Characteristics of HUD-Assisted Renters and Their Units in 2017

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Executive Summary

In 2017, the U.S. Department of Housing and Urban Development (HUD) provided rental subsidies to 4,540,000 households under several programs, with total costs exceeding \$38 billion. This report uses data from the American Housing Survey (AHS) to describe key features of both the rental housing assistance that HUD provided and the households that HUD served. The 2017 AHS contained information collected from 4,728 HUD-assisted rental units; this report compares this group with two control groups: all rental units and all rental units occupied by very low-income (VLI) households (that is, by households with incomes not exceeding 50 percent of local median income, adjusted for household size). Most VLI households are eligible for HUD assistance.

HUD-Assisted Rental Housing (Section 2)

HUD-assisted housing falls into three broad types: (1) public housing, (2) vouchers, and (3) privately owned multifamily programs.³ Public housing and privately owned multifamily programs are *project-based* programs, meaning the subsidy is tied to the unit and that households apply for the units. Vouchers are *tenant-based* because the subsidy attaches to the household, that then selects the unit.

Public housing was first implemented in 1937 when the federal government encouraged the formation of local public housing authorities (PHAs) that planned projects, issued bonds to finance these projects, and managed the projects after completion. The government paid off the bonds, and PHAs maintained projects using rent from tenants. Currently, HUD also subsidizes operating costs and capital improvements. In 2017, public housing assisted 968,000 households.

Historically, tenant-based assistance began with the Section 8 certificate and voucher programs created in 1974 and 1983, respectively. The Housing Choice Voucher (HCV) program replaced these programs under legislation enacted in 1998. Although the voucher program is predominantly tenant-based, a variant of it allows PHAs to attach vouchers to units in a project,

¹ The estimates presented in this report are based on survey data, which are subject to sampling and non-sampling error. The definitions and periods of time used in this report may not be the same as used in HUD administrative data or other surveys (which have their own sources of error). Readers are advised to use caution when comparing the results in this report with documents based on other data sources, including HUD's *Picture of Subsidized Households*.

² Throughout this report, the term "very low-income households" refers to renter households eligible for HUD assistance, including renter households receiving HUD assistance. According to the authorizing statute, households are initially income-eligible for the HUD rental assistance programs if they have incomes at or below 80 percent of the HUD area median income. Additional statutes and HUD regulations for specific rental assistance programs, however, as well as public housing authority-specific rules, generally limit income eligibility to households with incomes at or below 50 percent of the HUD area median income. As of 2019, approximately 4 percent of HUD-assisted households have incomes greater than 50 percent of the HUD area median income.

³ In discussing differences between individual HUD programs or between HUD-assisted housing and comparison groups, the report does not determine whether the differences are statistically significant. Statistical testing was beyond the scope of this study. In particular, we did not have access to the sample counts behind the tables, which are needed for manageable testing.

and the "voucher" data in this report contain both the traditional voucher program and this variant. In 2017, the HCV program assisted 2,169,000 households.

Privately owned multifamily housing includes projects created under a collection of programs created during the past four decades. These programs provide private landlords with housing subsidies from HUD to provide affordable housing to qualified tenants. The subsidy arrangement is project-based because the assisted household may not take the subsidy and move to another location. The single largest (87 percent) project-based program is the Section 8 program, which was created in 1974 as a project-based companion to the Section 8 voucher program. In 2017, privately owned multifamily programs assisted 1,403,000 households.

HUD generally limits income eligibility for rental assistance to VLI households that have incomes at or below 50 percent of the HUD area median income. Throughout this report, these households are called VLI households. In 2017, 18,742,000 households in the United States were VLI, and 4,540,000 (24.2 percent) were in HUD-assisted units.

The number of assisted rental units has increased by only 12 percent during the past 26 years: In 1991, HUD assisted 4,036,000 rental units, compared with 4,540,000 in 2017. During the same period, the number of VLI households increased nearly 16 percent, from 16,194,000 to 18,742,000. Because of a reduced rate of HUD-assisted households and an increase in the number of VLI households, the percentage of VLI households receiving assistance fell from 24.9 to 24.2 percent.

The mix of HUD-assisted housing has changed dramatically over time as HUD has shifted its resources away from project-based housing to tenant-based housing. The voucher program's share of HUD-assisted households grew from 26 percent in 1989 to 48 percent in 2017. During this period, the shares of public housing and privately owned multifamily housing declined by 12 and 10 percentage points, respectively; public housing decreased from 33 percent to 21 percent, and privately owned multifamily housing decreased from 41 percent to 31 percent.

Characteristics That Affect Program Performance (Section 3)

HUD administers its assisted rental housing through agents: In the case of public housing, this is done with local PHAs and, in the case of privately owned multifamily units, private landlords. When and where these agents get involved in the housing process and their preferences⁴ determine where the programs operate and who the programs serve. This circumstance is particularly true of project-based programs; once constructed, projects continue to serve a locality and a certain clientele for 40 years or more.

Project-based programs were most active before 1985; approximately 75 percent of privately owned multifamily housing and 80 percent of public housing was built before 1985. This housing construction was influenced by the demographics of that period, such as the age, size, and composition of low-income households. For these programs, the local needs and

⁴ Such as helping households that are senior, disabled, with children, or recently homeless.

interests of PHAs and project managers determined the type of housing and, in particular, the mix of bedrooms built.

In creating assisted units during that period, public housing and privately owned multifamily programs were heavily oriented toward building smaller units. In 2017, 37 percent of public housing units and 63 percent of privately owned multifamily were efficiencies or one-bedroom units; for all renter households and VLI renter households, the share was 28 percent and 35 percent, respectively. This heavy concentration of efficiencies and one-bedroom units determined the size and composition of the households served by these programs. By comparison, 29 percent of the units in the voucher program were efficiency or one-bedroom units.

The location of projects also influences resident characteristics. In the Northeast and the central cities of U.S. metropolitan areas, the percentage of public housing and privately owned multifamily rental housing is higher than the percentage of VLI households in the same areas.

Characteristics of HUD-Assisted Tenants (Sections 4 and 5)

For some characteristics of households, the U.S. Census Bureau reports data on all household members; for other characteristics, such as age or race, the U.S. Census Bureau reports data from one individual, known as the householder. The householder is any responsible member of the household competent enough to answer questions about the household. For example, in a household with two adults and a child or children, the householder could be either adult. This report uses AHS data on both the householder (Section 4) and the household (Section 5) to describe the characteristics of those served by HUD-assisted housing.

HUD-assisted rental housing generally serves the lowest income population. In 2017, the median income for VLI households not assisted by HUD was \$16,000; for VLI households assisted by HUD, the median income was \$10,800 among public housing tenants, \$11,160 among tenants of privately owned multifamily units, and \$12,500 among voucher recipient households. Compared with all VLI households, householders in HUD-assisted units had substantially lower educational attainment, received wage and salary income less often, and relied on welfare and Supplemental Security Income, or SSI, more often. HUD-assisted households were less often married-couple households and more often single-adult households with a female householder. HUD-assisted households, especially in privately owned multifamily projects, were more likely to contain members with disabilities (hereafter referred to as *disabled households*).

Some of the deviations in characteristics between HUD-assisted households and householders and the population of unassisted VLI households generally relate to when and where programs began operation. HUD householders are more often Black than those in the VLI renter population because HUD programs operate more often in central cities of metropolitan areas. HUD householders are somewhat less likely to be Hispanic, likely because project-based programs were historically concentrated in the Northeast and South and were constructed before the rapid growth of the Hispanic population. Similarly, HUD householders are more often seniors because PHAs and the owners of subsidized multifamily projects favored this clientele.

Housing Costs, Unit Quality, and Tenant Satisfaction (Sections 5 and 6)

The goals of HUD-assisted housing are to reduce the burden of housing costs on households, provide households with decent housing in safe neighborhoods, and improve tenant welfare overall.

Section 5 concludes with an examination of *rent burden* (the ratio of total housing costs to income). Generally, a rent burden of more than 40 percent is considered excessive. AHS data show that 40 percent of HUD-assisted households have excessive rent burdens. This percentage is substantially higher than expected because tenants' rents in HUD-assisted housing are usually set at 30 percent of income. Section 5 presents plausible reasons for this apparent program discrepancy. The bottom line is that excessive rent burdens are much less common among HUD-assisted households than all VLI households (63 percent).

The main conclusion from section 6 is that American housing stock and the HUD-assisted stock are of high quality. The AHS includes an overall measure of housing quality that detects whether an individual unit is adequate, moderately inadequate, or severely inadequate. In 2017, 1.9 percent of all rental units, 2.9 percent of all VLI units, and 2.3 percent of all HUD-assisted units were severely inadequate.

Section 6 examines various indicators of housing problems: heating problems, toilet breakdowns, water leaks, other deficiencies, electrical problems, and having incomplete kitchen facilities. In almost every case, HUD-assisted units had few problems, were comparable in quality to all rental units, and were sometimes slightly better than all VLI units (see exhibit 6-13).

HUD-assisted tenants are mostly satisfied with their units and neighborhoods. A higher percentage of respondents from HUD-assisted units gave their units a score of 9 or 10—on a scale of 1 to 10, with 1 being the worst and 10 being the best—than did respondents from units occupied by VLI households or from all rental units. Public housing tenants are the least likely to be satisfied with their units and neighborhoods, while tenants of privately owned multifamily units are most likely to be satisfied. With respect to neighborhoods, tenants in public housing appear to be less satisfied than tenants in the other groups; they have the lowest percentage of ratings of 9 or 10 and the highest percentage of 1 through 5 ratings.

When asked to compare their current unit with their previous home, recent-mover respondents in HUD-assisted units were more likely than either all renters or VLI renters to rate the HUD-assisted unit and neighborhoods as better than their previous unit and neighborhoods.

Conclusions (Section 7)

This section looks across the earlier sections to assess HUD's rental assistance, focusing on four questions.

Who Do the Programs Serve?

The households that receive HUD assistance have incomes at the bottom end of the VLI group. More than one-half of all HUD-assisted households had a total income in 2017 of less than \$12,500, compared with a median of \$16,000 among unassisted VLI households. Other characteristics of assisted households confirm that HUD-assisted housing is targeted to those most in need. Seventy percent of HUD-assisted households are single-adult households with a female householder, compared with 55 percent among VLI households, and HUD-assisted housing serves households with one or more disabled members at a rate (44 percent) substantially higher than the rate among either VLI renter units (33 percent) or all rental units (22 percent).

HUD-assisted households differ in some demographic characteristics from all VLI households. Among HUD-assisted households, 46 percent have Black householders,n and 18 percent have Hispanic householders, compared with 28 percent and 23 percent, respectively, among all VLI households.

What Benefits Do the Programs Provide?

Excessive rent burdens are lower among HUD-assisted households (40 percent) compared with all VLI renters (63 percent).

HUD-assisted programs achieved their primary objective of providing decent and affordable housing for needy households. The AHS provides extensive information on the quality and condition of units, and AHS data show that the American rental housing stock is in good condition and that HUD-assisted units are as good as other rental units.

Tenants of HUD-assisted housing rate their units with the highest satisfaction more often than VLI renters or all renters. Among recent movers, HUD tenants rate their new units and neighborhoods as better compared with all VLI movers and all renters.

How Do the Programs Differ with Respect to Recipients and Benefits?

Forty-four percent of privately owned multifamily householders are seniors, compared with 24 percent of householders in public housing and 18 percent in the voucher program. Thirty-six percent of privately owned multifamily households include two or more persons, compared with 56 percent in public housing and 58 percent in the voucher program. Forty-nine percent of privately owned multifamily households have a disabled member, compared with 42 percent in public housing and 41 percent in the voucher program.

How Have the Programs Evolved Since 1989?

The biggest change in assisted housing programs has been the shift from project-based assistance to tenant-based assistance. From 1989 to 2017, the number of HUD-assisted units increased by 500,000 units, but the program mix changed dramatically. The voucher program's share grew from 26 percent in 1989 to 48 percent in 2017, while shares of public housing and privately owned multifamily housing each declined by 12 and 10 percentage points, respectively.

The shift to vouchers had some programmatic effects: The metropolitan areas outside of central cities have a larger share of HUD assistance, at 31 percent in 2017 compared with 26 percent in 1989, and the share of senior householders in HUD-assisted units fell from 35 percent to 27 percent.

Section 1: Introduction

In 2017, HUD subsidized 4.5 million renter households under a variety of programs where total costs exceeded \$38 billion. Using data from the 2017 American Housing Survey (AHS), this report describes the operations of these rental assistance programs and assesses their performance. This study examines the following questions:

- Where is HUD-assisted housing located? Who operates these programs? Do these aspects affect who the programs serve?
- Who lives in these units? Do HUD programs serve the lowest-income population? Are the occupants typical of all low-income households in terms of race, ethnicity, age, and household composition?
- What types—in terms of size, structure type, and age—of units are provided? Do these aspects affect who the programs serve?
- How do recipients benefit from HUD assistance? Is their cost of housing reduced? Are the units of good quality? Are occupants satisfied with HUD-assisted units?

Using the AHS, this report answers these questions by comparing HUD units and their occupants to two relevant groups: (1) all rental units and their occupants, and (2) units occupied by all very low-income (VLI) households. Both groups include assisted units and their occupants.

The AHS is an ideal data source for these purposes. The 2017 AHS contained information collected from 4,728 HUD-assisted rental units, and this report compares this group with two control groups: all rental units and all rental units occupied by VLI households (that is, households eligible for HUD assistance). The data reported here represent assisted households and units in all 50 states and the District of Columbia but exclude households and units in Puerto Rico, Guam, and the U.S. Virgin Islands—those places are not included in the AHS.⁵ This report is the ninth in a series of studies dating back to 1989 that use AHS information on HUD-assisted housing stock and its occupants.⁶

This report contains seven sections and an executive summary:

- Section 1 serves as an introduction to the overall report.
- Section 2 discusses the HUD-assisted rental housing programs, focusing on their history, size, and the two broad strategies that the federal government has used to subsidize renters.
- Section 3 looks at three characteristics of how HUD-assisted housing has evolved: location, year built, and size (number of bedrooms). To a large extent, these features determine who the programs serve.

⁵ Another series of HUD-produced reports and datasets focus only on assisted households using information gleaned from administrative records. These reports and databases have been published under the series titled *Picture of Subsidized Households* and are posted at http://www.huduser.org/datasets/assthsg.html.

⁶ The eight previous studies are listed in appendix B. The 2007 data were collected and analyzed, but a report was not prepared.

- Section 4 uses the information on one important household member, called the householder, to describe who the programs serve. Key characteristics of the householder are age, race and ethnicity, education, and how long the householder has lived in the unit.
- Section 5 uses the information on the entire household to describe who the programs serve. These household characteristics include income amount, income sources, household size and composition, presence or absence of a disabled member, and the relationship between rent and other housing costs and income.
- Section 6 focuses on unit quality and tenant satisfaction: structure type, equipment failures and other deficiencies, how well tenants rate their units and neighborhoods, and how and why renters who just moved in chose their units.
- Section 7 uses information from the previous sections to assess HUD-assisted rental housing.

Section 2: HUD Rental Assistance Programs

Multiple Assistance Programs but Two Strategies

HUD's rental assistance programs provide affordable housing in one of two ways: either HUD (or its predecessor) subsidizes the construction and operation of units dedicated to low-income renters, or HUD allows selected households to find suitable housing and pays part of the rent on behalf of the tenants. These approaches are called *project-based* and *tenant-based*, respectively.

HUD rental housing assistance programs for families and individuals fall into three basic categories:

- 1. Conventional public housing (hereafter referred to as *public housing*): project-based.
- 2. Section 8 Housing Choice Vouchers (hereafter referred to as *voucher*): tenant-based.
- 3. Privately owned multifamily housing (hereafter referred to as *privately owned multifamily*): project-based.

Public housing consists of housing developments owned by local public housing authorities (PHAs) or Indian housing authorities. HUD makes payments to these authorities to cover the development, rehabilitation, and operating costs of the housing units, which are then rented to selected low-income families and individuals at below-market rents. Because HUD payments cover the development and maintenance of the project, public housing is project-based. The amount of rent that low-income families pay is typically a fraction (30 percent) of their income. New tenants can select from vacant and available units owned and operated by local PHAs, but they must select a unit owned by the local PHA.

Public housing was first implemented in 1937; it was designed as a program to provide housing for "teachers and firemen"—that is, working low-income families. The federal government encouraged the formation of local PHAs that planned projects, issued bonds to finance these projects, and managed the projects after completion. The government paid off the bonds, and the PHAs maintained the projects using the rent from tenants. In time, PHAs began serving households with lower and lower incomes; these incomes eventually would not support the rents needed to cover operating costs and building upkeep. HUD now subsidizes operating costs and capital improvements.

The Section 8 Housing Choice Voucher (HCV) program serves selected low-income households searching for housing units of their choice in the private rental market. After the housing unit is located and approved by the local PHA, the PHA makes a subsidy payment to the private-sector landlord on behalf of the tenant household. The program is designed so that if the housing unit rents for up to the fair market rent (established by HUD based on location and household size), the out-of-pocket amount that tenants pay is 30 percent of the household's income. Families are given the choice of renting units that are more expensive, but tenants must then pay the difference between the payment standard and the higher rent in addition to the

standard 30 percent of their income.⁷ If the tenant household decides to move to another location, the tenant household may take the Section 8 voucher with them to another rental unit—this is why this program is referred to as tenant-based assistance.

Tenant-based assistance is the most prevalent form of housing assistance provided today. Historically, tenant-based assistance began with the Section 8 certificate and voucher programs created in 1974 and 1983, respectively. These programs were replaced by the HCV program under legislation enacted in 1998. Whereas the voucher program is predominantly tenant-based, a variant allows PHAs to attach vouchers to units in a project. The "voucher" data in this report contain both the traditional voucher program and this variant.

The third major type of HUD rental assistance is a set of programs collectively referred to as privately owned multifamily housing. These programs were created during the last four decades of the 20th century. What these programs have in common is that they provide rental housing that is owned by private landlords who enter into contracts with HUD to receive housing subsidies. The subsidies pay the difference between tenant rent and total rental costs. The subsidy arrangement is project-based because the assisted household is not allowed to take the subsidy and move to another location. The single largest (87 percent) privately owned multifamily program is the Section 8 program, which was created in 1974 as a project-based companion to the Section 8 voucher program. This program allowed for new construction and substantial rehabilitation delivered through a wide variety of financing mechanisms. An important variant of project-based Section 8 was the Loan Management Set Aside (LMSA) program, which was provided in projects financed under Federal Housing Administration (FHA) programs that were not originally intended to provide deep subsidy rental assistance and which were in danger of foreclosure. Projects receiving these LMSA "piggyback" subsidies were developed under the Section 236 program, the Section 221(d)(3) Below Market Interest Rate (BMIR) program, and some others that were unassisted when originally developed. The Section 202 Supportive Housing for the Elderly program is another important privately owned multifamily program, accounting for 9 percent of the units in this category.

Despite the enactment of the project-based Section 8 new construction/moderate rehabilitation programs, the tenant-based approach has become the federal government's major mechanism for providing assisted rental housing. HUD turned toward the tenant-based approach because of problems with project-based housing. In public housing, concentrating low-income families in densely packed projects sometimes led to crime and vandalism; for example, the early abandonment and eventual demolition of Pruitt-Igoe buildings in St. Louis, MO, and Cabrini Green in Chicago, IL, were costly failures and became embarrassments to HUD. Numerous Section 221(d)(3) BMIR and Section 236 projects failed financially, causing sizable losses to FHA, which insured the mortgages on these programs.

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⁷ The entity administering the voucher programs sets a payment standard based on the fair market rent, usually between 90 and 110 percent of the local fair market rent.

⁸ See *Picture of Subsidized Households* at https://www.huduser.gov/portal/datasets/assthsg.html.

HUD believes that the tenant-based approach offers positive advantages over the alternative. With vouchers, tenants can choose housing best suited to their needs in terms of unit characteristics, neighborhood amenities, and location.

The debate between project-based and tenant-based approaches continues. Advocates of the project-based approach argue that subsidized units, once built, can continue to provide assistance for 40 or more years, whereas the federal government can terminate the voucher program at any time. A recent study of affordable housing during the 1985–2013 period concluded that almost 20 percent of all the affordable rental housing available during this time came from project-based units (Weicher, Eggers, and Moumen, 2018).

During the 1989–2017 period, the number of HUD-assisted units increased by 500,000 units, but the program mix changed dramatically (exhibit 2-1). In this and all future exhibits, the term "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units. Due to differences in the way these programs are structured, sizable changes might be expected during this period in how HUD housing assistance affected American households.

Exhibit 2-1. Trends in HUD-Assisted Housing by Program Type

AHS Survey	All HUD-Assisted	Tenants in Public	Voucher	Tenants in Privately
Year	(Thousands)	Housing (%)	Recipients (%)	Owned MF Units (%)
1989	4,070	33.4	26.0	40.5
1991	4,036	28.4	28.3	43.3
1993	4,054	28.1	29.6	42.3
2003	4,280	25.6	42.1	32.4
2007	4,273	23.5	45.1	31.4
2009	4,426	22.6	46.8	30.6
2011	4,466	22.9	47.0	30.1
2013	4,490	22.9	46.8	30.2
2015	4,475	22.7	47.4	29.9
2017	4,540	21.3	47.8	30.9

AHS = American Housing Survey. MF = multifamily.

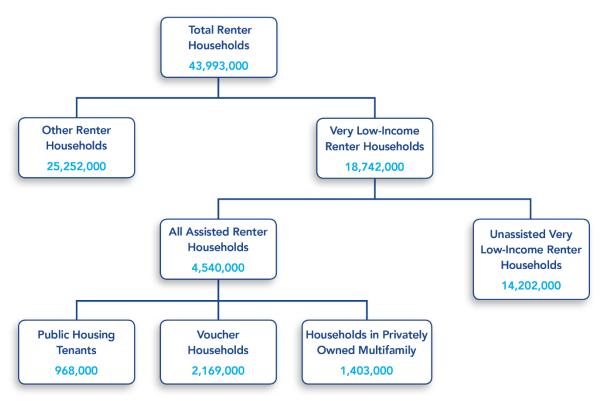
Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

An important note: not all housing assistance programs are assessed in this report. The AHS sample includes but does not identify renter households receiving housing assistance from U.S. Department of Agriculture (USDA) programs or state and local rental assistance programs. Estimates indicate that in fiscal year 2004, 464,000 units were available under the Rural Housing Service (formerly known as the Farmers Home Administration) Section 515 Rental Assistance Program, and 264,000 of the available units received deep subsidies under the Section 521 Rental Assistance Program. The report also does not provide information on units available for occupancy under the U.S. Department of the Treasury's Low-Income Housing Tax Credit program; from 1987 through 2013, 40,502 projects containing 2.6 million units were placed in service for low-income households (those with incomes less than 60 percent of local area median income; HUD, 2019). Some of these tax credit units may also receive HUD or USDA subsidies.

The Big Picture in 2017

Exhibit 2-2 explains how HUD-assisted housing fits into the overall rental housing market. In 2017, 18,742,000 of the 43,993,000 renter households were eligible on the basis of income for HUD assistance.





HUD programs served 4,540,000 (24.2 percent) of very low-income (VLI) households. The voucher program helped 2,169,000 households; another 1,403,000 households lived in privately owned multifamily housing, and public housing provided housing to 968,000 households. This process left 14,202,000 eligible households without any HUD housing assistance. AHS data depict how housing assistance has evolved over the 28 years between the 1989 AHS and the 2017 AHS (exhibit 2-3).

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⁹ In the 2017 and previous AHS surveys that identified HUD-assisted units, HUD provided the U.S. Census Bureau with estimates of the number of HUD-assisted units by program. The U.S. Census Bureau used these estimates to adjust the weights of the HUD-assisted units so that the weighted counts matched program totals.

Exhibit 2-3. Trends in HUD-Assisted Rental Housing, Relative to Need

AHS Survey Year	All Renters (Thousands)	All VLI Renters (Thousands)	All HUD-Assisted (Thousands)	Percent of VLI Assisted (%)
1989	33,767	13,808	4,070	29.5
1991	33,351	16,194	4,036	24.9
1993	33,472	15,795	4,054	25.7
2003	33,604	16,576	4,280	25.8
2007	35,032	16,494	4,273	25.9
2009	35,378	18,233	4,426	24.3
2011	38,816	19,824	4,466	22.5
2013	40,202	18,856	4,490	23.8
2015	43,991	19,876	4,475	22.5
2017	43,993	18,742	4,540	24.2

AHS = American Housing Survey. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Source: AHS

During the 1991–2017 period, the number of renter households grew from 33.4 million to 44.0 million—an increase of 32 percent. ¹⁰ During the same timeframe, the number of VLI households increased by 16 percent, while the number of HUD-assisted units increased by only 12 percent. The percentage of VLI households receiving assistance fell from 24.9 percent in 1991 to 24.2 percent in 2017. The financial crisis and recession that began in 2007 caused a sharp increase in the number of renter households and an even sharper increase in the number of renter households with very low incomes. Most of the decline in the percentage of VLI households receiving assistance occurred during the 2007–2011 period. The number of VLI renter households declined by 1 million between 2011 and 2013, rose again by 2015, but then fell again in 2017.

Interpreting the Data

There are three factors crucial for interpreting the data:

- Unlike Medicaid, the Supplemental Nutrition Assistance Program (also known as food stamps or SNAP), and Temporary Assistance to Needy Families, or TANF, assisted housing is not an entitlement; that is, not every household that meets the eligibility requirements for assisted housing will receive housing assistance. Some households receive help, while others are placed on waiting lists. Such variations mean that the "who is helped" question is particularly relevant. In other words, individually and as a group, do the assisted housing programs overserve some populations and underserve others?
- HUD delivers housing assistance through agents: PHAs administer public housing, PHAs and state agencies administer the voucher program, and private developers and landlords administer the privately owned multifamily programs. The motivations of these agents and where and when they function greatly affect how these programs operate.

¹⁰ The percentages reported in this and the following two sentences are based on the 1991–2013 period. In 1991, the U.S. Census Bureau revised AHS weights to reflect information from the 1990 census. This change corrected an overcount of the housing stock in the 1989 AHS of more than 1 million units. Adjustments to the weights in 2003 and 2013 for subsequent censuses did not reveal any major problems in housing stock counts.

• Two of the three major categories of HUD-assisted housing—public housing and privately owned multifamily housing—provide assisted housing by first producing the housing. Housing units are clumps of capital and land that have long lifespans. Those characteristics mean the location and type of units produced (such as one-bedroom units in central cities) determine who will be served for years to come (a one-bedroom unit cannot serve a larger family with multiple children, for example).

A Note on Eligibility

This report uses VLI rental households and the units they occupy as a comparison group because this group generally corresponds to renters who are eligible to receive HUD-assisted housing. Things are more complicated than that, however; in one sense, 50 percent of adjusted local median income is a lower bound because other families with higher incomes (up to 80 percent of median income) are eligible in some privately owned multifamily programs. In another sense, 50 percent of adjusted local median income is an upper bound because the Quality Housing and Work Responsibility Act of 1998 set tighter targeting requirements for the HCV and public housing programs. For vouchers, no less than 75 percent of any new admissions must have extremely low incomes—that is, income less than 30 percent of adjusted local median income. For public housing, the act requires 40 percent of new admissions to be extremely low income, although the act allows PHAs to offset this requirement with admissions to their voucher programs. Finally, the act eliminated the federal admission preference and allowed PHAs to establish local preferences.

Section 3: Location and Key Unit Characteristics

Three factors greatly influence who the HUD-assisted housing programs serve and what type of housing is provided: (1) which agents choose to work with HUD to provide housing assistance, (2) where these agents are located, and (3) the agents' objectives. For this reason, this report begins the analysis with information on the location of HUD-assisted housing and the types of units provided.

How to Read a Current Characteristics Table

Except for historical tables, the table exhibits in this and the remaining sections are percent distributions of groups of units or households by various characteristics of rental housing in 2017. Each of these table exhibits will have seven columns. The first column will list the various characteristics, such as the Census Region or Division where the rental units are located or the race and ethnicity of the householders in the households. The remaining six columns will provide the percentage of rental units or occupant households in that column that have that characteristic. In the column headers, "renters" refers to "renter households" and not individuals in renter households. The seven columns, in order from left to right, are:

- 1. Unit or occupant characteristics.
- 2. All assisted units or households (4,540,000). This column contains the weighted sum of columns 3, 4, and 5.
- 3. Public housing units or households (968,000).
- 4. Voucher units or households (2,169,000).
- 5. Privately owned multifamily units or households (1,403,000).
- 6. All very low-income renter households (or units occupied by them), including assisted households (18,742,000).
- 7. All renter households (or units occupied by them), including assisted households (43,993,000).

The cells in these columns, unless otherwise noted, contain the percentage of the column total that has that characteristic. For example, the third number down in the second column of exhibit 3-1 indicates that 7.7 percent of the 4,540,000 HUD-assisted units are located in the New England Census Division.

In the characteristics exhibits and accompanying text, percentages are rounded to the nearest 1/10 of a percentage point to provide the fullest exposition of the data from the American Housing Survey. Readers should recognize that sampling errors and respondent errors limit the precision of all the reported percentages. In the overview sections—that is, the Executive Summary and Section 7—percentages are generally presented without the 1/10 of a percentage point for simplicity and to prevent giving a false sense of precision.

Regional and Metropolitan Location

Exhibit 3-1 reports the geographical distribution of HUD-assisted housing; the top row shows the number of rental units within the United States in a given category. The subsequent rows give the percentage of those units that are located within a given Census Region or Census Division.

Each division row lists states within that division. At the regional level, the proportions of all renters and all VLI renters are roughly equal; the same is true at the division level. For example, 36.5 percent of all renters and 35.2 percent of VLI renters live in the South. Because eligibility is relative to local income, this pattern is not surprising because high-income areas will have higher local median incomes.

Exhibit 3-1. Distribution of HUD-Assisted Housing by Region and Census Division, 2017

		HUD-Assist				
Regions and Divisions	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
United States (Units, in Thousands)	4,540	968	2,169	1,403	18,742	43,993
Northeast Region	27.7	36.5	24.4	26.8	22.0	19.0
New England Division: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	7.7	6.7	7.2	9.3	5.7	4.8
Middle Atlantic Division: New Jersey, New York, Pennsylvania	20.0	29.8	17.2	17.5	16.3	14.3
Midwest Region	22.0	21.4	19.2	26.7	20.3	19.5
East North Central Division: Illinois, Indiana, Michigan, Ohio, Wisconsin	15.6	15.4	13.5	19.1	14.3	13.5
West North Central Division: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	6.3	6.0	5.7	7.6	6.0	5.9
South Region	32.8	33.4	33.4	31.6	35.2	36.5
South Atlantic Division: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, District of Columbia	16.3	15.0	16.8	16.4	18.2	19.1
East South Central Division: Alabama, Kentucky, Mississippi, Tennessee	7.0	9.5	5.7	7.2	5.8	5.6
West South Central Division: Arkansas, Louisiana, Oklahoma, Texas	9.6	8.9	10.9	8.0	11.2	11.8
West Region	17.4	8.8	22.9	14.8	22.4	25.0
Mountain Division: Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming	4.1	2.6	4.7	4.3	6.0	7.0
Pacific Division: Alaska, California, Oregon, Washington, Hawaii	13.3	6.2	18.3	10.5	16.4	18.0

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Source: U.S. Census Bureau

When compared with either all renter households or all VLI renter households, the HUD programs as a group are more concentrated in the Northeast and less concentrated in the West. Nineteen percent of all renters and 22 percent of VLI renters live in the Northeast, but 28 percent of HUD-assisted housing is located there. Public housing is particularly concentrated in this region, but the percentages of voucher units and privately owned multifamily units are also higher than the percentages of all renters or all VLI renters. In 2017, the West contained 25 percent of all renters and 22 percent of VLI renters but only 17 percent of HUD-assisted households. The shares of HUD-assisted renters found in the Midwest and South are closer to the geographic distributions of all renter households and all VLI households.

The regional distribution of public housing, the oldest HUD-assisted housing program, drives this imbalance. PHAs administered most vouchers, which is the newest HUD program. The voucher program has a regional distribution that is close to that of all renter households but still has a higher percentage in the Northeast and a lower percentage in the West. The overall regional imbalance is a function of the age of the programs; communities in the Northeast created active PHAs in the early years of the public housing program, whereas PHAs in the West became more active in the years after HUD moved toward voucher assistance. During this period, the nation's population also shifted toward the West. Similar patterns appear in the metropolitan/nonmetropolitan distribution of HUD-assisted housing.

Overall, the split of HUD-assisted housing between metropolitan and nonmetropolitan areas in 2017 was similar to that of all renter households and all VLI renter households (exhibit 3-2). Within metropolitan areas, HUD-assisted households were more concentrated in central cities and less concentrated outside central cities than either all renter households or all VLI renter households. The disparity between the central city and the rest of the metropolitan area was most pronounced in public housing, but the voucher and privately owned multifamily programs also exhibited this imbalance to a lesser extent.

Exhibit 3-2. Distribution of HUD-Assisted Housing by Metropolitan/ Nonmetropolitan Status, 2017

Hommotropontari Otatao, 2011									
		HUD-Assist							
Metropolitan/ Nonmetropolitan Areas	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)			
Inside Metropolitan Statistical Areas	87.3	82.7	88.8	88.2	86.5	87.9			
In Central Cities	56.0	61.6	54.5	54.4	49.9	47.3			
Outside Central Cities	31.3	21.2	34.3	33.8	36.7	40.6			
Outside Metropolitan Statistical Areas	12.7	17.3	11.2	11.8	13.5	12.1			

MF = multifamily. VLI = very low income.

Notes: This exhibit does not include similar programs administered by the U.S. Department of Agriculture's Rural Housing Service or Rural Development programs, which presumably are concentrated outside metropolitan areas. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Exhibit 3-3 shows that the regional and metropolitan/nonmetropolitan distribution on HUD-assisted rental housing has not seen a significant change over time. The discussion in section 2 called attention to the shifting importance of the voucher program in HUD's housing assistance between 1989 and 2013, but despite the growth in the voucher program, the overall distribution of HUD-assisted housing has changed little in the past 28 years. The 10 years between 1993 and 2003 saw a drop in the percentage of units located in central cities and an increase in the percentage of units located outside central cities. This trend continued through 2009, but since then, the share of units in central cities has increased slightly while the share outside central cities has declined. The percentage located outside of metropolitan areas has declined over time.

Exhibit 3-3. Trends in the Distribution of All HUD-Assisted Households by Region and by Metropolitan/Nonmetropolitan Status, 1989–2017¹¹

Percentage of All HUD-	AHS Survey Year									
Assisted Renters by Location	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
Northeast	28	24 ^a	27	28	28	28	28	28	28	28
Midwest	22	22	22	22	22	22	22	22	22	22
South	34	37	35	34	32	32	33	33	33	33
West	16	17	15	17	18	18	18	18	18	17
Inside Metropolitan Statistical Areas	84	81	82	87	86	86	86	87	87	87
In Central Cities	58	53	56	54	52	52	53	55	56	56
Outside Central Cities	26	27	26	33	34	34	33	32	31	31
Outside Metropolitan Statistical Areas	16	19	18	13	14	14	14	13	13	13

AHS = American Housing Survey.

Notes: This exhibit reports percentages as whole percentages. The published matched data for 1989, 1991, and 1993 are available only as whole percentages, so the data for subsequent years are rounded to whole percentages. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Source: AHS

The distribution of all renters and VLI renters has also changed over time. Between 1989 and 2017, the proportion of assisted housing in metropolitan areas outside central cities grew from 26 percent to 31 percent, while the proportion of all renter households grew from 38 to 41 percent. During this time, the proportion of assisted housing outside of metropolitan areas fell from 16 to 13 percent, while the proportion of all renters fell from 16 to 12 percent. ¹²

The continuity between 2013 and 2017 in exhibit 3-3 is surprising for another technical reason. From 1985 to 2013, the AHS used the same 1984 boundaries between the central city and

¹¹ The table exhibits in this document that describe trends over all nine matched data studies report percentages as whole percentages, whereas the table exhibits describing characteristics of HUD programs in 2017 report percentages to one-tenth of a percentage point. The published matched data for 1989, 1991, and 1993 are available

only as whole percentages, so the data for subsequent years are rounded to whole percentages.

^a The sequence of percentages of HUD-assisted units in the Northeast between 1989 and 1993 (28 to 24 to 27) looks suspicious. Research confirms that these were the reported percentages, but the 1991 regional percentages may be incorrect. Alternatively, the 1 million overcount of housing units in 1989 may have affected the regional distribution.

¹² The 1989 numbers in this paragraph come from Table 3 on page 25 of *Characteristics of HUD-Assisted Renters and Their Units in 1989*.

non-central city parts of metropolitan areas in its sample, but in 2015, the AHS updated the sample to reflect the boundaries in 2015. This change, however, appears to have had little effect on the profile of the housing stock. In 2013, 47.8 percent of all renters lived in central cities; for 2017, 47.3 percent did. The percentage of renters living outside central cities changed slightly more, from 39.7 percent in 2013 to 40.6 percent in 2017.

Year Structure Built

HUD-operated public housing and privately owned multifamily housing programs work by creating new rental units and then filling these units with eligible households. The type of units built determine what type of families are served. PHAs and private developers, with HUD approval, chose what type of units to construct or renovate, based on their objectives and the needs at the time when building took place. Decisions made at one point in time become frozen in housing capital. This fact was impressed on the author by a visit in the mid-1990s to an unassisted, HUD-insured project in the area outside of Minneapolis and St. Paul, MN. The project was constructed in the early 1970s to accommodate all of the baby boomers entering the job market and consisted entirely of one-bedroom units; after experiencing declining demand, the project was renovated at the time of his visit to serve a family market. HUD rules determine what size household can be housed in different-sized units. Decisions made 40 to 50 years ago can still determine what type of households can be served in 2017.

Exhibit 3-4 shows that VLI renters tend to live in older housing than that occupied by all renters. Almost one half (47 percent) of VLI renters rent housing built before 1970, compared with 43 percent of all renters. Although the percentage of assisted renters is similar, with 46 percent living in units built before 1970, the similarity between all HUD-assisted units and those occupied by VLI renters vanishes when one looks across the individual programs and all four periods.

Exhibit 3-4. Distribution of HUD-Assisted Housing by Year Built, 2017

		HUD-Assist				
Year Built	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
1949 and Earlier	23.7	26.3	25.3	19.8	25.2	22.7
1950–1969	22.7	30.5	20.8	20.5	21.6	20.2
1970–1984	26.3	22.7	22.8	34.0	23.9	22.1
1985-1994	10.2	7.6	10.3	11.8	9.9	11.2
1995 or Later	17.0	12.9	20.8	13.9	19.4	23.7

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Public housing began in 1937, and 26.3 percent of today's public housing units were built before 1950. More than 53 percent of public housing units were built between 1950 and 1985 when HUD restructured its housing assistance programs to favor the voucher approach.¹³

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¹³ The voucher program began in 1974; for this reason, it might have been more useful to split the two most recent categories at 1980 or 1985 rather than 1990. Unfortunately, these data are available only on the U.S. Census

Twenty percent of occupied public housing units were built after 1984, a surprisingly high percentage that may reflect errors by the AHS respondents in estimating the year built. The privately owned multifamily programs were most active between 1965 and 1985; 34 percent of these units were constructed between 1970 and 1985. The 20 percent of privately owned units reportedly built before 1950 results from a combination of rehabilitating older buildings for use as assisted housing and possible errors on the part of AHS respondents.

Because the voucher program can use any rental units in the stock if their owners are willing to participate, its distribution by year built should more closely match the distribution of all renter households than either of the other two programs. This finding is certainly true for the three middle "Year Built" categories (1950 to 1969, 1970 to 1984, and 1985 to 1994). The distribution of vouchers households by age of structure is almost identical to the distribution for all VLI renter households.

Number of Bedrooms

The number of bedrooms in an assisted unit determines the size of the household that can be served. Because public housing and privately owned multifamily units are in large apartment buildings, the number of bedrooms in these units is set when the building is constructed. The bedroom configurations of these units are based on local needs as of the time they are built and the needs that PHAs and project owners choose to serve. Exhibit 3-5 contains the distribution of rental units by bedroom in 2017. ¹⁴

Exhibit 3-5. Distribution of HUD-Assisted Housing by Number of Bedrooms, 2017

		HUD-Assist				
Number of Bedrooms	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Efficiency/One	41.5	37.4	29.3	62.8	34.8	28.1
Two	32.4	30.3	37.6	25.8	37.7	39.1
Three	19.6	22.9	25.2	8.9	21.6	24.9
Four or More	6.5	9.3	7.9	2.5	5.9	8.0

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

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Bureau's internal use file, which is not available to the public. Exhibit 3-4 (and most other table exhibits in this report) were constructed using the U.S. Census Bureau's Table Creator tool and must use the same categories provided by Table Creator.

¹⁴ For previous matched studies, the counts of efficiencies are available. The U.S. Census Bureau's disclosure rules have become much stricter because of the increase in computation power and the availability of many large datasets that can be compared to the AHS. Exhibit 3-5 combines efficiencies (units without separate bedrooms) with one-bedroom units because, for some unit categories (particularly the various types of HUD-assisted housing), the count of zero-bedroom units is so small that the U.S. Census Bureau will not release these counts due to the risk of identifying individual respondents.

Looking across all four categories of units in exhibit 3-5, it is clear that VLI renters generally live in smaller units than most renters. The next section shows that, compared to all renters, a higher percentage of VLI renters are elderly and, therefore, smaller households that have a lower demand for multiple bedroom units.

The distribution of units by number of bedrooms varies markedly across the three HUD program types. Almost 63 percent of the occupied units in privately owned multifamily projects are either efficiencies or one-bedroom units, compared with 34.8 percent of units occupied by VLI renters and 28.1 percent of all renters. A large percentage of these multifamily projects were created to serve seniors.

Although many public housing projects were also designed to serve seniors, that focus was less pronounced in public housing than in privately owned multifamily housing. The percentage of efficiencies and one-bedroom units in public housing is 37.4 percent.

The distribution of voucher households by the number of bedrooms is almost identical to the distribution for all renter households—only 29.3 percent are efficiencies and one-bedroom units. Because vouchers are assigned to households rather than units, they can be used more flexibly; that is, household size does not limit who can receive a voucher.

Over time, the distribution of HUD-assisted units has shifted toward units with more bedrooms, but this movement has been modest and irregular (see exhibit 3-6). In 1989, 76 percent of HUD-assisted units were either one- or two-bedroom units, while 24 percent had three or more bedrooms; by 2017, the percentages were 73 percent versus 27 percent, respectively. Those percentages appear to be the result of the shift in the program mix toward the voucher program.

Exhibit 3-6. Trends in the Distribution of HUD-Assisted Units by Number of Bedrooms

Percent of Units by		All HUD-Assisted Renters								
Number of Bedrooms	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
Efficiency/One	44	45	42	41	43	38	38	39	40	41
Two	32	33	35	33	30	31	33	33	32	32
Three	20	20	19	22	22	23	23	22	21	20
Four or More	4	3	4	4	4	7	6	6	6	7

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Closing Thoughts

Sections 4 and 5 describe the individuals and households served by HUD-assisted rental housing. This report argues the answer to the "who is served" question is determined by the information presented in this section.

The project-based programs were most active prior to 1985. Exhibit 3-4 confirms that more than 75 percent of public housing and privately owned multifamily housing were built before 1985 and thus were influenced by the demographics of that period, such as the age, size, and composition of low-income households. For these programs, the local needs and the interests of PHAs and project managers determined what type of housing and, in particular, what mix of

bedrooms was built. Exhibit 3-5 shows that public housing and privately owned multifamily rental housing have a heavy concentration of efficiency and one-bedroom units, which in turn determines the size and composition of the households served by these programs.

The location where projects were built also influences resident characteristics. Using the population of VLI households for assistance as the standard, public housing and privately owned multifamily rental housing is concentrated in the Northeast and central cities.

Section 4: Householder Characteristics

The U.S. Census Bureau characterizes some households using data on all household members, providing information on household size, the presence or absence of children, or family status, for example. For other characteristics, such as age or race, the U.S. Census Bureau takes characteristics from one individual, known as the householder. The householder is any responsible member of the household competent enough to answer questions about the household. In a traditional household with two adults and a child or children, the householder could be either of the adults. This section focuses on the householder to describe who the assisted housing serves and compare those served with all renters or all very low-income (VLI) renters.

Race and Ethnic Origin of Householder

Exhibit 4-1 reveals that VLI households, as a group, have a higher percentage of households with Black and Hispanic householders than all renter households, reflecting the lower income of minority households. As a group and individually, the HUD-assisted programs have a higher percentage of households with a Black householder and a lower percentage with a Hispanic householder compared with all VLI households.

Exhibit 4-1. Distribution of HUD-Assisted Housing by Race and Ethnicity of Householder. 2017

1101100110111011, = 0.11									
		HUD-Assist							
Race and Ethnicity of Householder	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)			
White Alone	46.3	42.6	44.7	51.5	62.7	68.4			
Black Alone	45.5	49.2	48.6	38.2	27.9	21.4			
Other Races Alone or Multiple Races	8.1	8.3	6.7	10.3	9.4	10.2			
Hispanic (of Any Race)	18.4	20.8	19.1	15.6	22.6	19.9			

MF = multifamily. VLI = very low income.

Notes: Race and ethnicity are different householder characteristics. The percentages for the racial categories (the first three rows) add up to 100 percent, except for rounding, for each column. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

The percentage of HUD-assisted units with Black householders in 2017 was 45.5 percent, while the percentage of all VLI renter households with Black householders was 27.9 percent. The differentials were greatest for the public housing and voucher programs, where 49.2 and 48.6 percent of units, respectively, were occupied by Black householders. One possible explanation for the public housing differential is its high concentration in central cities. Privately

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¹⁵ The U.S. Census Bureau defines the householder as follows: "The householder is the first household member listed on the questionnaire who is an owner or renter of the sample unit and is 18 years or older . . . If no one meets the full criteria, the age requirement is relaxed to 14 years or older before the owner/renter requirement. Where the respondent is one of several unrelated persons who all could meet the criteria, the interviewer will select one of them to be . . . the householder. The householder is not necessarily the one answering the survey questions."

owned multifamily units, however, have the smallest differential (38.2 percent compared with the total VLI percentage of 27.9), and these units are also concentrated in central cities.

With respect to ethnicity, the percentage of all HUD-assisted households with Hispanic householders (18.4 percent) is smaller than the percentage of VLI households with Hispanic householders (22.6 percent). This conclusion applies to all three HUD programs and is most pronounced for privately owned multifamily housing (15.6 percent).

Exhibit 4-2 traces how the racial and ethnic distribution of HUD-assisted renters has changed over time. Results from the 1989, 1991, and 1993 surveys are not strictly comparable with those from the surveys after 2001 when HUD and other federal agencies changed how they collect data on race. Before that year, survey respondents were forced to choose between four racial groups and an "other" category. Starting in 2001, respondents could choose more than one racial category; the AHS records these answers in 21 codes (for example, RACE = 1 is "White Alone" and RACE = 2 is "Black Alone," whereas RACE = 6 means that the respondent chose both White and Black). Thus, "other" in exhibit 4-1 for later surveys consists of those who were coded into one of the other 19 categories, and White is really "White Alone" after 2001.

Exhibit 4-2. Trends in the Distribution of HUD-Assisted Households by Race and Ethnicity of Householder

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Percentage of Race	All HUD-Assisted Renters									
and Ethnicity of Householder	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
White Alone	54	61	54	54	52	48	49	49	47	46
Black Alone	40	35	40	40	41	46	44	44	45	46
Other Races Alone or Multiple Races	6	4	6	6	7	6	7	8	8	8
Hispanic (of Any Race)	10	10	10	18	15	17	17	17	17	18

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Despite this qualification, the numbers tell an interesting story. The percentage of households with Black householders rose sharply in 2009, long after the change in the race question. The percentage of units with Hispanic householders rose between 1993 and 2003, reflecting in part the rising Hispanic share of the population. The change in the race question did not directly affect the collection of data on ethnicity.

Age of Householder

Exhibit 4-3 reveals that VLI households as a group have a higher percentage of householders over 65 than all renter households, reflecting the lower income of senior households. Combined, HUD-assisted housing programs serve households with senior householders at a rate (27.5 percent) greater than their share (22.7 percent) of the population of VLI renter households. The percentage of households with senior householders is particularly high among units in privately owned multifamily housing (44.2 percent). Owners of project-based multifamily projects appear to favor serving a senior population, either out of concern for seniors or because senior households present fewer management problems. One privately owned multifamily program, Section 202, was created strictly for seniors. Only the voucher program serves seniors at a rate (18.3 percent) smaller than their share of VLI renter households.

Exhibit 4-3. Distribution of HUD-Assisted Housing by Age of Householder, 2017

		HUD-Assist				
Age of Householder	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Under 35	20.8	24.4	20.5	18.8	27.7	33.4
35 to 64	51.7	51.9	61.2	37.0	49.6	51.4
65 or Older	27.5	23.9	18.3	44.2	22.7	15.2

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

The share of households with householders under 35 years old is substantially lower in all three HUD programs than the share of VLI renter households—24.4 percent in public housing, 20.5 percent in the voucher program, and 18.8 percent in the project-based program compared with 27.7 percent for all VLI households.

The voucher program has a higher proportion of households with householders between 35 and 64 years old (61.2 percent) than the VLI renter population (49.6 percent). Thirty-seven percent of households in privately owned multifamily units were in this age range. The voucher program focuses more on families.

Exhibit 4-4 shows that the share of all HUD-assisted units with senior householders has fallen from 35 percent in 1989 to 27 percent in 2017, with most of the change taking place between 1993 and 2003. This change results from the steady increase in the importance of the voucher program and the decline in the number of privately owned multifamily projects.

Exhibit 4-4. Trends in the Distribution of HUD-Assisted Households by Age of Householder

Percentage of Age of	All HUD-Assisted Renters									
Householder	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
Under 35	29	31	34	29	24	27	26	25	21	21
35 to 64	36	33	34	43	48	45	47	47	52	52
65 or Older	35	36	32	28	28	28	27	28	27	27

Education of Householder

The last two columns in exhibit 4-5 emphasize the link between education and income. VLI renter households are much less educated than all renter households; among VLI renter households, 25.1 percent have householders without high school diplomas, compared with 15.7 percent among all renter households, and 43.0 percent of VLI households had householders with education beyond the high school level, compared with 57.0 percent among all renter households.

Exhibit 4-5. Distribution of HUD-Assisted Housing by Education Attainment of Householder, 2017

	•	HUD-Assist				
Educational Attainment of Householder	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Less Than 9th Grade	8.3	10.1	6.6	9.7	8.3	5.1
9th to 12th Grade, No Diploma	21.5	25.0	20.1	21.2	16.8	10.6
High School Graduate (Includes Equivalency)	37.0	36.1	36.8	38.1	36.2	31.1
Additional Vocational Training	4.9	5.8	4.5	4.9	4.4	3.8
Some College, No Degree	17.4	15.6	19.2	16.0	18.3	18.0
Associate Degree	7.7	7.2	8.8	6.3	7.7	9.0
Bachelor's Degree	6.1	4.1	6.8	6.3	9.2	17.5
Graduate or Professional Degree	1.9	1.9	1.7	2.4	3.4	8.8
Percent High School Graduate or Higher	69.8	64.9	73.3	69.1	74.7	84.3
Percent Bachelor's Degree or Higher	7.6	6.0	8.5	8.7	12.6	26.3

MF = multifamily. VLI = very low income.

Notes: In this exhibit, "Additional Vocational Training" is a subset of "High School Graduate." Omitting the "Additional Vocational Training" row and the final two rows, the percentages in each column total 100 percent, allowing for rounding. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

High school graduation rates are low in all three HUD programs (64.9 percent in public housing, 73.3 percent in the voucher program, and 69.1 percent in privately owned multifamily), compared with 74.7 percent among all VLI renter households and 84.3 percent among all renter households. These results are consistent with the finding in Section 5 that HUD-assisted households have lower incomes than VLI renter households overall.

Years in Same Unit

Because housing assistance is not an entitlement, one might expect households receiving assistance to be reluctant to move if moving means giving up assistance. Exhibit 4-6 examines this presumption. The bolded rows report the percentages for all householders, regardless of race, ethnicity, age, or disability; the remaining rows look at subsets based on race and ethnicity, age, and disability status.

Exhibit 4-6. Distribution of HUD-Assisted Housing by Householder Years in Unit by Race, Ethnicity, and Senior and Disability Status, 2017

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Years in Unit, 2017	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
0 to 7 Years: All	69.4	67.8	71.6	67.0	76.6	81.2
Householders						
White, Non-Hispanic	68.5	73.3	67.7	67.3	76.9	81.8
Black, Non-Hispanic	72.4	64.7	77.8		76.0	79.3
Other Races	71.3	69.8	72.8		79.2	86.1
Hispanic	63.1	67.0	62.7	60.4	75.5	79.5
Under 65	76.4	74.9	76.7	77.1	81.8	84.7
Over 65	51.0	44.5	49.1	54.4	58.5	61.6
Without a Disabled Person	73.8	71.2	74.7	74.1	80.2	83.7
With a Disabled Person	63.8	62.9	67.2	59.9	69.2	72.6
8 to 13 Years: All Householders	14.3	12.0	14.2	16.1	9.8	8.5
White, Non-Hispanic	15.0	13.4	14.5	16.3	10.0	8.4
Black, Non-Hispanic	13.6	12.2	12.5	16.8	10.6	9.6
Other Races	14.0	11.1	12.8	16.7	8.7	6.0
Hispanic	14.9	10.0	18.1	13.5	9.0	8.7
Under 65	11.6	9.1	12.4	12.2	8.3	7.5
Over 65	21.4	21.4	21.9	21.0	14.9	14.2
Without a Disabled Person	13.8	12.2	14.1	14.6	8.6	7.8
With a Disabled Person	14.9	11.6	14.2	17.7	12.3	11.0
More Than 13: All Householders	16.3	20.3	14.2	16.9	13.6	10.3
White, Non-Hispanic	16.5	13.4	17.8	16.5	13.0	9.7
Black, Non-Hispanic	14.0	23.0	9.7	14.5	13.4	11.2
Other Races	14.6	19.0	14.4	12.7	12.1	8.0
Hispanic	22.0	23.0	19.3	26.1	15.5	11.7
Under 65	12.0	16.0	10.9	10.8	9.8	7.8
Over 65	27.6	34.1	28.9	24.6	26.6	24.2
Without a Disabled Person	12.4	16.6	11.2	11.3	11.1	8.5
With a Disabled Person	21.3	25.5	18.5	22.5	18.6	16.3

MF = multifamily. VLI = very low income.

Note: This exhibit combines race and ethnicity. The first rows ("White, Non-Hispanic") list householders who classified themselves as White and no other race and did not classify themselves as Hispanic. "White Alone" householders who also identified themselves as Hispanic are listed in row four, Hispanic. This inconsistency arose because this exhibit had to be compiled at the U.S. Census Bureau using data that are not publicly available. The U.S. Census Bureau does not tabulate "Years in Unit;" rather, it reports the year the household moved into the unit in 5-year blocks. For 2017, the blocks include 2000–2004, 2005–2009, and 2010–2017. This presentation translates years in unit into categories of "0 to 7 Years," "8 to 13 Years," and "More than 13 Years." Because the size of the initial category depends on the survey year, the 2017 results cannot be compared with any of the previous match studies. The same exhibit for the 2015 Characteristics Report contained four years-in-unit categories. The request for special runs for this report asked for four categories, but disclosure issues limited the race and ethnicity tabulations to three categories. In constructing Exhibit 4-6, therefore, the other tabulations were collapsed to three categories. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Householders who have lived in the unit for less than 8 years constitute 76.6 percent of VLI renter households and 81.2 percent of all renters, compared with 69.4 percent of all HUD-assisted renters. There are notable differences between the two assistance paradigms—the public housing and privately owned multifamily programs, in which the subsidy attaches to the unit, and the voucher program, in which the subsidy generally remains with the tenant. The voucher program has a higher percentage of "recently" moved householders at 71.6 percent, compared with 67.8 percent of householders in public housing and 67.0 percent in privately owned multifamily housing.

The voucher program also has fewer householders with long tenures; for example, 14.2 percent of voucher householders have lived in their units more than 13 years, nearly the same percentage as all VLI householders (13.6 percent). By comparison, 20.3 percent of public housing householders and 16.9 percent of householders in privately owned HUD-subsidized units have lived in their units for more than 13 years. The voucher program does not match the turnover pattern among all renters, likely due to the expense of moving in both time and effort and the fact that voucher participants can carry their subsidies only to units where landlords will participate in the program.

The race and ethnicity, age, and disability breakouts show that other factors affect turnover. ¹⁶ This finding is best understood by looking down the columns within each "Years in Unit" category. In the All Renters and VLI columns, the differences across race and ethnicity are minor. Senior householders and householders with a disabled person in the household, however, display much lower turnover—that is, lower rates of short tenure (0 to 7 years) and higher rates of long tenures (more than 13 years).

The longer tenure among senior householders and households with disabled members also appears in the tenure patterns of HUD-assisted households. The tenure patterns among HUD-assisted households also display one characteristic that is not seen in the patterns for VLI renters or all renters—namely, the tendency among HUD-assisted households with Hispanic householders to have longer tenures than HUD-assisted households with non-Hispanic householders. This report has no explanation for this observed difference.

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¹⁶ Exhibit 4-1 treats race and ethnicity as separate characteristics. The first row in exhibit 4-1 ("White Alone") lists householders who classified themselves as White and no other race, regardless of whether they classified themselves as Hispanic.

Section 5: Household Characteristics

This section describes key characteristics of HUD-assisted households, focusing primarily on characteristics that relate to the need for housing assistance. It is unlikely there will be substantial year-over-year changes in the characteristics of HUD households or householders, as only new units and turnover among existing assisted units can alter the mix of households. The 26-year period from 1991 to 2017 saw an increase in the number of assisted units of only 12 percent, and the previous section showed that turnover was low.

Household Income

Eligibility for assisted housing is based primarily on household income, determined by comparing household income to median family income in the locality. Typically, a household is eligible if it earns less than 50 percent of the median income for that locality, adjusted for family size. Within a group of lower-income households, HUD agents may, in some circumstances, look at additional criteria, such as being homeless or displaced, in prioritizing households for the limited number of units available at a given time.

In 2017, the median income of all renters nationally was \$36,100, based on American Housing Survey data (exhibit 5-1). The median income of voucher recipients was substantially lower, at 34.6 percent of the median income for all renters, whereas ratios were even lower in public housing (29.9 percent) and privately owned multifamily housing (30.9 percent). The median income for very low-income households who are not assisted was \$16,000, or 44.3 percent of the all-renter median. Individually and jointly, HUD programs generally serve households from the lower end of the distributions of VLI renter households and all renter households.

Exhibit 5-1. Median Income of Households by Assistance Status, 2017

		HUD-Assist	ted Renters			
Median Household Income	All HUD- Assisted	Tenants in Public Housing	Voucher Recipients	Tenants in Privately Owned MF Units	Total VLI Renters ^a	All Renters
Median Household Income	NA	\$10,800	\$12,500	\$11,160	NA	\$36,100
As a Percentage of the Median Income of All Renter Households	NA	29.9	34.6	30.9	NA	100

MF = multifamily. NA = data not available. VLI = very low income.

Exhibit 5-2 reveals a sharp drop in median income ratios for all three HUD program types between 2013 and 2015, which continued into 2017. This movement was unexpected. The economy was reasonably strong, but not so strong as to enlarge the gap between assisted renters and all renters. The Characteristics Report for 2015 suggested that this could be the result of the AHS drawing a new sample in 2015.

^a Throughout, the report combines data on assisted and unassisted eligible households to produce this column. There is no legitimate way to meld the medians of those groups to produce a median for the combined group. Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Exhibit 5-2 also suggests a gradual decline from 1989 through 2011 in how median incomes of tenants in all HUD-assisted housing have changed in relation to the median income of all renters. This apparent decline is probably the result of a change in program mix. Before 2015, the ratios of the median incomes of households served by the public housing and the voucher program had remained relatively flat, with a higher voucher ratio than public housing ratio. The ratio of median income in the privately owned multifamily stock to the median income of all renters declined steadily from 1989 to 2009. During that period, the stock of privately owned multifamily housing decreased by 300,000. Section 2 explained that some components of the privately owned multifamily rental stock had rents that could be greater than 30 percent of tenant income. In recent years (particularly from 1995 to 2005), many of these units—rent supplements, Section 236, and the old Section 202 programs—left the programs, which may explain the downtrend in the ratio of median incomes among households in the privately owned stock.

Exhibit 5-2. Trends in Median Income of Households by Assistance Status

Group Median Income as a Percentage of Renter Median Income	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
All HUD-Assisted	41	39	38	39	36	37	37	N/A	N/A	N/A
Tenants in Public Housing	37	36	35	37	33	32	36	36	31	30
Voucher Recipients	42	39	39	40	38	42	43	39	35	35
Tenants in Privately Owned Housing	43	42	40	39	37	34	34	34	32	31

N/A = data not available.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Income Sources

HUD-assisted households differ substantially from other households in how they obtain their income. Exhibit 5-3 shows that 41.8 percent of HUD-assisted households receive wage and salary income, compared with 53.3 percent of VLI renter households and 73.2 percent of all renters. Tenants in privately owned multifamily projects have the lowest percentage of households with wage and salary income (30.1 percent), which is almost surely the result of the greater percentage of senior householders in this program.

Although cited as sources of household income far less often, the same pattern appears for self-employment income and income from interest, dividends, and rent. HUD-assisted households report these sources less frequently than all VLI households, which, in turn, report them less frequently than all renter households.

The results are somewhat different for the "Social Security and Railroad Retirement" row and the "Retirement or Survivors' Pensions" row. The high proportion of senior households among the public housing and privately owned multifamily populations make these sources important for HUD's clientele. Among the six columns, the proportion of households receiving Social Security (45.3 percent) is the highest by far for privately owned multifamily households.

The income source information reinforces the inference drawn from the median income ratios that HUD programs serve those with the lowest incomes of the low-income population. For example, 11.5 percent of HUD-assisted households report receiving welfare, compared with 7.2 percent of VLI households and 3.7 percent of all renter households. Similarly, 21.7 percent of

all HUD-assisted households receive Supplemental Security Income, or SSI, compared with 12.9 percent among all VLI renter households and 6.8 percent among all renters.

Exhibit 5-3. Income Sources for Renter Households by Assistance Status, 2017

	H	HUD Assist	ed Renters	3	All VLI	All
Income Sources of Families and Primary Individuals	All HUD- Assisted (%)	Public Housing (%)	Voucher (%)	Privately Owned MF (%)	Renters (%)	Renters (%)
Wages and Salaries	41.8	46.5	47.2	30.1	53.3	73.2
Self-Employment	2.8	2.7	3.6	1.6	4.9	7.9
Interest, Dividends, and Rental Income	2.3	1.2	1.9	3.6	4.4	8.2
Social Security or Railroad Retirement	33.0	32.0	25.6	45.3	26.9	18.3
Retirement or Survivors' Pensions	5.7	6.3	2.9	9.6	6.2	6.7
SSI	21.7	22.4	21.3	21.6	12.9	6.8
Public Assistance or Public Welfare	11.5	9.9	13.3	9.8	7.2	3.7
Other Income (Worker's Compensation, Alimony, and Any Other Income Not Previously Reported)	19.8	20.5	22.6	14.9	15.8	12.8

MF = multifamily. SSI = Supplemental Security Income. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Household Composition

Exhibit 5-4 presents the distribution of households from various renter groups by household composition and provides further evidence that HUD-assisted housing programs serve a clientele different from the typical renter household. In 2017, 27.6 percent of all renter households consisted of married couple households, whereas the percentage among all VLI renter households was 19.1 percent, and the percentage across all HUD programs ranged between 8.7 and 12.2 percent. Privately owned multifamily units served the lowest percentage of married couple households.

Combining the 4th (Other Female Householder) and the 13th (Female Householder) rows of exhibit 5-4 provides some additional insight into who HUD programs serve. Seventy percent of HUD-assisted households are single-adult householders with a female householder, compared with 55 percent of VLI households and 42 percent of all renter households. The program percentages are equal, but the ages of the female householder differ. The voucher program serves the highest percentage of female householders under 65 (60 percent), and the privately owned multifamily program serves the lowest (40 percent). Twenty-seven percent of the units in privately owned multifamily projects were occupied by senior, single females—more than two times the rate among VLI households and four times the rate among all renter households.

Exhibit 5-4 reveals other important differences across HUD programs in the households served. Forty-four percent of all voucher recipient households are two-or-more-person, single-adult households with a female householder (more than one and a half times the rate among all renter households), compared with 24 percent of households in privately owned multifamily

units. As previously noted, the privately owned multifamily housing program serves senior households at a much higher rate than their share of the VLI renter household population.

Exhibit 5-4. Distribution of HUD-Assisted Housing by Household Composition, 2017

		HUD-Assist	All VLI	All		
Household Composition by Age of Householder	All HUD- Assisted (%)	Public Housing (%)	Vouchers (%)	Privately Owned MF (%)	Renters (%)	Renters (%)
Two-or-More-Person Households	50.9	56.2	57.8	36.4	55.0	63.5
Married-Couple Families, No Nonrelatives	9.9	12.2	9.7	8.7	19.1	27.6
Other Male Householder	4.1	4.3	4.6	3.2	7.8	12.8
Other Female Householder	36.8	39.6	43.6	24.4	28.1	23.1
Under 45 Years Old	23.8	23.9	27.5	17.9	18.4	15.2
45 to 64 Years Old	11.5	13.5	14.5	5.5	8.0	6.6
65 Years Old and Over	1.6	2.2	1.6	1.1	1.7	1.3
One-Person Households	49.2	43.9	42.2	63.6	45.0	36.5
Male Householder	16.2	16.8	12.4	21.7	18.1	17.5
Under 45 Years Old	2.6	3.5	2.6	2.0	5.7	7.7
45 to 64 Years Old	7.0	6.3	7.0	7.3	7.2	6.4
65 Years Old and Over	6.7	7.0	2.9	12.3	5.2	3.4
Female Householder	32.9	27.1	29.7	41.9	27.0	19.0
Under 45 Years Old	4.0	3.2	5.3	2.5	5.9	5.9
45 to 64 Years Old	12.5	10.8	13.2	12.6	8.8	6.2
65 Years Old and Over	16.4	12.9	11.3	26.8	12.2	6.9

MF = multifamily. VLI = very low income.

Notes: The "Two-or-More-Person Households" and the "One-Person Households" rows sum to 100 percent, except for rounding. Within these two groups, the next level subgroups sum up to the group percentages. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Exhibit 5-5 presents the distribution of households by the presence or absence of children under 18.

Exhibit 5-5. Distribution of HUD-Assisted Housing by Number of Children in Household, 2017

	,						
		HUD-Assis	All VLI	All			
Households by Number of Children	All HUD- Assisted (%)	Public Housing (%)	Vouchers (%)	Privately Owned MF (%)	Renters (%)	Renters (%)	
None	64.1	59.9	59.0	74.7	65.2	67.8	
One	15.1	15.0	16.3	13.3	13.9	14.8	
Two	10.3	13.1	10.9	7.7	11.5	10.3	
Three or more	10.5	12.0	13.9	4.3	9.4	7.1	

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

With the exception of the privately owned multifamily program, HUD-assisted housing serves households with children at a rate similar to their share of the VLI renter population. Overall, 35.9 percent of assisted households have children, compared with 34.8 percent of all VLI renter households and 32.2 of all renter households. Among voucher households, 41.0

percent contain children, while 25.3 percent of assisted households in the privately owned multifamily program have children. The percentage of households with three or more children is higher in the voucher program (13.9 percent) than among all VLI renter households (9.4 percent).

Despite the observed program differences and the noted change in program mix over time, there has been virtually no change during the past 28 years in the type of households served by all three HUD programs combined. Exhibit 5-6 appears to contain only random movements.

Exhibit 5-6. Trends in the Distribution of HUD-Assisted Housing by Household Composition

Percentage of Household		AHS Survey Year								
Composition	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
Two-or-More-Person Households	57	56	58	54	53	55	57	55	52	51
Married Couple Families, No Nonrelatives	13	15	13	11	10	9	11	10	10	10
Other Male Householder	4	4	3	2	4	3	5	4	4	4
Other Female Householder	39	36	42	41	40	42	41	40	38	37
One-Person Households	43	44	42	46	47	45	43	45	48	49
Male Householder	10	13	13	14	13	13	14	15	15	16
Female Householder	33	32	29	32	34	33	29	30	33	33

AHS = American Housing Survey.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Household Size

AHS data on household size highlight the differences among the HUD programs (exhibit 5-7). Compared with all VLI renter households, HUD-assisted households include a higher percentage of one-person households (49.2 percent vs. 45.0 percent, respectively) and a lower percentage of two-to-four-person households (43.0 percent vs. 44.9 percent, respectively); these differences are small. Households with five or more persons account for 7.3 percent of HUD-assisted households and 10.0 percent of VLI households.

Exhibit 5-7. Distribution of HUD-Assisted Housing by Household Size, 2017

		HUD-Assis	ted Renters			
Number of Persons in Household	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
One Person	49.2	43.9	42.2	63.6	45.0	36.5
Two-Four Persons	43.0	46.5	48.1	32.9	44.9	54.1
Five or More Persons	7.3	9.6	9.7	2.1	10.0	9.4
Overcrowded	2.4	1.2	3.8	1.1	5.2	3.9

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Taken individually, HUD-assisted programs have notably different household size distributions. The privately owned multifamily program has the highest percentage of one-person households (63.6 percent), while the public housing and voucher programs serve the highest

percentage of large (five-or-more-person) households (10 percent); this percentage is similar to that of VLI renters (10.0 percent) and all renters (9.4 percent).

Overcrowding is defined as more than one person per room. In recent years, overcrowding has not been a serious problem in the American housing stock; in 2017, 5.2 percent of VLI renters and 3.9 percent of all renters were considered overcrowded. HUD-assisted stock generally experienced even lower rates of overcrowding, at 2.4 percent for all HUD-assisted renters in 2017. HUD program rules determine how many persons can occupy units of different bedroom sizes and therefore act to reduce overcrowding.

Households with a Disabled Member

Exhibit 5-8 shows that HUD-assisted housing serves households with one or more disabled members at a rate (43.6 percent) substantially higher than among either VLI renter households (33.0 percent) or all renter households (22.3 percent). The privately owned multifamily housing programs contain the highest percentage of households with a disabled member, at 49.5 percent.

Exhibit 5-8. Distribution of HUD-Assisted Housing by Disability Status of Members, 2017

		HUD-Assis	ted Renters			
Households by Disability Status of Members	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
With a Disabled Member	43.6	41.5	40.7	49.5	33.0	22.3
Without a Disabled Member	54.1	57.0	56.9	47.5	64.4	75.0
Not Reported	2.3	1.4	2.4	2.9	2.6	2.7
2013 Percent "With a Disabled Member"	37.8	38.2	34.3	42.9	25.9	17.5

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

The "Characteristics" report for 2015 noted that the percentages of households with a disabled member were substantially higher across all columns in 2015 than in 2013. The differences between the 2017 numbers and the 2013 numbers are slightly larger for VLI renters and all renters but slightly smaller for the HUD-assisted programs. Nevertheless, across all columns, the 2017 percentages of households with a disabled member were still substantially higher than the 2013 numbers. This finding could be the result of drawing a new sample in 2015 or differences in how the disability questions were asked. ¹⁷

Housing Cost as Percentage of Income

The primary objective of assisted housing is to make decent housing affordable for needy households. Section 6 examines the decent part of the objective; this section finishes with a look at the affordable part. The traditional measure of affordability is the ratio of monthly housing

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¹⁷ The questions were identical in wording but may have been asked differently.

costs to monthly household income, where housing costs include both rent and utility expenses. A ratio of 0.3 is generally considered acceptable, while a ratio greater than 0.4 is considered excessive (Eggers and Moumen, 2008).

The percentages reported in exhibit 5-9 ignore cases where respondents pay no cash rent and cases where respondents report zero or negative income. Among all renters, 4.4 percent report no cash rent, whereas 2.6 percent report zero or negative income; the percentages for all HUD-assisted renters are 1.5 and 4.8, respectively.

Exhibit 5-9. Distribution of HUD-Assisted Housing by Ratio of Housing Costs to Income, 2017

		HUD-Assist	ted Renters			
Monthly Housing Cost- to-Income Ratio	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Less Than 20 Percent	11.9	16.2	10.6	11.0	5.0	22.8
40 Percent or More	39.7	35.3	47.9	30.1	62.7	32.6
Median Rent Burden ¹⁸	N/A	32	40	32	N/A	30

MF = multifamily. N/A = data not available. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

The rent-to-income data from the 2017 AHS clearly illustrated why housing assistance is needed. Among VLI renter households, 63 percent reported excessive rent burdens—that is, ratios greater than 40 percent. Excessive rent burdens affected 40 percent of HUD-assisted households. While this is substantially less than that of all VLI renter households, this rate was still surprisingly high. The corresponding rate for all renter households was 32.6 percent.

In all previous analyses of HUD-assisted housing using AHS data, this table has generated unnecessary confusion because AHS data on how HUD programs function appear to be at odds with program rules. Since the early 1980s, HUD has *generally* required tenants to contribute 30 percent of their income toward rent and related expenses. No such uniformity exists in the above table. According to AHS data, a number of households in each of the HUD programs spend considerably less than 30 percent, and a number spend considerably more than 30 percent.

The reported results should not be considered surprising: First, HUD rules allow for variation with regard to the 30-percent figure. Thirteen percent of households in privately owned multifamily housing do not pay rent based on the 30 percent of income requirement. Another important exception applies to the voucher program, in which recipient households are allowed to rent units more expensive than the HUD-established payment standard if the households incur all of the added rental costs. Public housing also allows public housing authorities to establish minimum rent contributions that can exceed 30 percent of income for families with very small incomes.

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¹⁸ The bottom row in this table is the median of the individual ratios of housing cost to income, not a ratio of medians.

Further, one should never expect the AHS data collection process to correspond to the processes by which HUD agents collect information on tenant incomes and set tenant rents. The HUD-mandated process is more formal and detailed and focuses solely on determining program eligibility and setting tenant rent. HUD agents require households to present collaborating information on income, whereas the AHS collects data on income and rent within an instrument that also gathers information on other household characteristics and unit and neighborhood characteristics. The AHS interview may be separated by as much as a year from the income recertification process carried out by HUD agents. Measurement errors, misreporting, and month-to-month variation in both income and housing-related expenses affect both HUD agents and AHS data. A recent HUD-funded study showed that the rent-to-income ratio can vary substantially between surveys for the same household and demonstrated how normal variation and measurement error might account for a large portion of the survey-to-survey variation (Eggers and Moumen, 2010).

Exhibit 5-10 examines how the median rent-to-income ratio has varied over time among different components of the rental housing stock. The numbers in the table are all medians, meaning that one-half of the renters in that category have ratios less than or equal to the reported ratio, and one-half have ratios greater than or equal to the reported ratio.

Exhibit 5-10. Trends in the Distribution of HUD-Assisted Housing by Ratio of **Housing Costs to Income**

Median Monthly Housing		AHS Survey								
Cost-to-Income Ratio (%)	1989	1991	1993	2003	2007	2009	2011	2013	2015	2017
All HUD-Assisted	30	31	29	32	34	35	34	NA	NA	NA
Tenants in Public Housing	30	30	29	27	30	35	30	30	31	32
Voucher Recipients	32	34	32	40	39	40	39	39	43	40
Tenants in Privately Owned MF Housing	30	31	28	32	31	30	32	30	32	32
Total VLI Renters	39	36	38	81	51	52	55	NA	NA	NA
All Renters	28	27	28	30	33	34	35	33	31	30

AHS = American Housing Survey. MF= multifamily. NA = data not available. VLI = very low income. Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Source: AHS

For all renter households as a group, the ratio of rent to income increased steadily from 1991 until 2013, when it declined slightly and then fell through 2017. More than one-half of VLI renters began to experience excessive rent burdens sometime between 1993 and 2003, a majority that remained through 2011, the most recent year for which a median for this group is available. 19 Throughout the seven periods for which comparable data are available, the median ratios in each of the HUD programs were substantially lower than the median reported for all VLI renter households. Consistent with the special voucher exception, the voucher program had the highest median ratio among the HUD programs in all 10 periods.

¹⁹ The 81-percent median rent burdens for all eligible households in 2003 seems to be an anomaly.

Closing Thoughts

Taken together, Sections 4 and 5 provide strong evidence that HUD-assisted rental housing generally serves the lowest-income population. The median incomes of households participating in the three broad HUD programs in 2017 were less than one-third of the median income of the typical renter. Householders in HUD-assisted units have substantially lower educational attainment, and HUD-assisted households received wage and salary income less often and relied more often on welfare and Supplemental Security Income, or SSI. HUD-assisted households were less often married-couple households and more often single-adult households with a female householder. HUD-assisted households, especially in privately owned multifamily projects, were more likely to contain members with disabilities.

The deviations in characteristics between HUD-assisted households and householders and the VLI population generally relate to when and where programs began operation. HUD householders are more often Black than those in the VLI renter population because HUD programs operate more often in central cities of metropolitan areas. HUD householders are somewhat less likely to be Hispanic, likely because project-based programs were historically concentrated in the Northeast and South and were constructed before the rapid growth of the Hispanic population. Similarly, HUD householders are more often seniors because PHAs and the owners of subsidized multifamily projects favored this clientele.

While the ratio of total housing costs to income reported in the AHS is higher than expected, there are plausible reasons for this apparent program discrepancy. The bottom line is that excessive rent burdens are much less common among HUD-assisted households than all VLI households. Section 6 will look at the quality of the housing provided by the HUD programs.

The "Characteristics" reports for both 2015 and 2017 have uncovered two areas that are so different from their 2013 counterparts that it can be suspected these differences more likely relate to the AHS redesign than a shift in program characteristics. The turnover among HUD-assisted units is too low to believe the population changed that much within 2 years. The two areas are the ratios of program median income to all renters' median income and the proportion in all six renter groups of households containing a disabled member.

Section 6: Unit Quality and Tenant Satisfaction

This section examines the quality of housing provided by the assisted housing programs. It begins by comparing the types of structures containing the units available through HUD-assisted rental housing programs with (1) structures housing all renters and (2) structures housing all very low-income (VLI) renters. The next comparison focuses on the overall physical adequacy of units using an index devised by HUD and the U.S. Census Bureau. The appendix lists the criteria used to define the three categories of adequacy: severely inadequate, moderately inadequate, and adequate. The examination of overall adequacy is followed by a series of comparisons involving specific features of units and structures that go into the determination of adequacy. Then, using the subsample of recent movers, the section examines the reasons for moving into assisted housing. The section ends with comparisons of tenants' satisfaction ratings with their units and neighborhoods.

Concerns about privacy limit the comparisons that can be generated using the U.S. Census Bureau's Table Creator. Only in a few places has HUD been asked for assistance in retrieving information from the internal use file kept at the U.S. Census Bureau, as accessing this file is useful only when categories can be collapsed to produce counts large enough to protect privacy. Most of the information on housing quality are yes/no questions that cannot be collapsed.

Structure Type

Exhibit 6-1 provides percentage distributions by structure type for the six groups followed in this report. Mobile homes and single-family detached units are combined because there are so few mobile homes in HUD-assisted housing programs that reporting them separately would violate the U.S. Census Bureau's disclosure rules. "Other" includes boats, tents, and caves—rare structure types that are not permitted in HUD-assisted housing.

Exhibit 6-1. Distribution of HUD-Assisted Housing by Structure Type, 2017

			ted Renters		<u> </u>	
Structure Type	All HUD Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Mobile Homes, Single- Family Detached, Other	14.6	6.4	25.8	2.9	26.4	32.2
Single-Family Attached	15.0	17.3	14.9	13.4	14.2	
2 to 4	17.6	24.5	18.3	11.9	17.4	15.8
5 to 9	13.3	11.3	12.9	15.3	12.2	
10 to 19	9.1	4.6	10.3	10.2	9.8	10.0
20 to 49	8.2	5.3	8.0	10.5	7.9	
50 or More	22.2	30.7	9.6	35.8	12.0	9.6

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Structure type can affect quality of life, but households differ in what they consider the most desirable structure type. Senior and small renter households generally favor units in garden

or high-rise apartments that are safe and low maintenance, whereas households with children generally favor single-family units, whether detached or attached (for example, townhouses).

The most important distinction between HUD-assisted housing and both VLI rental housing and all rental housing is the far lower reliance on single-family detached units and mobile homes in HUD-assisted housing. Only 14.6 percent of HUD-assisted units fall into this category, slightly less than one-half the percentage found among households in VLI units or all rental units. The second most important distinction is the greater reliance on large buildings (those with 50 or more units) among the HUD-assisted units at 22.2 percent, compared with 12.0 percent among units occupied by VLI households and 9.6 percent among all renters.

These two distinctions are even sharper when the focus is restricted to public housing or units in privately owned multifamily projects: 30 percent of public housing tenant households and 35 percent of households in privately owned multifamily projects live in buildings with 50 or more units. The voucher distribution is most similar to the distribution among all renters.

Overall Adequacy of Units

For many years, HUD and the U.S. Census Bureau have used American Housing Survey data to assess the physical condition of each unit and categorize it into one of three groups: severely inadequate, moderately inadequate, and adequate. Appendix A explains how this determination is made; over time, definitions of the categories and the variables used to define them have changed.²⁰

By these adequacy standards, 90 percent of all units are judged to be adequate, with trivial differences among HUD programs and between HUD programs and the comparison groups (exhibit 6-2). Units in the public housing program have the highest percentage of severely inadequate units, but even so, only 4.8 percent qualify as such. Voucher units and units in privately owned multifamily projects have lower rates of severely inadequate housing than all VLI units. Their rates are indistinguishable from the rate of all rental units.

Exhibit 6-2. Distribution of HUD-Assisted Housing by Physical Adequacy, 2017

		HUD-Assis	•			
Housing Adequacy	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Severely Inadequate	2.3	4.8	1.8	1.3	2.9	1.9
Moderately Inadequate	5.4	7.0	4.6	5.6	7.1	5.6
Adequate	92.3	88.2	93.5	93.1	90.0	92.5

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

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²⁰ The definition last changed with the 2009 AHS.

HUD rules help ensure good performance on these measures. HUD oversees conditions in both public housing and privately owned projects, and voucher units are subject to inspection before being approved for participation.

The suppression of data by the U.S. Census Bureau to avoid disclosure prevented looking at the following features that would contribute to a unit being classified as severely inadequate:

- Complete bathrooms
- Electric or wiring problems
- Upkeep problems

Data on the heating adequacy are not suppressed. AHS tables classify the factors that determine a unit to be moderately inadequate into two categories: Upkeep and Other. Table Creator does not suppress data on these two categories.

This report does not analyze the three factors for which data are suppressed. Instead, to the extent that data are not suppressed, it analyzes conditions that feed into these factors. For example, to be inadequate because of heating issues, a household must have been uncomfortably cold last winter for 24 hours or more, and the heating equipment must have broken down at least three times for at least 6 hours each time. The U.S. Census Bureau provides data on being uncomfortably cold and having a heating breakdown but, once assisted status is introduced into the analysis, Table Creator suppresses data on the number of breakdowns.

Heating Adequacy

Exhibit 6-3 shows that HUD-assisted units are more likely to have heating equipment than units occupied by VLI renters or all renters. HUD-assisted households are slightly more likely to have experienced periods of cold discomfort lasting 24 hours or more, however, although tenants in privately owned multifamily are an exception to this generalization.

Exhibit 6-3. Distribution of HUD-Assisted Housing by Heating Adequacy, 2017

		HUD-Assist				
Heating Adequacy	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
With Heating Equipment and Occupied Last Winter	91.2	91.2	90.9	91.7	86.0	84.7
Not Uncomfortably Cold for 24 Hours or More	81.2	78.7	79.9	84.9	76.6	77.2
Uncomfortably Cold for 24 Hours or More	10.0	12.5	11.0	6.8	9.5	7.5
Utility Interruption	0.7	S	1.4	S	0.7	0.7
Inadequate Heating Capacity	1.3	2.1	1.8	S	1.6	1.4
Inadequate Insulation	1.0	S	2.0	S	1.5	1.3
Cost of Heating	0.0	S	S	S	S	0.6
Other	0.7	S	1.4	S	1.0	
Discomfort not Reported	0.0	S	S	S	S	S

MF = multifamily. VLI = very low income. S = data suppressed.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Toilet Breakdowns

The number of toilet breakdowns within 3 months enters into the determination of moderately inadequate. Data on the number of breakdowns are suppressed, but exhibit 6-4 shows whether a breakdown did occur. Breakdowns are rare for all groups (in the 3 to 5 percent range), and the differences among HUD programs and between HUD programs and either comparison group are trivial.

Exhibit 6-4. Distribution of HUD-Assisted Housing by Flush Toilet Breakdowns, 2017

		HUD-Assis	ted Renters			
Flush Toilet Breakdowns	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
With One or More Flush Toilets	99.8	100.0	99.7	99.9	99.6	99.8
With at Least One Toilet Working at All Times in Last 3 Months	95.7	95.4	95.6	96.2	95.7	96.7
None Working Some Time in Last 3 Months	4.1	4.6	4.1	3.6	3.8	3.1
Breakdowns not Reported	0.0	S	S	S	S	0.8

MF = multifamily. VLI = very low income. S = data suppressed.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Water Leakage

Having a water leak, whether from indoors or outdoors, enters into the determination of both severely and moderately inadequate. Exhibit 6-5 reports on water leaks from both inside and outside the unit. Indoor water leaks are slightly more likely in public housing. Overall, HUD-assisted households are about as likely to have indoor water leaks as VLI renters or all renters. With respect to water leaks from outside, there are only minor differences across all six groups. Looking at the possible sources of leaks, no major differences across groups are apparent.

Exhibit 6-5. Distribution of HUD-Assisted Housing by Water Leaks, 2017

		HUD-Assis	ted Renters			
Water Leaks	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
No Leakage from Inside Structure	88.0	86.8	88.0	89.0	88.6	89.3
With Leakage from Inside Structure	12.0	13.2	12.0	11.0	11.4	10.7
Fixtures Backed up or Overflowed	3.0	4.6	3.0	1.8	2.9	2.5
Pipes Leaked	4.5	4.3	4.5	4.8	4.8	4.5
Broken Water Heater	0.0	S	S	S	0.7	0.7
Other or Unknown (Includes not Reported)	4.3	4.3	4.1	4.4	3.8	3.7
No Leakage from Outside Structure	91.9	94.5	89.5	93.7	90.6	90.5

		HUD-Assis	ted Renters			
Water Leaks	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
With Leakage from Outside Structure	8.1	5.5	10.5	6.3	9.4	9.5
Roof	3.5	2.9	4.9	1.9	4.9	4.7
Basement	1.0	S	2.1	S	1.1	1.5
Walls, Closed Windows, or Doors	2.6	S	3.0	3.8	2.8	2.8
Other or Unknown (Includes not Reported)	0.8	S	1.7	S	1.2	1.3

MF = multifamily. VLI = very low income. S = data suppressed.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Selected Deficiencies

The AHS reports a variety of quality problems under the title "Selected Deficiencies." Most of these problems, except for signs of cockroaches, enter into the determination of being severely or moderately inadequate. None of the listed deficiencies would be considered serious enough to cause a unit to be labeled severely inadequate or moderately inadequate but can produce either designation when discovered in combination with each other or other problems, such as water leaks. Exhibit 6-6 reports on these items.

Exhibit 6-6. Distribution of HUD-Assisted Housing by Selected Deficiencies, 2017

Exilibit 0-0. Distribution	HUD-Assisted Renters								
		HUD-Assist							
Selected Deficiencies	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)			
Signs of Mice or Rats Inside Home in Last 12 Months	13.5	15.2	14.5	10.8	14.1	12.2			
Signs of Cockroaches in Last 12 Months	22.3	31.2	19.5	20.6	20.7	17.9			
Holes in Floors	1.9	3.1	1.8	1.4	2.5	1.8			
Open Cracks or Holes (interior)	8.2	10.2	8.3	6.7	8.2	7.0			
Broken Plaster or Peeling Paint (interior)	3.3	7.9	1.6	2.7	3.5	2.9			
Exposed Wiring	2.6	2.1	2.8	2.7	3.4	3.3			
Rooms without Electric Outlets	1.8	2.1	1.8	1.6	2.6	2.3			

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Except for signs of cockroaches, the incidence of such problems is generally low and there are no substantial differences across the six groups. In general, these problems occur less frequently in voucher units and units in privately owned multifamily housing than in units occupied by VLI households, but the differences are small. The rates of occurrence are typically highest in public housing units.

Electricity and Blown Fuses or Tripped Circuit Breakers

A unit without electricity is considered severely inadequate. The frequency of blown fuses or tripped circuit breakers enters into the determinations of both severely and moderately inadequate. Exhibit 6-7 provides information on the availability of electricity and experiencing blown fuses or tripped circuit breakers in units, but not the frequency of these latter conditions.

Exhibit 6-7. Distribution of HUD-Assisted Housing by Electrical Problems, 2017

		HUD-Assis				
Electrical Problems	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
With Electrical Wiring	100.0	100.0	100.0	99.9	99.8	99.9
No Fuses or Breakers Blown in Last 3 Months	93.3	95.2	92.2	93.9	92.2	92.0
With Fuses or Breakers Blown in Last 3 Months	6.6	4.8	7.8	6.1	7.7	7.9

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Fewer than 0.2 percent of all VLI rental units lack electricity. Surprisingly, the frequency of blown fuses or tripped circuit breakers is higher among all renters than among VLI renters, voucher holders, or tenants in privately owned, HUD-assisted housing; the lowest incidence occurred in public housing. The small differences reported in these most recent exhibits tend to vary across surveys; for example, in the "Characteristics" report for 2015, public housing had the highest percentage of units experiencing blown fuses or tripped circuit breakers (8.6 percent).

Complete Kitchens

If a unit lacks complete kitchen facilities (sink, refrigerator, stove, or burners) or if the household shares kitchen facilities, it is classified as moderately inadequate. Exhibit 6-8 provides information on the completeness of kitchens. With the exception of units in privately owned multifamily projects, fewer HUD units fail the complete kitchen test than all rental units (second row of exhibit 6-8). The lack of complete kitchen facilities is highest among units occupied by all VLI households

Exhibit 6-8. Distribution of HUD-Assisted Housing by Complete Kitchen Facilities, 2017

		HUD-Assis	ted Renters			
Complete Kitchens	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
With Complete Kitchen	98.1	98.1	98.5	97.6	97.1	97.6
Lacking Complete Kitchen Facilities	1.5	S	1.5	2.4	2.8	2.4
Kitchen Sink	99.8	100.0	99.9	99.7	99.1	99.5
Refrigerator	99.6	99.9	99.5	99.6	99.1	99.4
Cooking Stove or Range	98.8	99.3	99.2	97.9	97.1	98.0

MF = multifamily. VLI = very low income. S = data suppresses.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Exhibit 6-8 also provides information on three of the necessary elements of a complete kitchen (sinks, refrigerators, and stoves) but not on burners or the necessity of sharing kitchen facilities

Tenant Satisfaction

The AHS asks respondents to rate their structure and their neighborhood on a scale from 1 to 10, where 10 is considered the best. Exhibit 6-9 presents a capsulized summary of these ratings. So few residents rate their units or neighborhood at the bottom of the scale that the analysis had to combine the bottom five ratings to avoid possible disclosure.

Exhibit 6-9. Distribution of HUD-Assisted Housing by Tenant Ratings as "Best" or "Worst," 2017

		HIID Assist						
		HUD-Assis						
Overall Opinion	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)		
Structure								
1–5 Rating	15.8	16.8	16.4	14.3	15.5	15.5		
9–10 Rating	39.2	35.1	37.4	44.9	34.8	32.5		
Neighborhood								
1–5 Rating	20.0	23.0	18.9	19.8	16.3	18.4		
9–10 Rating	36.6	32.9	36.0	39.8	37.0	37.3		

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

A higher percentage of respondents from HUD-assisted units give their units a score of 9 or 10 than did respondents from units occupied by VLI households or from all rental units. This result is driven by the favorable ratings given by tenants in privately owned multifamily units.

The neighborhood ratings in exhibit 6-9 tell a different story. Tenants in public housing appear to be less satisfied than tenants in the other groups; they have the lowest percentage of 9 or 10 ratings and the highest percentage of 1–5 ratings.

Recent Movers

The AHS gathers additional information on households in which the respondent has moved into the unit during the past 2 years. Exhibit 4-6 demonstrated that householders tend to remain in assisted units much longer than householders in VLI households or all renters. The same pattern holds when one looks at recent movers: 30 percent of HUD-assisted units are occupied by recent-mover households, compared with 48.3 percent of all renter households (exhibit 6-10). The voucher program has the highest percentage of recent movers.

²¹ In AHS surveys before 2015, recent movers were defined as respondents who moved into their unit within the past year.

Exhibit 6-10. Distribution of HUD-Assisted Housing by Percent of Recent Movers, 2017

		HUD-Assist				
Recent-Mover Households	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Respondent Moved During Past 2 Years	30.7	25.8	32.5	31.4	42.3	48.3

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

The AHS asks a detailed series of questions about why recent-mover respondents moved into their current units. Exhibit 6-11 discusses some key reasons given by respondents. Respondents could give more than one answer and, thus, the percentages add to more than 100 percent; on average, recent movers gave two reasons.

Some of the differences between the reasons given by recent movers into HUD-assisted housing and those given by all renters are large, reflecting the lower ability of the VLI population to afford to move and the reluctance among HUD-assisted households to move. For example, 15.0 percent of all renters cite a new job or transfer, compared with 6.5 percent of VLI renters; the numbers of HUD-assisted recent movers who cite the same reason were so low that the U.S. Census Bureau reported them only for the voucher program (3.7 percent). The pattern is similar for "to reduce commuting time." On the other hand, "to reduce housing costs" is a reason given by 22.5 percent of HUD-assisted renters but only 16.2 percent of all renters.

Exhibit 6-11. Distribution of Recent Movers HUD-Assisted Housing by Key Reasons Given for Move, 2017

Reasons Given for Move, 2017									
		HUD-Assist	ted Renters						
Reasons for Moving	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)			
Forced to Move	8.7	S	12.8	7.0	7.3	5.6			
New Job or Job Transfer	S	S	3.7	S	6.5	15.0			
To Form Own Household	26.5	34.4	21.4	30.2	27.7	26.2			
To Be Closer to Family	26.8	21.6	24.0	34.1	23.9	20.2			
Change in Household or Family Size	12.6	15.6	10.1	15.0	12.8	12.7			
To Reduce Commuting Time	6.0	S	7.4	7.3	8.4	12.1			
Wanted a Larger or Better- Quality Home	29.6	31.6	30.8	26.4	23.6	25.2			
To Reduce Housing Costs	22.5	27.2	15.6	30.9	16.8	16.2			
Wanted a More Desirable Neighborhood	28.2	24.8	31.4	25.0	22.0	24.2			
Other	19.9	16.0	20.0	21.8	21.8	18.9			
Not Reported	4.6	3.2	5.1	4.5	5.8	5.1			

MF = multifamily. VLI = very low income. S = data suppressed.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

When asked to compare their current unit to their previous home, recent-mover respondents in HUD-assisted units are more likely than all renters or all VLI renters to rate the HUD-assisted unit as better than their previous unit (exhibit 612).

Exhibit 6-12. Distribution of Recent Movers HUD-Assisted Housing by Comparison of Current and Previous Home and Neighborhood, 2017

-		HUD-Assis	ted Renters			All Renters (%)		
Comparison of Current and Previous Home and Neighborhood	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Renters			
Current Home								
Better	51.6	48.0	52.7	51.8	43.5	42.4		
Worse	15.6	18.4	16.1	13.2	16.4	16.1		
Current Neighborhood								
Better	39.4	37.6	39.9	39.5	36.0	34.5		
Worse	15.2	16.4	12.6	18.6	13.2	12.2		

MF = multifamily. VLI = very low income.

When asked to compare their current neighborhood with their previous neighborhood, recent movers in all three HUD-assisted programs are more likely to rate their current neighborhood as better than their previous neighborhoods. This finding was true in 2017 for recent movers into public housing despite the lower satisfaction scores for neighborhoods provided by all public housing respondents.

Closing Thoughts

The main conclusion from section 6 is that both the American housing stock and the HUD-assisted stock are high quality, with few units experiencing major problems. The AHS has an overall measure of housing quality that detects whether an individual unit is adequate, moderately inadequate, or severely inadequate; in 2017, 1.9 percent of all rental units were severely inadequate, whereas the percentages among all VLI units and all HUD-assisted units were 2.9 percent and 2.3 percent, respectively.

This section separately examined various indicators of housing problems: heating problems, toilet breakdowns, water leaks, other deficiencies, electrical problems, and having complete kitchen facilities. Exhibit 6-13 pulls together key rows from exhibit 6-3 through exhibit 6-8. In almost every case, HUD-assisted units have few problems and are comparable in quality to all rental units and sometimes slightly better than all VLI units.

Exhibit 6-13. Key Findings from Exhibits 6-3 Through 6-8

_		HUD-Assist				
Various Components of Adequate Housing	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Uncomfortably Cold for 24 Hours or More	10.0	12.5	11.0	6.8	9.5	7.5
No Toilets Working Some Time in Last 3 Months	4.1	4.6	4.1	3.6	3.8	3.1
With Water Leakage from Inside Structure	12.0	13.2	12.0	11.0	11.4	10.7
With Water Leakage from Outside Structure	8.1	5.5	10.5	6.3	9.4	9.5
Signs of Mice or Rats Inside Home in Last 12 Months	13.5	15.2	14.5	10.8	14.1	12.2
Holes in Floors	1.9	3.1	1.8	1.4	2.5	1.8
Exposed Wiring	2.6	2.1	2.8	2.7	3.4	3.3
With Fuses or Breakers Blown in Last 3 Months	6.6	4.8	7.8	6.1	7.7	7.9
Lacking Complete Kitchen Facilities	1.5	S	1.5	2.4	2.8	2.4

MF = multifamily. VLI = very low income.

Note: "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

HUD tenants are mostly satisfied with their units and neighborhoods. A higher percentage of respondents from HUD-assisted units give their units a score of 9 or 10 than did respondents from units occupied by VLI households or from all rental units. This result is driven by the favorable ratings given by tenants in privately owned multifamily. Public housing tenants are the least likely to be satisfied with their units and neighborhoods. With respect to neighborhoods, tenants in public housing appear to be less satisfied than tenants in the other groups; they have the lowest percentage of ratings of 9 or 10 and the highest percentage of 1 through 5 ratings.

When asked to compare their current unit and current neighborhood with their previous home, recent-mover respondents in HUD-assisted units are more likely to rate the HUD-assisted unit as better than their previous unit than all renters or all VLI renters.

Section 7: Assessment of HUD-Assisted Housing—Looking Across the Sections

The previous sections use the information from the 2017 American Housing Survey to examine the characteristics of HUD-assisted units (their location, year built, size, structure type, and quality) and the characteristics of their occupants (race and ethnicity, age, education, income, household composition, and satisfaction with their living environment). This section looks across these earlier sections to assess HUD's rental assistance.

The assessment focuses on four questions:

- 1. Who do the programs serve?
- 2. What benefits do the programs provide?
- 3. How do the programs differ with respect to recipients and benefits?
- 4. How have the programs evolved from 1989 onward?

Who Do the Programs Serve?

Several characteristics attest that HUD-assisted housing serves households at the bottom of the income distribution, particularly those with special issues—single-adult households with a female householder, households with disabled members, and households with householders without a high school diploma:

- More than one half of all HUD-assisted households had a total income in 2017 of less than \$12,500, compared with a median of \$16,000 among unassisted households whose income would still qualify them to participate in the program. The median income of all renters was \$36,000, whereas the median income of all households was \$55,100.
- Forty percent of HUD-assisted households receive wage and salary income, compared with 73 percent of all renters.
- Seventy percent of HUD-assisted households are single-adult households with a female householder, compared with 55 percent among very low-income households and 42 percent among all renter households.
- HUD-assisted housing serves households with one or more disabled members at a rate (44 percent) substantially higher than the rate among either units rented to VLI households (33 percent) or all renter households (22 percent).
- Thirty percent of householders in HUD-assisted households did not graduate from high school, compared with 16 percent of householders among all renters.

HUD-assisted households differ in some demographic characteristics from all VLI households:

- Among HUD-assisted households, 46 percent have Black householders, compared with 28 percent among VLI households.
- Among HUD-assisted households, 18 percent have Hispanic householders, compared with 23 percent among VLI households.

- Among HUD-assisted households, 27 percent have senior householders (classified as householders 65 or older), compared with 23 percent among VLI households.
- Fifty percent of HUD-assisted households have only one person, compared with 45 percent among VLI renters and 35 percent among all renters.

The report attributes these differences to where the programs function and when they originally began operation. Units constructed for public housing and other project-based multifamily programs can last 40 years or more, and the original purpose and location of these units determines who lives in them (for example, one-bedroom units cannot serve families).

- Approximately 80 percent of public housing units and 75 percent of privately owned multifamily units were built before 1985. These units were designed to serve the needs of the locations where they were built at the time they were built. Fifty-six percent of HUDassisted units are located in central cities, while 50 percent of units occupied by VLI renters are in central cities.
- More than 40 percent of HUD-assisted units are efficiencies or one-bedroom units, compared with 35 percent of all units occupied by VLI households and 28 percent of all rental units. Among units in privately owned multifamily projects, the percentage of onebedroom units is nearly 63 percent.

What Benefits Do the Programs Provide?

HUD-assisted programs achieved their primary objective of providing decent and affordable housing for needy households. The AHS provides extensive information on the quality and condition of units, and AHS data show that the American rental housing stock is in good condition, and HUD-assisted units are as good as other rental units.

- By the AHS quality index, 92 percent of HUD-assisted units, 90 percent of units occupied by all VLI households, and 92 percent of all rental units are considered adequate.
- Section 6 examined several aspects of unit quality. Exhibit 6-13, which is reproduced here as exhibit 7-1, shows that HUD-assisted units had few problems and were comparable in quality to all rental units and sometimes slightly better than all VLI units.

Exhibit 7-1. Key Findings from Exhibits 6-3 Through 6-8

_	HUD-Assisted Renters					
Various Components of Adequate Housing	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF Units (%)	Total VLI Renters (%)	All Renters (%)
Uncomfortably Cold for 24 Hours or More	10.0	12.5	11.0	6.8	9.5	7.5
No Toilets Working Some Time in Last 3 Months	4.1	4.6	4.1	3.6	3.8	3.1
With Water Leakage from Inside Structure	12.0	13.2	12.0	11.0	11.4	10.7
With Water Leakage from Outside Structure	8.1	5.5	10.5	6.3	9.4	9.5
Signs of Mice or Rats Inside Home in Last 12 Months	13.5	15.2	14.5	10.8	14.1	12.2
Holes in Floors	1.9	3.1	1.8	1.4	2.5	1.8
Exposed Wiring	2.6	2.1	2.8	2.7	3.4	3.3
With Fuses or Breakers Blown in Last 3 Months	6.6	4.8	7.8	6.1	7.7	7.9
Lacking Complete Kitchen Facilities	1.5	S	1.5	2.4	2.8	2.4

- Among households that moved into their units within the past 2 years, respondents in HUD-assisted units are more likely than all renters or all VLI renters to rate the HUD-assisted unit and its neighborhood as better than their previous unit and neighborhood.
- The traditional measure of affordability is the ratio of monthly housing costs to monthly household income, where housing costs include both rent and utility expenses. A ratio of 0.3 is generally considered acceptable, while a ratio greater than 0.4 is considered excessive. By this standard, program participants are better off than the typical VLI household. Forty percent of HUD-assisted households pay more than 40 percent of their income for rent, utilities, and related expenses, compared with 63 percent of all VLI renters.

Section 5 discusses why the AHS records that so many HUD-assisted households pay more than 30 percent of their income, which is the general requirement in HUD programs. Program rules differ, allowing higher ratios in some cases—this difference is particularly important in regard to the voucher program. In addition, AHS income and cost numbers may differ from HUD administrative records.

How Do the Programs Differ with Respect to Recipients and Benefits?

The most important differences among the HUD programs are the following:

- A higher percentage of public housing units are located in central cities (62 percent) than voucher units (54 percent) or privately owned multifamily units (54 percent).
- Thirty-eight percent of privately owned multifamily households have Black householders, compared with 49 percent in both public housing and in the voucher program.

- Forty-four percent of privately owned multifamily householders are seniors, compared with 24 percent of householders in public housing and 18 percent in the voucher program.
- Thirty-six percent of privately owned multifamily households are two-or-more-persons households, compared with 56 percent in public housing and 58 percent in the voucher program.
- Forty-nine percent of privately owned multifamily households have a disabled member, compared with 42 percent in public housing and 41 percent in the voucher program.
- Voucher households had the highest median incomes in 2017 at \$12,500, compared with \$11,160 among privately owned multifamily households and \$10,800 among public housing tenants.
- Forty-eight percent of voucher households pay more than 40 percent or more of their income on housing, compared with 35 percent of public housing tenants and 30 percent of privately owned multifamily tenants.
- Voucher households are the most mobile; 32 percent moved in the past 2 years. Tenants in privately owned multifamily units were almost as mobile; 31 percent moved in the past 2 years. Public housing tenants were the least mobile; 26 percent moved. Mobility is much higher among the comparison groups; 42 percent of VLI renters and 48 percent of all renters moved in the past 2 years.
- Recent movers in HUD-assisted households generally rate their new units as better than their previous units, with only small differences among the programs: 53 percent in the voucher program, 52 percent in privately owned multifamily units, and 48 percent in public housing. These percentages are lower among VLI renter recent movers (44 percent) and all recent-mover renters (42 percent).

How Have the Programs Evolved Since 1989?

This report is the 10th compilation of AHS data on HUD-assisted rental housing, and it uses information from the previous studies to track changes in the HUD programs.

- The biggest change in assisted housing programs has been the shift from project-based assistance to tenant-based assistance. From 1989 to 2017, the number of HUD-assisted units increased by 500,00 units, but program mix changed dramatically. The voucher program's share grew from 26 percent in 1989 to 48 percent in 2017, while shares of public housing and privately owned multifamily housing each declined by 12 and 10 percentage points, respectively.
- The metropolitan areas outside of central cities have a larger share of HUD assistance, at 31 percent in 2017 compared with 26 percent in 1989, probably because of the growth of the voucher program.
- The share of householders who are Black rose from 40 percent to 46 percent; the share who are Hispanic rose from 10 percent to 18 percent.

- The share of households with senior householders fell from 35 percent to 27 percent with the decline of the privately owned multifamily program.
- In the voucher program, the median ratio of housing costs to income rose from 32 to 40.

Although these 10 studies cover the 1989–2017 timeframe, the studies are clustered at the front (1989, 1991, 1993) and back (2003, 2007, 2009, 2011, 2013, 2015, 2017) ends of the period. And while the shift in program composition was generally smooth over the 28-year period, there were marked changes in the share of households with a Hispanic householder, the share of households with a senior householder, and the median ratio of housing costs to income in the voucher program between the "1993 and earlier" era and the "2003 and later" era. Due to the back- and front-end clustering, the report cannot rule out a sharp change during the 1993–2003 gap.

Appendix A: How HUD Determines Physical Adequacy

At the request of HUD, the U.S. Census Bureau provided this cogent explanation of the adequacy measures.

Housing Adequacy

HUD measures housing quality by creating a measure called *housing adequacy*. The housing adequacy measure is classified into three degrees of severity: "severely inadequate," "moderately inadequate," and "adequate." Each sample unit has to meet the conditions defined below to be classified in one of these three categories.

Severely Inadequate

Units are classified as "severely inadequate" if at least one of the following conditions is met:

- *Plumbing*. Lacking hot or cold piped water, lacking a full bathroom, or sharing a bathroom with non-household members.
- *Heating*. Having been uncomfortably cold last winter for 24 hours or more because the heating equipment broke down, and the heating equipment broke down at least three times last winter for at least 6 hours each time.
- *Electricity*. Having no electricity.
- *Wiring*. Having all of the following electric problems: exposed wiring, a room with no working wall outlet, and three blown fuses or tripped circuit breakers in the last 3 months.
- *Upkeep*. Having at least five of the following six maintenance problems:
 - 1. Water leaks from the outside in the last 12 months, such as from the roof, basement, windows, or doors.
 - 2. Leaks from inside the structure in the last 12 months, such as pipes or plumbing fixtures.
 - 3. Holes in the floors.
 - 4. Holes or open cracks (wider than a dime) in the walls or ceilings.
 - 5. More than 8 by 11 inches of peeling paint or broken plaster.
 - 6. Signs of rats in the last 12 months.

Moderately Inadequate

Units are classified as "moderately inadequate" if at least one of the following conditions is met:

- *Upkeep*. Having only three or four of the six problems listed under "Severely Inadequate Upkeep."
- Other. Having any one of the following conditions:
 - 1. On at least three occasions during the last 3 months, all the flush toilets were broken down at the same time for 6 hours or more.

- 2. Having unvented gas, oil, or kerosene heaters as the main heating equipment.
- 3. Lacking a kitchen sink, lacking a working refrigerator, lacking cooking equipment (stove, burners, or microwave oven), or sharing the kitchen with non-household members.

Adequate

A unit is deemed "adequate" if it does not meet the definitions of "severely inadequate" or "moderately inadequate."

Appendix B: Previous Studies of the Characteristics on HUD-Assisted Renters and Their Units Based on AHS Data

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Weicher, John C., Frederick J. Eggers, and Fouad Moumen. 2017. *The Long-Term Dynamics of Affordable Rental Housing*. Washington, DC: The Hudson Institute. https://www.hudson.org/research/13339-the-long-term-dynamics-of-affordable-rental-housing.

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