Characteristics of HUD-Assisted Renters and Their Units in 2015

Prepared by Frederick J. Eggers Econometrica, Inc. SP Group LLC



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U.S. Department of Housing and Urban Development | Office of Policy Development and Research

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November 2019

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Executive Summary

In 2015, the U.S. Department of Housing and Urban Development (HUD) provided rental subsidies to 4.475 million households under several programs, with total costs exceeding \$36 billion. This report uses data¹ from the American Housing Survey (AHS) to describe key features of both the rental housing assistance HUD provided and the households HUD served. The 2015 AHS contained information collected from 5,346 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) households² (that is, by households with incomes not exceeding 50 percent of local median income, adjusted for household size). In most cases, the group of VLI households is 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 households apply for the units. Vouchers are *tenant-based* because the subsidy attaches to the household, who 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 projects after completion. The government paid off the bonds, and PHAs maintained projects using the rent from tenants. Currently, HUD also subsidizes operating costs and capital improvements. In 2015, public housing assisted 1.015 million 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 time periods used in this report may not be the same as used in U.S. Department of Housing and Urban Development (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 particularly, we did not have access to the sample counts behind the tables, which are needed for manageable testing.

The "voucher" data in this report contain both the traditional voucher program and this variant. In 2015, the HCV program assisted 2.12 million 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, in order 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 (approximately 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 2015, privately owned multifamily programs assisted 1.34 million 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 2015, 19.976 million households in the United States were VLI and 4.575 million (approximately 22.5 percent) were in HUD-assisted units.

The number of assisted rental units increased by only 11 percent during the past 24 years. In 1991, HUD assisted 4.036 million rental units, compared with 4.475 million in 2015. During the same period, the number of VLI households increased approximately 32 percent, from 16.194 million to 19.876 million. As a result of a reduced rate of HUD assisting households with an increase in the number of VLI households, the percentage of VLI households receiving assistance fell from 24.9 to 22.5 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 approximately 26 percent in 1989 to approximately 47 percent in 2015. During this period, the shares of public housing and privately owned multifamily housing each declined by approximately 11 percentage points; public housing decreased from approximately 33 percent to approximately 22 percent, and privately owned multifamily housing decreased from approximately 41 percent to approximately 30 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, vouchers, and 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 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 prior to 1990; approximately two-thirds of public housing and privately owned multifamily housing was built between 1950 and 1989. This housing construction was influenced by the demographics of that period, such as the age, size,

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

and composition of low-income households. For these programs, the local needs and 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 heavily oriented toward building smaller units. In 2015, approximately 37.6 percent of public housing units and approximately 62.8 percent of privately owned multifamily units were efficiencies or one-bedroom, whereas, for all renter households, the share was approximately 27.6 percent and approximately 33.2 percent for VLI households. This heavy concentration of efficiencies and one-bedroom units determined the size and composition of the households served by these programs in 2015. By comparison, approximately 27.4 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 in central cities of metropolitan areas in the United States, the percentage of public housing and privately owned multifamily rental housing is higher than the percentage of VLI households in these 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 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 HUD-assisted housing serves.

HUD-assisted rental housing generally serves the lowest income population. In 2015, the median income for VLI households not assisted by HUD was approximately \$15,889, compared with those VLI households assisted by HUD: it was approximately \$10,200 among public housing tenants, approximately \$10,380 among tenants of privately owned multifamily units, and approximately \$11,400 among voucher recipient households. Compared with all VLI households, householders in HUD-assisted units had substantially lower educational attainment. Also, HUD-assisted households received wage and salary income less often and relied on welfare and Supplement Security Income (SSI) more often than all VLI households. 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 approximately 44.1 percent of HUD-assisted household have excessive rent burdens. This percentage is substantially higher than expected because usually tenants' rents in HUD-assisted housing are 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 (approximately 69.1 percent).

The main conclusion from Section 6 is that American housing stock and the HUDassisted stock are high quality. AHS includes an overall measure of housing quality that detects whether an individual unit is adequate, moderately inadequate, or severely inadequate. In 2015, approximately 1.9 percent of all rental units were severely inadequate, and approximately 2.7 percent of all VLI units and 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 complete kitchen facilities. In almost every case, HUD-assisted units had few problems, were comparable in quality to all rental units, and were generally 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. This result is driven by the favorable ratings given by tenants in privately owned multifamily units. 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 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 as better than their previous unit. When asked to compare their current neighborhood with their previous neighborhood, recent movers in the voucher program or in privately owned multifamily units were more likely to rate their current neighborhood as better than their previous neighborhoods. For public housing, however, recent movers did not tend to favorably view their current 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 2015 of less than \$11,400, compared with a median of \$15,900 among unassisted VLI households. Other characteristics of assisted households confirm that HUD-assisted housing is targeted to those most in need. Approximately 70 percent of HUD-assisted households are female-headed, compared with approximately 55 percent among VLI households. HUD-assisted housing serves households with one or more disabled members at a rate (approximately 45.7 percent) substantially higher than the rate among either VLI renter units (approximately 31.8 percent) or all rental units (approximately 21.9 percent).

HUD-assisted households differ in some demographic characteristics from of all VLI households. Among HUD-assisted households, approximately 45 percent have Black householders and approximately 18 percent have Hispanic householders, compared with approximately 27 percent and 23 percent, respectively, among all VLI households.

What Benefits Do the Programs Provide?

Excessive rent burdens are lower among HUD-assisted households (approximately 44 percent) compared with all VLI renters (approximately 69 percent).

HUD-assisted programs achieved their primary objective of providing decent and affordable housing for needy households. AHS provides extensive information on the quality and condition of units. AHS data show the American rental housing stock is in good condition and 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 as better compared with all VLI movers and all renters. The neighborhood ratings are mixed, with public housing tenants rating their neighborhoods less favorably.

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

Approximately 45 percent of privately owned multifamily householders are seniors, compared with approximately 22 percent of householders in public housing and approximately 18 percent in the voucher program. Approximately 39 percent of privately owned multifamily households include two or more persons, compared with approximately 55 percent in public housing and approximately 60 percent in the voucher program. Approximately 54 percent of privately owned multifamily households have a disabled member, compared with approximately 43 percent in public housing and approximately 42 percent in the voucher program.

Voucher households are the most mobile. Approximately 34 percent moved in the past 2 years, compared with approximately 28 percent among public housing tenants and approximately 30 percent among privately owned multifamily tenants. Mobility is much higher among the comparison groups: Approximately 44 percent of VLI renters and approximately 48 percent of all renters moved in the past 2 years.

How Have the Programs Evolved from 1989 Onwards?

The biggest change in assisted housing programs has been the shift from project-based assistance to tenant-based assistance. From 1989 to 2015, the number of HUD-assisted units increased by approximately 400,000 units, but the program mix changed dramatically. The voucher program's share grew from approximately 26 percent in 1989 to approximately 47 percent in 2015, while shares of public housing and privately owned multifamily housing each declined by approximately 11 percentage points.

The shift to vouchers had some programmatic effects. The metropolitan areas outside of central cities have a larger share of HUD assistance, at approximately 32 percent in 2015 compared with approximately 26 percent in 1989. The share of senior householders in voucher units fell from approximately 35 percent to approximately 27 percent.

Characteristics of HUD-Assisted Renters and Their Units in 2015

Section 1: Introduction

In 2015, the U.S. Department of Housing and Urban Development (HUD) subsidized 4.475 million renter households under a variety of programs where total costs exceeded \$36 billion. Using data from the 2015 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 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.

AHS is an ideal data source for these purposes. The 2015 AHS contained information collected from 5,346 HUD-assisted rental units; 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, which are not included in the AHS.⁵ This report is the eighth 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.

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

- Section 2 discusses the HUD-assisted rental housing programs, focusing on their history, size, and the two broad strategies 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.
- 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. It looks at 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 (approximately 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"—in other words, 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 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 approximately 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, there is a variant that 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) project-based 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.⁸ 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 due to 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-Igo buildings in St. Louis, Missouri, and Cabrini Green in Chicago, Illinois, 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.

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 1989–2015 period, the number of HUD-assisted units increased by approximately 400,000 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. The voucher program's share grew from approximately 26 percent in 1989 to approximately 47 percent in 2015, while the shares of public housing and privately owned assisted housing each declined by approximately 11 percentage points. 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.

AHS Survey Year	All HUD-Assisted (Thousands)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)
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

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

AHS = American Housing Survey. MF = multifamily.

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

It is important to note that 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, approximately 464,000 units were available under the Rural Housing Service (formerly known as the Farmers Home Administration) Section 515 Rental Assistance Program. Approximately 264,000 of the available units received deep subsidies under the Section 521 Rental Assistance Program. The report 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 PD&R, 2019). Some of these tax credit units may also receive HUD or USDA subsidies.

The Big Picture in 2015

Exhibit 2-2 explains how HUD-assisted housing fits into the overall rental housing market. In 2015, of the 43.991 million renter households, 19.876 million were eligible on the basis of income for HUD assistance.



Exhibit 2-2. Renter Eligibility and Housing Assistance in 2015

The term "Worst Case Needs Households" is used in exhibit 2-2 but is not further present in this report. "Worst-case needs" refers to renters who do not receive federal assistance, whose incomes fall below 50 percent of median family income in their area (as adjusted by HUD), and who spend more than one-half their income on rent and utilities or live in severely inadequate housing. Reports presenting estimates of worst-case needs households have been submitted to Congress since 1991.⁹

HUD programs served 4.475 million (22.5 percent) of the VLI households. The voucher program helped 2.12 million households; another 1.34 million households lived in privately owned multifamily housing, and public housing provided housing to 1.015 million households.¹⁰ This left 15.401 million eligible households without any HUD housing assistance; of these, 8.326

⁹ These Worst-Case Needs publications are available online at

https://www.huduser.gov/portal/publications/affhsg/rha_main.html.

¹⁰ In the 2015 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 Census Bureau used these estimates to adjust the weights of the HUD-assisted units so that the weighted counts matched program totals.

million were judged to have worst-case housing needs. AHS data depict how housing assistance has evolved over the 26 years between the 1989 AHS and the 2015 AHS (exhibit 2-3).

AHS Survey	All Renters	All VLI Renters All HUD-Assis		Percent of VLI
Year	(Thousands)	(Thousands)	(Thousands)	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

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

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 1991–2015 period, the number of renter households grew from approximately 33.4 million to approximately 44.0 million, an increase of 32 percent.¹¹ During the same time period, the number of VLI households increased by 23 percent, while the number of HUD-assisted units increased by only 11 percent. The percentage of VLI households receiving assistance fell from approximately 24.9 percent in 1991 to approximately 22.5 percent in 2015. 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 approximately 1 million between 2011 and 2013 but rose again by 2015.

Interpreting the Data

There are three factors crucial for interpreting the data:

• Unlike Medicaid, Supplemental Nutrition Assistance Program (also known as food stamps), and Temporary Assistance to Needy Families (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?

¹¹ 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.

- 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.
- 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. This means 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 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 allows 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 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 2015. 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 (4,475,000). This column contains the weighted sum of columns 3, 4, and 5;
- 3. Public housing units or households (1,015,000);
- 4. Voucher units or households (2,120,000);
- 5. Privately owned multifamily units or households (1,340,000);
- 6. All VLI renter households (or units occupied by them), including assisted households (19,876,000);
- 7. All renter households (or units occupied by them), including assisted households (43,991,000).

The cells in these columns, unless otherwise noted, contain the percentage of the column total that have that characteristic. For example, the third number down in the second column of exhibit 3-1 indicates that 7.6 percent of the 4,475,000 HUD-assisted units are located in the New England Census Division. Percentages are rounded to one decimal place.

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 following 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, approximately 36.1 percent of all renters and approximately 34.8 percent of VLI renters live in the South. Since eligibility is relative to local income, this pattern is not surprising because high-income areas will have higher local median incomes.

			A 11				
Regions and Divisions	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)	
United States (Units, in Thousands)	4,475	1,015	2,120	1,340	19,876	43,991	
Northeast Region	27.6	35.8	24.2	26.9	21.0	19.1	
New England Division: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	7.6	6.6	7.1	9.3	5.1	4.8	
Middle Atlantic Division: New Jersey, New York, Pennsylvania	20.0	29.2	17.1	17.5	15.9	14.3	
Midwest Region	21.9	19.6	19.5	27.5	21.0	19.6	
East North Central Division: Illinois, Indiana, Michigan, Ohio, Wisconsin	15.6	13.7	13.6	20.0	14.6	13.4	
West North Central Division: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	6.4	5.9	5.8	7.5	6.4	6.2	
South Region	32.8	36.2	32.6	30.5	34.8	36.1	
South Atlantic Division: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, District of Columbia	16.2	16.8	16.1	15.8	17.6	18.7	
East South Central Division: Alabama, Kentucky, Mississippi, Tennessee	7.0	10.0	5.5	7.1	6.2	5.6	
West South Central Division: Arkansas, Louisiana, Oklahoma, Texas	9.7	9.4	11.1	7.6	11.0	11.8	
West Region	17.7	8.6	23.7	15.0	23.2	25.2	
Mountain Division: Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming	4.1	2.6	4.9	4.0	6.3	7.(
Pacific Division: Alaska, California, Oregon, Washington, Hawaii	13.6	6.0	18.8	11.0	17.0	18.2	

Exhibit 3-1. Distribution of HUD-Assisted Housing by Region and Census Division, 2015

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. Approximately 19 percent of all renters and approximately 21 percent of VLI renters live in the Northeast, but approximately 28 percent of HUD-assisted housing is located there. Public housing is particularly concentrated in this region, but the percentage of voucher units and privately owned multifamily units are also higher than the percentages of all renters or all VLI renters. In 2015, the West contained approximately 25 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 2015 is similar to that of all renter households and all VLI renter households (exhibit 3-2). Within metropolitan areas, HUD-assisted households are 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 is most pronounced in public housing, but the voucher and privately owned multifamily programs also exhibit this imbalance to a lesser extent.

		Total						
Metropolitan/ Nonmetropolitan Areas	All HUD- Assisted (%)	PUDUC POCIDIONIS		Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)		
Inside Metropolitan Statistical Areas	87.4	84.2	88.7	87.9	87.1	88.2		
In Central Cities	56.3	61.6	55.0	54.3	49.6	47.4		
Outside Central Cities	31.2	22.7	33.6	33.7	37.5	40.8		
Outside Metropolitan Statistical Areas	12.6	15.8	11.3	12.1	12.9	11.8		

Exhibit 3-2. Distribution of HUD-Assisted Housing by Metropolitan/ Nonmetropolitan Status, 2015

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 26 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.

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

Exhibit 3-3. Trends in the Distribution of All HUD-Assisted Households by Region and by Metropolitan/Nonmetropolitan Status, 1989–2015¹²

^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 these were the reported percentages. The 1991 regional percentages may be incorrect. Alternatively, the 1 million overcount of housing units in 1989 may have affected the regional distribution. 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.

The distribution of all renters and VLI renters has also changed over time. Between 1989 and 2015, 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; 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.¹³

There is a further technical reason as to why the continuity between 2013 and 2015 in exhibit 3-3 is surprising. From 1985 to 2013, AHS used the same boundaries between the central city and non-central city parts of metropolitan areas in its sample as their 1984 boundaries. In 2015, AHS updated the sample, changing the boundaries between central cities and areas outside of central cities to those 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 2015,

¹² 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 2015 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.

¹³ The 1989 numbers in this paragraph come from Table 3 on page 25 of *Characteristics of HUD-Assisted Renters* and Their Units in 1989.

this is 47.4 percent. The percentage of renters living outside central cities changed slightly more, from 39.7 percent in 2013 to 40.8 percent in 2015.

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, Minnesota. 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 2015.

Exhibit 3-4 shows that VLI renters tend to live in older housing than that occupied by all renters. Almost one-half (approximately 49 percent) of VLI renters rent housing built prior to 1970, compared with approximately 45 percent of all renters. Although the percentage of assisted renters is similar, with approximately 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.

		HUD-Assisted Renters					
Year Built	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)	
1949 and Earlier	22.3	18.5	27.2	17.4	25.5	22.9	
1950–1969	23.8	35.0	21.9	18.4	23.6	21.9	
1970–1989	34.5	32.4	27.1	47.8	29.2	29.3	
1990 or Later	19.3	14.1	23.7	16.3	21.7	25.9	

Exhibit 3-4. Distribution of HUD-Assisted Housing by Year Built, 2015

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 approximately 18.5 percent of today's public housing units were built before 1950. More than 67 percent of public housing units were built between 1950 and 1989, when HUD restructured its housing assistance programs to favor the voucher approach.¹⁴ The privately owned multifamily programs were most active between 1965 and 1989; 66 percent of these units were constructed between 1970 and 1989. The 17 percent of

¹⁴ 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 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 Census Bureau's Table Creator tool and must use the same categories provided by Table Creator.

privately owned units reportedly built before 1950 results from a combination of rehabilitating older buildings for use as assisted housing and errors on the part of AHS respondents in identifying the year built.

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 is certainly true for the two middle "Year Built" categories (1950–1969 and 1970–1989). Voucher households occupy more pre-1950 housing and less post-1989 housing than all renters, however. The percentages of voucher households living in pre-1950 and post-1989 units are higher than those of all VLI 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 2015.¹⁵

Exhibit 3-5. Dis	ribution of HUD-Assisted Housing by Number of Bedrooms, 2015	

	HUD-Assisted Renters					
Number of Bedrooms	All HUD- Assisted (%)	Tenants in PublicVoucher RecipientsTenants in Privately Owned MF (%)		Total VLI Renters (%)	All Renters (%)	
Efficiency/One	40.3	37.6	27.4	62.8	33.2	27.6
Two	31.9	30.9	36.3	25.7	39.2	39.8
Three	21.3	22.1	28.2	9.7	22.0	24.9
Four or More	6.5	9.4	8.1	1.8	5.5	7.7

MF = multifamily. VLI = very low income.

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

As shown in exhibit 3-6, the distribution of units by number of bedrooms is approximately equal for total VLI renters and all renters, but the distribution across HUDassisted units are more heavily concentrated toward fewer bedrooms. Approximately 40 percent of HUD-assisted units are efficiencies or one-bedroom units, compared with approximately 33 percent for all units occupied by VLI households and approximately 28 percent of all renters.

¹⁵ 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 AHS. Exhibit 3-5 combines efficiencies (units without separate bedrooms) with onebedroom 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 Census Bureau will not release these counts due to the risk of identifying individual respondents.

Thirty-two percent of HUD-assisted units have two bedrooms, compared with 39 percent of VLI households and 40 percent of all renters.

Among units in privately owned multifamily projects, the percentage of one-bedroom units is nearly 63 percent. This characteristic will strongly determine who the privately owned projects serve in terms of household size and composition. In turn, project owners built smaller units because they envisioned serving senior households. Thirty-eight percent of public housing units are efficiency and one-bedroom units.

Only the voucher program has a distribution of units similar to the distribution of all rental units. It has the same percentage of efficiency and one-bedroom units (approximately 27 percent), a lower percentage of two-bedroom units (approximately 36 percent vs. approximately 40 percent), and higher percentages of large units. Three-bedroom units make up approximately 28 percent of the voucher program's units, compared with approximately 25 percent of all rental units, and the voucher program sees a marginally higher percentage of four-or-more bedroom units, at approximately 8.1 percent versus approximately 7.7 percent for all renters.

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

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

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

Over time, the distribution of HUD-assisted units has shifted toward units with more bedrooms, but this movement has been modest and irregular. In 1989, approximately 76 percent of HUD-assisted units were either one- or two-bedroom units, while approximately 4 percent had three or more bedrooms; by 2015, the percentages were approximately 72 percent versus approximately 27 percent, respectively. This appears to be the result of the shift in the program mix toward the voucher program.

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 1990. Exhibit 3-4 confirms that approximately two-thirds of public housing and privately owned multifamily housing were built between 1950 and 1989, 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 in central cities.

Section 4: Householder Characteristics

The 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 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.¹⁶ 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 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 lower percentage with a Hispanic householder compared with all VLI households.

1100001101001,						
		Total				
Race and Ethnicity of Householder	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
White Alone	47.1	40.4	44.2	56.8	64.0	69.8
Black Alone	44.8	51.4	48.1	34.4	27.3	21.2
Other Races Alone or Multiple Races	8.1	8.1	7.7	8.8	8.7	9.0
Hispanic (of Any Race)	17.5	18.5	18.5	15.0	23.0	19.3

Exhibit 4-1. Distribution of HUD-Assisted Housing by Race and Ethnicity of Householder, 2015

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 2015 was approximately 44.8 percent, while the percentage of all VLI renter households with Black householders was approximately 27.3 percent. The differentials were greatest for the public housing and voucher programs, where approximately 51.4 and 48.1 percent of units, respectively, were occupied by Black householders. One possible explanation for public housing is its high concentration in central cities. Privately owned multifamily units, however, have the

¹⁶ 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."

smallest differential (approximately 34.4 percent compared with the total VLI percentage of 27.3), and these units are also concentrated in central cities.

With respect to ethnicity, the percentage of all HUD-assisted households with Hispanic householders (17.5 percent) is smaller than the percentage of VLI households with Hispanic householders (23.0 percent). This conclusion applies to all three HUD programs and is most pronounced for privately owned multifamily housing (15.0 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. Prior to 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 in 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

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

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 were serving households with senior householders at a rate (approximately 27.0 percent) greater than their share (20.4 percent) of the population of VLI renter households. The percentage of households with senior householders was particularly high among units in privately owned multifamily housing (approximately 45.3 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 served seniors at a rate (approximately 17.5 percent) smaller than their share (20.4 percent) of VLI renter households.

		HUD-Assist	ed Renters			
Age of Householder	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Under 35	21.3	24.3	21.6	18.4	31.1	34.8
35 to 64	51.7	52.9	60.9	36.3	48.5	50.9
65 or Older	27.0	22.8	17.5	45.3	20.4	14.2

Exhibit 4-3. Distribution of HUD-Assisted Housing by Age of Householder, 2015

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—24.3 percent in public housing, 21.6 percent in the voucher program, and 18.4 percent in the project-based program compared with 31.1 percent for all VLI households.

The voucher program has a higher proportion of households with householders between 35 and 64 years old (approximately 60.9 percent) than the VLI renter population (approximately 48.5 percent). Approximately 36.3 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 approximately 35 percent in 1989 to approximately 27 percent in 2015, with most of the change taking place between 1993 and 2003. This results from the steady increase in importance of the voucher program and the decline in the number of privately owned multifamily projects.

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

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

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, approximately 25.6 percent had householders without high school diplomas, compared with approximately 16.2 percent among all renter households; approximately 42.4 percent of VLI households have householders with education beyond the high school level, compared with approximately 56.7 percent among all renter households.¹⁷

¹⁷ The Characteristics Report using the 2013 data analyzed educational attainment, controlling first for race and ethnicity and then for age. The extra analysis did not provide useful insights and was dropped from this report since this level of analysis is not obtainable with just Table Creator.

		HUD-Assiste	ed Renters		Total	
Educational Attainment of Householder	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Less Than 9th Grade	8.7	9.3	6.9	11.0	8.4	5.2
9th to 12th Grade, No Diploma	22.0	24.1	20.8	22.5	17.2	11.0
High School Graduate (Includes Equivalency)	37.5	36.5	36.9	39.3	35.8	30.7
Additional Vocational Training	3.9	5.0	3.3	4.1	3.8	3.7
Some College, No Degree	16.9	14.1	19.9	14.3	18.6	18.6
Associate Degree	7.6	9.2	7.9	6.0	7.6	9.0
Bachelor's Degree	5.3	5.0	5.6	5.0	9.0	16.9
Graduate or Professional Degree	2.0	2.0	2.0	1.9	3.5	8.6
Percent High School Graduate or Higher	69.3	66.7	72.3	66.5	74.4	83.8
Percent Bachelor's Degree or Higher	7.3	7.0	7.6	6.9	12.4	25.4

Exhibit 4-5. Distribution of HUD-Assisted Housing by Education Attainment of Householder, 2015

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 (approximately 66.7 percent in public housing, 72.3 percent in the voucher program, and 66.5 percent in privately owned multifamily), compared with approximately 74.4 percent among all VLI renter households and 83.8 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.

by Race, Ethi			sted Renters			
Years in Unit, 2015	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
0 to 5 Years: All Householders	61.2	60.2	64.7	56.3	71.4	71.1
White, Non-Hispanic	59.7	67.5	58.6	57.3	71.7	76.7
Black, Non-Hispanic	64.0	57.1	70.9	56.8		74.6
Other Races	63.8	56.5	67.9	63.2	71.5	77.7
Hispanic	56.0	59.0	58.2	48.8	70.2	74.1
Under 65	67.8	66.7	70.0	63.7	76.7	79.6
Over 65	43.4	38.5	39.7	47.4	50.8	53.5
Without a Disabled Person	66.5	66.7	67.8	63.7	75.2	78.7
With a Disabled Person	54.8	51.5	60.3	50.1	63.3	65.6
6 to 10 Years: All Householders	19.0	15.6	18.9	21.9	13.6	14.9
White, Non-Hispanic	20.3	13.1	20.6	23.2	12.9	11.6
Black, Non-Hispanic	17.8	16.7	17.0	20.6	13.5	12.5
Other Races	17.1	17.4	15.0	19.8	12.8	10.4
Hispanic	20.2	14.9	21.9	21.9	15.1	14.0
Under 65	16.7	14.2	17.2	18.4	12.3	11.1
Over 65	25.3	20.3	27.0	26.2	18.3	18.5
Without a Disabled Person	17.7	13.9	17.7	21.0	12.3	11.2
With a Disabled Person	20.7	17.7	20.5	22.8	16.3	15.5
11 to 15 Years: All Householders	9.0	10.7	8.1	9.2	6.4	6.3
White, Non-Hispanic	9.9	11.2	10.7	8.5	6.5	5.1
Black, Non-Hispanic	7.9	9.2	6.0	10.7	5.9	5.4
Other Races	13.7	21.7	12.9	9.4	8.2	6.3
Hispanic	7.9	10.1	7.4	7.0	6.3	5.5
Under 65	7.7	9.1	7.0	7.9	5.4	4.6
Over 65	12.6	16.5	13.2	10.7	10.6	9.9
Without a Disabled Person	7.0	8.4	6.6	6.5	5.6	4.6
With a Disabled Person	11.3	13.8	10.1	11.4	8.3	7.7
More Than 15: All Householders	10.8	13.5	8.3	12.5	8.6	7.7
White, Non-Hispanic	10.1	8.2	10.1	10.9	8.8	6.7
Black, Non-Hispanic	10.2	16.9	6.2	11.6	8.9	7.5
Other Races	5.1	2.9	4.3	7.5	7.4	5.6
Hispanic	15.6	15.4	12.5	21.9	8.4	6.3
Under 65	7.8	10.1	5.9	10.0	5.6	4.8
Over 65	18.7	24.7	20.0	15.7	20.3	18.1
Without a Disabled Person	8.8	10.8	7.8	8.9	7.0	5.4
With a Disabled Person	13.1	16.8	9.2	15.6	12.1	11.2

Exhibit 4-6. Distribution of HUD-Assisted Housing by Householder Years in Unit by Race, Ethnicity, and Senior and Disability Status, 2015

MF = multifamily. VLI = very low income.

Notes: This exhibit combines race and ethnicity. The first rows ("White, Non-Hispanic") lists householders who classified themselves as White and no other race and did not classify themselves as Hispanic. "White Alone" 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 Census Bureau does not tabulate "Years in Unit;" rather, it reports the year the household moved into the unit in 5-year blocks. For 2015, the blocks include 2000–2004, 2005–2009, and 2010–2015. This presentation translates into "0 to 5 Years," "6 to 10 Years," "11 to 15 Years," and "More than 15 Years" categories for years in unit. Because the size of the initial category depends on the survey year, the 2015 results cannot be compared with any of the previous match studies. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

Householders who have lived in the unit fewer than 6 years constitute approximately 71.4 percent of VLI renter households and approximately 71.1 percent of all renters, compared with approximately 61.2 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 approximately 64.7 percent, compared with approximately 60.2 percent of householders in public housing and approximately 56.3 percent in privately owned multifamily housing.

The voucher program also has fewer householders with long tenures; for example, approximately 8.3 percent of voucher householders have lived in their units more than 15 years, approximately the same percentage as all VLI householders (8.6 percent). By comparison, approximately 13.5 percent of public housing householders and approximately 12.5 percent of householders in privately owned HUD-subsidized units have lived in their units for more than 15 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.¹⁸ This 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 (0–5 years) and higher rates of long tenures (more than 15 years).

¹⁸ Exhibit 4-1 treats race and ethnicity as separate characteristics. The first row ("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 24-year 1991-to-2015 period saw an increase in the number of assisted units of only 11 percent, and the previous section showed that turnover is 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 2015, the median income of all renters nationally was \$32,640, based on AHS data (exhibit 5-1). The median income of voucher recipients was substantially lower at approximately 34.9 percent of the median income for all renters, whereas ratios were even lower in public housing (approximately 31.3 percent) and privately owned multifamily housing (approximately 31.8 percent). The median income for VLI households who are not assisted was \$15,889, or approximately 48.7 percent of the all-renter median. Individually and jointly, HUD programs generally serve households from the lower end of the distribution of renter households.

		HUD-Ass				
Median Household Income	All HUD- Assisted		Voucher Recipients	Tenants in Privately Owned MF	Total VLI Renters ^a	
Median Household Income	N/A	\$10,200	\$11,400	\$10,380	N/A	\$32,640
As a Percentage of the Median Income of All Renter Households	N/A	31.3%	34.9%	31.8%	N/A	100%

Exhibit 5-1. Median Income of Households by Assistance Status, 2015

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

^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 reveals no clear income trend in how median incomes of tenants in HUDassisted housing programs have changed in relation to the median income of all renters. The ratio of median incomes among program participants and all renter households dropped sharply between 2013 and 2015. Prior to that, ratios of the median incomes of households served by the public housing and the voucher program have 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 approximately 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.

		y 733	Stant		011 2013 2015				
Group Median Income as a Percentage of Renter Median Income	1989	1991	1993	2003	2007	2009	2011	2013	2015
All HUD-Assisted	41	39	38	39	36	37	37	N/A	N/A
Tenants in Public Housing	37	36	35	37	33	32	36	36	31
Voucher Recipients	42	39	39	40	38	42	43	39	35
Tenants in Privately Owned Housing	43	42	40	39	37	34	34	34	32

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

N/A = data not available.

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

The sharp drop in median income ratios between 2013 and 2015 is puzzling. The economy was reasonably strong, but not so strong as to enlarge the gap between assisted renters and all renters. This could be the result of AHS drawing a new sample in 2015; this is the first time that suspicion has arisen in this report.

Income Sources

HUD-assisted households differ substantially from other households in how they obtain their income. Exhibit 5-3 shows that approximately 39.3 percent of HUD-assisted households receive wage and salary income, compared with approximately 55.2 percent of VLI renter households and approximately 73.1 percent of all renters. Tenants in privately owned multifamily projects have the lowest percentage of households with wage and salary income (27.2 percent), which is almost surely the result of the greater percentage of senior householders in this program.

Although cited as sources of household income 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 (46.1 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, approximately 12.3 percent of HUD-assisted households reported receiving welfare, compared with approximately 7.9 percent of VLI households and approximately 4.2 percent of all renter households. Similarly, approximately 23.2 percent of all HUD-assisted households received SSI compared with approximately 12.7 percent among all VLI renter households and 7.1 percent among all renters.

		HUD Assis	ted Rente	rs		All
Income Sources of Families and Primary Individuals	All HUD- Assisted (%)	Public Housing (%)	Voucher (%)	Privately Owned MF (%)	Renters (%)	Renters (%)
Wages and Salaries	39.3	43.3	44.9	27.2	55.2	73.1
Self-Employment	2.9	3.1	3.6	1.6	5.8	7.9
Interest, Dividends, and Rental Income	2.6	2.7	1.6	4.3	4.4	8.6
Social Security or Railroad Retirement	33.5	29.3	27.5	46.1	24.6	17.5
Retirement or Survivors' Pensions	6.3	7.3	3.9	9.4	6.4	7.1
SSI	23.2	21.6	23.5	24.1	12.7	7.1
Public Assistance or Public Welfare	12.3	10.3	13.3	12.2	7.9	4.2
Other Income (Worker's Compensation, Alimony, and Any Other Income Not Previously Reported)	20.6	22.2	24.4	13.5	15.7	13.1

Exhibit 5-3. Income Sources for Renter Households by Assistance Status, 2015

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 2015, approximately 27.3 percent of all renter households consisted of married couple households, while the percentage among all VLI renter households was approximately 18.8 percent, and the percentage across all HUD programs ranged between 9.3 and 10.7 percent. Privately owned multifamily units served the lowest percentage of married couple households.

Combining the seventh (Other Female Householder) and the 16th (Female Householder) rows of exhibit 5-4 provide some additional insight into who HUD programs serve. Approximately 70 percent of HUD-assisted households are female-headed, compared with approximately 55 percent of VLI households and 42 percent of all renter households. The program percentages are approximately equal, but the ages of the female householder differ. The voucher program serves the highest percentage of female householders under 65 (approximately 60 percent) and the privately owned multifamily program serves the lowest (approximately 37 percent). Twenty-nine percent of the units in privately owned multifamily projects were occupied by senior, single females, almost three times the rate among VLI households and five times the rate among all renter households.

Exhibit 5-4 reveals other important differences across HUD programs in the households served. Approximately 44 percent of all voucher recipient households were two-or-more-person, female-headed households (almost twice the rate among all renter households), compared with approximately 26 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.

2015						
		HUD-As	ters	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	52.2	54.5	59.6	38.7	57.4	63.8
Married-Couple Families, No Nonrelatives	10.1	10.1	10.7	9.3	18.8	27.3
Other Male Householder	4.1	3.7	4.7	3.4	9.2	12.9
Under 45 Years Old	2.2	2.6	2.2	1.8	5.9	9.0
45 to 64 Years Old	1.3	1.1	1.7	0.9	2.6	3.2
65 Years Old and Over	0.6	0.1	0.8	0.6	0.7	0.6
Other Female Householder	38.0	40.6	44.2	26.1	29.4	23.6
Under 45 Years Old	25.0	26.5	28.2	19.0	19.8	15.8
45 to 64 Years Old	11.2	12.6	14.0	5.7	7.7	6.4
65 Years Old and Over	1.8	1.5	2.1	1.5	2.0	1.4
One-Person Households	47.8	45.5	40.4	61.3	42.6	36.2
Male Householder	15.1	16.8	11.7	19.1	17.3	17.6
Under 45 Years Old	2.7	2.2	2.9	3.0	6.8	8.4
45 to 64 Years Old	6.6	8.2	6.3	5.9	6.1	6.0
65 Years Old and Over	5.8	6.5	2.5	10.3	4.4	3.1
Female Householder	32.7	28.7	28.6	42.2	25.3	18.7
Under 45 Years Old	3.7	3.1	4.4	2.9	5.8	
45 to 64 Years Old	12.5		13.8	9.9	8.7	6.4
65 Years Old and Over	16.5	12.2	10.5	29.3	10.8	6.3

Exhibit 5-4. Distribution of HUD-Assisted Housing by Household Composition, 2015

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 5-1. Distribution of HUD-Assisted Housing by Number of Children in	n
Household, 2015	

		HUD-As	ers		All						
Households by Number of Children	All HUD- Assisted (%)	Public Housing (%)	Vouchers (%)	Privately Owned MF (%)	All VLI Renters (%)	Renters (%)					
None	62.7	60.0	56.7	74.3	63.7	67.3					
One	14.5	15.1	16.4	11.2	13.9	14.3					
Two	12.1	13.4	13.1	9.4	12.2	10.8					
Three	6.4	7.0	8.2	3.3	6.7	5.1					
Four	2.7	3.3	3.3	1.4	2.3	1.7					
Five	1.1	1.0	1.7	0.3	0.8	0.5					
Six or More	0.4	0.3	0.8	0.1	0.4	0.2					

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, approximately 37.3 percent of assisted households have children, compared with approximately 36.3 percent of all VLI renter households and approximately 32.7 of all renter households. Among voucher households, approximately 43.3 percent contain children, while approximately 25.7 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 (approximately 13.9 percent) than among all VLI renter households (approximately 10.2 percent). Despite the observed program differences and the noted change in program mix over time, there has been virtually no change during the past 24 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						
Two-or-More-Person Households	57	56	58	54	53	55	57	55	52						
Married Couple Families, No															
Nonrelatives	13	15	13	11	10	9	11	10	10						
Other Male Householder	4	4	3	2	4	3	5	4	4						
Other Female Householder	39	36	42	41	40	42	41	40	38						
One-Person Households	43	44	42	46	47	45	43	45	48						
Male Householder	10	13	13	14	13	13	14	15	15						
Female Householder	33	32	29	32	34	33	29	30	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 (approximately 47.8 percent vs. approximately 42.6 percent, respectively) and a lower percentage of two-to-four-person households (approximately 43.7 percent vs. approximately 47.3 percent, respectively). Households with five or more persons account for approximately 8.5 percent of HUD-assisted households and approximately 10.1 percent of VLI households.

Exhibit 5-7. Distribution of HUD-Assisted Housing by Household Size, 2015

		HUD-Assis	sted Renters		Total	
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	47.8	45.5	40.4	61.2	42.6	36.2
Two–Four Persons	43.7	45.9	48.8	33.9	47.3	54.6
Five or More Persons	8.5	8.6	10.8	4.8	10.1	9.2
Overcrowded	2.7	1.9	3.5	2.0	3.9	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 (approximately 61.2 percent), and the voucher program serves the highest percentage of large (five-or-more-person) households (approximately 10.8 percent); this percentage is similar to that of VLI renters (approximately 10.1 percent) and all renters (approximately 9.2 percent).

Overcrowding, defined as more than one person per room. In recent years, overcrowding has not been a serious problem in the American housing stock; in 2015, approximately 3.9 percent of both VLI renters and all renters were considered as overcrowded. HUD-assisted stock generally experiences even lower rates of overcrowding, at approximately 2.7 percent for all HUD-assisted renters in 2015. HUD rules determine how many persons can occupy units of different bedroom sizes.

Households with a Disabled Member

Exhibit 5-8 shows that HUD-assisted housing serves households with one or more disabled members at a rate (approximately 45.7 percent) substantially higher than among either VLI renter households (approximately 31.8 percent) or all renter households (approximately 21.9 percent). The privately owned multifamily housing programs contained the highest percentage of households with a disabled member at approximately 53.7 percent.

Exhibit 5-8. Distribution of HUD-Assisted Housing by Disability Status of Members, 2015

		HUD-Assis		Total			
Households by Disability Status of Members	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)	
With a Disabled Member	45.7	43.4	41.7	53.7	31.8	21.9	
Without a Disabled Member	52.5	54.5	56.2	45.2	66.3	76.0	
Not Reported	1.7	2.1	2.0	1.0	1.9	2.0	
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 same table for the 2013 Characteristics Report showed different percentages for the program groups. Table Creator verified the numbers for 2013. These higher percentages in 2015 over 2013 could result from having a new sample, but more likely result from changes in how the disability question is asked.¹⁹

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

¹⁹ The questions were identical but may have been asked differently.

at the affordable part. 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 (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, approximately 4.9 percent reported no cash rent, while approximately 2.6 percent reported zero or negative income; the percentages for all HUD-assisted renters were approximately 1.9 and 4.7, respectively.

Exhibit 5-9. Distribution of HUD-Assisted Housing by Ratio of	Housing Costs to
Income, 2015	-

			Total			
Monthly Housing Cost- to-Income Ratio	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
Less Than 20%	12.8	16.7	11.5	11.7	5.4	23.8
40% or More	44.1	35.5	54.9	33.5	69.1	36.6
Median Rent Burden ²⁰	N/A	31	43	32	N/A	31

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 2015 AHS clearly illustrated why housing assistance is needed. Among VLI renter households, approximately 69 percent report excessive rent burdens—that is, ratios greater than 40 percent. Excessive rent burdens affect approximately 44 percent of HUD-assisted households. While this is substantially less than that of all VLI renter households, this rate is still surprisingly high. The corresponding rate for all renter households is 36.6 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. Approximately 13 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 allows PHAs to establish

²⁰ The bottom row in this table is the median of the individual ratios of housing cost to income, not a ratio of medians.

minimum rent contributions that can exceed 30 percent of income for families with very small incomes.

Further, one should never expect the AHS data collection process to correspond to the process 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, while 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 the renters in that category had ratios less than or equal to the reported ratio and one-half had ratios greater than or equal to the reported ratio.

Median Monthly Housing				Ał	IS Surv	еу									
Cost-to-Income Ratio (%)	1989	1991	1993	2003	2007	2009	2011	2013	2015						
All HUD-Assisted	30	31	29	32	34	35	34	N/A	N/A						
Tenants in Public Housing	30	30	29	27	30	35	30	30	31						
Voucher Recipients	32	34	32	40	39	40	39	39	43						
Tenants in Privately Owned MF Housing	30	31	28	32	31	30	32	30	32						
Total VLI Renters	39	36	38	45	51	52	55	N/A	N/A						
All Renters	28	27	28	30	33	34	35	33	31						

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

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

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 again in 2015. More than one-half 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.²¹ 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 nine periods.

²¹ 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 serve the lowest-income population. The median incomes of households participating in the three broad HUD programs in 2015 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 SSI. HUD-assisted households were less often married-couple households and more often female-headed households. 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 AHS are 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.

This report has uncovered two areas where the 2015 characteristics 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 in 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 VLI renters. The next comparison focuses on the overall physical adequacy of units using an index devised by HUD and the 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 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 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 Census Bureau's disclosure rules. "Other" includes boats, tents, and caves—rare structure types that are not permitted in HUD-assisted housing.

			Total			
Structure Type	All HUD Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
Mobile Homes, Single- Family Detached, Other	15.2	6.1	27.5	2.5	28.3	32.8
Single-Family Attached	11.6	14.9	12.4	7.8	10.8	10.8
2 to 4	19.1	24.3	21.3	11.8	18.9	17.3
5 to 9	12.5	11.7	11.5	14.7	11.5	10.9
10 to 19	9.6	7.5	9.1	12.0	10.1	9.9
20 to 49	8.4	5.4	8.4	10.8	8.3	8.0
50 or More	23.6	30.0	9.9	40.3	12.1	10.2

Exhibit 6-1. Distribution of HUD-Assisted Housing by Structure Type, 2015

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 15.2 percent of HUD-assisted units fall into this category, approximately 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 approximately 23.6 percent, compared with 12.1 percent among units occupied by VLI households and 10.2 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: Approximately 30 percent of public housing tenant households and approximately 40.3 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 Census Bureau have used AHS 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.²²

By these adequacy standards, approximately 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 voucher program have the highest percentage of severely inadequate units, but even so, only approximately 3.3 percent qualify as such.

		HUD-Assisted Renters				
Housing Adequacy	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Severely Inadequate	2.7	3.1	3.3	1.6	2.7	1.9
Moderately Inadequate	7.3	8.7	7.0	6.6	8.3	6.7
Adequate	90.0	88.3	89.7	91.7	89.1	91.4

Exhibit 6-2. Distribution of HUD-Assisted Housing	g by	y Physica	I Adequacy	, 2015
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MF = multifamily. VLI = very low income.

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

Compared with 2013, the percentage of severely inadequate units is the same or lower for all groups, but the differences are small. 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 Census Bureau to avoid disclosure prevented looking at the following features that would contribute to a unit being classified as severely inadequate:

²² The definition last changed with the 2009 AHS.

- 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 a period of at least 6 hours each time. The 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 also 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. Inadequate heating capacity is cited more often in voucher housing.

		HUD-Assis		Total		
Heating Adequacy	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
With heating equipment and occupied last winter	93.1	94.0	92.3	93.9	89.6	89.6
Not uncomfortably cold for 24 hours or more	78.6	77.5	76.0	83.4	76.9	78.3
Uncomfortably cold for 24 hours or more	13.6	15.3	15.3	9.5	11.6	10.1
Utility interruption	0.9	0.8	1.2	0.6	0.8	0.8
Inadequate heating capacity	3.0	2.3	3.8	2.4	2.3	1.9
Inadequate insulation	2.9	2.3	3.8	2.0	2.4	2.1
Cost of heating	0.7	0.6	0.8	0.6	1.1	0.9
Other	1.4	1.8	1.5	1.0	1.4	1.3
Discomfort not reported	1.0	1.3	0.8	0.9	1.1	1.2

Exhibit 6-3. Distribution of HUD-Assisted Housing by Heating Adequacy, 2015

MF = multifamily. VLI = very low income.

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

Toilet Breakdowns

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

group are trivial. The "none working" percentages are higher in 2015 than in 2013; for all HUD-assisted households, the difference is 5.7 in 2015 vs. 3.9 percent in 2013.

Exhibit 6-4. Distribution of HUD-Assisted Housing by Flush Toilet Breakdowns, 2015

		HUD-Assis	Total			
Flush Toilet Breakdowns	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
With one or more flush toilets	100.0	100.0	100.0	100.0	100.0	100.0
With at least one toilet working at all times in last 3 months	93.8	93.2	93.2	95.4	94.6	95.6
None working some time in last 3 months	5.7	6.1	6.4	4.3	4.4	3.5
Breakdowns not reported	0.5	0.7	0.5	0.3	1.0	0.9

MF = multifamily. VLI = very low income.

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 and slightly less likely in privately owned multifamily units. 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.

		HUD-Assis		Total		
Water Leaks	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
No leakage from inside structure	88.3	84.1	88.4	91.3	88.3	88.7
With leakage from inside structure	11.3	15.2	11.1	8.5	11.2	10.7
Fixtures backed up or overflowed	3.2	3.0	3.7	2.5	2.8	2.7
Pipes leaked	5.1	7.9	4.7	3.7	5.1	4.9
Broken water heater	0.8	0.9	0.9	0.4	0.9	0.8
Other or unknown (includes not reported)	3.6	4.9	2.9	3.7	3.3	3.1
Interior leakage not reported	0.4	0.8	0.4	0.1	0.6	0.7
No leakage from outside structure	90.6	91.3	89.3	92.2	89.9	90.3
With leakage from outside structure	8.9	7.7	10.3	7.6	9.5	9.0
Roof	4.2	3.2	5.3	3.4	5.2	4.9
Basement	1.0	0.8	1.6	0.4	1.1	1.2
Walls, closed windows, or doors	3.4	3.1	3.5	3.5	2.9	2.7
Other or unknown (includes not reported)	1.1	0.9	1.2	1.2	1.2	1.0
Exterior leakage not reported	0.4	1.0	0.4	0.1	0.6	0.7

Exhibit 6-5. Distribution of HUD-Assisted Housing by Water Leaks, 2015

MF = multifamily. VLI = very low income.

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

Water leakages were reported in the Characteristics Report using the 2013 AHS. For both inside and outside leakages, the incidence for all HUD-assisted units and all rental units are higher in 2015, but the percentage point differences are small.

Selected Deficiencies

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.

		HUD-Assis	ted Renters		Total	
Selected Deficiencies	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
Signs of mice or rats inside home in last 12 months	12.9	13.1	14.7	10.0	11.9	10.1
Signs of cockroaches in last 12 months	20.8	31.9	20.0	13.7	19.6	17.0
Holes in floors	2.2	3.2	3.0	0.2	2.7	2.0
Open cracks or holes (interior)	8.7	10.7	9.4	6.0	9.5	7.9
Broken plaster or peeling paint (interior)	4.8	8.1	4.2	3.3	4.0	3.3
Exposed wiring	3.6	4.4	3.5	3.3	4.2	3.5
Rooms without electric outlets	3.0	2.6	3.0	3.3	3.8	3.2

Exhibit 6-6. Distribution of HUD-Assisted Housing by Selected Deficiencies, 2015

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. With the exception of rooms without outlets, privately owned multifamily units have the lowest incidence of any of these deficiencies across the three HUD program variants.

All items, except for signs of cockroaches, were reported in the Characteristics Report using the 2013 AHS. In every case, the incidence for all HUD-assisted units and all rental units are higher in 2015, but the percentage point differences are small.

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 enter 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.

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		HUD-Assis	sted Renters		Total	
Electrical Problems	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
With electrical wiring	99.8	99.8	99.8	99.9	99.8	99.8
No fuses or breakers blown in last 3 months	92.9	90.1	92.3	96.1	91.6	90.7
With fuses or breakers blown in last 3 months	6.3	8.6	6.8	3.7	7.5	8.3
Problem not reported or don't know	0.6	1.1	0.7	0.1	0.8	0.9

MF = multifamily. VLI = very low income.

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

Fewer than 0.3 percent of all 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 highest incidence occurred in public housing. These differences are small.

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 among units occupied by all VLI households is higher than such an incidence in every HUD program.

Exhibit 6-8. Distribution of HUD-Assisted Housing by Complete Kitchen Facilities, 2015

		HUD-Assi	sted Renters		Total	
Complete Kitchens	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)
With complete kitchen	97.0	97.4	97.4	96.0	95.7	96.6
Lacking complete kitchen facilities	3.0	2.6	2.6	4.0	4.3	3.4
Kitchen sink	99.6	99.9	99.7	99.1	98.7	99.1
Refrigerator	99.5	99.5	99.5	99.6	98.8	99.2
Cooking stove or range	99.0	99.1	99.1	99.0	96.6	97.8

MF = multifamily. VLI = very low income.

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

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," 2015

		HUD-Assisted Renters				
Overall Opinion	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Structure						
1–5 Rating	17.4	22.0	17.0	14.6	16.6	13.4
9–10 Rating	37.6	34.5	35.1	43.8	33.4	31.3
Neighborhood						
1–5 Rating	21.5	26.4	20.1	20.1	17.4	13.5
9–10 Rating	33.9	29.1	33.2	38.7	35.1	35.4

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 gave 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.

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

AHS gathers additional information on households in which the respondent has moved into the unit during the past 2 years.²³ Section 4 confirmed that householders tended 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: Approximately 31.5 percent of HUD-assisted units are occupied by recent mover households, compared with approximately 48.5 percent of all renter households (exhibit 6-10). The voucher program has the highest percent of recent movers.

Exhibit 6-10. Distribution of HUD-Assisted Housing by Percent of Recent Movers, 2015

		Total				
Recent Mover Households	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Respondent moved during past 2 years	31.5	28.4	34.0	30.1	44.1	48.5

MF = multifamily. VLI = very low income.

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

AHS asks a detailed series of question about why recent mover respondents moved into their current units. Exhibit 6-11 discusses some key reasons given by respondents. Respondents

²³ In AHS surveys prior to 2015, recent movers were defined as respondents who moved into their unit within the past year.

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 and reflect the lower ability of the VLI population to afford to move, as well as the reluctance among HUD-assisted households to move. For example, approximately 17.1 percent of all renters cited a new job or transfer, compared with approximately 9.7 percent of VLI renters; approximately 2.9 of HUD-assisted households cite the same reason. The percentage of voucher holders that gave this response was a surprisingly low 1.5 percent. The pattern is the same for "to reduce commuting time." On the other hand, "to reduce housing costs" was a reason given by approximately 30.3 percent of HUD-assisted renters, but only approximately 18.5 percent of all renters.

Exhibit 6-11. Distribution of Recent Movers HUD-Assisted Housing by Key Reasons Given for Move, 2015

		HUD-Assi	sted Renters		Total	
Reasons for Moving	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Forced to move	9.5	9.7	10.1	8.2	8.6	7.5
New job or job transfer	2.9	4.2	1.5	4.5	9.7	17.1
To form own household	29.6	37.8	24.3	33.3	29.3	27.9
To be closer to family	27.9	27.8	26.8	30.0	24.7	21.2
Change in household or family size	15.3	20.5	11.8	17.9	14.6	15.1
To reduce commuting time	6.4	9.4	6.3	4.5	9.7	13.1
Wanted a larger or better- quality home	30.4	31.6	32.9	25.1	25.1	26.3
To reduce housing costs	30.3	36.8	26.7	32.0	21.4	18.5
Wanted a more desirable neighborhood	30.4	26.4	31.8	30.8	24.2	25.9
Other	16.9	12.5	17.5	18.9	21.9	19.7
Not reported	4.9	3.5	6.0	4.0	6.6	5.8

MF = multifamily. VLI = very low income.

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 were more likely to rate the HUD-assisted unit as better than their previous unit than all renters or all VLI renters.

Exhibit 6-12. Distribution of Recent Movers HUD-Assisted Housing by Comparison of Current and Previous Home and Neighborhood, 2015

		Total							
Comparison of Current and Previous Home and Neighborhood	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	VLI Renters (%)	All Renters (%)			
Current Home									
Better	58.8	56.3	62.2	54.9	48.5	46.7			
Worse	16.2	18.6	16.2	14.4	18.6	18.8			
Current Neighborhood									
Better	47.2	39.1	51.5	45.3	42.3	40.7			
Worse	18.2	26.0	16.3	16.3	17.2	15.1			

MF = multifamily. VLI = very low income.

Notes: The similar numbers in the 2013 report are wrong; the responses were divided by all units and not units occupied by recent movers. "All HUD-Assisted" encompasses public housing, vouchers, and privately owned multifamily units.

When asked to compare their current neighborhood with their previous neighborhood, recent movers in the voucher program or in privately owned multifamily units were more likely to rate their current neighborhood as better than their previous neighborhoods. Recent movers into public housing, however, did not tend to view their current neighborhoods as favorably. The differences between public housing and the other programs are large.

Closing Thoughts

The main conclusion from Section 6 is that the American housing stock and the HUD-assisted stock is high quality, with few units experiencing major problems. AHS has an overall measure of housing quality that detects whether an individual unit is adequate, moderately inadequate, or severely inadequate. In 2015, approximately 1.9 percent of all rental units were severely inadequate; the percentages among both all VLI units and all HUD-assisted units were approximately 2.7 percent.

This section examined separately 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 exhibits 6-3 through 6-8. In almost every case, HUD-assisted units had few problems and were comparable in quality to all rental units and generally slightly better than all VLI units.

		Total				
Various Components of Adequate Housing	All HUD- Assisted (%)	Tenants in Public Housing (%)	Voucher Recipients (%)	Tenants in Privately Owned MF (%)	Total VLI Renters (%)	All Renters (%)
Uncomfortably cold for 24 hours or more	13.6	15.3	15.3	9.5	11.6	10.1
No toilets working some time in last 3 months	5.7	6.1	6.4	4.3	4.4	3.5
With water leakage from inside structure	11.3	15.2	11.1	8.5	11.2	10.7
With water leakage from outside structure	8.9	7.7	10.3	7.6	9.5	9.0
Signs of mice or rats inside home in last 12 months	12.9	13.1	14.7	10.0	11.9	10.1
Holes in floors	2.2	3.2	3.0	0.2	2.7	2.0
Exposed wiring	3.6	4.4	3.5	3.3	4.2	3.5
With fuses or breakers blown in last 3 months	6.3	8.6	6.8	3.7	7.5	8.3
Lacking complete kitchen facilities	3.0	2.6	2.6	4.0	4.3	3.4

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

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 gave 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 with their previous home, recent mover respondents in HUD-assisted units were more likely to rate the HUD-assisted unit as better than their previous unit than all renters or all VLI renters. When asked to compare their current neighborhood with their previous neighborhood, recent movers in the voucher program or in privately owned multifamily units were more likely to rate their current neighborhood as better than their previous neighborhoods. Recent movers into public housing, however, did not tend to view their current neighborhoods as favorably.

Section 7: Conclusions—Looking Across the Sections

The previous sections use the information from the 2015 AHS 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 onwards?

Who Do the Programs Serve?

Several characteristics attest that HUD-assisted housing serves VLI households:

- More than one-half all HUD-assisted households had a total income in 2015 of less than \$11,400, compared with a median of \$15,900 among unassisted households whose income would still qualify them to participate in the program. The median income of all renters was \$32,640, whereas the median income of all renter households was \$50,300.
- Approximately 40 percent of HUD-assisted households receive wage and salary income, compared with approximately 73 percent of all renters.
- Approximately 70 percent of HUD-assisted households are female-headed, compared with approximately 55 percent among VLI households and 42 percent among all renter households.
- HUD-assisted housing serves households with one or more disabled members at a rate (approximately 45.7 percent) substantially higher than the rate among either units rented to VLI households (31.8 percent) or all renter households (21.9 percent).
- Approximately 31 percent of householders in HUD-assisted households did not graduate from high school, compared with approximately 16 percent of householders among all renters.

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

- Among HUD-assisted households, approximately 45 percent have Black householders, compared with approximately 27 percent among VLI households.
- Among HUD-assisted households, approximately 18 percent have Hispanic householders, compared with approximately 23 percent among VLI households.
- Among HUD-assisted households, approximately 27 percent have senior householders (classified as householders 65 or older), compared with approximately 20 percent among VLI households.

• Approximately 48 percent of HUD-assisted households have only one person, compared with approximately 43 percent among VLI renters and 36 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 programs can last 40 years or more—the original purpose and location of these units determines who lives in them. For example, one-bedroom units cannot serve families.

- Approximately 56 percent of HUD-assisted units are located in central cities, while approximately 50 percent of units occupied by VLI renters are in central cities.
- Public housing began in 1937, and approximately 18.5 percent of public housing units were built before 1950. More than 67 percent of public housing units were built between 1950 and 1989, during the period HUD restructured its housing assistance programs to favor the voucher approach. Privately owned housing programs were most active between 1965 and 1989; approximately 66 percent of these units were constructed between 1970 and 1989.
- Approximately 40 percent of HUD-assisted units are efficiencies or one-bedroom units, compared with approximately 33 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 one-bedroom 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. AHS provides extensive information on the quality and condition of units. AHS data show the American rental housing stock is in good condition and HUDassisted units are as good as other rental units.

- By the AHS quality index, approximately 90 percent of HUD-assisted units, 89 percent of units occupied by all VLI households, and 91 percent of all rental units are considered adequate.
- Approximately 14 percent of HUD-assisted households experienced one of more periods of at least 24 hours being uncomfortably cold last winter, compared with approximately 11 percent of all VLI households and approximately 10 percent of all renters.
- In the previous 3 months, approximately 6 percent of HUD-assisted units had at least one period with no working toilets, compared with approximately 4 percent of units with VLI households and approximately 4 percent of all rental units.
- Approximately 11 percent of HUD-assisted housing had water leaks originating inside the unit, compared with approximately 11 percent of units with VLI renters and approximately 11 percent of all rental units.
- Approximately 9 percent of HUD-assisted housing had water leaks originating outside the unit, compared with approximately 10 percent of units with VLI renters and approximately 9 percent of all rental units.

- Approximately 6 percent of HUD-assisted housing experienced one or more blown fuses or tripped circuit breakers in the last 3 months, compared with approximately 8 percent of units with VLI renters and approximately 8 percent of all rental units.
- Among households that moved into their units within the past 2 years, approximately 59 percent of HUD-assisted householders rate their new homes as better than their old ones, compared with approximately 48 percent of all VLI households and approximately 47 percent of all renters.
- Among households that moved into their units within the past 2 years, approximately 47 percent of HUD-assisted householders rate their new neighborhoods as better than their old ones, compared with approximately 42 percent of all VLI households and approximately 41 percent of renters.

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:

• Approximately 44 percent of HUD-assisted households pay more than 40 percent of their income for rent, utilities, and related expenses, compared with approximately 69 percent of all VLI renters.

Section 5 discusses why AHS records so many HUD-assisted households paying 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 is particularly important in regard to the voucher program and 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 (approximately 62 percent) than voucher units (approximately 55 percent) or privately owned multifamily units (approximately 54 percent).
- Approximately 34 percent of privately owned multifamily households have Black householders, compared with approximately 51 percent in public housing and approximately 48 percent in the voucher program.
- Approximately 45 percent of privately owned multifamily householders are seniors, compared with approximately 22 percent of householders in public housing and approximately 18 percent in the voucher program.
- Approximately 39 percent of privately owned multifamily households are two-or-morepersons households, compared with approximately 55 percent in public housing and approximately 60 percent in the voucher program.

- Approximately 54 percent of privately owned multifamily households have a disabled member, compared with approximately 43 percent in public housing and approximately 42 percent in the voucher program.
- Voucher households had the highest median incomes in 2015 at approximately \$11,400, compared with approximately \$10,380 among privately owned multifamily households and approximately \$10,200 among public housing tenants.
- Approximately 55 percent of voucher households pay more than 40 percent or more of their income on housing, compared with approximately 36 percent of public housing tenants and approximately 34 percent of privately owned multifamily tenants.
- Voucher households are the most mobile. Approximately 34 percent moved in the past 2 years, compared with approximately 28 percent among public housing tenants and approximately 30 percent among privately owned multifamily tenants. Mobility is much higher among the comparison groups: Approximately 44 percent of VLI renters and approximately 48 percent of all renters moved in the past 2 years.
- More recent movers in voucher households rate their new units as better: approximately 62 percent said that their new unit was better than the old one, compared with approximately 56 percent of public housing tenants and approximately 55 percent of privately owned multifamily tenants.
- More recent movers in public housing rate their neighborhood as worse: approximately 26 percent said that their new neighborhood was worse than their old one, compared with approximately 16 percent among both voucher and privately owned multifamily recent movers.

How Have the Programs Evolved Since 1989?

This report is the ninth compilation of AHS data on HUD-assisted rental housing; 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 2015, the number of HUD-assisted units increased by approximately 400,000 units, but program mix changed dramatically. The voucher program's share grew from approximately 26 percent in 1989 to approximately 47 percent in 2015, while shares of public housing and privately owned multifamily housing each declined by approximately 11 percentage points.
- The metropolitan areas outside of central cities have a larger share of HUD assistance, at approximately 32 percent in 2015 compared with approximately 26 percent in 1989, probably because of the growth of the voucher program.
- The share of householders who are Black rose from approximately 40 percent to approximately 45 percent; the share who are Hispanic rose from approximately 10 percent to approximately 17 percent.
- The share of senior householders fell from approximately 35 percent to approximately 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 43.

Although the nine studies cover the 1989–2015 timeframe, the studies are clustered at the front (1989, 1991, 1993) and back (2003, 2007, 2009, 2011, 2013, 2015) ends of the period. Although the shift in program composition was generally smooth over the 26-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 the U.S. Department of Housing and Urban Development (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 was 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 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 shares 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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