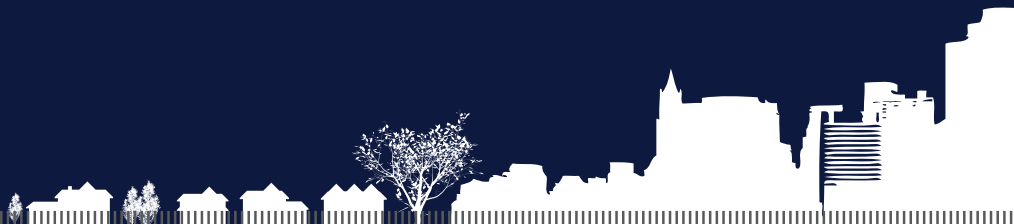


A Picture of Disability and Designated Housing

Multi-Disciplinary
Research Team



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

March 6, 2015

Submitted by:
Economic Systems Inc.
Falls Church, Virginia

Prepared by:
Casey J. Dawkins, Ph.D., and Mark Miller
National Center for Smart Growth
University of Maryland, College Park, Maryland

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Introduction and Overview

This report examines the characteristics of federally-assisted housing designated for disabled households living in the U.S. Prior research suggests that disabled persons face significant challenges when trying to secure affordable, high quality housing. The 2009 “Worst Case Housing Needs of People with Disabilities” report (Souza et al. 2011) finds that renter households with nonelderly disabled members are more likely than nondisabled households to have very low incomes, experience worst case housing needs, pay more than 50 percent of their income on rent, and live in inadequate or overcrowded housing. The inadequate housing conditions of the disabled reflects both the relatively lower incomes and assets of disabled persons (She and Livermore 2009) combined with the lack of available housing with accessibility features. Hoffman and Livermore (2012) find that disabled persons also tend to live in less desirable neighborhoods than non-disabled persons. Such neighborhoods exhibit lower median incomes, lower fair market rents, poorer access to public services, and more neighborhood problems such as crime and heavy street noise.

Due to their lower incomes, a significant share of disabled households are eligible to receive or already receive federal housing assistance from the U.S. Department of Housing and Urban Development (HUD). According to the 2013 Picture of Subsidized Households (<http://www.huduser.org/portal/datasets/picture/yearlydata.html>), approximately 20 percent of households receiving assistance from HUD are disabled. Among those with household heads aged 62 or older, this percentage is twice as high (40 percent) and exhibits substantial variability across HUD program type. Given that the prevalence of disability within the U.S. is expected to increase over time with the aging of the baby boomer population, it is important to understand whether HUD’s assisted housing programs adequately address the growing needs of this population. This report sheds light on these issues. The objective of this research is to consolidate administrative data and survey data related to households with disabilities and designated housing in a form similar to the Picture of Subsidized Households, which presents information on HUD program participants by various levels of geography. We use these data to address the following research questions:

- In HUD housing programs and the broader population, what are the prevalence and characteristics of households containing one or more persons with disabilities, by type of disability and geographic unit?
- What is the availability of assisted units that the public housing authority or owner/managing agent has designated as accessible, in relation to the need at different geographic levels?
- What policy recommendations are supported by the evidence on disability and designated units, and how should HUD data resources be revised to address future questions pertaining to disability?

This report is structured as follows: The background section gives an overview of the major HUD programs designed to serve the needs of the disabled population. Next, we provide a brief description of the data relied upon for the analyses and research methods employed. The main

body of the report addresses the research questions posed above, with policy recommendations addressed in the conclusion section. Appendix A provides a detailed discussion of the methods and assumptions used to assemble the data analyzed in this report, and Appendix B provides a description of all variables assembled for the final analytical dataset (provided as a separate Excel file).

Background: HUD Programs Serving the Needs of the Disabled

We begin with an overview of HUD programs serving the disabled, followed by a discussion of how “disability” is defined in this report. All of HUD’s programs serve a portion of the disabled population. According to the 2013 Picture of Subsidized Households, households with disabilities are most prevalent, 32 percent, in the Moderate Rehabilitation program,¹ followed by the Housing Choice Voucher program, the Section 8 New Construction/Substantial Rehabilitation program, and the public housing program. The smallest percentages of disabled persons are served by the Section 236 and other multifamily programs.

The Section 202 and Section 811 programs are the largest and longest standing programs targeted specifically to the needs of disabled persons. Section 202 was created in 1959 to house low income elderly persons aged 62 and older. The program provides low interest loans (and later project-based Section 8 rental assistance contracts) to nonprofit developers seeking to construct housing for families with elderly members. In 1964, handicapped persons were added to the definition of eligible elderly families. Until 1990, Section 202 served the needs of both elderly and disabled populations, although a separate set-aside was established in 1978 to focus specifically on the needs of nonelderly disabled individuals. That set-aside was expanded into the newly-created Section 811 program in 1990 to focus specifically on the needs of nonelderly disabled persons between 18 and 61. The funding mechanism also changed to emphasize capital grants rather than loans. The 2010 Frank Melville Supportive Housing Investment Act changed the manner in which Section 811 project rental assistance contracts (PRAC) could be used. Previously, these subsidies could only be tied to units developed using Section 811 capital grants. With the 2010 changes, PRACs could be used to subsidize multifamily units developed using other sources, including the Low Income Housing Tax Credit, HOME funds, and other sources. Programmatic changes were also implemented to encourage the integration of disabled households into the larger community. After 2010, disabled households living in multifamily units developed using Section 811 could only constitute 25 percent of the total number of units in the building (Perl 2013; Schwartz 2015).

Disabled households may also qualify for tenant-based rental assistance. Under the Section 811 program, “mainstream” vouchers were created in 1992 to serve the needs of disabled households seeking housing in the private market. The funding for the mainstream voucher program was eventually absorbed by the Section 8 tenant-based voucher program. Beginning in 2005, HUD

¹ Although the Moderate Rehabilitation program serves the highest percent of disabled households, this program serves few households compared to other HUD programs, so the total number of disabled persons served is quite small.

required voucher-administering agencies to help participants of the program find supportive services and provide assistance to landlords in making reasonable accommodations to serve the needs of disabled mainstream voucher holders. No new vouchers have been issued under this program since 2006. The Section 8 (now Housing Choice Voucher) program also provides tenant-based rental assistance targeted directly to families with a disabled adult in the household. These are often referred to as “designated” vouchers or vouchers for “certain developments.” Beginning with the 2010 Frank Melville Act, all mainstream and designated vouchers were to be made available to other disabled households upon turnover (Devine 2000; Perl 2013; Schwartz 2015).

An important policy question of interest is the extent to which disabled households participate in programs specifically targeted to the disabled versus participating in other HUD programs. Since programs targeted to the disabled are often combined with supportive services, physical accommodations, and technical assistance to landlords for accommodating disability needs, participants in targeted HUD programs likely receive more accommodations than other HUD program participants. We address this issue later in the report.

Defining Disability

Although the HUD definition of disability has varied over time and across program category, our report relies on data from HUD’s most recent administrative records to characterize the disabled population and make comparisons with the characteristics of the larger disabled population living in the U.S. Varying definitions of disability across the two populations make such comparisons challenging. For the population at large, the American Community Survey includes questions about disability status. This report defines disability for the larger population based on the current definition first introduced in 2008. According to the U.S. Census, disabled persons are those exhibiting one or more of the following characteristics (<https://www.census.gov/people/disability/methodology/acs.html>):

- *Sensory Disability* – Conditions that include blindness, deafness, or a severe vision or hearing impairment.
- *Physical Disability* – Conditions that substantially limit one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying.
- *Mental Disability* – Because of a physical, mental, or emotional condition lasting 6 months or more, the person has difficulty learning, remembering or concentrating.
- *Self-care Disability* – Because of a physical, mental, or emotional condition lasting 6 months or more, the person has difficulty dressing, bathing, or getting around inside the home.
- *Go-outside-home Disability* – Because of a physical, mental, or emotional condition lasting 6 months or more, the person has difficulty going outside the home alone to shop or visit a doctor's office.
- *Employment Disability* – Because of a physical, mental, or emotional condition lasting 6 months or more, the person has difficulty working at a job or business.

Most of HUD’s programs, on the other hand, do not distinguish among type of disability, although housing providers are to use the following criteria to identify disabled persons when reporting to HUD’s tenant-level administrative data systems:²

- A disability as defined in section 223 of the Social Security Act.
- A physical, mental, or emotional impairment, which is expected to be of long-continued and indefinite duration, substantially impedes his or her ability to live independently, and is of such a nature that such ability could be improved by more suitable housing conditions.
- A developmental disability as defined in section 102 of the Developmental Disabilities Assistance and Bill of Rights Act.
- Acquired immune deficiency syndrome (AIDS) or any condition that arises from the etiologic agent for AIDS.

Since disability is often under-reported, we also include in our definition of the disabled HUD-assisted population all those who receive Supplemental Security Income (SSI), a federal income supplement designed to meet the needs of low-income disabled persons. We also present data using two indicators that provide additional information on the appropriateness of accessibility features for a person’s disability needs: (1) public housing residents may request disability features, and HUD’s tenant-level data identify whether these features are requested by and provided to public housing residents; (2) Several multi-family properties are specifically designed to meet the needs of specific types of disabilities experienced by HUD-assisted households. We report information describing both of these conditions to gain a better understanding of the match between disabled household needs and the accessibility characteristics of HUD units.

Data and Research Methods

Our analyses in this report consist primarily of various descriptive statistics for disabled households both within the U.S. at large and for U.S. households receiving HUD assistance. Where possible, we emphasize comparisons between these two groups. For all households, we present information for the U.S., for each Census region, and for central, outlying, and rural counties.³ Each table primarily presents information for either (1) the number of disabled persons per household, or (2) the number/percent of households containing disabled persons, depending on which is more appropriate. At the end of the report, we also present various

² The HUD tenant-level data utilized for this project include data reported on the HUD-50058 form (completed by PHAs for each assisted household participating in PHA-administered programs as reported in the Public and Indian Housing Information Center (PIC) data) and HUD-50059 form (completed by private housing providers for assisted households participating in HUD Office of Housing-administered “multifamily” programs as reported in the Tenant Rental Assistance Certification System (TRACS) data).

³ Throughout the report, “central counties” refer to all counties within 2013 Core Based Statistical Areas (CBSAs) that contain the largest portion of the CBSA’s urbanized area; “outlying” counties include all other counties within the CBSA; and “rural” counties include counties outside of 2013 CBSAs.

measures of the supply and demand for disabled housing units, which we describe in sections to follow. Statistics presented for HUD-assisted households are further disaggregated by program type and PHA size.

Data sources for statistics presented to describe disabled households in the U.S. include the most recently available American Community Survey (ACS) 2009-2013 5-year sample and the most recently available HUD Comprehensive Housing Affordability Strategy (CHAS) sample (2008-2010 3-year sample and 2006-2010 5-year sample, depending on the availability of the data being examined). The data used to describe HUD-assisted households living in the U.S. are constructed from HUD administrative databases, including HUD's 2013 longitudinal household and member files (PIC and TRACS) and the Integrated Real Estate Management System (iREMS) multifamily property database. We match the household-level files to iREMS to characterize the units and properties where disabled persons reside.

Prevalence of Disabilities in the U.S. and in HUD Programs

Research Question: In HUD housing programs and the broader population, what are the prevalence and characteristics of households containing one or more persons with disabilities, by type of disability and geographic unit?

We begin with an examination of the prevalence of disability among all U.S. households, using data from the 2009-2013 ACS. Table 1 displays the number of disabled persons per 1000 households by sex and age category. Table 1 and the following tables also display the total number of HUD-assisted units. We present the information for the U.S.; all major Census regions; and for central counties, outlying counties and rural counties.

In the U.S. population at large, there are roughly 322 disabled persons per 1000 households.⁴ The ratio of disabled persons to households varies somewhat by Census region, with the highest number found in the South and the lowest in the Northeast. Comparing central, outlying and rural counties, we find that the ratio is highest in rural areas and lowest in more urban, central counties.

Table 1 shows that of the 322 disabled persons per 1000 households, 167 are female and 154 are male. Breaking down the results by age in addition to sex reveals that below age 18, more of the disabled individuals are male rather than female (16 versus 10); for ages 18–64, male and female shares are equal (84 versus 84); and above age 65, a greater share are female (54 males versus 74 females). As before, disabled persons of both sexes are more commonly found among households in the South and in rural areas.

Ratios of disabled persons per 1000 households are affected by both the size of the age subgroups and the prevalence of disabilities among individuals of those subgroups. Senior individuals are most likely to have a disability, yet the working-age population (age 18-64)

⁴ Limitations of the data make it difficult to estimate the proportion of households that contain at least one disabled person without double-counting. Tables 3 and 4 indicate the proportion of households having individuals with specific disabilities.

accounts for 168 of the 322 disabled persons per 1000 households. Seniors are next with 128 disabled persons, and children account for a much smaller share, 26 disabled persons. This pattern holds for all geographic areas. For all age groups regardless of sex, the ratio of disabled persons to households is highest in the South and in rural areas, although less variable across regions compared with the household population at large.

Table 1: Disabled persons per 1,000 occupied housing units by sex and age category

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties
Total Disabled	322	300	309	349	305	309	367	435
Below Age 18	26	24	26	28	23	25	30	29
Age 18-64	168	150	162	186	157	161	197	226
Age 65+	128	125	121	135	125	123	140	179
Total Non-Disabled	2,329	2,309	2,229	2,300	2,497	2,353	2,291	2,057
Below Age 18	612	556	586	619	674	616	623	550
Age 18-64	1,494	1,511	1,423	1,464	1,604	1,517	1,439	1,249
Age 65+	223	242	221	217	219	220	229	258
Disabled Males	154	139	150	167	149	147	181	221
Below Age 18	16	15	16	17	15	16	19	18
Age 18-64	84	74	82	92	80	80	100	118
Age 65+	54	50	52	57	54	51	63	84
Non-Disabled Males	1,140	1,124	1,094	1,118	1,236	1,151	1,125	1,011
Below Age 18	310	281	296	313	342	312	315	279
Age 18-64	731	736	700	708	795	741	705	616
Age 65+	99	107	97	97	100	98	104	116
Disabled Females	167	161	159	182	157	163	185	214
Below Age 18	10	9	9	11	9	9	11	11
Age 18-64	84	77	80	94	77	81	97	108
Age 65+	74	75	69	78	71	72	77	95
Non-Disabled Females	1,189	1,185	1,135	1,182	1,260	1,202	1,167	1,046
Below Age 18	302	275	290	306	332	304	307	271
Age 18-64	764	775	722	756	810	776	734	633
Age 65+	123	136	123	120	119	122	125	142
Total HUD assisted units (thousands)	4,619	1,240	970	1,488	801	4,179	203	217

Source: American Community Survey, 5-year sample, 2009-2013; HUD longitudinal data from the TRACS system and public housing databases (form 50058 and the MTW program), 2013, household and member files.

Table 2 displays estimates of disabled and non-disabled persons per 1,000 households by age and poverty status. Non-poor households contribute the majority, 249, of the 320 disabled individuals per 1,000 households. Yet disability is more prevalent among the poor: 17.6 percent of individuals in poor households are disabled, compared with only 11.2 percent of individuals in non-poor households. The primary reason that non-poor households contribute most disabled individuals is that non-poor households represent 84.6 percent of the population. In addition, the disabled poor population includes a larger number of elderly disabled persons living in single-person households. In fact, we find that 51.5 percent of elderly persons in poor households have disabilities, compared with only 35.0 percent of elderly persons in non-poor households.

Table 2: Disabled and nondisabled persons per 1000 occupied housing units by age, poverty status, and geography⁵

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties
Total	2,620	2,568	2,505	2,621	2,779	2,630	2,631	2,471
Total Disabled	320	298	308	348	304	308	365	434
In Poverty	71	64	68	81	63	68	77	109
Not In Poverty	249	234	240	267	241	240	289	325
Total Non-Disabled	2,300	2,270	2,197	2,274	2,474	2,322	2,266	2,037
In Poverty	332	270	297	363	368	335	290	345
Not In Poverty	1,968	2,000	1,900	1,910	2,106	1,987	1,975	1,692
Total Below Age 18	629	573	602	639	687	633	643	569
Total Disabled Below Age 18	25	24	25	27	23	25	29	29
In Poverty	8	7	8	10	7	8	9	11
Not In Poverty	17	16	17	18	16	17	20	17
Total Non-Disabled Below Age 18	604	549	577	611	665	608	614	541
In Poverty	128	97	114	144	139	128	116	140
Not In Poverty	477	452	463	467	526	480	499	401
Total Age 18-64	1,640	1,627	1,561	1,631	1,747	1,655	1,618	1,464
Total Disabled Age 18-64	167	149	161	186	156	160	196	226
In Poverty	46	41	46	52	41	44	50	70
Not In Poverty	121	108	115	133	116	116	146	156
Total Non-Disabled Age 18-64	1,473	1,478	1,399	1,446	1,591	1,495	1,422	1,238
In Poverty	189	156	170	202	213	191	160	182
Not In Poverty	1,285	1,323	1,230	1,244	1,378	1,303	1,263	1,056
Total Age 65 And Above	351	368	342	352	344	343	369	437
Total Disabled Age 65 And Above	128	125	121	135	125	123	140	179
In Poverty	17	16	14	19	15	16	17	28
Not In Poverty	111	109	107	116	110	107	123	152
Total Non-Disabled Age 65 And Above	223	242	221	217	219	220	229	258
In Poverty	16	17	14	18	16	16	15	23
Not In Poverty	206	225	207	199	203	204	214	236
Total HUD assisted units (thousands)	4,619	1,240	970	1,488	801	4,179	203	217

Source: American Community Survey, 5-year sample, 2009-2013; HUD longitudinal data from TRACS and PIC, 2013, household and member files

⁵ The totals in this table represent persons for whom poverty information is available and do not precisely match the totals from Table 1.

Tables 3 and 4 use CHAS data to examine the number and proportion of households that include persons with specific types of disabilities by tenure status and household income as a percent of HUD-Adjusted Median Family Income (HAMFI). HUD categorizes incomes up to 30 percent of HAMFI as extremely low income, up to 50 percent of HAMFI as very low income, up to 80 percent of HAMFI as low-income, and greater than 80 percent of HAMFI as moderate income or higher. Totals are displayed in Table 3, and percentages of households within each row are displayed in Table 4. Because the total number of households varies for each category, we focus our interpretation on the percentages displayed in Table 4.

For each disability type, the prevalence of disability is highest among households with the lowest incomes (Table 4). Generally, the percentage of households with hearing or vision impairments is largest in the South and in rural areas, but some differences emerge when we consider different types of disability. Among all households, the percentage of households with members that experience cognitive and self-care or independent living limitations is highest in the South. Interestingly, the geographic distribution of all types of disabilities varies when we consider renter households only. For these households, all types of disability are more prevalent in the Midwest than in other Census regions.

Table 3: Number of households with at least one disabled person by type of disability, tenure status, and household income as a percent of HAMFI (in thousands)

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties
Tenure: All	114,597	20,964	25,968	42,377	25,288	99,954	7,112	3,824
Hearing or vision impairment	12,680	2,099	2,784	5,077	2,720	10,594	901	626
By relative income								
≤ 30% HAMFI	2,143	446	439	811	447	1,849	135	92
> 30%, ≤ 50% HAMFI	2,099	361	473	839	426	1,734	148	112
> 50%, ≤ 80% HAMFI	2,489	385	583	991	530	2,050	184	134
> 80% HAMFI	5,949	907	1,289	2,435	1,317	4,961	434	288
Ambulatory limitation	16,241	2,803	3,506	6,709	3,224	13,644	1,140	793
By relative income								
≤ 30% HAMFI	3,492	763	727	1,319	683	3,004	219	145
> 30%, ≤ 50% HAMFI	2,986	520	669	1,233	564	2,466	211	162
> 50%, ≤ 80% HAMFI	3,192	498	738	1,330	626	2,641	233	173
> 80% HAMFI	6,571	1,021	1,372	2,827	1,351	5,533	477	315
Cognitive limitation	9,605	1,676	2,124	3,866	1,940	8,172	669	445
By relative income								
≤ 30% HAMFI	2,461	528	545	901	486	2,144	152	101
> 30%, ≤ 50% HAMFI	1,864	313	414	766	371	1,567	128	94
> 50%, ≤ 80% HAMFI	1,070	162	263	463	182	859	85	66
> 80% HAMFI	4,211	673	902	1,735	901	3,602	304	183
Self-care or independent living limitation	12,148	2,172	2,626	4,853	2,497	10,380	818	549
By relative income								
≤ 30% HAMFI	2,708	592	572	988	555	2,357	166	104
> 30%, ≤ 50% HAMFI	2,222	395	495	898	434	1,864	151	113
> 50%, ≤ 80% HAMFI	2,356	378	540	959	479	1,982	167	119
> 80% HAMFI	4,862	807	1,019	2,008	1,028	4,176	334	213

Source: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 3: Number of households with at least one disabled person by type of disability, tenure status, and household income as a percent of HAMFI (in thousands) (continued)

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties
Tenure: Renters	39,039	7,678	7,747	13,759	9,855	35,420	1,808	938
Hearing or vision impairment	3,852	744	793	1,399	916	3,372	215	140
By relative income								
≤ 30% HAMFI	1,299	306	268	439	286	1,157	66	43
> 30%, ≤ 50% HAMFI	879	165	196	321	198	752	52	37
> 50%, ≤ 80% HAMFI	737	125	161	273	179	640	43	30
> 80% HAMFI	936	149	169	366	253	823	54	31
Ambulatory limitation	5,667	1,176	1,208	2,045	1,238	4,958	312	209
By relative income								
≤ 30% HAMFI	2,220	552	471	743	454	1,965	116	73
> 30%, ≤ 50% HAMFI	1,318	256	301	483	278	1,128	77	57
> 50%, ≤ 80% HAMFI	1,004	176	224	377	228	872	57	41
> 80% HAMFI	1,125	192	213	441	279	994	62	38
Cognitive limitation	4,266	839	932	1,527	968	3,758	238	153
By relative income								
≤ 30% HAMFI	1,728	411	391	570	356	1,540	92	58
> 30%, ≤ 50% HAMFI	959	174	218	355	213	829	55	39
> 50%, ≤ 80% HAMFI	761	126	165	286	183	665	44	29
> 80% HAMFI	818	128	158	317	216	724	48	27
Self-care or independent living limitation	4,321	889	929	1,503	1,000	3,813	230	148
By relative income								
≤ 30% HAMFI	1,751	428	379	562	382	1,561	89	53
> 30%, ≤ 50% HAMFI	1,001	194	227	356	224	864	57	40
> 50%, ≤ 80% HAMFI	753	131	167	273	182	660	40	29
> 80% HAMFI	817	137	156	311	212	728	43	27
Tenure: Owners	75,558	13,286	18,220	28,618	15,434	64,534	5,304	2,885
Hearing or vision impairment	8,828	1,355	1,991	3,677	1,804	7,222	686	486
By relative income								
≤ 30% HAMFI	844	140	171	372	161	691	69	49
> 30%, ≤ 50% HAMFI	1,219	196	277	518	229	982	96	75
> 50%, ≤ 80% HAMFI	1,752	260	423	718	351	1,411	141	104
> 80% HAMFI	5,013	759	1,121	2,069	1,064	4,138	380	258
Ambulatory limitation	10,574	1,626	2,297	4,664	1,986	8,685	828	585
By relative income								
≤ 30% HAMFI	1,271	211	256	576	229	1,039	103	72
> 30%, ≤ 50% HAMFI	1,667	263	368	749	286	1,338	133	105
> 50%, ≤ 80% HAMFI	2,188	322	514	953	399	1,769	176	132
> 80% HAMFI	5,447	829	1,159	2,387	1,072	4,539	415	277
Cognitive limitation	5,339	838	1,192	2,338	971	4,414	430	292
By relative income								
≤ 30% HAMFI	733	117	153	331	130	605	60	43
> 30%, ≤ 50% HAMFI	904	139	197	411	158	738	73	55
> 50%, ≤ 80% HAMFI	309	36	98	177	-2	193	41	38
> 80% HAMFI	3,392	545	744	1,419	685	2,878	256	156
Self-care or independent living limitation	7,827	1,283	1,697	3,350	1,498	6,567	588	401
By relative income								
≤ 30% HAMFI	957	164	193	426	174	795	77	52
> 30%, ≤ 50% HAMFI	1,221	201	268	542	210	1,001	94	73
> 50%, ≤ 80% HAMFI	1,604	247	373	685	298	1,322	127	90
> 80% HAMFI	4,045	670	863	1,696	816	3,448	290	186
Total HUD assisted units (thousands)	4,619	1,240	970	1,488	801	4,179	203	217

Source: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 4: Percentage of households with at least one disabled person by type of disability, tenure status, and household income as a percent of HAMFI

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties
Tenure: All								
Hearing or vision impairment	11.1	10.0	10.7	12.0	10.8	10.6	12.8	16.3
By relative income	≤ 30% HAMFI	15.0	14.9	14.4	15.8	14.2	14.5	20.0
	> 30%, ≤ 50% HAMFI	15.8	14.6	16.1	17.0	14.4	15.1	22.2
	> 50%, ≤ 80% HAMFI	13.3	11.9	13.2	14.4	12.5	12.6	15.7
	> 80% HAMFI	8.8	7.4	8.3	9.7	8.9	8.4	10.1
Ambulatory limitation	14.2	13.4	13.5	15.9	12.8	13.7	16.2	20.7
By relative income	≤ 30% HAMFI	24.4	25.6	23.9	25.7	21.6	23.6	28.0
	> 30%, ≤ 50% HAMFI	22.4	21.0	22.8	24.9	19.1	21.4	26.3
	> 50%, ≤ 80% HAMFI	17.0	15.5	16.6	19.3	14.8	16.3	19.8
	> 80% HAMFI	9.7	8.3	8.8	11.2	9.1	9.3	11.1
Cognitive limitation	8.4	8.0	8.2	9.2	7.7	8.2	9.5	11.6
By relative income	≤ 30% HAMFI	17.2	17.7	17.9	17.6	15.4	16.9	19.4
	> 30%, ≤ 50% HAMFI	14.0	12.7	14.1	15.5	12.5	13.6	16.0
	> 50%, ≤ 80% HAMFI	5.7	5.0	5.9	6.7	4.3	5.3	7.2
	> 80% HAMFI	6.2	5.5	5.8	6.9	6.1	6.1	7.1
Self-care or independent living limitation	10.6	10.4	10.1	11.5	9.9	10.4	11.6	14.3
By relative income	≤ 30% HAMFI	18.9	19.8	18.8	19.3	17.6	18.5	21.2
	> 30%, ≤ 50% HAMFI	16.7	16.0	16.9	18.2	14.7	16.2	18.8
	> 50%, ≤ 80% HAMFI	12.6	11.7	12.2	13.9	11.3	12.2	14.2
	> 80% HAMFI	7.2	6.6	6.6	8.0	6.9	7.1	7.8
Tenure: Renters								
Hearing or vision impairment	10.1	9.9	10.5	10.4	9.5	9.7	12.3	15.2
By relative income	≤ 30% HAMFI	13.7	14.4	13.3	13.9	13.1	13.4	15.2
	> 30%, ≤ 50% HAMFI	12.8	12.4	13.5	13.3	11.6	12.2	15.6
	> 50%, ≤ 80% HAMFI	9.4	8.9	9.8	9.8	8.9	9.0	11.4
	> 80% HAMFI	6.7	5.5	6.9	7.2	6.8	6.5	8.9
Ambulatory limitation	14.9	15.6	15.9	15.2	12.9	14.3	17.8	22.6
By relative income	≤ 30% HAMFI	23.4	25.9	23.3	23.5	20.8	22.7	26.8
	> 30%, ≤ 50% HAMFI	19.1	19.3	20.7	20.1	16.3	18.3	23.0
	> 50%, ≤ 80% HAMFI	12.8	12.5	13.6	13.5	11.3	12.3	15.1
	> 80% HAMFI	8.1	7.1	8.7	8.7	7.5	7.8	10.2
Cognitive limitation	11.2	11.1	12.3	11.4	10.1	10.9	13.6	16.5
By relative income	≤ 30% HAMFI	18.2	19.3	19.3	18.0	16.3	17.8	21.1
	> 30%, ≤ 50% HAMFI	13.9	13.1	15.0	14.7	12.5	13.4	16.4
	> 50%, ≤ 80% HAMFI	9.7	9.0	10.0	10.3	9.1	9.4	11.6
	> 80% HAMFI	5.9	4.8	6.4	6.3	5.8	5.7	7.9
Self-care or independent living limitation	11.3	11.8	12.3	11.2	10.4	11.0	13.1	16.1
By relative income	≤ 30% HAMFI	18.4	20.1	18.7	17.8	17.5	18.0	20.6
	> 30%, ≤ 50% HAMFI	14.5	14.6	15.6	14.8	13.2	14.0	17.1
	> 50%, ≤ 80% HAMFI	9.6	9.3	10.1	9.8	9.0	9.3	10.6
	> 80% HAMFI	5.9	5.1	6.4	6.2	5.7	5.7	7.1

Source: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; CHAS, 5-year sample, 2006-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 4: Percentage of households with at least one disabled person by type of disability, tenure status, and household income as a percent of HAMFI (continued)

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties
Tenure: Owners								
Hearing or vision impairment	11.6	10.1	10.8	12.8	11.6	11.1	12.9	16.7
By relative income								
≤ 30% HAMFI	17.5	16.4	16.8	18.9	16.6	17.0	19.9	21.9
> 30%, ≤ 50% HAMFI	19.0	17.1	18.7	20.4	18.3	18.4	20.5	24.0
> 50%, ≤ 80% HAMFI	16.0	14.3	15.2	17.5	15.8	15.5	17.7	21.3
> 80% HAMFI	9.3	7.9	8.6	10.3	9.5	8.9	10.3	13.7
Ambulatory limitation	13.9	12.2	12.5	16.2	12.7	13.4	15.6	20.1
By relative income								
≤ 30% HAMFI	26.4	24.6	25.1	29.2	23.6	25.6	29.4	32.1
> 30%, ≤ 50% HAMFI	26.0	23.0	24.8	29.6	22.8	25.1	28.6	33.7
> 50%, ≤ 80% HAMFI	20.0	17.7	18.5	23.2	18.0	19.4	22.0	26.8
> 80% HAMFI	10.1	8.7	8.8	11.9	9.6	9.8	11.3	14.7
Cognitive limitation	7.0	6.3	6.5	8.1	6.2	6.8	8.1	10.0
By relative income								
≤ 30% HAMFI	15.2	13.7	15.0	16.8	13.4	14.9	17.2	19.5
> 30%, ≤ 50% HAMFI	14.1	12.1	13.3	16.2	12.6	13.9	15.7	17.5
> 50%, ≤ 80% HAMFI	2.8	2.0	3.5	4.3	-0.1	2.1	5.2	7.7
> 80% HAMFI	6.3	5.7	5.7	7.0	6.1	6.2	6.9	8.3
Self-care or independent living limitation	10.3	9.6	9.2	11.7	9.6	10.1	11.1	13.8
By relative income								
≤ 30% HAMFI	19.9	19.1	19.0	21.7	17.9	19.6	22.1	23.2
> 30%, ≤ 50% HAMFI	19.0	17.6	18.1	21.4	16.8	18.8	20.1	23.4
> 50%, ≤ 80% HAMFI	14.7	13.6	13.4	16.7	13.4	14.5	15.9	18.2
> 80% HAMFI	7.5	7.0	6.6	8.4	7.3	7.4	7.9	9.9
Total HUD assisted units (thousands)	4,619	1,240	970	1,488	801	4,179	203	217

Source: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; CHAS, 5-year sample, 2006-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files

Turning now to HUD-assisted households, Table 5 displays the number of disabled persons per 1,000 HUD-assisted units, broken down by sex, age, geographic area, Public Housing Agency (PHA) size, and HUD program type. In contrast to the results for all U.S. households, there are more disabled persons per HUD-assisted household in the West and in central counties. Large PHAs are also likely to serve larger numbers of disabled persons. Interestingly, regional variations fluctuate with the age of disabled household members, with greater ratios of young disabled household members (age <18) found in the South, and greater ratios of working-aged and elderly disabled household members found in the West. We also find greater ratios of working-aged disabled persons in rural counties.

There are many more disabled females per 1,000 HUD-assisted households than there are disabled males. This partly reflects the prevalence of female-headed households in the larger population of HUD-assisted households (77 percent of HUD-assisted households, according to the 2013 Picture of Subsidized Households). Ratios of disabled females are greater in outlying counties, particularly among those of working age. For both males and females, ratios of disabled children and disabled elderly persons are greater in the South.

Table 5: Number of disabled members per 1000 HUD-assisted units by sex and age

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties	Small PHAs	Medium PHAs	Large PHAs
Total disabled persons	407	434	385	387	465	408	403	404	401	452	509
Below Age 18	35	39	29	41	29	36	25	19	15	24	50
Age 18-64	286	289	299	275	311	284	308	313	296	336	332
Age 65 and above	86	106	57	71	126	87	69	73	89	91	126
Total disabled males	153	163	150	140	183	154	144	151	152	164	187
Below Age 18	23	26	19	27	18	24	17	12	10	15	33
Age 18-64	105	106	114	94	123	105	109	118	114	123	117
Age 65 and above	25	31	17	19	41	26	18	21	28	26	37
Total disabled females	254	272	236	248	282	254	259	253	249	288	322
Below Age 18	12	13	10	14	10	13	9	7	6	9	17
Age 18-64	181	183	185	181	188	180	199	194	182	213	215
Age 65 and above	60	75	40	52	85	61	51	52	61	65	89
Total HUD assisted units (thousands)	4,619	1,240	970	1,488	801	4,179	203	217	60	316	2,854

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 5: Number of disabled members per 1000 HUD-assisted units by sex and age (continued)

	Public Housing	Housing Choice Vouchers: Tenant- Based and All Other	Housing Choice Vouchers: "Designated"	Housing Choice Vouchers: Mainstream	Housing Choice Vouchers: Project-Based	Housing Choice Vouchers: Homeownership
Total disabled persons	428	524	1,077	1,113	491	552
Below Age 18	29	58	39	27	23	63
Age 18-64	280	343	950	870	325	410
Age 65 and above	120	123	88	216	143	78
Total disabled males	169	184	388	406	220	200
Below Age 18	19	38	25	16	14	39
Age 18-64	111	112	337	328	153	138
Age 65 and above	40	33	26	62	53	24
Total disabled females	259	340	689	707	271	352
Below Age 18	10	20	14	11	9	24
Age 18-64	169	230	614	543	172	273
Age 65 and above	80	90	62	154	90	55
Total HUD assisted units (thousands)	1,072	2,019	43	9	55	10

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 5: Number of disabled members per 1000 HUD-assisted units by sex and age (continued)

	All Housing Choice Voucher Programs	Section 8 Moderate Rehabilitation	Section 202	Section 811	Section 236	Multifamily Assisted Programs Breaking Out Section 8	All Multifamily Programs
Total disabled persons	537	500	109	843	158	193	186
Below Age 18	56	15	0	2	11	8	7
Age 18-64	357	370	108	841	146	185	180
Age 65 and above	123	114	0	1	0	0	0
Total disabled males	190	277	54	464	64	80	82
Below Age 18	37	10	0	1	7	5	4
Age 18-64	119	211	54	463	57	75	77
Age 65 and above	34	55	0	0	0	0	0
Total disabled females	347	223	54	379	94	113	105
Below Age 18	20	5	0	1	4	3	2
Age 18-64	238	159	54	378	90	110	102
Age 65 and above	89	59	0	0	0	0	0
Total HUD assisted units (thousands)	2136	34	271	31	164	911	1377

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

When we examine the prevalence of disabled persons by HUD program, we find that it is highest in the mainstream voucher program, which is somewhat expected given that this program is specifically targeted to households with disabled persons. Considering programs not targeted to the needs of the disabled, the prevalence of disabled persons is highest in the Housing Choice Voucher program. Since there are no special accommodations to ensure that these households receive necessary disability accommodations, this is potentially a source of concern. These results generally hold true regardless of the age or sex of disabled persons.

Table 6 displays the number of households containing at least one disabled person per 1000 HUD-assisted units by income as a percent of HAMFI. As might be expected, the prevalence of disability is highest for the lowest income households, regardless of geographic location or PHA size. Disabled households with the lowest incomes, which are especially likely to include non-wage sources of income, are most prevalent in Northeastern and rural counties, while those with higher incomes are more prevalent in outlying Western counties and in medium-sized PHAs. Interestingly, while the prevalence of disability in the Section 811 program is higher for higher income households, for all other HUD programs, disabled households are more prevalent among lower income categories. Again, the Housing Choice Voucher program serves a larger proportion of disabled persons than other HUD programs not geared towards the needs of the disabled, regardless of income.

Table 6: Number of HUD-assisted households containing at least one disabled person per 1000 HUD-assisted units, by household income (as a percent of HAMFI)

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties	Small PHAs	Medium PHAs	Large PHAs
Total	416.75	433.44	411.34	405.70	457.76	416.25	424.11	431.92	398.02	447.72	472.54
Household income ≤30% HAMFI	440.63	478.47	436.87	418.57	472.45	440.47	440.25	453.00	449.96	469.59	495.55
Household income <30%, ≤ 50% HAMFI	368.91	334.00	354.61	388.45	422.30	364.91	395.87	411.02	363.32	433.29	435.16
Household income >50%, ≤80% HAMFI	261.54	222.36	250.52	298.65	305.58	258.45	300.12	287.64	254.76	314.05	287.68
Household income ≥80% HAMFI	201.83	174.00	199.10	250.84	247.32	197.68	255.71	233.41	195.63	247.37	205.81
Total HUD assisted units (thousands)	4,619	1,240	970	1,488	801	4,179	203	217	60	316	2,854

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 6: Number of HUD-assisted households containing at least one disabled person per 1000 HUD-assisted units, by household income (as a percent of HAMFI) (continued)

	Public Housing	Housing Choice Vouchers: Tenant-Based and All Other	Housing Choice Vouchers: "Designated"	Housing Choice Vouchers: Mainstream	Housing Choice Vouchers: Project-Based	Housing Choice Vouchers: Homeownership
Total	412.01	484.19	980.58	999.55	483.50	484.92
Household income ≤30% HAMFI	440.21	503.82	982.07	999.44	514.19	643.44
Household income <30%, ≤ 50% HAMFI	382.38	446.71	975.94	1000.00	392.68	437.59
Household income >50%, ≤80% HAMFI	270.09	304.73	948.07	1000.00	289.44	250.43
Household income ≥80% HAMFI	204.12	238.48	925.93	1000.00	195.12	224.49
Total HUD assisted units (thousands)	1,072	2,019	43	9	55	10

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 6: Number of HUD-assisted households containing at least one disabled person per 1000 HUD-assisted units, by household income (as a percent of HAMFI) (continued)

	All Housing Choice Voucher Programs	Section 8 Moderate Rehabilitation	Section 202	Section 811	Section 236	Multifamily Assisted Programs Breaking Out Section 8	All Multifamily Programs
Total	496.39	491.50	204.46	986.30	255.24	305.85	295.02
Household income ≤30% HAMFI	517.03	502.03	233.06	986.26	277.97	324.26	318.55
Household income <30%, ≤ 50% HAMFI	456.52	408.76	143.35	986.96	216.08	257.98	236.34
Household income >50%, ≤80% HAMFI	309.43	234.50	142.62	981.57	125.61	182.02	171.64
Household income ≥80% HAMFI	242.12	277.78	148.33	1,000.00	76.74	118.69	110.18
Total HUD assisted units (thousands)	2,136	34	271	31	164	911	1,377

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

Availability of Assisted HUD Units in Relation to Need

Research Question: What is the availability of assisted units that the public housing authority or owner/managing agent has designated as accessible, in relation to the need at different geographic levels?

Table 7 presents various statistics for those participating in the public housing program. Within this program, the number of disabled persons per 1000 public housing units is highest in central Northeastern counties managed by large PHAs. Roughly 41 percent of public housing units contain at least one disabled person, and this percentage varies little across geographic area. The third row from the bottom presents the percentage of households with at least one disabled person which requested disability features and ultimately received them in their public housing unit. Only 30 percent of households with at least one disabled person requesting such amenities actually received them. This percentage is highest in the West, where 77 percent of those requesting disability features received them, and lowest in the South, where only 11 percent of those requesting disability features received them. Central counties and large PHAs are the most successful in matching disabled households with their requested accommodations. Looking at the second to last row in Table 7, we find that a surprisingly low percentage (3 percent) of disabled households living in public housing were actually reported as receiving units with accessibility features, regardless of whether accessible units were requested. The highest percentages are in outlying Western counties and in large PHAs.

Table 7: Summary statistics, among HUD-assisted households in public housing

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties	Small PHAs	Medium PHAs	Large PHAs
Number of disabled persons per 1000 public housing households	449	496	459	436	482	455	417	407	385	422	458
Percent of households with at least one disabled person	41.2	44.1	43.4	40.7	44.3	41.6	39.2	38.4	36.4	39.8	41.8
Percent of households, among those which requested disability features, with at least one disabled person	43.6	61.0	48.3	37.8	71.8	45.5	37.2	35.7	38.8	36.6	46.9
Percent of households, among those which received disability features, with at least one disabled person	60.3	63.0	61.6	61.7	92.1	60.9	50.5	59.3	70.3	52.9	61.3
Percent of households, among those 1) with at least one disabled person and 2) which requested disability features, which ultimately received them	30.3	53.8	39.5	11.4	76.6	33.4	17.1	14.5	24.8	17.1	35.2
Percent of households, among those 1) with no disabled persons and 2) which requested disability features, which ultimately received them	15.4	49.4	23.0	4.3	16.8	17.9	9.9	5.5	6.7	8.8	19.7
Percent of households, among those with at least one disabled person, which received housing units with disability features	3.4	3.8	2.2	2.2	6.5	3.4	3.6	2.4	2.6	3.0	3.5
Total HUD-assisted, public housing units (thousands)	1,072	361	199	370	86	944	48	75	47	160	854

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files

Table 8 present various statistics for those participating in HUD’s multifamily programs. Since HUD multifamily program participants were not asked whether they have requested disability features, we do not present this information, but we do present the percent of households residing in properties with units designated for the disabled, by multifamily program. In contrast to the public housing program, we find greater ratios of disabled multifamily program participants per 1,000 units in Midwestern and rural counties. Ratios of disabled persons are greater in units designated for the chronically mentally ill and less in units designated for the elderly and disabled. Breaking multifamily programs down by various HUD program categories, we find that the average size of the disabled population is highest among multifamily assisted programs specifically designed to serve the needs of the disabled. The Section 811 program serves the largest number of disabled persons per unit. Approximately 99 percent of those participating in the Section 811 program live in households with at least one disabled person. In the Section 202 and 811 programs, the largest shares of households living in properties with units designated exclusively for the disabled are indeed disabled, while in other multifamily assisted programs, properties with units designated for the chronically mentally ill house the largest share of households with at least one disabled person.

Table 8: Multifamily housing statistics

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties	Small PHAs	Medium PHAs	Large PHAs
Number of disabled persons per 1000 multifamily units	303	310	329	302	267	297	334	380	1000	221	316
Percent of multifamily households with at least one disabled person	30	30	32	30	26	29	33	37	100	22	31
Percent of households with at least one disabled person, among those residing in multifamily housing units designed for...											
the elderly and disabled	36	31	41	40	32	35	41	46	100	7	58
the disabled exclusively	87	75	85	94	90	87	91	91			53
the chronically mentally ill	96	98	97	94	98	96	94	98			75
the physically disabled	70	53	72	68	93	69	90	65			75
the developmentally disabled	91	82	99	90	97	92	98	83			50
persons with HIV	86	100	98	70	94	86					50
Total HUD-assisted, multifamily units (thousands)	1,298	324	355	404	192	1,169	62	65	0	0	3

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files; iREMs database

Table 8: Multifamily housing statistics (continued)

	Section 202	Section 811	Section 236	Multifamily assisted programs breaking out Section 8	Housing Choice Vouchers: Project-Based
Number of disabled persons per 1000 multifamily units	219	999	264	313	314
Percent of multifamily households with at least one disabled person	22	99	26	31	31
Percent of households with at least one disabled person, among those residing in multifamily housing units designed for...					
the elderly and disabled	26	98	42	39	56
the disabled exclusively	90	99	30	66	53
the chronically mentally ill	85	98		83	75
the physically disabled	34	98	44	45	75
the developmentally disabled	79	99		75	50
persons with HIV		97		48	50
Total HUD-assisted, multifamily units (thousands)	242	25	157	870	4

Sources: HUD longitudinal data from TRACS and PIC, 2013, household and member files; iREMs database

Supply of and Demand for Accessible Assisted Units

Table 9 presents various indicators of the supply and demand for accessible HUD-assisted units. Within the tenant-based voucher, multifamily, and public housing programs, we present the percent of disabled HUD-assistance recipients that live in units specifically designated for the disabled by geography to identify the extent to which the needs of the disabled population are being met in these HUD programs.⁶ The bottom rows display, by income, the total and percent of households with at least one disabled person, the total and percent of households with at least one disabled person minus those receiving HUD assistance, and the percent of the disabled population not receiving HUD assistance. These rows are further provided for two groups: the first for all households, and the second for all rental households. The final row gives an estimate of the percent of households with disabled persons who would qualify for HUD assistance based on income alone but who do not receive any HUD assistance.

We find that in the tenant-based voucher program, less than five percent of disabled households receive assistance from a tenant-based program specifically targeted to the needs of the disabled. This percentage varies little by geography. This is a source of concern, because such vouchers do not come with supportive services or other accommodations to meet the needs of the disabled population. Furthermore, upon turnover, these vouchers may not be made available to other disabled households. In public housing, the percentage is somewhat higher, but still quite low (8 percent). In Western counties, more than 10 percent of disabled persons live in public housing units with accessibility features. The multifamily program has the highest percent of disabled households living in properties with units designated for the disabled (48 percent). This percentage is highest in the Midwest and in rural counties. Turning to the bottom rows in Table 9, we find that a substantial percentage of the disabled population does not receive HUD assistance. Even among those with extremely low incomes (<30% of HAMFI), more than 70 percent of all households and 50 percent of all renting households in particular do not receive HUD assistance. For both groups, this percentage is highest in outlying counties and within the South.

⁶ These percentages refer to the proportion (prevalence) living in designated units for given level of geography and not the share of such households found in each geography.

Table 9: Summary of supply and demand for affordable housing among disabled households

Total HUD assisted households with at least one disabled person (1000s)		1,916	534	399	603	366	1,739	86	90
By relative income	≤ 30% HAMFI	1,518	436	316	458	299	1,390	66	62
	> 30%, ≤ 50% HAMFI	339	80	73	123	59	298	17	24
	> 50%, ≤ 80% HAMFI	53	15	9	20	8	47	2	4
	> 80% HAMFI	6	3	1	2	1	5	0	1
Tenure: All owner- and renter-occupied households									
Total households with at least one disabled person (1000s)		27,560	4,856	6,197	10,841	5,666	22,851	1,834	1,287
By relative income	≤ 30% HAMFI	5,123	1,147	1,108	1,874	996	4,318	306	217
	> 30%, ≤ 50% HAMFI	4,423	810	997	1,761	855	3,596	297	231
	> 50%, ≤ 80% HAMFI	5,131	858	1,207	2,024	1,042	4,191	354	260
	> 80% HAMFI	12,883	2,041	2,887	5,182	2,774	10,746	878	579
Percent of total households with at least one disabled person		24.1	23.2	23.9	25.7	22.5	23.2	26.4	33.6
By relative income	≤ 30% HAMFI	35.8	38.4	36.4	36.5	31.5	34.6	40.2	47.4
	> 30%, ≤ 50% HAMFI	33.2	32.7	33.9	35.6	28.9	31.7	37.7	45.9
	> 50%, ≤ 80% HAMFI	27.3	26.6	27.2	29.4	24.6	26.1	30.5	37.8
	> 80% HAMFI	19.0	16.7	18.6	20.6	18.7	18.3	20.7	26.5
Total households with at least one disabled person (minus disabled households receiving HUD assistance) (1000s)		25,644	4,322	5,798	10,238	5,299	21,112	1,748	1,197
By relative income	≤ 30% HAMFI	3,605	710	792	1,415	696	2,928	240	155
	> 30%, ≤ 50% HAMFI	4,084	730	923	1,639	796	3,299	280	208
	> 50%, ≤ 80% HAMFI	5,077	843	1,197	2,004	1,034	4,144	351	255
	> 80% HAMFI	12,877	2,039	2,886	5,180	2,773	10,741	877	579
Percent of total households with at least one disabled person (minus disabled households receiving HUD assistance)		22.4	20.7	22.3	24.3	21.0	21.4	25.1	31.2
By relative income	≤ 30% HAMFI	25.2	23.8	26.0	27.6	22.1	23.5	31.5	33.9
	> 30%, ≤ 50% HAMFI	30.7	29.5	31.4	33.2	26.9	29.0	35.5	41.2
	> 50%, ≤ 80% HAMFI	27.0	26.2	27.0	29.1	24.4	25.8	30.3	37.2
	> 80% HAMFI	19.0	16.7	18.6	20.6	18.7	18.3	20.6	26.5
Percent of disabled households not receiving HUD assistance		93.0	89.0	93.6	94.4	93.5	92.4	95.3	93.0
By relative income	≤ 30% HAMFI	70.4	62.0	71.5	75.5	69.9	67.8	78.4	71.6
	> 30%, ≤ 50% HAMFI	92.3	90.1	92.6	93.0	93.1	91.7	94.2	89.8
	> 50%, ≤ 80% HAMFI	99.0	98.3	99.2	99.0	99.3	98.9	99.3	98.3
	> 80% HAMFI	100.0	99.9	100.0	100.0	100.0	100.0	100.0	99.9

Table 9: Summary of supply and demand for affordable housing among disabled households (continued)

	U.S.	Northeast Region	Midwest Region	South Region	West Region	Central counties	Outlying counties	Rural counties	
Tenure: Renter-occupied households only									
Total renting households with at least one disabled person (1000s)	8,717	1,827	1,891	3,067	1,932	7,536	467	318	
By relative income	≤ 30% HAMFI	3,233	816	715	1,046	655	2,824	163	108
	> 30%, ≤ 50% HAMFI	1,937	388	442	694	413	1,646	109	81
	> 50%, ≤ 80% HAMFI	1,592	290	354	582	366	1,366	90	61
	> 80% HAMFI	1,955	332	380	745	497	1,701	105	67
Percent of total renting households with at least one disabled person	22.9	24.2	24.9	22.9	20.1	22.0	27.0	34.4	
By relative income	≤ 30% HAMFI	34.0	38.3	35.3	33.1	30.0	33.1	38.4	46.2
	> 30%, ≤ 50% HAMFI	28.1	29.2	30.4	28.8	24.2	26.9	32.9	42.5
	> 50%, ≤ 80% HAMFI	20.3	20.7	21.5	20.9	18.2	19.4	24.2	31.2
	> 80% HAMFI	14.1	12.4	15.5	14.7	13.5	13.5	17.4	22.3
Total renting households with at least one disabled person (minus disabled households receiving HUD assistance) (1000s)	6,801	1,293	1,492	2,464	1,566	5,797	381	228	
By relative income	≤ 30% HAMFI	1,715	380	399	588	356	1,434	97	47
	> 30%, ≤ 50% HAMFI	1,599	308	369	571	354	1,349	92	58
	> 50%, ≤ 80% HAMFI	1,539	275	345	562	359	1,319	87	57
	> 80% HAMFI	1,949	330	380	743	497	1,695	104	67
Percent of total renting households with at least one disabled person (minus disabled households receiving HUD assistance)	17.8	17.1	19.7	18.4	16.3	16.9	22.0	24.7	
By relative income	≤ 30% HAMFI	18.1	17.9	19.7	18.6	16.3	16.8	22.9	19.9
	> 30%, ≤ 50% HAMFI	23.2	23.2	25.4	23.7	20.8	22.0	27.7	30.2
	> 50%, ≤ 80% HAMFI	19.6	19.6	20.9	20.2	17.8	18.7	23.5	29.0
	> 80% HAMFI	14.0	12.3	15.4	14.7	13.4	13.5	17.4	22.1
Percent of disabled, renting households not receiving HUD assistance	78.0	70.8	78.9	80.3	81.0	76.9	81.6	71.7	
By relative income	≤ 30% HAMFI	53.1	46.6	55.8	56.2	54.3	50.8	59.5	43.1
	> 30%, ≤ 50% HAMFI	82.5	79.3	83.4	82.3	85.8	81.9	84.3	71.1
	> 50%, ≤ 80% HAMFI	96.6	94.8	97.4	96.5	97.9	96.6	97.3	93.0
	> 80% HAMFI	99.7	99.2	99.8	99.7	99.9	99.7	99.7	99.1

Sources: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; CHAS, 5-year sample, 2006-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files; iREMs database

Table 10 presents the same information, broken down by quartiles of poverty rate, median rent, and median household income of the counties in which HUD-assisted disabled persons reside. Generally, the percent of disabled voucher recipients receiving vouchers designated for the disabled is higher in counties with lower poverty rates and higher median rents. The same is true for the multifamily assisted program, although counties with moderate median rents house the highest percent of disabled persons living in facilities designed for the disabled. The relationship is strongest for the public housing program. For these residents, counties with high poverty rates, low median rents, and low median incomes house the highest percent of those living in units designated for the disabled. Turning to the section of Table 10 inventorying the unassisted population among all households, we find that, among those with the lowest income, counties with lower median rents and income tend to house a larger population of potentially eligible disabled persons that do not receive HUD assistance.

Table 10: Summary of supply and demand for affordable housing among disabled households, by quartile using county level averages (among counties with HUD assistance)

	Poverty Rate Quartile				Median Gross Rent Quartile				Median Household Income Quartile				
	1	2	3	4	1	2	3	4	1	2	3	4	
County level statistic average	9.4	14.1	17.8	24.3	20.1	17.1	15.9	12.5	23.4	17.5	14.5	10.2	
Average percent of mainstream/designated voucher households among disabled voucher households	5.3	5.5	4.5	4.7	4.4	4.3	5.7	5.6	4.5	5.0	4.3	6.2	
Average percent of disabled, multifamily households in properties with disability accommodations	53.0	55.7	51.6	46.7	54.1	57.0	51.9	43.6	49.3	53.3	55.8	48.3	
Average percent of disabled, public housing households with an accessibility feature in their unit	6.0	7.3	6.9	9.4	8.1	8.0	6.4	7.5	9.8	6.1	7.0	6.8	
Average number of HUD assisted households with at least one disabled person	780	934	1,389	911	256	399	972	2,392	471	753	1,156	1,635	
By relative income	≤ 30% HAMFI	643	734	1,103	716	177	289	758	1,977	352	567	916	1,362
	> 30%, ≤ 50% HAMFI	120	173	244	161	66	95	187	350	98	159	207	234
	> 50%, ≤ 80% HAMFI	15	25	38	30	12	14	24	58	19	24	31	34
	> 80% HAMFI	2	2	4	4	2	1	2	7	3	2	3	5

Sources: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; CHAS, 5-year sample, 2006-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files; iREMs database

Table 10: Summary of supply and demand for affordable housing among disabled households, by quartile using county level averages (among counties with HUD assistance) (continued)

	Poverty Rate Quartile				Median Gross Rent Quartile				Median Household Income Quartile				
	1	2	3	4	1	2	3	4	1	2	3	4	
Tenure: All owner- and renter-occupied households													
Average number of households with at least one disabled person													
	13,394	14,553	18,137	10,305	5,099	7,045	14,155	30,169	6,664	11,915	15,537	22,301	
By relative income	≤ 30% HAMFI	2,241	2,492	3,477	2,299	913	1,188	2,579	5,844	1,388	2,076	2,842	4,208
	> 30%, ≤ 50% HAMFI	1,939	2,299	2,929	1,789	949	1,224	2,295	4,498	1,204	2,000	2,453	3,302
	> 50%, ≤ 80% HAMFI	2,297	2,778	3,418	1,937	1,044	1,428	2,729	5,241	1,307	2,318	2,940	3,869
	> 80% HAMFI	6,918	6,984	8,313	4,279	2,192	3,205	6,551	14,586	2,765	5,520	7,301	10,922
Average percent of total households with at least one disabled person													
	22.3	27.0	30.0	33.5	34.2	29.4	26.7	22.4	35.5	29.9	25.8	21.6	
By relative income	≤ 30% HAMFI	37.6	40.1	42.4	42.6	47.6	42.0	38.9	34.1	46.6	41.3	39.0	35.9
	> 30%, ≤ 50% HAMFI	33.0	37.7	41.2	44.1	46.7	41.0	37.1	31.1	46.8	41.2	36.6	31.3
	> 50%, ≤ 80% HAMFI	26.0	30.5	34.0	38.1	39.2	33.6	30.2	25.6	40.4	33.8	29.2	25.2
	> 80% HAMFI	17.4	21.3	23.8	26.9	26.5	23.3	21.4	18.2	28.2	23.9	20.3	17.0
Average number of households with at least one disabled person (minus disabled households receiving HUD assistance)													
	12,614	13,620	16,748	9,394	4,842	6,646	13,183	27,776	6,193	11,162	14,380	20,665	
By relative income	≤ 30% HAMFI	1,597	1,758	2,375	1,584	737	898	1,821	3,867	1,036	1,509	1,926	2,846
	> 30%, ≤ 50% HAMFI	1,819	2,126	2,685	1,628	883	1,129	2,108	4,147	1,106	1,841	2,246	3,068
	> 50%, ≤ 80% HAMFI	2,282	2,754	3,379	1,908	1,032	1,415	2,705	5,183	1,289	2,294	2,909	3,835
	> 80% HAMFI	6,916	6,982	8,309	4,275	2,190	3,203	6,549	14,579	2,762	5,518	7,298	10,918
Average percent of total households with at least one disabled person (minus disabled households receiving HUD assistance)													
	21.3	25.6	28.5	31.7	32.6	28.0	25.3	21.1	33.7	28.4	24.5	20.4	
By relative income	≤ 30% HAMFI	29.5	30.9	33.1	34.2	38.8	33.4	29.9	25.4	38.2	32.2	29.8	27.3
	> 30%, ≤ 50% HAMFI	31.2	35.1	38.3	40.8	43.5	38.1	34.5	29.1	43.5	38.3	34.1	29.5
	> 50%, ≤ 80% HAMFI	25.8	30.3	33.7	37.6	38.8	33.3	29.9	25.4	39.9	33.4	28.9	25.1
	> 80% HAMFI	17.4	21.3	23.8	26.9	26.5	23.3	21.4	18.2	28.2	23.9	20.3	17.0
Average percent of disabled households not receiving HUD assistance													
	95.4	94.7	94.4	94.2	95.1	95.0	94.5	94.1	94.8	94.8	94.4	94.8	
By relative income	≤ 30% HAMFI	78.5	76.0	76.4	79.5	80.2	79.7	75.5	74.9	80.5	78.2	75.2	76.4
	> 30%, ≤ 50% HAMFI	94.0	92.9	92.3	91.7	92.8	92.3	92.7	93.1	92.0	92.5	92.7	93.8
	> 50%, ≤ 80% HAMFI	99.5	99.2	99.0	98.6	98.9	99.1	99.2	99.2	98.7	99.0	99.2	99.4
	> 80% HAMFI	100.0	100.0	99.9	99.9	99.9	100.0	100.0	100.0	99.9	100.0	100.0	100.0

Sources: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; CHAS, 5-year sample, 2006-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files; iREMs database

Table 10: Summary of supply and demand for affordable housing among disabled households, by quartile using county level averages (among counties with HUD assistance) (continued)

		Poverty Rate Quartile				Median Gross Rent Quartile				Median Household Income			
		1	2	3	4	1	2	3	4	1	2	3	4
Tenure: Renter-occupied households only													
Average number of renting households with at least one disabled person		3,702	4,462	6,236	3,667	1,398	2,042	4,532	10,121	2,080	3,675	5,100	7,220
By relative income	≤ 30% HAMFI	1,371	1,555	2,304	1,492	496	701	1,644	3,890	814	1,274	1,841	2,795
	> 30%, ≤ 50% HAMFI	798	1,007	1,376	808	362	515	1,031	2,086	483	869	1,124	1,516
	> 50%, ≤ 80% HAMFI	653	858	1,135	647	269	396	859	1,773	372	695	970	1,256
	> 80% HAMFI	881	1,042	1,421	720	271	430	998	2,372	411	837	1,166	1,653
Average percent of total renting households with at least one disabled person		24.4	28.3	30.4	31.5	35.3	30.1	27.1	21.9	34.4	29.9	27.4	22.7
By relative income	≤ 30% HAMFI	37.5	39.9	41.3	39.3	46.3	40.7	37.9	33.0	43.9	40.1	38.4	35.5
	> 30%, ≤ 50% HAMFI	30.9	34.7	37.4	38.2	43.0	37.7	32.9	27.5	41.7	37.2	33.8	28.4
	> 50%, ≤ 80% HAMFI	21.2	24.8	26.8	30.5	33.0	27.0	23.6	19.6	32.6	26.9	24.2	19.6
	> 80% HAMFI	15.2	18.5	20.0	21.1	22.0	19.8	18.7	14.2	22.8	19.5	18.2	14.2
Average number of renting households with at least one disabled person (minus disabled households receiving HUD assistance)		2,922	3,528	4,847	2,756	1,141	1,643	3,561	7,728	1,609	2,923	3,944	5,585
By relative income	≤ 30% HAMFI	727	821	1,201	776	319	412	886	1,913	462	707	925	1,433
	> 30%, ≤ 50% HAMFI	678	834	1,133	647	296	421	844	1,736	385	710	917	1,282
	> 50%, ≤ 80% HAMFI	638	833	1,096	617	257	382	834	1,715	354	671	939	1,222
	> 80% HAMFI	879	1,040	1,417	716	269	429	996	2,364	408	835	1,163	1,648
Average percent of total renting households with at least one disabled person (minus disabled households receiving HUD assistance)		20.3	23.2	25.1	25.8	29.1	25.0	22.4	17.9	28.6	24.6	22.6	18.6
By relative income	≤ 30% HAMFI	23.1	24.5	26.0	25.3	30.7	25.9	23.2	19.0	29.4	25.0	23.4	21.0
	> 30%, ≤ 50% HAMFI	26.7	28.9	30.9	30.8	35.1	31.2	27.5	23.5	33.9	30.6	28.4	24.4
	> 50%, ≤ 80% HAMFI	20.8	24.0	25.9	29.1	31.5	26.1	23.0	19.1	31.1	25.9	23.6	19.2
	> 80% HAMFI	15.1	18.5	19.9	20.9	21.9	19.7	18.6	14.2	22.7	19.5	18.1	14.2
Average percent of disabled, renting households not receiving HUD assistance		82.8	81.6	81.3	80.3	81.6	81.8	81.6	81.0	81.2	81.5	81.6	81.7
By relative income	≤ 30% HAMFI	60.0	57.6	58.9	60.4	61.9	58.8	59.9	56.2	60.3	62.0	56.6	57.9
	> 30%, ≤ 50% HAMFI	84.1	82.5	81.6	80.1	81.5	81.5	83.2	82.0	80.1	82.1	82.4	83.7
	> 50%, ≤ 80% HAMFI	98.1	95.7	95.9	95.6	94.4	95.4	97.7	97.8	95.2	95.6	96.8	97.8
	> 80% HAMFI	99.8	99.5	99.6	99.8	99.7	99.6	99.8	99.7	99.6	99.8	99.5	99.8

Sources: Comprehensive Housing Affordability Strategy (CHAS) dataset, 3-year sample, 2008-2010; CHAS, 5-year sample, 2006-2010; HUD longitudinal data from TRACS and PIC, 2013, household and member files; iREMs database

Conclusions and Policy Implications

This report presents the first comprehensive nationwide analysis of the relationship between disabled households, disabled HUD-assisted households, and the HUD-assisted units in which households reside. We conclude with a discussion of several policy implications of these findings, focusing on specific policy questions addressed by our analyses.

Which HUD programs serve the largest number of disabled households by the age and sex of disabled household members?

The number of disabled persons per HUD-assisted housing unit is largest among the working-age population (age 18-64), regardless of the sex of disabled persons. We find that HUD programs serve a larger number of female disabled adults than males, likely due in part to the prevalence of female-headed households in the population of HUD-assisted households. Below age 18, however, greater numbers of disabled males than disabled females are found per unit. Comparing these outcomes across program types, we find that the number of disabled persons per HUD-assisted housing unit is greatest in the mainstream voucher program, which is somewhat expected given that this program is specifically targeted to households with disabled persons. With the exception of the Section 811 program, most HUD programs serve a lower income population.

Considering programs not specifically targeted to the needs of the disabled, the prevalence of disabled persons is highest in the tenant-based voucher program. Among disabled persons receiving tenant-based voucher assistance, less than five percent of disabled households receive assistance from a tenant-based program specifically targeted to the needs of the disabled. By comparison, 48 percent of disabled persons participating in the multifamily program live in properties with units designated for the disabled. This is a source of policy concern, because such non-designated vouchers do not come with supportive services or other accommodations to meet the needs of the disabled population. Furthermore, upon turnover, these vouchers may not be made available for other disabled households.

Which types of geographic areas are most successful in serving the needs of disabled HUD-assisted households?

HUD-assisted disabled households are more prevalent in the West and in central counties, but these results vary with the age of disabled persons. Greater numbers of disabled individuals of all age groups are found per 1,000 assisted units in the South. We also find that these ratios are greater for working-aged female disabled persons in outlying suburban counties, for disabled children and elderly persons in the South, and for working-aged disabled persons in the West.

We find that the percent of disabled HUD-assisted households living in units designated for the disabled varies little by geography with a few exceptions. In the public housing program, Western counties accommodate the highest share of disabled households in designated units, and in the multifamily program, rural Midwestern counties accommodate the highest percentage. If we consider those in the public housing program that have requested disability amenities, only 30 percent of those requesting such amenities actually received them. This percentage is highest in the West, where 77 percent of those requesting disability features received them, and lowest in

the South, where only 11 percent of those requesting disability features received them. Central counties are also more successful in matching disabled households with their requested accommodations. We also find that in the public housing program particularly, counties with high poverty rates, low median rents, and low median incomes house the highest percent of disabled households living in units designated for the disabled.

We find that a substantial percentage of potentially-eligible disabled U.S. households do not receive HUD assistance. Even among those with extremely low incomes (<30% of AMI), more than 70 percent of total households and more than 50 percent of renting households do not receive HUD assistance. This percentage is highest in outlying counties within the South and in counties with lower rents and, for total households, median incomes. These findings point to a need for more community outreach to identify potentially-eligible and interested disabled households for HUD's disability assistance programs. Devine (2000) conducted an informal survey of 25 PHAs to identify how disabled households were recruited for participation in HUD's mainstream voucher program and found that more than half added disabled persons to waiting lists following community outreach to local advocacy groups and other public and private agencies. Our results point to the need for more targeting of such efforts, particularly within suburban counties in the South.

Which types of PHAs are most successful in serving the needs of disabled HUD-assisted households?

We find that larger PHAs generally serve a larger number of disabled persons. Large PHAs are also generally more successful in accommodating disabled households within accessible units than smaller PHAs. There is one exception to these overall trends: medium-sized PHAs serve a larger population of working-aged disabled males.

Future research should determine why large PHAs are more successful in accommodating disabled households within accessible units, particularly disabled households earning lower incomes. Larger PHAs may operate more efficiently due to economies of scale, may be better staffed, and may have more resources to address the needs of special needs populations. Alternatively, other confounding factors may be driving the results for large PHAs, such as disabled people being more predominantly located in areas with larger PHAs. PHAs in larger cities may also have admissions preferences that favor disabled persons of a particular sex or age group. Finally, as suggested by Devine's (2000) analysis of a sample of PHAs administering the mainstream voucher program, larger PHAs may be more capable of actively seeking out special needs households through various community outreach efforts.

How should HUD data resources be revised to address future questions pertaining to disability?

We conclude with a discussion of proposed changes to HUD's administrative datasets that would facilitate future analyses of HUD-assisted disabled households. First, information on disabled households is often provided in more than one database, raising the potential for conflicting information about the program or location where the household resides, even after controlling for the "effective date" of a household action. Future assessments, using pooled datasets scanned for consistency, would better allow researchers to unambiguously identify a household's program and geography at a given point in time.

Second, the definition of disability and disability program status are not clearly and consistently identified in HUD's data resources. Both PIC and TRACS include a single variable identifying disability for HUD program participants, but the information does not contain type of disability, making it impossible to determine if HUD households are living in units appropriate for their disability. Only public housing residents are asked to identify whether an accessible unit was requested and received. This information should be provided for all HUD program participants, and an additional question should be added such as, "Does the requested accessible unit provide all necessary accommodations appropriate to the disabled household member(s) needs?" Furthermore, the information for disability program status was made available in several separate variables (see Appendix A). We recommend that a single variable be created to make it easier to identify any and all disability programs for which HUD-assisted households qualify. If additional supportive services are provided, these should be identified as well.

Third, we note several instances of missing data and potential measurement error in key variables used to analyze disability. For example, roughly 15 percent of public housing observations did not have information on whether accessibility features were provided. In some instances, high values for age were observed (with more than 1,700 observations being over 100, and more than 2 dozen over 120), several of which were seemingly unrealistic. This generally coincided with erroneous information on birth dates.

Finally, in this analysis we had to combine both the 5-year (2006-2010) and 3-year (2008-2010) CHAS files to determine the total number of disabled households within each income group, because both the total number of households and total number of disabled households within each income group was not available in each sample. Future CHAS products should make such comparisons feasible for each CHAS sample provided.

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Appendices. Explanation of data products and variable codebook

The first part of this document, Appendix A, provides a detailed explanation of the process associated with generating the data products and the variables contained therein. A codebook listing the variable and their definitions for each file can be found in the second part of this document in Appendix B. While the information in these two sections overlap to a large extent, the first section offers additional details beyond particular calculations, and more specifically outlines the assumptions made by the researchers, as well as any additional comments and caveats.

Appendix A. Explanation of data products

Data products derived from public summary files

The following data products, A)-D), were calculated at the national, state, county, and place level (using FIPS codes for the latter three),⁷ using publicly available data from the Census Bureau and the Department of Housing and Urban Development. *Note that all output covers only the 50 states and the District of Columbia (thereby ignoring other regions with FIPS codes, such as Puerto Rico).* Product D) additionally reports variables at the level of PHA and multifamily Project.

- A) Number of disabled persons by sex and age (< 5, 5-17, 18-34, 35-64, 65-74, 75+), and ratio of number of disabled persons by sex and age to the number of occupied housing units.

Source: 2009-2013 5-year ACS estimates (Tables B18101 for disability status and B25002 for occupied housing units)

Files: “sex by age by disability, ACS 2009-2013 (total count).xlsx” and “sex by age by disability, ACS 2009-2013 (per occupied housing unit).xlsx”

Geographies are distinguished by worksheet, within each file. Variable names are primarily self-explanatory, and make use of the following acronyms:

- Dis: disabled
- POHU: per occupied housing unit

- B) Ratio of number of disabled persons by age (<18, 18-64, and 65+) and poverty status to number of occupied housing units.

Source: 2009-2013 5-year ACS estimates (Table C18130 for disability / poverty status and B25002 for occupied housing units).

⁷ A “Census designated place” (CDP), or “place” for short, is defined by the Census as a concentration of population identified for statistical classifications purposes. They are delineated for each decennial census as the statistical counterparts of incorporated places, such as counties, towns, and villages. CDPs are not jurisdictions per se; however, their geography tends to be similar to the places incorporated within.

File: “age by disability by poverty, ACS 2009-2013 (per occupied housing unit).xls”

Geographies are distinguished by worksheet. Variable names are primarily self-explanatory, and make use of the following acronyms:

- Dis: disabled
- Pov/NoPov: count for households that are in poverty/not in poverty
- POHU: per occupied housing unit

Products A) and B) were obtained directly from queries made on Dataferret.

Unfortunately, the age category breakdowns available for B) are less detailed in the 5-year estimates for ACS (in the case of disability/poverty status, only the “C” Table is available for download, rather than the alternative, more detailed “B” Table).

- C) Number of households containing at least one disabled person by type of disability, tenure status, and household income (as a percent of HAMFI).
Source: 2008-2010 CHAS (obtained using the CHAS Data Query tool on huduser.org).

File: “CHAS data, 2008-2010.xls”

For this data product, the variable names already provided by CHAS were used. They are identified in the subsequent worksheet, labeled “variable key.”

- D) Total unit count, total occupied, percent occupied, number reported, and percent (among those occupied) reported.
Source: A Picture of Subsidized Housing (POSH), 2013

File: “POSH unit totals by program.xlsx”

Nine program categories are used in this file, and are determined using the “program” and “sub-program” variables from POSH (which is available only in the Project level file, which is then aggregated for other levels of geography), as follows:

- 1) Public housing: program equals 2
- 2) Section 8 certificates and vouchers: program equals 3
- 3) Section 8 mod rehab: program equals 4
- 4) Multifamily, Section 202: sub-program equals 2 or 3
- 5) Multifamily, Section 236: sub-program equals 4
- 6) Multifamily, Section 811: program equals 4, (i.e., sub-program equals 5 or 6)
- 7) Multifamily, programs breaking out Section 8: sub-program equals 1
- 8) Multifamily, all other: sub-program equals 7, 8, 9, 10, or 11
- 9) All programs combined: *no qualifiers*

Note that POSH provides information on the number of total units and the percent reported, from which it is possible to estimate, as done here, the number of occupied units. However, in the event of a low occupied unit count, the percent occupied is not

reported. By extension, this inhibits the percent reported, among those occupied, from also being reported (since the denominator is missing, in such cases). For this reason, in addition to the four variables, two flag variables, Flag_OccupiedMissingObs and Flag_NumReportedMissingObs, are reported. The former indicates whether the project level observation – for the Project level sheet – or at least one project level observation used to aggregate the value listed in the row for higher levels of aggregation was missing information on the percent of occupied units; the latter reports this for in a similar manner for the number reported variable, when information for it was missing for either a row directly in the Project worksheet or at least one of the projects used to calculate estimates for higher levels of aggregation. Thus, when a flag for either is reported, it is important that the estimate of total occupied and percent occupied (for the former flag), and number reported (for the second flag) be interpreted as a *lower bound*. When the second flag only is reported, the percent reported may be interpreted as an *upper bound*. However, when both flags are reported for a row, it is difficult to interpret the percent reported, since both the numerator and denominator comprising the estimate are underestimated.

Note also that, for the PHA worksheet, unit counts for the multifamily programs are not provided. This is because PHAs do not oversee multifamily programs.

Data products derived from HUD administrative data

Before discussing the subsequent data products, the following several measures that were taken, in preparing the data for aggregation, should be noted.

- Any rows in the data indicating the households removal from a program, i.e., with an entry for actn_type_cd of "6", "MO", or "TM", was dropped from our analysis
- Beginning with the longitudinal file (“index_hshld_longitudinal_2013”), it was recognized that many observations had duplicate entries in the data. These were primarily managed by using information about the most recent effective date (efctv_dt). In the event of duplicates entries with identical entries for efctv_dt, however, the following process was employed.
 - *Households were then compared the the date provided from the variable admsn_dt. The entry with the more recent admission date was used, when a discrepancy existed.*
 - *In the event of identical dates for admsn_dt as well, it was observed that virtually all households with duplicates entries were listed in more than one system (the Public and Indian Housing Information Center, or PIC [form 50058, and/or form 50058 MTW], or TRACS), and that one of the entries had listed as being part of a tenant-based or project-based housing choice voucher program (based on how participation in such is defined in Table 1A of this document). These HCV entries for each household were given priority.*
 - *Less than a dozen households remain with duplicate entries, following this procedure. Most of these share identical geographic and income information, and are thus of no concern. Four households remained, which contained conflicting geographic information. In the absence of further information, one of the two locations was*

arbitrarily chosen, since no other information was available to indicate which should take priority.

- Households are then classified into one of eleven HUD program categories (public housing; Housing Choice Vouchers (HCV) – tenant based/all other; HCV – “designated”; HCV – mainstream; HCV – homeownership; HCV – project-based; Section 8 Moderate Rehabilitation; multifamily assisted programs breaking out Section 8, Section 202/811, and Section 236). For details on this procedure, see Table 1A. In addition, they are separately included in a category for all HUD programs combined. Programs for HCV and multifamily are also combined together, in separate categories.
- Households are furthermore classified into one of four income categories:
 - Extremely low income (L30): where
 $\text{total_annl_incm_amnt} \leq \text{ext_low_inc_lmt_amnt}$, or
 $\text{ext_low_inc_lmt_indr}$ equals “Y”
 - Very low income (L50): where
 $\text{ext_low_inc_lmt_amnt} < \text{total_annl_incm_amnt} \leq \text{very_low_inc_lmt_amnt}$, or
($\text{very_low_inc_lmt_indr}$ equals “Y” and $\text{ext_low_inc_lmt_indr}$ does not equal “Y”)
(note that this category excludes L30 households)
 - Low income (L80): where
 $\text{very_low_inc_lmt_amnt} < \text{total_annl_incm_amnt} \leq \text{low_inc_lmt_amnt}$
(note that this category excludes L50 and L30 households)
 - Non-low income (all other): where
 $\text{total_annl_incm_amnt} > \text{low_inc_lmt_amnt}$
- In the event that no information is provided on either income or income category thresholds that apply to a household, they are excluded from this part of the analysis (note that these were not a major concern, as they comprise less than one percent of the total sample)
- The following methods were used to identify particular attributes of each household:
 - Whether disability features were requested: $\text{acsblty_rqstd_indr}$ equals “Y” or acsblty_rcvd_indr equaled “1” through “6” (i.e., neither contains an empty value, nor equals “0”)
 - Whether disability features were obtained: acsblty_rcvd_indr equals “1” or “2”
 - *Whether a household’s unit was designated as accessible: acsbl_unit_indr equals “Y”*
 - *Whether the accessibility designation is known: acsbl_unit_indr equals “Y” or “N” (i.e., not empty)*

- Disability status: households were identified as disabled by one of the following three methods:
 - Using the member file (index_member_longitudinal_2013), if a member of the household had a disability indicator (mbr_dsblty_indr) of “Y” or “y”
 - In the event no disabled were reported in the aforementioned file, households were alternatively labeled as disabled* by one of the following methods:
 - Using the disabled indicator from the “mf_member_special_status_code” file, households were denoted as disabled if “H” was reported under SPECIAL_STATUS_CD
 - Matching households to the file “mf_property_id_impairment”, a household was labeled as disabled if they had an indicator of “Y” for any of the following three variables: MOBILITY_IMPARED_IND, HEARING_IMPRD_IND, VISUALLY_IMPRD_IND
 - Lastly, when merged with the “ssi_households” file, if the family is recorded as 1) receiving a nonzero amount of SSI, and 2) not having anyone in the household age 65+ (since disability is not a prerequisite for members of this group to receive SSI)

*For these households, we cannot calculate just how many members within a household are disabled, let alone their age and gender. *As a conservative measure, we assume that only one disabled member resides in each of these households. Any aggregated tabulations, therefore, concerned with the total disabled count per region ought to be regarded as a lower bound estimate.* Tabulations concerning the sex and age of disabled household members will not include these households, since there is no information to identify the age and sex of the disabled household member(s).

- When collapsing the data to various geographic levels, the following information from the longitudinal file (i.e., index_hshld_longitudinal_2013) is used to classify a household’s geography:
 - State: unit_fips_state_cd
 - County: unit_fips_state_cd and unit_fips_cnty_cd
 - Place: unit_fips_state_cd and unit_place_cd
 - PHA: pha_cd
 - Project: for observations from TRACS, proj_num; for observations from PIC, dvlpt_num

The variables used to identify geography in the data products are hhNation, hhState, hhCounty, hhPlace, hhPHA, hhProj.

It should also be noted that many variables generated using the HUD longitudinal data are bottom-coded, in the event that few households are counted for a particular statistic within a specified geography and program. In general, entries are bottom-coded with a value of -1 in the

event that the number (or, in the event of it being a fraction or percent, the value of either the numerator or denominator) is less than 10. Details concerning which variables are subject to bottom-coding, and how bottom-coding was determined in such cases, are provided in the codebook (Appendix B).

The following products were calculated at the following levels, using HUD administrative data: national, state, county, place, PHA, and housing project:

- E) Number of disabled household members per HUD-assisted unit by sex and age (< 5, 5-17, 18-34, 35-64, 65-74, 75+, and all age categories).

Files: “disabled household count by sex by age.xlsx”

The age categories are constructed so as to be consistent with those reported in the ACS. The age and gender of each household member is determined directly from the “index_member_longitudinal” file (which is merged with the previously discussed household data), using the “mbr_age_yr_cnt” and “male” variables. Note that some observations were reported with erroneous, or seemingly erroneous, information; over 1700 observations have a reported age of 100+, and 26 observations of 120+. Albeit an arbitrary threshold, for the sake of establishing a boundary, we cap the age 75+ category at the age of 110.

- First, binary variables are created which classify whether a household member falls into a particular sex-age-disabled category (e.g., male, age 18-34, disabled).
 - Second, this information is aggregated to the household level, by taking the summation for each indicator by household id, giving us a household level total of disabled persons for each sex-age-disability cohort.
 - The dataset is then collapsed to the household level.
 - For each geographic level, households are then aggregated by taking the summation of household totals for each group. This value, for each cohort, is then divided by the summation of total HUD-assisted units, which is calculated as the summation of all households within our longitudinal file that are identified with that particular level of geography. The acronym PAU for each variable is used to refer to “per assisted unit”.
- F) Number of households containing at least one disabled person by household income (as a percent of HAMFI).

Files: “disabled household count by household income.xlsx”

The aggregation process is conducted in a manner very analogous to E), with a few notable exceptions. First the number of disabled persons was not counted; instead, a binary indicator was simply used to denote if a household had at least one disabled member. These binary values were then aggregated to produce a total household count for each geographic level. Second, instead of calculating the summations for each geographic level by sex-age-disabled cohort, the disabled households are each separated into four income categories (L30, L50, L80, and non-low income). The values in this file are reported in terms of both total count and, as with E), per-assisted unit.

Note: All statistics to be henceforth discussed have their variable names noted in parentheses at the end of each heading.

Public Housing Statistics

File: “disability characteristics of public housing residents.xlsx”

For public housing statistics, G)-K), the sample is filtered to include only households for which the variable “pgm_type_cd” equals “P”.

G) Number of disabled persons per public housing household (totDisabledPerPHHH)

The summation of disabled individuals contained in all public housing households, divided by the total number of public housing households counted for that particular geography.

H) Number of public housing households with at least one disabled person (totalDisabledHHs)

The sum of public housing households with at least one disabled person.

I) Percent of public housing households with at least one disabled person (pctTotalDisabledHHs)

The value from H), times 100, divided by the total number of HUD-assisted units counted at each level of geography.

J) Number of public housing households requesting disability features by disability status (reqstdAccssbltFtrs_Dis, reqstdAccssbltFtrs_NoDis)

Calculated by tallying the total number of households for which either 1) *acsblty_rqstd_indr* equals “Y” or 2) *acsblty_rcvd_indr* equals “1” through “6” (i.e., does not equal 0, nor is blank). This is calculated separately for households with and without 1 or more disabled persons in the household.

K) Percent of public housing households requesting disability features which have at least one disabled person (pctReqstdAccssbltFtrs_Dis)

The value from J) for *reqstdAccssbltFtrs_Dis*, times 100, divided by the sum of *reqstdAccssbltFtrs_Dis* and *reqstdAccssbltFtrs_NoDis*.

L) Number of public housing households receiving disability features by disability status (recvdAccssbltFtrs_Dis, recvdAccssbltFtrs_NoDis)

Similar procedure to J): this time, tallying only disabled and nondisabled households for which *acsblty_rcvd_indr* equals “1” or “2” (i.e., the household fully [“1”] or partially [“2”] received accessibility features that were requested)

M) Percent of public housing households receiving disability features which have at least one disabled person (pctRecvdAccssbltFtrs_Dis)

The value from L) for *recvdAccssbltFtrs_Dis*, times 100, divided by the sum of *recvdAccssbltFtrs_Dis* and *recvdAccssbltFtrs_NoDis*.

- N) Number of public housing households requesting accessibility features, which ultimately received them, by disability status (reqstdAndRecvd_Dis, reqstdAndRecvd_NoDis)

For disabled and non-disabled groups separately, the number of households which both requested and received accessibility features.

- O) Percent of public housing households requesting accessibility features, which ultimately received them, by disability status (pctReqstdAndRecvd_Dis, pctRreqstdAndRecvd_NoDis)

The first is equal to reqstdAndRecvd_Dis, times 100, divided by reqstdAccssbltFtrs_Dis. The second is equal to reqstdAndRecvd_NoDis, times 100, divided by reqstdAccssbltFtrs_NoDis.

- P) Percent of public housing households with at least one disabled person receiving housing units with disability features (pctDisHHsWithAccssbltyFtrs)

The value from recvdAccssbltFtrs_Dis, times 100, divided by the total number of disabled public housing households (totalDisabledHHs) counted for that geography.

Multifamily Assisted Program Statistics

File: “disability characteristics of multifamily residents.xlsx”

As the next calculations, L)-O), all pertain to multifamily assisted tenants, the sample is filtered to households designated, following the procedure outlined in Table 1A, for the following categories: Section 202, Section 811, Section 236, multifamily programs breaking out Section 8, and “all other”.

- Q) Number of disabled persons per multifamily unit (totDisabledPerUnit)

Similar procedure to that of G), this time using the universe of multifamily – rather than public housing - households.

The unit count is determined directly for all geographic levels except for the PHA and Project level using Data directly from the POSH database. The total unit count is aggregated for each geography for program categories “Section 8 New Construction or Substantial Rehabilitation (including 202/8 projects)”, “Section 236 Projects (FHA-Federal Housing Administration)”, and “All other multifamily assisted projects with FHA insurance or HUD subsidy (including Section 8 Loan Management, Rental Assistance Program (RAP), Rent Supplement (SUP), Property Disposition, Section 202/811 capital advance, and Preservation”. The total unit counts for PHA and project level results are alternatively calculated using the information within the longitudinal data, using a method similar to that outlined for counting the number of project level public housing units. Instead of using dvlpt_num and dvlpmnt_acc_unit_cnt. However, the variables cntrt_num and cntrt_asstd_unit_cnt are used, which are specific to each multifamily contract. In the case of PHA level estimates, however, not every household within a particular multifamily unit always belonged to the same PHA. A threshold was employed, therefore, whereby a PHA’s unit count only included a multifamily unit if more

than 10 percent of the households listed under for a given entry for cntrt_num were listed with the PHA.

- R) Number of households living in multifamily properties with at least one disabled person (totalDisabledHHs)

The sum of multifamily households with at least one disabled person.

- S) Percent of households living in multifamily properties with at least one disabled person (pctTotalDisabledHHs)

The value from totalDisabledHHs, times 100, divided by the total number of multifamily households counted for the geography.

- T) Number of households with at least one disabled person living in multifamily properties designed for the disabled disaggregated by type of disability feature (facility for elderly+disabled, disabled exclusively, the chronically mentally ill, the physically disabled, the developmentally disabled, or persons with HIV) (totalDisHHs_<condition>, where <condition> refers to EldrlyDisbld, DisbldExclsv, ChrncMentIll, PhysDisbld, DvlpmtDisbld, HIV)

Similar procedure to that of R), with calculations further disaggregated by the type of disability feature. Such disaggregation is made possible from merging the household data with the iREMS files - “iREMS 20141016 dbo_owner_survey” (1) and “iREMS 20141016 dbo_client_group_occupancy_detail” (2) – containing the following indicators:

- eldrly_disabled_indicator (1)
- exclusive_disabled_indicator (1)
- chronically_mentally_ill_ind (2)
- mobility_impairment_ind / other_impairment_ind (2) (facilities are identified as being for physically disabled if either one of these indicators equals “Y”)
- developmentally_disabled_ind (2)
- hiv_ind (2)

- U) Percent of households with at least one disabled person residing in multifamily housing units with disability features by type of disability feature (pctDisHHs_<condition>, where <condition> refers to those listed in T))

The value from T) is multiplied by 100, then divided by the total number of households residing in units containing each type of disability feature. (For example, if in a locality there are 100 households with at least one disabled person living in a unit of a facility identified as being for the physically disabled, and there are 200 total households identified within that locality as residing within a unit of a facility for the physically disabled, the value reported here would be 50 percent.) Note that in some geographies, there are zero units with a particular disability feature, in which case this procedure produces an empty value, since zero cannot be a denominator value.

Assisted Unit Count

File: “accessible unit count by number of bedrooms.xlsx”

- V) The number of accessible public housing and multifamily units by bedroom count (accessibleUnits_<bedroom group>, where <bedroom group> is categorized into 0 to 1 bedrooms (0to1Br), 2 bedrooms (2Br), 3 bedrooms (3Br), and 4 or more bedrooms (4plusBr))

These estimates are obtained by counting the number of households inhabiting 1) a public housing unit which, by our previously noted criteria, is denoted as accessible, or 2) a multifamily property with disability features previously listed under T). Note that, because no information was available to the researchers for counting the number of units within each multifamily property specifically (i.e., the iREMs categorizes, for multifamily properties as a whole, whether disability features are available), these counts are to be interpreted as *upper bound* estimates. The bedroom count for each unit is determined from the variable num_bedrm_cnt, listed for each observation in the HUD longitudinal data.

Supply and Demand Statistics

File: “unaided inventory.xlsx”

This file, provided for four geographic levels (U.S., state, county, and place) is discussed in two parts. The first, with products W) through Y), concerns statistics compiled with the combined use of HUD longitudinal data and CHAS data. The second, with Z) though BB), covers the final three summary statistics derived directly from the HUD longitudinal data.

The CHAS data provided by HUD for 2008-2010 (Table 6), when disaggregated by income group, provides only calculations that are disaggregated by disability group, including a group for nondisabled households. Because a household may be counted under more than one disabled category, it is therefore currently not possible to directly calculate the total number of disabled households by adding together the totals from each group. For this reason, we additionally employ the CHAS dataset for 2006-2010, where an estimate of the total households for each income category are provided (Table 1A6). Subsequent references to the count of total disabled households, for each low income group, are to be thus interpreted as the difference between of total number of households according to the 2006-2010 CHAS data, and the total number of households identified as non-disabled, according to the 2008-2010 CHAS data.

- W) Total disabled households at various HUD-assistance-eligible HAMFI levels (disHHs <income group>, where <income group> refers to households within the income groups L30, L50, L80, over L80 [and, as noted earlier in this document, with these income groups being mutually exclusive, such that L50, for example, does not include L30 households], and all income groups)

This is calculated directly from CHAS, by taking the estimated total number of disabled households within each of the four income groups.

- X) Percent of households at various HUD-assistance-eligible HAMFI levels which have at least one disabled person (pctDisHHs <income group>)

For each income group, the value from W), times 100, divided by the total number of households within that income group.

- Y) Total households at various HUD-assistance-eligible HAMFI levels with at least one disabled person minus disabled households receiving HUD assistance (unaidedDisHHs<income group>)

This simply subtracts, from W), the number of HUD-assisted households with at least one disabled person within each low income category. These were calculated directly in the previously discussed “disabled household count by household income” file.

- Z) Percent of households at various HUD-assistance-eligible HAMFI levels with at least one disabled person minus disabled households receiving HUD assistance (pctUnaidedDisHHs<income group>)

Similar procedure to X), but using Y) for the numerator instead of W).

- AA) Percent of households with at least one disabled person not receiving HUD assistance (pctUnaidedDisHHs<income group>)

The value of Y) divided by W).

The final three summary statistics are calculated directly from the HUD longitudinal database.

- BB) Percent of disabled HUD-assisted household in a housing voucher program, whose voucher is either part of the Designated or Mainstream voucher program (pctDisVoucherHHsInDesigOrMs)

This calculates the percentage of households with one or more disabled persons listed under one of the five voucher programs listed in Table 1A which fall into either the designated or mainstream voucher category.

- CC) Percent of disabled HUD-assisted, households in a multifamily property living within a multifamily property with designated accessible units (pctDisMFHHsInAccblUnt)

This calculates the percentage of households with one or disabled person, among those within a multifamily program, which live within a multifamily property that is designed for any one of the disability groups listed previously under H) and I).

- DD) Percent of disabled HUD-assisted, public housing households living within a designated accessible unit (pctDisPHHHsInAccblUnt)

This calculates the percentage of public housing households with at least one disabled person that are living in an accessible unit (indicated by having an entry of “Y” under acsbl_unit_indr)

Table A1. Methodology for sorting each household into applicable HUD program

Program	Identified in household data using
public housing	pgm_type_cd equals "P"
housing choice vouchers (HCV): tenant-based and all other	1) either A) pgm_type_cd equals "CE", "PR", "H", or "T"; or B) pgm_type_cd equals "VO" and vchr_type_cd either equals "TBV" or is blank; and 2) neither ned_spcl_pgm_indr nor ms5_spcl_pgm_indr equals 1
HCV: "designated"	1) pgm_type_cd equals "CE", "PR", "H", "T", or "V"; or B) pgm_type_cd equals "VO" and 2) ned_spcl_pgm_indr equals 1, and 3) ms5_spcl_pgm_indicator does not equal 1
HCV: mainstream	1) pgm_type_cd equals "CE", "PR", "H", "T", or "V"; or B) pgm_type_cd equals "VO" and 2) ms5_spcl_pgm_indr equals 1
HCV: homeownership	pgm_type_cd equals "VO" and vchr_type_cd equals "HV"
HCV: project-based	pgm_type_cd equals "VO" and vchr_type_cd equals "PBV"
Section 8 moderate rehabilitation	pgm_type_cd equals "MR"
Section 202	either 1) pgm_type_cd equals "H7" or "H9"; or 2) the 4th and 5th digits of proj_num equal "EH", "HH", or "SH"
Section 811	pgm_type_cd equals "H6" or "H8"
Section 236	either 1) pgm_type_cd equals "H4" or 2) pgm_type_cd equals "H1" and the 4th and 5th digits of proj_num equal "44" or "45"
multifamily assisted programs breaking out Section 8	all observations with pgm_type_cd of H1, H2, H3, and H5 which are not otherwise part of Section 202/811 or 236, above
All programs combined	<i>no qualifiers</i>
All HCV programs combined	All 5 HCV programs listed above
All Multifamily programs combined	All multifamily programs listed above (Section 202, 236, and 811; all multifamily programs breaking out Section 8)

Appendix B. Variable Codebook

SEX BY AGE BY DISABILITY, ACS 2009-2013 (TOTAL COUNT).XLSX

NOTE: this file is provided in four sheets, one for each level of geography (nation, state, county, and place)

Variable	Description
GEOID	Geography ID
SUMLEVEL	Summary level (not reported in "nation" worksheet)
ST	State FIPS code (not reported in "nation" worksheet)
COUNTY	County FIPS code (reported only for "county" worksheet)
PLACE	Place FIPS code (reported only for "place" worksheet)
malesUnder5Dis	Total disabled males under the age of 5
males5to17Dis	Total disabled males age 5-17
males18to34Dis	Total disabled males age 18-34
males35to65Dis	Total disabled males age 35-65
males65to74Dis	Total disabled males age 65-74
males75PlusDis	Total disabled males age 75 or higher
femalesUnder5Dis	Total disabled females under the age of 5
females5to17Dis	Total disabled females age 5-17
females18to34Dis	Total disabled females age 18-34
females35to65Dis	Total disabled females age 35-65
females65to74Dis	Total disabled females age 65-74
females75PlusDis	Total disabled females age 75 or higher

SEX BY AGE BY DISABILITY, ACS 2009-2013 (PER OCCUPIED HOUSING UNIT).XLSX

NOTE: this file is provided in four sheets, one for each level of geography (nation, state, county, and place)

Variable	Description
GEOID	Geography ID
SUMLEVEL	Summary level (not reported in "nation" worksheet)
ST	State FIPS code (not reported in "nation" worksheet)
COUNTY	County FIPS code (reported only for "county" worksheet)
PLACE	Place FIPS code (reported only for "place" worksheet)
malesUnder5DisPOHU	Total disabled males under the age of 5, per occupied housing unit
males5to17DisPOHU	Total disabled males age 5-17, per occupied housing unit
males18to34DisPOHU	Total disabled males age 18-34, per occupied housing unit
males35to65DisPOHU	Total disabled males age 35-65, per occupied housing unit
males65to74DisPOHU	Total disabled males age 65-74, per occupied housing unit
males75PlusDisPOHU	Total disabled males age 75 or higher, per occupied housing unit
femalesUnder5DisPOHU	Total disabled females under the age of 5, per occupied housing unit
females5to17DisPOHU	Total disabled females age 5-17, per occupied housing unit

females18to34DisPOHU	Total disabled females age 18-34, per occupied housing unit
females35to65DisPOHU	Total disabled females age 35-65, per occupied housing unit
females65to74DisPOHU	Total disabled females age 65-74, per occupied housing unit
females75PlusDisPOHU	Total disabled females age 75 or higher, per occupied housing unit

AGE BY DISABILITY BY POVERTY, ACS 2009-2013 (PER OCCUPIED HOUSING UNIT).XLS

NOTE: this file is provided in four sheets, one for each level of geography (nation, state, county, and place)

Variable	Description
GEOID	Geography ID
SUMLEVEL	Summary level (not reported in "nation" worksheet)
ST	State FIPS code (not reported in "nation" worksheet)
COUNTY	County FIPS code (reported only for "county" worksheet)
PLACE	Place FIPS code (reported only for "place" worksheet)
under18DisPOHU	Total disabled population below age 18, per occupied housing unit
under18DisPovPOHU	Total disabled population below age 18 in poverty, per occupied housing unit
under18DisNoPovPOHU	Total disabled population below age 18 not in poverty, per occupied housing unit
age18to64DisPOHU	Total disabled population age 18-64, per occupied housing unit
age18to64DisPovPOHU	Total disabled population age 18-64 in poverty, per occupied housing unit
age18to64DisNoPovPOHU	Total disabled population age 18-64 not in poverty, per occupied housing unit
age65PlusDisPOHU	Total disabled population age 65 and above, per occupied housing unit
age65PlusDisPovPOHU	Total disabled population age 65 and above in poverty, per occupied housing unit
age65PlusDisNoPovPOHU	Total disabled population age 65 and above not in poverty, per occupied housing unit

POSH UNIT TOTALS BY PROGRAM.XLSX

NOTE: this file is provided in one sheet, combining six different levels of geographic aggregation (nation, state, county, place, PHA, and project)

Nation	indicator for U.S.
State	State FIPS code
County	County FIPS code
Place	Place FIPS code
PHA	PHA ID
Project	Project ID
HUDProgramCategory	HUD Program Category (See Data Explanations Section for how these are determined)
totalUnits	total number of units
totalOccupied	total number of occupied units
pctOccupied	totalOccupied divided by totalUnits

totalReported	Number of households for which reports(Form-50058, From-50059) were received
pctReported	Percent, among those occupied, for which reports were received
Flag_OccupiedMissingObs	Indicator either 1) for non-project level estimates, at least one project used to calculate the aggregated estimate was missing information for the percent (and, by extension, the number occupied), or 2) for project level estimates, that information was missing for the percent, and number, occupied
Flag_NumReportedMissingObs	Indicator either 1) for non-project level estimates, at least one project used to calculate the aggregated estimate was missing information for the number (and thus the percent) reported, or 2) for project level estimates, that information was missing for the number (and percent) reported

CHAS DATA, 2008-2010.XLS

NOTE: this file is provided in one sheet, combining four different levels of geographic aggregation (nation, state, county, and place)

Variable	Description
sumlevel	Summary level (not reported in "nation" worksheet)
geoid	Geography ID
name	Name
st	State FIPS code
cnty	County FIPS code
place	Place FIPS code
T6_est1	Total: Occupied housing units
T6_est87	Renter occupied
T6_est2	Tenure: All; Household member has a hearing or vision impairment
T6_est19	Tenure: All; Household member has an ambulatory limitation
T6_est36	Tenure: All; Household member has a cognitive limitation
T6_est53	Tenure: All; Household member has a self-care or independent living limitation
T6_est70	Tenure: All; Household member has none of the above limitations
T6_est88	Renter occupied; Household member has a hearing or vision impairment
T6_est105	Renter occupied; Household member has an ambulatory limitation
T6_est122	Renter occupied; Household member has a cognitive limitation
T6_est139	Renter occupied; Household member has a self-care or independent living limitation
T6_est156	Renter occupied; Household member has none of the above limitations
T6_est3	Tenure: All; Household member has a hearing or vision impairment AND Household income is less than or equal to 30% of HAMFI
T6_est7	Tenure: All; Household member has a hearing or vision impairment AND Household income is greater than 30% but less than or equal to 50% of HAMFI

T6_est11	Tenure: All; Household member has a hearing or vision impairment AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est15	Tenure: All; Household member has a hearing or vision impairment AND Household income is greater than 80% of HAMFI
T6_est20	Tenure: All; Household member has an ambulatory limitation AND Household income is less than or equal to 30% of HAMFI
T6_est24	Tenure: All; Household member has an ambulatory limitation AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est28	Tenure: All; Household member has an ambulatory limitation AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est32	Tenure: All; Household member has an ambulatory limitation AND Household income is greater than 80% of HAMFI
T6_est37	Tenure: All; Household member has a cognitive limitation AND Household income is less than or equal to 30% of HAMFI
T6_est41	Tenure: All; Household member has a cognitive limitation AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est45	Tenure: All; Household member has a cognitive limitation AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est49	Tenure: All; Household member has a cognitive limitation AND Household income is greater than 80% of HAMFI
T6_est54	Tenure: All; Household member has a self-care or independent living limitation AND Household income is less than or equal to 30% of HAMFI
T6_est58	Tenure: All; Household member has a self-care or independent living limitation AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est62	Tenure: All; Household member has a self-care or independent living limitation AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est66	Tenure: All; Household member has a self-care or independent living limitation AND Household income is greater than 80% of HAMFI
T6_est71	Tenure: All; Household member has none of the above limitations AND Household income is less than or equal to 30% of HAMFI
T6_est75	Tenure: All; Household member has none of the above limitations AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est79	Tenure: All; Household member has none of the above limitations AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est83	Tenure: All; Household member has none of the above limitations AND Household income is greater than 80% of HAMFI
T6_est89	Renter occupied; Household member has a hearing or vision impairment AND Household income is less than or equal to 30% of HAMFI

T6_est93	Renter occupied; Household member has a hearing or vision impairment AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est97	Renter occupied; Household member has a hearing or vision impairment AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est101	Renter occupied; Household member has a hearing or vision impairment AND Household income is greater than 80% of HAMFI
T6_est106	Renter occupied; Household member has an ambulatory limitation AND Household income is less than or equal to 30% of HAMFI
T6_est110	Renter occupied; Household member has an ambulatory limitation AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est114	Renter occupied; Household member has an ambulatory limitation AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est118	Renter occupied; Household member has an ambulatory limitation AND Household income is greater than 80% of HAMFI
T6_est123	Renter occupied; Household member has a cognitive limitation AND Household income is less than or equal to 30% of HAMFI
T6_est127	Renter occupied; Household member has a cognitive limitation AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est131	Renter occupied; Household member has a cognitive limitation AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est135	Renter occupied; Household member has a cognitive limitation AND Household income is greater than 80% of HAMFI
T6_est140	Renter occupied; Household member has a self-care or independent living limitation AND Household income is less than or equal to 30% of HAMFI
T6_est144	Renter occupied; Household member has a self-care or independent living limitation AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est148	Renter occupied; Household member has a self-care or independent living limitation AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est152	Renter occupied; Household member has a self-care or independent living limitation AND Household income is greater than 80% of HAMFI
T6_est157	Renter occupied; Household member has none of the above limitations AND Household income is less than or equal to 30% of HAMFI
T6_est161	Renter occupied; Household member has none of the above limitations AND Household income is greater than 30% but less than or equal to 50% of HAMFI
T6_est165	Renter occupied; Household member has none of the above limitations AND Household income is greater than 50% but less than or equal to 80% of HAMFI
T6_est169	Renter occupied; Household member has none of the above limitations AND Household income is greater than 80% of HAMFI

DISABLED HOUSEHOLD COUNT BY SEX BY AGE (TOTAL COUNT).XLSX

NOTE: this file is provided in six sheets, one for each level of geography (nation, state, county, place, PHA, and Project); for definitions relating to household disability status, refer to Appendix A

Variable	Description
hhNation	Indicator for United States (within 50 states, and District of Columbia, according to the unit_fips_state_cd variable from the HUD longitudinal file; reported in "Nation" worksheet only)
hhState	State FIPS (using the unit_fips_state_cd variable from the HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using the unit_fips_cnty_cd variable from the HUD longitudinal file; reported only in "County" worksheet)
hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)
hhPHA	PHA code (using pha_cd from the HUD longitudinal file; reported only in "PHA" worksheet)
hhProj	Project code (using proj_num for observations from TRACS data and dvlpnum for observations from PIC data; reported only in "Proj" worksheet)
HUDProgCategory	HUD Program Category (See Table 1 for how these are determined)
maleAgeBel5_DisTotalCount	Total disabled males below age 5 (equals -1 if the total is less than 10)
maleAge5to17_DisTotalCount	Total disabled males age 5-17 (equals -1 if the total is less than 10)
maleAge18to34_DisTotalCount	Total disabled males age 18-34 (equals -1 if the total is less than 10)
maleAge35to64_DisTotalCount	Total disabled males age 35-64 (equals -1 if the total is less than 10)
maleAge65to74_DisTotalCount	Total disabled males age 65-74 (equals -1 if the total is less than 10)
maleAge75Plus_DisTotalCount	Total disabled males age 75 or higher (up to age 110) (equals -1 if the total is less than 10)
maleAgeOther_DisTotalCount	Total disabled males of any other age (not reported or over age 110) (equals -1 if the total is less than 10)
maleAllAges_DisTotalCount	Total disabled males of any age (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total is less than 10)
femaleAgeBel5_DisTotalCount	Total disabled females below age 5 (equals -1 if the total is less than 10)
femaleAge5to17_DisTotalCount	Total disabled females age 5-17 (equals -1 if the total is less than 10)
femaleAge18to34_DisTotalCount	Total disabled females age 18-34 (equals -1 if the total is less than 10)
femaleAge35to64_DisTotalCount	Total disabled females age 35-64 (equals -1 if the total is less than 10)
femaleAge65to74_DisTotalCount	Total disabled females age 65-74 (equals -1 if the total is less than 10)
femaleAge75Plus_DisTotalCount	Total disabled females age 75 or higher (up to age 110) (equals -1 if the total is less than 10)

femaleAgeOther_DisTotalCount	Total disabled females of any other age (not reported or over age 110) (equals -1 if the total is less than 10)
femaleAllAges_DisTotalCount	Total disabled females of any age (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total is less than 10)
totalAgeBel5_DisTotalCount	Total disabled persons below age 5 (equals -1 if the total is less than 10)
totalAge5to17_DisTotalCount	Total disabled persons age 5-17 (equals -1 if the total is less than 10)
totalAge18to34_DisTotalCount	Total disabled persons age 18-34 (equals -1 if the total is less than 10)
totalAge35to64_DisTotalCount	Total disabled persons age 35-64 (equals -1 if the total is less than 10)
totalAge65to74_DisTotalCount	Total disabled persons age 65-74 (equals -1 if the total is less than 10)
totalAge75Plus_DisTotalCount	Total disabled persons age 75 or higher (up to age 110) (equals -1 if the total is less than 10)
totalAgeOther_DisTotalCount	Total disabled persons of any other age (not reported or over age 110) (equals -1 if the total is less than 10)
totalAllAges_DisTotalCount	Total disabled persons of any age (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total is less than 10)
maleAgeBel5_DisHHs	Total households with at least one disabled male below age 5 (equals -1 if the total is less than 10)
maleAge5to17_DisHHs	Total households with at least one disabled male age 5-17 (equals -1 if the total is less than 10)
maleAge18to34_DisHHs	Total households with at least one disabled male age 18-34 (equals -1 if the total is less than 10)
maleAge35to64_DisHHs	Total households with at least one disabled male age 35-64 (equals -1 if the total is less than 10)
maleAge65to74_DisHHs	Total households with at least one disabled male age 65-74 (equals -1 if the total is less than 10)
maleAge75Plus_DisHHs	Total households with at least one disabled male age 75 or higher (up to age 110) (equals -1 if the total is less than 10)
maleAgeOther_DisHHs	Total households with at least one disabled male of any other age (not reported or over age 110) (equals -1 if the total is less than 10)
maleAllAges_DisHHs	Total households with at least one disabled male of any age (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total is less than 10)
femaleAgeBel5_DisHHs	Total households with at least one disabled female below age 5 (equals -1 if the total is less than 10)
femaleAge5to17_DisHHs	Total households with at least one disabled female age 5-17 (equals -1 if the total is less than 10)
femaleAge18to34_DisHHs	Total households with at least one disabled female age 18-34 (equals -1 if the total is less than 10)
femaleAge35to64_DisHHs	Total households with at least one disabled female age 35-64 (equals -1 if the total is less than 10)
femaleAge65to74_DisHHs	Total households with at least one disabled female age 65-74 (equals -1 if the total is less than 10)

femaleAge75Plus_DisHHs	Total households with at least one disabled female age 75 or higher (up to age 110) (equals -1 if the total is less than 10)
femaleAgeOther_DisHHs	Total households with at least one disabled female of any other age (not reported or over age 110) (equals -1 if the total is less than 10)
femaleAllAges_DisHHs	Total households with at least one disabled female of any age (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total is less than 10)
totalAgeBel5_DisHHs	Total households with at least one disabled person below age 5 (equals -1 if the total is less than 10)
totalAge5to17_DisHHs	Total households with at least one disabled person age 5-17 (equals -1 if the total is less than 10)
totalAge18to34_DisHHs	Total households with at least one disabled person age 18-34 (equals -1 if the total is less than 10)
totalAge35to64_DisHHs	Total households with at least one disabled person age 35-64 (equals -1 if the total is less than 10)
totalAge65to74_DisHHs	Total households with at least one disabled person age 65-74 (equals -1 if the total is less than 10)
totalAge75Plus_DisHHs	Total households with at least one disabled person age 75 or higher (up to age 110) (equals -1 if the total is less than 10)
totalAgeOther_DisHHs	Total households with at least one disabled person of any other age (not reported or over age 110) (equals -1 if the total is less than 10)
totalAllAges_DisHHs	Total households with at least one disabled person of any age (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total is less than 10)

DISABLED HOUSEHOLD COUNT BY SEX BY AGE (PER ASSISTED UNIT).XLSX

NOTE: this file is provided in six sheets, one for each level of geography (nation, state, county, place, PHA, and Project); for definitions relating to household disability status, refer to Appendix A

Variable	Description
hhNation	Indicator for United States (within 50 states, and District of Columbia, according to the unit_fips_state_cd variable from the HUD longitudinal file; reported in "Nation" worksheet only)
hhState	State FIPS (using the unit_fips_state_cd variable from the HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using the unit_fips_cnty_cd variable from the HUD longitudinal file; reported only in "County" worksheet)
hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)
hhPHA	PHA code (using pha_cd from the HUD longitudinal file; reported only in "PHA" worksheet)
hhProj	Project code (using proj_num for observations from TRACS data and dvlpt_num for observations from PIC data; reported only in "Proj" worksheet)
HUDProgCategory	HUD Program Category (See Table 1 for how these are determined)
maleAgeBel5_DisTotalCountPAU	Total disabled males below age 5 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)

maleAge5to17_DisTotalCountPAU	Total disabled males age 5-17 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAge18to34_DisTotalCountPAU	Total disabled males age 18-34 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAge35to64_DisTotalCountPAU	Total disabled males age 35-64 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAge65to74_DisTotalCountPAU	Total disabled males age 65-74 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAge75Plus_DisTotalCountPAU	Total disabled males age 75 or higher per assisted household (up to age 110) (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAgeOther_DisTotalCountPAU	Total disabled males of any other age (not reported or over age 110) per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAllAges_DisTotalCountPAU	Total disabled males of any age per assisted household (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAgeBel5_DisTotalCountPAU	Total disabled females below age 5 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAge5to17_DisTotalCountPAU	Total disabled females age 5-17 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAge18to34_DisTotalCountPAU	Total disabled females age 18-34 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAge35to64_DisTotalCountPAU	Total disabled females age 35-64 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAge65to74_DisTotalCountPAU	Total disabled females age 65-74 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAge75Plus_DisTotalCountPAU	Total disabled females age 75 or higher per assisted household (up to age 110) (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAgeOther_DisTotalCountPAU	Total disabled females of any other age (not reported or over age 110) per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
femaleAllAges_DisTotalCountPAU	Total disabled females of any age per assisted household (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAgeBel5_DisTotalCountPAU	Total disabled persons below age 5 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAge5to17_DisTotalCountPAU	Total disabled persons age 5-17 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)

	than 10)
totalAge18to34_DisTotalCountPAU	Total disabled persons age 18-34 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAge35to64_DisTotalCountPAU	Total disabled persons age 35-64 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAge65to74_DisTotalCountPAU	Total disabled persons age 65-74 per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAge75Plus_DisTotalCountPAU	Total disabled persons age 75 or higher per assisted household (up to age 110) (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAgeOther_DisTotalCountPAU	Total disabled persons of any other age (not reported or over age 110) per assisted household (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
totalAllAges_DisTotalCountPAU	Total disabled persons of any age per assisted household (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total number of disabled persons, i.e. the numerator, is less than 10)
maleAgeBel5_DisHHsPAU	Total households with at least one disabled male below age 5 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAge5to17_DisHHsPAU	Total households with at least one disabled male age 5-17 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAge18to34_DisHHsPAU	Total households with at least one disabled male age 18-34 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAge35to64_DisHHsPAU	Total households with at least one disabled male age 35-64 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAge65to74_DisHHsPAU	Total households with at least one disabled male age 65-74 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAge75Plus_DisHHsPAU	Total households with at least one disabled male age 75 or higher per assisted household (up to age 110) (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAgeOther_DisHHsPAU	Total households with at least one disabled male of any other age (not reported or over age 110) per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
maleAllAges_DisHHsPAU	Total households with at least one disabled male of any age per assisted household (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAgeBel5_DisHHsPAU	Total households with at least one disabled female below age 5 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAge5to17_DisHHsPAU	Total households with at least one disabled female age 5-17 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)

femaleAge18to34_DisHHsPAU	Total households with at least one disabled female age 18-34 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAge35to64_DisHHsPAU	Total households with at least one disabled female age 35-64 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAge65to74_DisHHsPAU	Total households with at least one disabled female age 65-74 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAge75Plus_DisHHsPAU	Total households with at least one disabled female age 75 or higher per assisted household (up to age 110) (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAgeOther_DisHHsPAU	Total households with at least one disabled female of any other age (not reported or over age 110) per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
femaleAllAges_DisHHsPAU	Total households with at least one disabled female of any age per assisted household (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAgeBel5_DisHHsPAU	Total households with at least one disabled person below age 5 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAge5to17_DisHHsPAU	Total households with at least one disabled person age 5-17 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAge18to34_DisHHsPAU	Total households with at least one disabled person age 18-34 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAge35to64_DisHHsPAU	Total households with at least one disabled person age 35-64 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAge65to74_DisHHsPAU	Total households with at least one disabled person age 65-74 per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAge75Plus_DisHHsPAU	Total households with at least one disabled person age 75 or higher per assisted household (up to age 110) (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAgeOther_DisHHsPAU	Total households with at least one disabled person of any other age (not reported or over age 110) per assisted household (equals -1 if the total number of households, i.e. the numerator, is less than 10)
totalAllAges_DisHHsPAU	Total households with at least one disabled person of any age per assisted household (including observations with erroneous age values below 0 or over 110, or that are blank) (equals -1 if the total number of households, i.e. the numerator, is less than 10)

DISABLED HOUSEHOLD COUNT BY HOUSEHOLD INCOME.XLSX

NOTE: this file is provided in six sheets, one for each level of geography (nation, state, county, place, PHA, and Project); for definitions relating to household disability status, refer to Appendix A

Variable	Description
hhNation	Indicator for United States (within 50 states, and District of Columbia, according to the unit_fips_state_cd variable from the

	HUD longitudinal file; reported in "Nation" worksheet only)
hhState	State FIPS (using the unit_fips_state_cd variable from the HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using the unit_fips_cnty_cd variable from the HUD longitudinal file; reported only in "County" worksheet)
hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)
hhPHA	PHA code (using pha_cd from the HUD longitudinal file; reported only in "PHA" worksheet)
hhProj	Project code (using proj_num for observations from TRACS data and dvlpt_num for observations from PIC data; reported only in "Proj" worksheet)
HUDProgCategory	HUD Program Category (See Table 1 for how these are determined)
totalDisabledCount	Total number of HUD-assisted households with at least one disabled person (equals -1 if value is less than 10)
L30_DisHHS	Total number of HUD-assisted households with at least one disabled person, for which household income is less than or equal to 30% of HAMFI (i.e. total_annl_inc_amnt ≤ ext_low_inc_lmt_amnt, or ext_low_inc_lmt_incr equals "Y", within the HUD longitudinal file) (equals -1 if value is less than 10)
L50ButNotL30_DisHHS	Total number of HUD-assisted households with at least one disabled person, for which household income is greater than 30 percent, but less than or equal to 50%, of HAMFI (i.e. ext_low_inc_lmt_amnt < total_annl_inc_amnt ≤ very_low_inc_lmt_amnt, or [very_low_inc_lmt_incr equals "Y" and ext_low_inc_lmt_incr does not equal "Y"], within the HUD longitudinal file) (equals -1 if value is less than 10)
L80ButNotL50_DisHHS	Total number of HUD-assisted households with at least one disabled person, for which household income is greater than 50 percent, but less than or equal to 80%, of HAMFI (i.e. very_low_inc_lmt_amnt < total_annl_inc_amnt ≤ low_inc_lmt_amnt, within the HUD longitudinal file) (equals -1 if value is less than 10)
aboveL80_DisHHS	Total number of HUD-assisted households with at least one disabled person, for which household income is greater than or equal to 80 percent of HAMFI (i.e. total_annl_inc_amnt > low_inc_lmt_amnt or no income information is given, within the HUD longitudinal file) (equals -1 if value is less than 10)

DISABILITY CHARACTERISTICS OF PUBLIC HOUSING RESIDENTS.XLSX

NOTE: this file is provided in six sheets, one for each level of geography (nation, state, county, place, PHA, and Project); for definitions relating to household disability status, refer to Appendix A

Variable	Description
hhNation	Indicator for United States (within 50 states, and District of Columbia; reported in "Nation" worksheet only)
hhState	State FIPS (using unit_fips_state_cd from HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using unit_fips_cnty_cd from HUD longitudinal file; reported only in "County" worksheet)

hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)
hhPHA	PHA code (using pha_cd from HUD longitudinal file; reported only in "PHA" worksheet)
hhProj	Project code (using proj_num for TRACS observations and dvlpt_num from 50058/MTW observations from HUD longitudinal file; reported only in "Proj" worksheet)
totDisabledPerPHHH	Number of disabled persons per public housing household (calculated as the summation of disabled individuals contained in all public housing households, divided by the total number of public housing households) (equals -1 if total number of units, i.e. the denominator, is less than 10)
totalDisabledHHs	Number of public housing households with at least one disabled person (i.e. the sum of public housing households (determined using the methods outlined under variable totalPHObs)) with at least one disabled person (equals -1 if value is less than 10)
pctTotalDisabledHHs	Percent of public housing households with at least one disabled person (equals -1 if the numerator is less than 10)
reqstdAccssbltFtrs_Dis	Number of public housing households with at least one disabled person requesting disability features (tallying the total number of households for which either 1) acsblty_rqstd_indr equals "Y" or 2) acsblty_rcvd_indr equals "1" through "6" (i.e. does not equal 0, nor is blank), within the HUD longitudinal file (equals -1 if value is less than 10)
reqstdAccssbltFtrs_NoDis	Number of public housing households with no disabled persons requesting disability features (determined using the method previously outlined for the preceding variable, reqstdAccssbltFtrs_Dis), within the HUD longitudinal file (equals -1 if value is less than 10)
pctReqstdAccssbltFtrs_Dis	Percent of public housing households with at least one disabled person requesting disability features (reqstdAccssbltFtrs_Dis times 100 divided by reqstdAccssbltFtrs_Dis plus reqstdAccssbltFtrs_NoDis) (equals -1 if numerator is less than 10)
recvdAccssbltFtrs_Dis	Number of public housing households with at least one disabled person receiving disability features (tallying the total number of households for which acsblty_rcvd_indr equals "1" or "2" [i.e. the household fully - "1" - or partially - "2" - received accessibility features that were requested]), within the HUD longitudinal file (equals -1 if value is less than 10)
recvdAccssbltFtrs_NoDis	Number of public housing households with no disabled persons receiving disability features (determined using the method previously outlined for the preceding variable, recvdAccssbltFtrs_Dis), within the HUD longitudinal file (equals -1 if value is less than 10)
pctRecvdAccssbltFtrs_Dis	Percent of public housing households with at least one disabled person receiving disability features (recvdAccssbltFtrs_Dis times 100 divided by recvdAccssbltFtrs_Dis plus recvdAccssbltFtrs_NoDis) (equals -1 if numerator is less than 10)
reqstdAndRecvd_Dis	Number of public housing households 1) with at least one disabled person and 2) which requested accessibility features, which ultimately received them

reqstdAndRecvd_NoDis	Number of public housing households 1) with no disabled persons and 2) which requested accessibility features, which ultimately received them
pctReqstdAndRecvd_Dis	Percent of public housing households 1) with at least one disabled person and 2) which requested accessibility features, which ultimately received them
pctReqstdAndRecvd_NoDis	Percent of public housing households 1) with no disabled persons and 2) which requested accessibility features, which ultimately received them
totalPHObs	Total public housing households (defined as households for which the variable "pgm_type_cd" equals "P" and which, while not labeled with pgm_type_cd "P", share a property_id value with a household which does have a pgm_type_cd of "P") (equals -1 if value is less than 10)
pctDisHHsWithAccssbltyFtrs	Percent of public housing households with at least one disabled person receiving housing units with disability features (The value from recvdAccssbltFtrs_Dis multiplied by 100, then divided by totalDisabledHHs) (equals -1 if either value in numerator, i.e. recvdAccssbltFtrs_Dis, or the value in the denominator, i.e. the number of units, is less than 10; is blank if the total number of public housing households equals 0)

DISABILITY CHARACTERISTICS OF MULTIFAMILY RESIDENTS.XLSX

NOTE: this file is provided in six sheets, one for each level of geography (nation, state, county, place, PHA, and Project); for definitions relating to household disability status, refer to Appendix A

Variable	Description
hhNation	Indicator for United States (within 50 states, and District of Columbia, according to the unit_fips_state_cd variable from the HUD longitudinal file; reported in "Nation" worksheet only)
hhState	State FIPS (using the unit_fips_state_cd variable from the HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using the unit_fips_cnty_cd variable from the HUD longitudinal file; reported only in "County" worksheet)
hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)
hhPHA	PHA code (using pha_cd from the HUD longitudinal file; reported only in "PHA" worksheet)
hhProj	Project code (using proj_num for observations from TRACS data and dvlpt_num for observations from PIC data; reported only in "Proj" worksheet)
totalMFunits	Total multifamily households (defined as all HUD-assisted households designated, following the procedure outlined in Table 1, for the following HUD program categories: Section 202, Section 811, Section 236, multifamily programs breaking out Section 8, and "all other") (equals -1 if value is less than 10)
totDisabledPerMFHH	Number of disabled persons per multifamily household (i.e. the variable totalDisabledHHs, divided by the variable totalMFunits) (equals -1 if number of units, i.e. the denominator, is less than 10; is blank if the total number of multifamily units is 0)

totalDisabledHHs	Number of households living in multifamily properties with at least one disabled person (the sum of multifamily households (determined using the methods outlined under variable totalMFunits) with at least one disabled person) (equals -1 if value is less than 10)
pctDisabledHHs	Percent of multifamily households with at least one disabled person (the sum of multifamily households (totalDisabledHHs times 100, divided by totalMFunits) (equals -1 if numerator is less than 10)
totalDisHHs_EldrlyDisbld	Number of households with at least one disabled person living in multifamily properties designated for the elderly and disabled (calculated using method outlined under the variable totalDisabledHHs, restricted to households in properties denoted with the "eldrly_disabled_indicator" variable in the iREMS dbo_owner_survey file) (equals -1 if value is less than 10)
totalDisHHs_DisbldExclsv	Number of households with at least one disabled person living in multifamily properties designated for the disabled exclusively (calculated using method outlined under the variable totalDisabledHHs, restricted to households in properties denoted with the "exclusive_disabled_indicator" variable in the iREMS dbo_owner_survey file) (equals -1 if value is less than 10)
totalDisHHs_ChrcncMentIlll	Number of households with at least one disabled person living in multifamily properties designated for the chronically mentally ill (calculated using method outlined under the variable totalDisabledHHs, restricted to households in properties denoted with the "chronically_mentally_ill_ind" variable in the iREMS dbo_client_group_occupancy_detail file) (equals -1 if value is less than 10)
totalDisHHs_PhysDisbld	Number of households with at least one disabled person living in multifamily properties designated for the physically disabled (calculated using method outlined under the variable totalDisabledHHs, restricted to households in properties denoted with the "mobility_impairment_ind" or "other_impairment_ind" variable in the iREMS dbo_client_group_occupancy_detail file) (equals -1 if value is less than 10)
totalDisHHs_DvlpmtDisbld	Number of households with at least one disabled person living in multifamily properties designated for the developmentally disabled (calculated using method outlined under the variable totalDisabledHHs, restricted to households in properties denoted with the "developmentally_disabled_ind" variable in the iREMS dbo_client_group_occupancy_detail file) (equals -1 if value is less than 10)
totalDisHHs_HIV	Number of households with at least one disabled person living in multifamily properties designated for persons with HIV (calculated using method outlined under the variable totalDisabledHHs, restricted to households in properties denoted with the "hiv_ind" variable in the iREMS dbo_client_group_occupancy_detail file) (equals -1 if value is less than 10)
pctDisHHs_EldrlyDisbld	Percent of households with at least one disabled person residing in multifamily properties designated for the elderly and disabled (i.e. the variable totalDisHHs_EldrlyDisbld, multiplied by 100, divided by the total number of households residing in units designated for the elderly and disabled) (equals -1 if totalDisHHs_EldrlyDisbld is less

	than 10; is blank if total occupied units designated for designated group equals 0)
pctDisHHs_DisbldExclsv	Percent of households with at least one disabled person residing in multifamily properties designated for the disabled exclusively (i.e. the variable totalDisHHs_DisbldExclsv, multiplied by 100, divided by the total number of households residing in units designated for the disabled exclusively) (equals -1 if totalDisHHs_DisbldExclsv is less than 10; is blank if total occupied units designated for designated group equals 0)
pctDisHHs_ChrcMentIIII	Percent of households with at least one disabled person residing in multifamily properties designated for the chronically mentally ill (i.e. the variable totalDisHHs_ChrcMentIIII, multiplied by 100, divided by the total number of households residing in units designated for the chronically mentally ill) (equals -1 if totalDisHHs_ChrcMentIIII is less than 10; is blank if total occupied units designated for designated group equals 0)
pctDisHHs_PhysDisbld	Percent of households with at least one disabled person residing in multifamily properties designated for the physically disabled (i.e. the variable totalDisHHs_PhysDisbld, multiplied by 100, divided by the total number of households residing in units designated for the physically disabled) (equals -1 if totalDisHHs_PhysDisbld is less than 10; is blank if total occupied units designated for designated group equals 0)
pctDisHHs_DvlpmtDisbld	Percent of households with at least one disabled person residing in multifamily properties designated for the developmentally disabled (i.e. the variable totalDisHHs_DvlpmtDisbld, multiplied by 100, divided by the total number of households residing in units designated for the developmentally disabled) (equals -1 if totalDisHHs_DvlpmtDisbld is less than 10; is blank if total occupied units designated for designated group equals 0)
pctDisHHs_HIV	Percent of households with at least one disabled person residing in multifamily properties designated for persons with HIV (i.e. the variable totalDisHHs_HIV, multiplied by 100, divided by the total number of households residing in units designated for persons with HIV) (equals -1 if totalDisHHs_HIV is less than 10; is blank if total occupied units designated for designated group equals 0)

ACCESSIBLE UNIT COUNT BY NUMBER OF BEDROOMS.XLSX

NOTE: this file is provided in six sheets, one for each level of geography (nation, state, county, place, PHA, and Project)

hhNation	Indicator for United States (within 50 states, and District of Columbia, according to the unit_fips_state_cd variable from the HUD longitudinal file; reported in "Nation" worksheet only)
hhState	State FIPS (using the unit_fips_state_cd variable from the HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using the unit_fips_cnty_cd variable from the HUD longitudinal file; reported only in "County" worksheet)

hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)
hhPHA	PHA code (using pha_cd from the HUD longitudinal file; reported only in "PHA" worksheet)
hhProj	Project code (using proj_num for observations from TRACS data and dvlpt_num for observations from PIC data; reported only in "Proj" worksheet)
accessibleUnits_0to1Br	The number of assisted households with 0 or 1 bedrooms inhabiting either 1) a public housing unit which is denoted as accessible (i.e. for which acsbl_unit_indr equals "Y"), or 2) a multifamily property with features designated for the elderly+disabled, disabled exclusively, the chronically mentally ill, the physically disabled, the developmentally disabled, or persons with HIV (according to the indicators in iREMS) (equals -1 if value is less than 10)
accessibleUnits_2Br	The number of assisted households with 2 bedrooms inhabiting either 1) a public housing unit which is denoted as accessible (i.e. for which acsbl_unit_indr equals "Y"), or 2) a multifamily property with features designated for the elderly+disabled, disabled exclusively, the chronically mentally ill, the physically disabled, the developmentally disabled, or persons with HIV (according to the indicators in iREMS) (equals -1 if value is less than 10)
accessibleUnits_3Br	The number of assisted households with 3 bedrooms inhabiting either 1) a public housing unit which is denoted as accessible (i.e. for which acsbl_unit_indr equals "Y"), or 2) a multifamily property with features designated for the elderly+disabled, disabled exclusively, the chronically mentally ill, the physically disabled, the developmentally disabled, or persons with HIV (according to the indicators in iREMS) (equals -1 if value is less than 10)
accessibleUnits_4plusBr	The number of assisted households with 4 or more bedrooms inhabiting either 1) a public housing unit which is denoted as accessible (i.e. for which acsbl_unit_indr equals "Y"), or 2) a multifamily property with features designated for the elderly+disabled, disabled exclusively, the chronically mentally ill, the physically disabled, the developmentally disabled, or persons with HIV (according to the indicators in iREMS) (equals -1 if value is less than 10)

UNAIDED INVENTORY.XLSX

NOTE: this file is provided in four sheets, one for each level of geography (nation, state, county, and place); for definitions relating to household disability status, refer to [Appendix A](#)

hhNation	Indicator for United States (within 50 states, and District of Columbia, according to the unit_fips_state_cd variable from the HUD longitudinal file; reported in "Nation" worksheet only)
hhState	State FIPS (using the unit_fips_state_cd variable from the HUD longitudinal file; reported in "State", "City", and "County" worksheets)
hhCounty	County FIPS (using the unit_fips_cnty_cd variable from the HUD longitudinal file; reported only in "County" worksheet)
hhPlace	Place FIPS (using the unit_place_cd variable from the HUD longitudinal file; reported only in "Place" worksheet)

disHHsL30	Number of total disabled households, for which household income is less than or equal to 30% of HAMFI (estimated by subtracting the number of non-disabled households in this income group [as identified from the variable T6_est71 in Table 6 of the CHAS, 2008-2010 data] from the number of total households [as identified from the sum of variables t16_est3 and t16_est88 from Table 16 of CHAS, 2006-2010 data])
disHHsL50	Number of total disabled households, for which household income is greater than 30%, but less than 50%, of HAMFI (estimated by subtracting the number of non-disabled households in this income group [as identified from the variable T6_est75 in Table 6 of the CHAS, 2008-2010 data] from the number of total households [as identified from the sum of variables t16_est24 and t16_est109 from Table 16 of CHAS, 2006-2010 data])
disHHsL80	Number of total disabled households, for which household income is greater than 50%, but less than 80%, of HAMFI (estimated by subtracting the number of non-disabled households in this income group [as identified from the variable T6_est79 in Table 6 of the CHAS, 2008-2010 data] from the number of total households [as identified from the sum of variables t16_est45 and t16_est130 from Table 16 of CHAS, 2006-2010 data])
disHHsOverL80	Number of total disabled households, for which household income is greater than 80% of HAMFI (estimated by subtracting the number of non-disabled households in this income group [as identified from the variable T6_est83 in Table 6 of the CHAS, 2008-2010 data] from the number of total households [as identified from the sum of variables t16_est66 and t16_est151 from Table 16 of CHAS, 2006-2010 data])
disHHsAll	The sum of variable disHHsL30, disHHsL50, disHHsL80, disHHsOverL80
pctDisHHsL30	Percent of total households, among which household income is less than or equal to 30% of HAMFI, which are disabled (estimated by multiplying 100 by disHHsL30, then dividing by the number of total households in this income group [t16_est3 + t16_est88 from Table 16 of CHAS, 2006-2010 data])
pctDisHHsL50	Percent of total households, among which household income is greater than 30% but less than or equal to 50% of HAMFI, which are disabled (estimated by multiplying 100 by disHHsL50, then dividing by the number of total households in this income group [t16_est24 + t16_est109 from Table 16 of CHAS, 2006-2010 data])
pctDisHHsL80	Percent of total households, among which household income is greater than 50% but less than or equal to 80% of HAMFI, which are disabled (estimated by multiplying 100 by disHHsL80, then dividing by the number of total households in this income group [t16_est45 + t16_est130 from Table 16 of CHAS, 2006-2010 data])
pctDisHHsOverL80	Percent of total households, among which household income is greater than 80% of HAMFI, which are disabled (estimated by multiplying 100 by disHHsOverL80, then dividing by the number of total households in this income group [t16_est66 + t16_est151 from Table 16 of CHAS, 2006-2010 data])
AllHHs	The count of all households (t16_est1 from Table 16 of CHAS, 2006-2010 data)

pctDisHHsAll	disHHsAll, times 100, divided by the number of total households (t16_est1)
disRentersL30	Number of total disabled, renting households, for which household income is less than or equal to 30% of HAMFI (estimated by subtracting the number of non-disabled, renting households in this income group [as identified from the variable T6_est157 in Table 6 of the CHAS, 2008-2010 data] from the number of total renting households [as identified from the variable t16_est88 from Table 16 of CHAS, 2006-2010 data])
disRentersL50	Number of total disabled, renting households, for which household income is greater than 30%, but less than 50%, of HAMFI (estimated by subtracting the number of non-disabled, renting households in this income group [as identified from the variable T6_est161 in Table 6 of the CHAS, 2008-2010 data] from the number of total renting households [as identified from the variable t16_est109 from Table 16 of CHAS, 2006-2010 data])
disRentersL80	Number of total disabled, renting households, for which household income is greater than 50%, but less than 80%, of HAMFI (estimated by subtracting the number of non-disabled, renting households in this income group [as identified from the variable T6_est165 in Table 6 of the CHAS, 2008-2010 data] from the number of total renting households [as identified from the variable t16_est130 from Table 16 of CHAS, 2006-2010 data])
disRentersOverL80	Number of total disabled, renting households, for which household income is greater than 80% of HAMFI (estimated by subtracting the number of non-disabled, renting households in this income group [as identified from the variable T6_est169 in Table 6 of the CHAS, 2008-2010 data] from the number of total renting households [as identified from the variable t16_est151 from Table 16 of CHAS, 2006-2010 data])
disRentersAll	The sum of variable disRentersL30, disRentersL50, disRentersL80, disRentersOverL80
pctDisRentersL30	Percent of total renting households, among which household income is less than or equal to 30% of HAMFI, which are disabled (estimated by multiplying 100 by disRentersL30, then dividing by the number of total renting households this income group [t16_est88 from Table 16 of CHAS, 2006-2010 data])
pctDisRentersL50	Percent of total renting households, among which household income is greater than 30% but less than or equal to 50% of HAMFI, which are disabled (estimated by multiplying 100 by disRentersL50, then dividing by the number of total renting households this income group [t16_est109 from Table 16 of CHAS, 2006-2010 data])
pctDisRentersL80	Percent of total renting households, among which household income is greater than 50% but less than or equal to 80% of HAMFI, which are disabled (estimated by multiplying 100 by disRentersL80, then dividing by the number of total renting households this income group [t16_est130 from Table 16 of CHAS, 2006-2010 data])
pctDisRentersOverL80	Percent of total renting households, among which household income is greater than 80% of HAMFI, which are disabled (estimated by multiplying 100 by disRentersOverL80, then dividing by the number of total renting households this income group [t16_est151 from Table 16 of CHAS, 2006-2010 data])

AllRenters	The count of all households (t16_est87 from Table 16 of CHAS, 2006-2010 data)
pctDisRentersAll	disRentersAll, times 100, divided by the number of total households (t16_est87)
unaidedDisHHsL30	disHHsL30 minus L30_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if L30_DisHHs is less than 10)
unaidedDisHHsL50	disHHsL50 minus L50ButNotL30_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if L50ButNotL30_DisHHs is less than 10)
unaidedDisHHsL80	disHHsL80 minus L80ButNotL50_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if L80ButNotL50_DisHHs is less than 10)
unaidedDisHHsOverL80	disHHsOverL80 minus aboveL80_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if aboveL80_DisHHs is less than 10)
unaidedDisHHsAll	The sum of variable unaidedHHsL30, unaidedHHsL50, unaidedHHsL80, unaidedHHsOverL80 (equals -1 if only one of the following is equal to -1: unaidedDisHHsL30, unaidedDisHHsL50, unaidedDisHHsL80, unaidedDisHHsOverL80)
pctUnaidedDisHHsL30	unaidedDisHHsL30, times 100, divided by total household count for this income group
pctUnaidedDisHHsL50	unaidedDisHHsL50, times 100, divided by total household count for this income group
pctUnaidedDisHHsL80	unaidedDisHHsL80, times 100, divided by total household count for this income group
pctUnaidedDisHHsOverL80	unaidedDisHHsOverL80, times 100, divided by total household count for this income group
pctUnaidedDisHHsAll	unaidedDisHHsAll, times 100, divided by total household count
unaidedDisRentersL30	disRentersL30 minus L30_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if L30_DisHHs is less than 10)
unaidedDisRentersL50	disRentersL50 minus L50ButNotL30_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if L50ButNotL30_DisHHs is less than 10)
unaidedDisRentersL80	disRentersL80 minus L80ButNotL50_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if L80ButNotL50_DisHHs is less than 10)
unaidedDisRentersOverL80	disRentersOverL80 minus aboveL80_DisHHs (provided from file "disabled household count by household income.xlsx") (equals -1 if aboveL80_DisHHs is less than 10)
unaidedDisRentersAll	The sum of variable unaidedRentersL30, unaidedRentersL50, unaidedRentersL80, unaidedRentersOverL80 (equals -1 if only one of the following is equal to -1: unaidedDisRentersL30, unaidedDisRentersL50, unaidedDisRentersL80, unaidedDisRentersOverL80)
pctUnaidedDisRentersL30	unaidedDisRentersL30, times 100, divided by total household count for this income group
pctUnaidedDisRentersL50	unaidedDisRentersL50, times 100, divided by total renting household count for this income group

pctUnaidedDisRentersL80	unaidedDisRentersL80, times 100, divided by total renting household count for this income group
pctUnaidedDisRentersOverL80	unaidedDisRentersOverL80, times 100, divided by total renting household count for this income group
pctUnaidedDisRentersAll	unaidedDisRentersAll, times 100, divided by total renting household count
pctDisHHsUnaidedL30	unaidedDisHHsL30, times 100, divided by disHHsL30
pctDisHHsUnaidedL50	unaidedDisHHsL50, times 100, divided by disHHsL50
pctDisHHsUnaidedL80	unaidedDisHHsL80, times 100, divided by disHHsL80
pctDisHHsUnaidedOverL80	unaidedDisHHsOverL80, times 100, divided by disHHsOverL80
pctDisHHsUnaidedAll	unaidedDisHHsAll, times 100, divided by disHHsAll
pctDisRentersUnaidedL30	unaidedDisRentersL30, times 100, divided by disRentersL30
pctDisRentersUnaidedL50	unaidedDisRentersL50, times 100, divided by disRentersL50
pctDisRentersUnaidedL80	unaidedDisRentersL80, times 100, divided by disRentersL80
pctDisRentersUnaidedOverL80	unaidedDisRentersOverL80, times 100, divided by disRentersOverL80
pctDisRentersUnaidedAll	unaidedDisRentersAll, times 100, divided by disRentersAll
pctDisVoucherHHsInDesigOrMs	Percent of disabled HUD-assisted household in one of the five housing voucher programs (tenant-based/other, project-based, homeownership, designated, mainstream), whose voucher is either part of the Designated or Mainstream voucher program (equals -1 if numerator is less than 10)
pctDisMFHHsInDisProperty	Percent of disabled HUD-assisted, households in a multifamily property living within a multifamily property with disability features (as indicated from iREMS) for the elderly+disabled, the disabled exclusively, the chronically mentally ill, the physically disabled, the developmentally disabled, or persons with HIV (equals -1 if numerator is less than 10)
pctDisPHHHsInAccblUnt	Percent of disabled HUD-assisted, public housing households living within a designated accessible unit (i.e. for which acsbl_unit_indr equals "Y" in the HUD longitudinal data) (equals -1 if numerator is less than 10)