40th percentile ASQ gross rents. Note that incorporating recent mover rents here means that the "recent mover adjustment factor" discussed in Section IV is inapplicable for the Islands.

Once the base rent is selected, it is still in decennial census year dollars (which for FY 2026 is 2020 dollars). Therefore, each Island's base rent needs to be inflated to the most recent year of ACS data, which for FY 2026 is 2023 dollars. This is accomplished by multiplying the base rent by:

$$\frac{2023\ public\ 1\text{-}year\ median\ gross\ rents\ for\ 50th\ percentile\ specified\ renters\ for\ the\ U.S.\ (excluding\ PR)^{14}}{2020\ experimental\ 1\text{-}year\ median\ gross\ rents\ for\ 50th\ percentile\ specified\ renters\ for\ the\ U.S.\ (excluding\ PR)^{15}}$$

For FY 2026, this ratio is $1,406/$1,129. The resulting base rent is rounded to the nearest whole dollar value. Continuing the St. Croix Island, VI example from above, step 2 shows the base rent (from the 40th percentile ASQ gross rents for recent movers) inflated to 2023 using the ratio described here.

[12] Sterling County, TX was removed from the San Angelo, TX metro area for the FY 2026 FMRs.
[13] Note that the calculation of FMRs for Puerto Rico (PR) follows the same methodology as the majority of FMR areas, rather than the slightly altered methodology associated with the Islands.
[14] Census Bureau table B25064.
[15] The Census Bureau did not release 2020 ACS 1-year data due to data quality issues stemming from COVID-related interruptions in data collection. As a result, 2020 1-year experimental data is used, specifically Table XK202511 which provides national median gross rent estimate.

As mentioned, not all the remaining steps detailed below will apply to the Islands. A summary of the calculations that will be made are noted below, and an additional note is made in each section as to their applicability (or lack thereof) for the Islands. The additional FMR methodology calculations that also apply to the Islands are:

1. the gross rent inflation adjustment factor, which updates the 2023 value to 2024, as described in Section V,
2. the trend factor adjustment, which brings the values into FY 2026, as described in Section VI,
3. the bedroom ratio applications, which develops FMRs for other bedroom sizes, as discussed in Section IX,
4. the limits on year-to-year declines, which prevents FMRs from declining by more than 10 percent from year to year, as discussed in Section X.

Additionally, the Islands may also submit ad hoc rent surveys (Section VII).

IV. Recent Mover Adjustment Factor

HUD is required by regulation to set FMRs on the basis of "recent movers." This helps ensure FMRs reflect current market conditions as much as possible and avoids biasing the FMRs low from the impact of rent control laws. HUD calculates a "recent mover adjustment" factor by comparing a 1-year 40th percentile recent mover to the 5-year 40th percentile ASQ gross rent. If either the recent mover or non-recent mover rent estimates do not meet the quality checks, HUD uses the recent mover adjustment for a larger geography. For metropolitan areas, the order of geographies examined is, as with base rents: FMR Area, Entire Metropolitan Area (for Metropolitan Sub-Areas), State Metropolitan Portion, Entire State, and Entire US; for non-metropolitan areas, the order of geographies examined is: FMR Area, State Non-Metropolitan Portion, Entire State, and Entire US. For each level of geography, HUD examines both the two-bedroom specific recent mover rents and the recent mover gross rent for units of all bedroom sizes.

Since the advent of the ACS, HUD has defined recent movers as those who have moved in the current year or preceding year of the ACS survey, so for ACS_{2023}, this would be 2022 or 2023. However, starting in FY 2024, HUD elected to first examine single-year recent mover rents using the same criteria when calculating the recent mover adjustment factor.

Recent Mover Hierarchy:

- 1-year two-bedroom recent mover factor for the local area
- 1-year all-bedroom recent mover factor for the local area
- 2-year two-bedroom recent mover factor for the local area
- 2-year all-bedroom recent mover factor for the local area
- 1-year two-bedroom recent mover factor for the parent metro
- 1-year all-bedroom recent mover factor for the parent metro
- 2-year two-bedroom recent mover factor for the parent metro
- 2-year all-bedroom recent mover factor for the parent metro

- 2-year two-bedroom recent mover factor for the parent state metro/non-metro portion
- 2-year all-bedroom recent mover factor for the parent metro/non-metro portion
- 2-year two-bedroom recent mover factor for the parent state

For example, in FY 2026, the St. George, Utah (UT) MSA had a 5-year 40th percentile ASQ gross rent estimate of $1,231 for two-bedroom units. This estimate passes the margin of error and sample size tests, so $1,231is used as the base rent estimate. For the recent mover adjustment factor, however, neither the St. George, UT MSA's 1-year ACS 1-year recent mover estimate for two-bedroom units or the 1-year ACS 1-year recent mover estimate for all bedroom sizes meets the sample size test. Next, St. George, UT MSA's 1-year ACS 2-year recent mover estimates are examined, first for two bedrooms and then for all bedroom size units. Neither of these estimates meets the sample size test. Therefore the 1-year ACS 2-year recent mover estimate for two-bedroom units in the next largest geography, UT metropolitan portion for two-bedrooms, is examined and that estimate of $1,500 is found to pass both tests. The recent mover adjustment factor for the St. George, UT MSA is therefore calculated as a ratio of the UT metropolitan portion's 1-year ACS 2-year recent mover 40th percentile gross rent estimate for two-bedroom units ($1,500) divided by the UT metropolitan portion's 5-year 40th percentile gross rent estimate for two-bedroom units ($1,231). See here.

If a metropolitan area crosses State lines and does not use a local-level recent mover adjustment factor, the area uses the population-weighted average of State metropolitan recent mover adjustment factors for the relevant States where the State metropolitan recent mover factors are statistically reliable.

For example, in FY 2026, the Cape Girardeau, MO-IL MSA had a 5-year 40th percentile ASQ gross rent estimate of $795 for a two-bedroom unit. This estimate passes the margin of error and sample size tests, so $795 is used as the base rent estimate. For the recent mover adjustment factor, however, neither Cumberland's 1-year ACS 1-year or 2-year estimates for two-bedroom units or the estimates for all bedroom size units meets the sample size test. Since the Cape Girardeau, MO-IL MSA does not have a useable local level recent mover factor and crosses state lines, a population weighted average of MO and Illinois' (IL's) state metropolitan portion recent mover factors are used instead. See here. For FY 2026, there are no instances of statistically unreliable data in cases where a population-weighted average of State metropolitan recent mover adjustment factors is required. However, in the FY 2025 FMRs, the Sioux City, IA-NE-SD MSA recent mover factor is based on only the Iowa and Nebraska data; the South Dakota data is excluded because its sample size is too small.

As discussed in the Base Rents section (Section III), recent mover rents are handled differently for the Islands. The adjustment factor discussed here is not applicable, as the base rent is determined using the higher of the 40th percentile ASQ gross rent or the 40th percentile ASQ gross rent for recent movers.

V. Gross Rent Inflation Adjustment Factor

The purpose of the gross rent inflation adjustment factor is to inflate estimates of recent mover gross rents from the most recent survey year of the ACS to the subsequent calendar year. For FY 2026, this means inflating the base rent and recent mover data from 2023 to 2024. Again, measures of rents from the ACS (and the FMRs themselves) are gross rents (meaning they include rent and utility costs). This step in the calculation of FMRs is applied uniformly to all areas, including the Islands.

Traditionally, HUD updated the latest ACS-based rent estimates with one year of gross rent inflation measured with the 23 local or 4 regional CPI components for rent of primary residence and household

fuels and utilities, depending on the location of the FMR area. Beginning in FY 2023, and expanded starting in FY 2024, HUD augmented the established CPI inflation factor methodology with data obtained from private rental companies. Each inflation factor type is calculated separately according to its own methodology and then combined through a weighting scheme as described below.

1. CPI-Based Rent Indexes

1.1 Summary

CPI data on changes in residential rents and fuel and other utilities is available for a total of 23 FMR areas and 4 Census Regions. For each area,

1. The change in the residential rent and utilities components are taken from the most recent CPI annual average change data;
2. A shelter rent factor is calculated by eliminating the effect of the heating costs included in the rent of many CPI survey units; and
3. A gross rent factor is calculated by weighting the shelter rent and utility components from the CPI with the corresponding components from the most recent ACS, updated as shown later in this paper.

1.2 Detailed Description

1.2.1 The CPI Survey

The CPI Housing Survey is conducted monthly by the Bureau of Labor Statistics (BLS) and made available each year in early February, covering the previous year. The residential rent component of the CPI is based on a sample of about 50,000 rental units in urban areas throughout the country.[16] The fuel and other utilities component of the CPI, however, are not collected from renters. Homeowners provide fuel and utilities survey data for each CPI area. The changes in these amounts are about the same regardless of whether it is paid by a homeowner or a renter.

1.2.2 CPI and HUD Geography

The CPI survey is conducted at the CBSA level. The CPI sample currently consists of 75 urban areas, of which 23 are published at the CBSA level.[17] HUD uses local CPI data for FMR areas within Size Class A metropolitan areas covered by local CPI data.[18] HUD uses CPI data aggregated at the Census region level for all Size Class B and C metropolitan areas and non-metropolitan areas.

[16] The most recent CPI Handbook of methods is available as a series of webpages here, although some of the details listed above are from an earlier, more easily printable version, that is still consistent with the current approach: BLS Handbook of Methods, Chapter 17. The Consumer Price Index (Updated 2-14-2018).
[17] See The CPI Handbook of Methods Design page.
[18] Size Class A metropolitan areas are those with populations over 2.5 million, while Size Class B/C (discussed next) cover areas with populations of 2.5 million or less. See the footnotes of the BLS table here for example.

1.2.3 Calculating CPI Weights

Units with Utilities Included in Rent - CPI Housing Survey

HUD acquires a special tabulation of the CPI Housing Survey from the BLS for each CPI survey area, or primary sampling unit (PSU), showing the proportion of rental units where heat is included in the rent (**GR_w**). This is used as a proxy for the share of units with utilities included in rent and is ultimately used to remove the influence of utilities from the contract rent. CBSAs within Size Class A PSUs are assigned the proportion for their respective PSU. All other CBSAs are assigned the proportion for the respective region of their PSU. Because a proportion is not provided at the regional PSU level, an estimate is derived by aggregating the sum of PSUs in Size Class B and C areas.

Components Shares of Gross Rent - American Community Survey

HUD uses a special ACS 1-year tabulation of utility expenses in combination with the 50th percentile gross rents special tabulation to estimate a proxy for the proportion of the gross rents attributable to utilities (**U_w**) for all CBSAs with a corresponding Size Class A PSU and all Census regions, which are comparable to PSU regions.

1.2.4 Shelter Rent Increase (Shelter only)

The residential rent CPI index (Rent of Primary Residence) is a mixture of units with and without separate utility bills. For indexing purposes HUD first calculates a *Shelter Rent* CPI for each of the CPI areas, which excludes the cost of heating, starting with the following weighted-average-type formula:

Shelter Rent Change: Decomposing the CPI "Rent of primary residence" statistic to remove the influence of utilities from contract rents

1) $RPR = (1 - GR_w) * SR + GR_w * GR$
2) $RPR = (1 - GR_w) * SR + GR_w * [(1 - U_w) * SR + U_w * U]$
3) $SR = [\ RPR - (GR_w \times U_w \times U)\ ] / [\ 1 - (GR_w \times U_w)\ ]$

where:

- **GR** is the change in gross rents from year to year (unknown);
- **GR_w** is the fraction of renters who pay gross rents (known from a special tabulation of the CPI Housing Survey data provided by the BLS to HUD each year);
- **RPR** is the change in contract rents from year to year (known from the BLS CPI series "Rent of Primary Residence" – BLS Code SEHA);
- **SR** is the change in CPI shelter rents from year to year (unknown);
- **U** is the change in utility costs from year to year (known from the BLS CPI series "Housing – Fuels and Utilities" – BLS Code SAH2)**;** and
- **U_w** is the fraction of gross rents attributable to utilities for CPI areas (CBSAs, as described in the "Components Shares of Gross Rent - American Community Survey" portion of Section 1.2.3 above).

1.2.5 Gross Rent Increase Factor (Shelter plus Utilities)

Using the same variables as above, and the calculated value of the shelter rent increase factor (SR), the ***gross rent increase factor*** is:

CPI Gross Rent Change: Taking a weighted average of the change in area CPI shelter rents and the change in CPI utility costs

$$GR = (1 - U_w) * SR + U_w * U\Delta$$

2. Private Source-Based Rent Indexes

2.1 Summary

Private rental company data on changes in residential rents is available for a large number of FMR areas. For each area:

1. The changes in the residential rent and household fuels and utilities are measured from available private data sources and the most recent CPI annual average change data, respectively; and

2. A gross rent factor is calculated by weighting the shelter rent and utility components with the corresponding components from the most recent ACS, updated as shown later in this paper.

2.2 Detailed Description

2.2.1 Private Company Rental Data

HUD uses measures of contract rents obtained from a total of six possible company sources of commercial rental information ("private data"). The measures of rent used by HUD are the RealPage (formerly Axiometrics) average effective rent per unit, the Moody's Analytics CRE (formerly REIS) average market rent, the CoStar Group average effective rent, the Cotality (formerly CoreLogic, Inc.) single-family combined three-bedroom median rent, the ApartmentList Rent Estimate, and the Zillow Observed Rent Index.[19]

To produce private gross rents, HUD combines the private rent data with the fuel and utilities component of the CPI, which are not collected from renters. Homeowners provide fuel and utilities survey data for each CPI area. The changes in these amounts are about the same regardless of whether or not they are paid by a homeowner or a renter.

2.2.2 Geographic Coverage of Private Rent Data

Each private data source is available for different geographic areas:

- RealPage data generally reflect one or more CBSAs, with over 434 currently available with consistent quarterly data. The data are published by CBSA metropolitan and micropolitan codes.
- Moody's Analytics CRE data is available at the MSA level. It represents over 8 million commercial properties in metropolitan areas nationwide (condensed from 18 million by grouping appropriate parcels together). With a couple of exceptions, their MSA areas correspond to CBSA market areas.

[19] RealPage, REIS, CoStar, and Cotality are HUD purchased data. ApartmentList and Zillow are publicly available online.

- CoStar data generally reflect one or more CBSAs, including the Metropolitan Divisions. There are currently approximately 390 CBSAs available with consistent quarterly data. The data are published by CBSA metropolitan and micropolitan codes.
- Cotality data covers most of the U.S. market and is available at the CBSA level, as well as the ZIP Code level.
- ApartmentList data covers approximately 10 percent of U.S. rentals at the national, state, county, city, and metropolitan/MSA levels.
- Zillow data covers all major metropolitan and micropolitan areas (617 MSAs with corresponding Region IDs). While Zillow's MSAs do not map to OMB's definitions, Zillow provides a crosswalk to HUD which maps their MSAs to CBSAs. Their Observed Rent Index is calculated at the national, county, city and ZIP Code levels for all regions where sufficient data is available.

HUD aligns the private data source's geography to CBSAsubs before incorporating them.

HUD uses a local measure of private rent inflation for markets that are covered by at least three of the six available sources of private rent data. For FY 2026, a total of 686 out of 2,622 CBSAsubs were covered by a local private inflation factor, or approximately 85.7 percent of the U.S. population.

For areas without at least three of the six private rent data sources available, HUD uses a regional average of private rent inflation factors. HUD constructs the regional average mirroring the construction of CPI-Rent Regional Size Class B/C Factors. HUD takes the rental unit weighted average of the change in rents for each area in a region that does have private rent data coverage yet excludes the CPI Size Class A metro areas. As an example of calculating a weighted average, if a given region contained non-Size Class A areas X, Y, and Z with 4,000, 3,000, and 1,000 rental units respectively, and private inflation factors of 10 percent, 5 percent, and 1 percent, the regional inflation factor would be 10% * 0.5 + 5% * 0.375 + 1% * 0.125 = 7 percent. This ensures that smaller areas which are not covered directly by the private sources directly still have current rental market conditions taken into account in the calculation of the rent inflation factor.

2.2.3 Calculating Utility Weights

Components Shares of Gross Rent - American Community Survey

HUD uses a special ACS 1-year tabulation of utility expenses in combination with the 50th percentile gross rents special tabulation to estimate a proxy for the proportion of the gross rents attributable to utilities ($\mathbf{U_w}$) for all CBSAsubs. HUD applies the same margin of error and survey count tests that were used for base rent and recent mover estimates, assigning the most recent 1-year ACS if it passes (local), else taking the 5-year local ACS, otherwise using the 1-year ACS Census region estimate.

2.2.4 Shelter Rent Increase (Shelter Only)

Unlike the CPI, HUD makes an implicit assumption that the private rent changes represent units with separate utility bills. In other words, the private rent data constitute *shelter rents.* Therefore, HUD first takes the annual average of each statistic, then its year-to-year change. HUD then takes the average of all available private rents for each area which constitutes the private shelter rent (R).

2.2.5 Gross Rent Increase Factor (Shelter Plus Utilities)

To calculate a private gross rent inflation factor, HUD takes the weighted average of the Private Shelter Rent Change and the CPI-Utility Index. Using the same variables as above, and the calculated value of the shelter rent increase factor (SR), the ***gross rent increase factor*** is:

Private Gross Rent Change: Develop a weighted average of the change in area private shelter rents and the change in CPI utility costs

$$GR = (1 - U_w) * SR + U_w * U\Delta$$

where:

- **GR** is the change in gross rents from year to year (unknown);
- **SR** is the change in private shelter rents from year to year (unknown but calculated as described above);
- **U** is the change in utility costs from year to year (known from the BLS CPI series "Housing – Fuels and Utilities" – BLS Code SAH2)**;** and
- $\mathbf{U_w}$ is the fraction of gross rents attributable to utilities for CPI areas (CBSAsubs).

3. Computing a Weighted Average Private and CPI Inflation Factor

3.1 Summary

Upon calculating both a CPI and private gross rent inflation factor for each area, HUD combines the two using a weighting scheme such that the weighted national average of the CPI and private gross rent inflation factors equal the change in the ACS national recent mover gross rents. To derive the FY 2026 weights, HUD compared the national average private rent inflation rates and the CPI rent of primary residence to the change in national average of recent mover rents each year in the ACS from 2017 to 2023.

3.2 Detailed Description

3.2.1 Determining the Weights

HUD weights the private data averages and overall CPI rent of primary residence in such a way as to minimize the root mean squared error (RMSE) between the resulting average and the ACS recent mover rents (64.8 percent private and 35.2 percent CPI). Comparing the average private rent change to the ACS produces an RMSE (a measure of accuracy) of 2.68 percent. No other combination of weights produces a lower RMSE. HUD updates the weights each year by adding the most recent year of ACS recent mover rents, private rent data, and CPI rent of primary residence to the analysis.

	2017-18	2018-19	2019-20	**2020-21**	**2021-22**	**2022-23**
ACS National Recent Mover Change	5.24%	4.06%	7.34%	7.34%	11.01%	7.70%
Average National Private Rent Change	3.34%	3.62%	1.11%	7.59%	10.98%	4.67%
CPI Rent of Primary Residence (RPR)	3.62%	3.71%	3.12%	2.25%	6.03%	7.95%

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Weighted Avg of CPI RPR and Private Change	3.41%	3.64%	1.61%	6.25%	9.74%	5.84%
Squared Error between Weighted Change and ACS	3.00E-04	2.00E-05	3.00E-03	3.00E-04	3.00E-04	3.00E-04

	FY 2026
RMSE of Private Change and ACS	2.68%

3.2.2 An Example

3. **Inflation Adjustment Factor Calculation**
A gross rent inflation adjustment factor is applied based on a weighted average of a private source gross rent inflation factor and a Consumer Price Index gross rent inflation factor. Since Altoona, PA MSA is covered by at least 3 private data sources, a local-based private rent factor is applied. Furthermore, since Altoona, PA MSA is not covered by a local-CPI rent area, a Region-based CPI gross rent factor is applied.

Components of 2024 Inflation Adjustment Factor for Altoona, PA MSA					
	R_{2024}= Shelter Rent Change, 2023 to 2024	U_{2024} = CPI Annual Utilities Change, 2023 to 2024	C_{2024} = ACS Utility Cost as a Percent of Gross Rent	Gross Rent Inflation Factor Calculation = (R_{2024} x (1-C_{2024}) + U_{2024} x C_{2024})	Inflation Factor Type
P_{2024}= Private Inflation Factor	1.04103	1.00072	0.27667	(1.04103 * 0.72333) + (1.000724 * 0.2767)= 1.02988	Local
CPI_{2024}= CPI Inflation Factor	1.06659	1.00072	0.1442	(1.06659 * 0.8558) + (1.00072 * 0.1442)= 1.05709	Region

The 2024 Gross Rent Inflation Factor for Altoona, PA MSA is computed as follows:

= $\mathbf{CPI}_{2024}$ x (1-$\mathbf{W}_{2024}$) + $\mathbf{P}_{2024}$ x $\mathbf{W}_{2024}$

= (1.05709 x 0.356965956) + (1.02988 x 0.643034044)

= (0.377345) + (0.662248)

= **1.03959**

VI. Trend Factor Adjustment

The "trend factor" is used to make the dollar values of the FMRs "as of" the fiscal year for which they are effective. It is applied to all areas, including the Islands. HUD calculates trend factors by forecasting values of the CPI series described above, for each local and regional CPI area.[20] HUD chose the actual model used for each trend factor based on which model generates the lowest RMSE statistic. As detailed in the June 5, 2019 Federal Register notice (84 FR 26141), HUD selected the trend factor model for each area or region from a series of time series models based on national inputs (National Input Model or NIM), local inputs (Local Input Model or LIM) and historical values of the predicted series (Pure Time Series – PTS). HUD held the type of model selected (NIM, LIM, or PTS) constant for 5 years and intended to reassess the model selections during the calculation of the FY 2025 FMRs. However, HUD feels that the high degree of volatility in rental markets from 2020-2023 would not result in the best long-term model selection. Therefore, model reevaluation has been temporarily postponed. The same models were used for FY 2025 and will continue to be used for FY 2026. During future evaluations, HUD may update the functional form of the model if it improves the performance of the model for a specific

[20] Excluding the Riverside–San Bernardino–Ontario, CA MSA due to a lack of historical data.

geography. In these cases, HUD will ensure the change to the functional form is not due to overfitting the model or outliers. HUD updates the gross rent forecast models annually with current data for inputs.

VII. Areas With Ad Hoc Rent Surveys

HUD allows for the submission of rental survey data by outside parties. In these cases, if the submitted data is more current than the ACS, HUD uses it in place of the ACS rent estimates. Based on the date the survey was conducted, HUD multiplies the survey rent by the appropriate gross rent inflation factor and/or trend factor to produce an FMR as of the current FY.

Specifically, because surveys are "as of" a specific month, HUD converts the monthly dollars to an annual estimate by multiplying the survey estimate by the ratio of the annual CPI gross rent to the monthly CPI gross rent for the month of the survey. Prior to FY 2023, this adjustment used CPI-U, to mimic the inflation adjustment of respondent values in the ACS. Starting with FY 2023, HUD began using gross rent CPI values for surveys from 2021 and later to better match the inflation adjustment in the rest of the FMR process.

If the survey is "as of" the current year, then HUD multiplies the survey estimate by a prorated trend factor. The proration is the number of months needed to trend the survey estimate to the midpoint of the FY of the FMR (March).

For example, in FY 2026 HUD used an ad hoc survey to calculate FMRs for Hood River County, Oregon (OR).

VIII. State Minimum Comparison

All of the above steps – multiplying the base rent by the recent mover factor, the gross rent inflation adjustment factor, and the trend factor, rounded to the nearest dollar – produce a preliminary two-bedroom FMR for areas other than the Islands.[21] Next, for each State, HUD calculates a "State Minimum" FMR by finding the median of non-metropolitan area county FMRs, weighted by population. HUD also calculates a National Median that is calculated in the same manner. The State Minimum used for each area is the lesser of these two values. This State Minimum serves as a floor for FMRs. For multi-state metropolitan areas, the State Minimum is the greater of the relevant State Minima. This applies even if the FMR area is a subarea that does not cross State lines; the State Minima for the States included in the larger metropolitan statistical area are checked.

For example, in FY 2026, Pierce County, North Dakota (ND) (a non-metropolitan county) was calculated as having a preliminary two-bedroom FMR of $789 based on the calculations and adjustments described in previous steps. This is lower than both the North Dakota State Non-metropolitan Median FMR of $873 and the U.S. Non-metropolitan Median FMR of $973, so the lower of the two is used to set the two-bedroom FMR for Pierce County, ND at $873. See here (county), here (state), and here (U.S.).

IX. Bedroom Ratios Application

All of the previous calculation steps produce a preliminary FMR for a two-bedroom unit size. To calculate FMRs for units of other bedroom sizes, HUD applies "bedroom ratios."

[21] This calculation is not applicable to the Islands.

Bedroom ratios are calculated by first evaluating the estimates of gross rent for each unit size from the five-year ACS for each of the past three ACS releases. If the margin of error is less than half (50 percent) of the estimate, the ratio of the zero-, one-, three-, or four-bedroom rent to the two-bedroom rent is calculated. If this ratio exists in two or three of the past three ACS releases, the average is used as the preliminary bedroom ratio. If not, the ratios for the next higher level of geography are calculated and used as a proxy for the area-specific bedroom ratio.

The bedroom ratios for the Islands are calculated using the decennial census data. The 40th percentile two-bedroom ASQ gross rents are compared to the appropriate alternative bedroom size (zero-, one-, three-, or four-bedroom 40th percentile ASQ gross rents, creating a ratio where the alternative bedroom size rent is the numerator, and the two-bedroom rent is the denominator. For example, the initial three-bedroom ratio for St. John, VI is:

$$\frac{40th\ percentile\ ASQ\ gross\ rent\ for\ three\text{-}bedroom\ units}{40th\ percentile\ ASQ\ gross\ rent\ for\ two\text{-}bedroom\ units}$$

The remaining bedroom ratio application steps apply to all areas equally.

The ratios are capped and floored at amounts representing the 10th and 90th percentile ratios of the distribution of all bedroom size ratios nationwide. In the case of three-bedroom ratio for St. John, VI the National Floor becomes the updated three-bedroom ratio because it is higher than the initial three-bedroom ratio for St. John.

Following the application of caps and floors, the three-bedroom ratio is increased by 8.7 percent and the four-bedroom ratio is increased by 7.7 percent, based on the general consensus that larger bedroom units are especially difficult to obtain for voucher holders. The FMRs are then rounded to the nearest $1. The three-bedroom ratio for Waldo County, Maine (ME) provides an example of the 8.7 percent three-bedroom ratio bonus.

After any bonuses are applied to the bedroom ratios, consistency between the ratios is checked to ensure that the FMRs for smaller units are lower than those for larger units. Specifically, the zero-bedroom (efficiency) rent ratio is checked against the one-bedroom rent ratio and the three-bedroom rent ratio is checked against the four-bedroom rent ratio. In both cases, the smaller bedroom units must have rent ratios that are at least 0.005 lower than the larger bedroom units. For example, in FY 2025 the preliminary zero-bedroom ratio exceeded the one-bedroom ratio for American Samoa. Therefore, the zero-bedroom ratio was set equal to the one-bedroom ratio minus 0.005 (here, 0.762 minus 0.005, or 0.757). Lastly, the FMRs for the additional bedroom sizes are calculated by applying the appropriate final bedroom ratio to the two-bedroom FMR.

X. Limits on Year-to-Year Declines in FMRs

Pursuant to the 2016 rulemaking on Small Area FMR use, no FMR may decline by more than 10 percent from year to year. Therefore, the preliminary FMRs are checked against last year's values to ensure they are not too low. For example, in FY 2026, Sweetwater County, Wyoming (WY) (a non-metropolitan county) was calculated as having an efficiency FMR of $728 based on the calculations and adjustments described in previous steps. 90 percent of Sweetwater County, WY's efficiency FY 2025 FMR ($816) is $735. Therefore, Sweetwater County, WY's FY 2026 efficiency FMR is floored at $735.

Limits on year-to-year declines also apply to the Islands. However, because decennial census data is used for the Islands, the only time such a decline might potentially be seen is when new decennial

census data becomes available. Given that new Decennial Census data was used for FY 2026, it is an explicit consideration this FY and shown on the Island documentation pages (see, for example, the FY 2026 FMRs for American Samoa).

50th percentile rents calculated by HUD are also floored to the level of the FMR. Although there are no longer 50th percentile FMRs, 50th percentile rents are still used for the Success Rate Payment Standard.

XI. Appendix: Brief History of Methodological Changes

There have been three definitions of FMRs since 1974, the year Congress established the Section 8 program. The most recent definition is the 40th percentile. Prior definitions were the 45th and 50th percentiles, as shown in the table below. Additionally, there have been numerous methodology changes both before and after the current definition of FMRs (reflected in the methodology described above) went into effect in 1995.[22]

The table below is intended to briefly document the major methodological changes for each FY of FMRs, starting with the most recent. References for more detailed information are provided throughout.

FY of FMRs	Methodological Change(s)
FY 2026[23]	The special tabulations of ACS and Decennial Census data cease to exclude new construction from the ASQ universe per the regulations at 24 CFR § 888.113 (see Section III), as amended by the final rule for implementing sections 102, 103, and 104 of the Housing Opportunity Through Modernization Act (HOTMA).[24]
	As a result of OMB geographic revisions, HUD adopts the new MSA definitions for CT rather than maintaining the previous HMFA definitions (see Section II).
FY 2025[25]	Westchester County, NY was included in the New York, NY HUD Metro FMR Area for the first time (see Section II).
FY 2024[26]	Began evaluating one-year recent mover data and only using two-year recent mover data if statistically reliable one-year data is unavailable.
	For areas not represented individually in the private rent data, HUD began using rental unit weighted average of the private inflation factors rather than applying a Census Region-based CPI rent inflation factor.
FY 2023[27]	Private data sources included for the first time, in conjunction with the CPI, to inflate the ACS-based rent estimates when calculating the average gross rent inflation factor for areas where sufficient private rent data is available.

[22] See Fair Market Rents.
[23] See **FY 2026 Federal Register notice.**
[24] HUD finalized HOTMA rulemaking in 2023 to put Sections 102, 103, and 104 into effect through revisions to HUD's regulations found in 24 CFR Part 5 and 24 CFR Part 891.
[25] See FY 2025 Federal Register notice.
[26] See FY 2024 Federal Register notice.
[27] See FY 2023 Federal Register notice.

FY of FMRs	Methodological Change(s)
	Short-term methodology change to address the temporary lack of availability of usual ACS data due to COVID.
FY 2020[28]	Began using localized and regional trend forecasts based on CPI metropolitan areas and Census regions rather than national trend factors.
	For the first time since FY 2001 there were no designated 50th percentile areas, having been fully replaced by SAFMRs.
FY 2018[29]	Added number of observations to the existing statistical reliability criteria.
	Began using all-bedroom rents when two-bedroom rents are not statistically reliable before moving to a higher level of geography.
FY 2017[30]	Small area fair market rents (SAFMRs) are officially introduced following a court settlement and subsequent pilot project in FY 2011. See Small Area Fair Market Rent (SAFMR) methodology for a more detailed timeline.
	Started using a statistical model to forecast CPI gross rents at the national level.
FY 2014[31]	Changed the basis for PR's FMRs to the Puerto Rico Community Survey (PRCS) data, which is part of the ACS program.
	Also began using CPI data calculated specifically for PR rather than using South Census Region CPI data.
FY 2013[32]	Updated bedroom ratio methodology, using 5-year ACS data rather than decennial census data.
	Implemented new trend factor methodology based on national gross rent data.
FY 2012[33]	5-year ACS tabulation completely replaces decennial census data for the first time.
FY 2008[34]	Began incorporating ACS data into the FMR calculations, gradually increasing the degree to which it was relied upon.

[28] See HUD's Fair Market Rents and Income Limits and FY 2020 Federal Register notice.
[29] See FY 2018 Federal Register notice and FY 2018 Notice of Proposed Rulemaking.
[30] See HUD's Fair Market Rents and Income Limits and the SAFMR methodology for additional information on the timeline of the introduction of SAFMRs and HUD's Fair Market Rents and Income Limits.
[31] See FY 2014 Federal Register notice.
[32] See FY 2013 Federal Register notice.
[33] See HUD's Fair Market Rents and Income Limits and FY 2012 Federal Register Notice.
[34] See HUD's Fair Market Rents and Income Limits, FY 2009 Federal Register notice, and FY 2008 Federal Register notice.

FY of FMRs	Methodological Change(s)
FY 2002[35]	One time change to methodology used for natural gas data due to data availability.
FY 2001[36]	Areas meeting certain criteria began being evaluated at the 50th percentile. This ceased with the passage of the SAFMR final rule and their full implementation in FY 2017.
FY 1995[37]	Changed from a 45th percentile standard to a 40th percentile standard as a cost saving measure.
FY 1984[38]	No FMRs were calculated.
FY 1982[39]	Changed FMRs from a 50th percentile standard to a 45th percentile standard.
	Began excluding public housing and recently constructed units from standard quality units.
	Higher FMRs were established for units with more than two bedrooms.
FY 1979[40]	Began supplementing decennial census data with American Housing Survey (AHS) data.
FY 1975[41]	First FMR schedules developed using updated decennial census data.

XII. Appendix: Acronyms

ACS	American Community Survey
AHS	American Housing Survey
AS	American Samoa
ASQ	adjusted standard quality
BLS	Bureau of Labor Statistics
CBSA	Core Based Statistical Area
CoC	Continuum of Care
CPI	Consumer Price Index
DC	District of Columbia

[35] See FY 2002 Federal Register notice.
[36] See "FMR History 1983 - Present: Read Me" located here: https://www.huduser.gov/portal/datasets/fmr.html#history.
[37] See HUD's Fair Market Rents and Income Limits and "FMR History 1983 - Present: Read Me" (https://www.huduser.gov/portal/datasets/fmr.html#history).
[38] See "FMR History 1983 - Present: Read Me" located here: https://www.huduser.gov/portal/datasets/fmr.html#history.
[39] See HUD's Fair Market Rents and Income Limits.
[40] See HUD's Fair Market Rents and Income Limits.
[41] See HUD's Fair Market Rents and Income Limits.

DTRH	Puerto Rico Department of Labor and Human Resources, Bureau of Statistics of the Commonwealth Government
ESG	Emergency Solutions Grant
FIPS	Federal Information Processing Standard
FMR	Fair Market Rent
FY	fiscal year
GU	Guam
HAP	housing assistance payment
HCV	Housing Choice Voucher
HMFA	HUD Metro FMR Areas (also called “subareas” or CBSAsubs or “hud_area_codes” in the publicly available datasets)
HOME	Home Investment Partnerships Program
HOTMA	Housing Opportunity Through Modernization Act
HUD	Department of Housing and Urban Development
IL	Illinois
LIM	Local Input Model
MD	Maryland
ME	Maine
MO	Missouri
Mod Rehab	Moderate Rehabilitation Single Room Occupancy program
MP	Northern Mariana Islands
MSA	metropolitan statistical area
ND	North Dakota
NIM	National Input Model
NY	New York
OMB	Office of Management and Budget
OR	Oregon
PHA	public housing agency
PIC	PIH Information Center
PIH	Office of Public and Indian Housing
PR	Puerto Rico
PRCS	Puerto Rico Community Survey
PSU	primary sampling unit
PTS	Pure Time Series
RFIF	renewal funding inflation factor
RMSE	root mean squared error
RPR	Rent of Primary Residence
SAFMR	Small area fair market rent
TX	Texas
U.S.	United States
UT	Utah
VA	Virginia
VI	Virgin Islands
WV	West Virginia
WY	Wyoming