

Demographic and socio-economic characteristics of persons with serious hearing loss and other serious health conditions in Washington State

From the 2008 American Community Survey

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THIS PAPER describes the characteristics and numbers of Washington residents with serious hearing difficulties and compares them with the general population and other persons with health conditions causing serious functional limitations. The prevalence of Washington residents with serious hearing loss were requested by the DSHS Office of Deaf and Hard of Hearing. The data are drawn from the 2008 American Community Survey (ACS), which is administered each year by the U.S. Census Bureau to a representative sample of the Washington State population. In 2008, the ACS interviewed 40,855 Washington residents living in households, and 2,260 Washington residents living in group quarters (such as dormitories, nursing homes, bases, correctional facilities, institutions or boarding homes).

Executive Summary: Key findings for persons with serious hearing difficulty

The 2008 American Community Survey for Washington State asked about each member of the household: “*Is this person deaf or does he/she have serious difficulty hearing?*” The following estimates are based on the persons for whom that answer was “yes”—the persons with serious hearing difficulties.

Four out of 100 Washington residents (262,481 persons) had serious hearing difficulties. Of those people:

- ***Demographics of those with serious hearing difficulty***
 - 55 percent (145,474 persons) were 65 or older.
 - 60 percent (159,121 persons) were male.
 - 86 percent (225,112 persons) were white and not Hispanic.
 - 14 percent were persons of minority race or ethnicity.
- ***Education of those older than 25 with serious hearing difficulty (247,049 persons over 25)***
 - 19 percent (47,660 persons) had not completed high school.
 - 31 percent (76,070 persons) had a high school degree or diploma and no other school.
 - 24 percent (59,709 persons) had some college but no college degree.
 - 7 percent (17,420 persons) had an associate degree but no higher degree.
 - 12 percent (30,178 persons) had a bachelor’s degree, no post-bachelor’s degrees.
 - 7 percent (16,013 persons) had a graduate or professional degree.
- ***Employment, income and poverty status of those with serious hearing difficulty***
 - 70 percent of civilian persons aged 16 or older (178,078 persons) were not in the labor force.
 - 28 percent of civilians aged 16 or older (69,994 persons) were employed.
 - 2 percent of civilian persons aged 16 or older (5,811 persons) were unemployed.
 - The unemployment rate of civilian persons with serious hearing difficulty was 7.7%
 - Among those employed, the average earned income was \$37,824.
 - Average household income, however, was \$58,745.
 - 14 percent (31,537 persons) lived in households below 100% of the Federal Poverty Level (FPL).
 - 33 percent (73,061 persons) lived in households between 100% and 250% of the FPL.



Definitions of Disability and Serious Hearing Difficulty

In 2008, the American Community Survey altered its disability questions, separating vision and hearing questions for the first time. The 2008 ACS asked the following two questions about people of all ages:

- *Is this person deaf or does he/she have serious difficulty hearing?*
- *Is this person blind or does he/she have serious difficulty seeing even when wearing glasses?*

For all persons over five years old, the 2008 ACS asks:

- *Because of a physical, mental, or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions?*
- *Does this person have serious difficulty walking or climbing stairs?*
- *Does this person have difficulty dressing or bathing?*

For all persons over fifteen years old, the 2008 ACS asks:

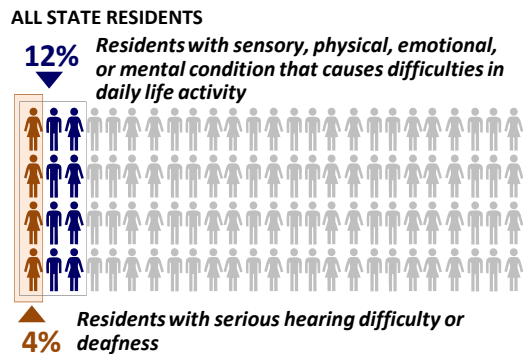
- *Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?*

If any of the above questions were answered “yes”, that person was defined as having a serious disability. If the first question was answered with a “yes” the person is defined as having serious hearing difficulty.

Four percent of Washington's people have serious hearing difficulty or deafness

In 2008, over **816,000** Washington residents (12 percent of the state population) are estimated to have a sensory, physical, emotional, or mental condition that caused difficulties in daily life activities.

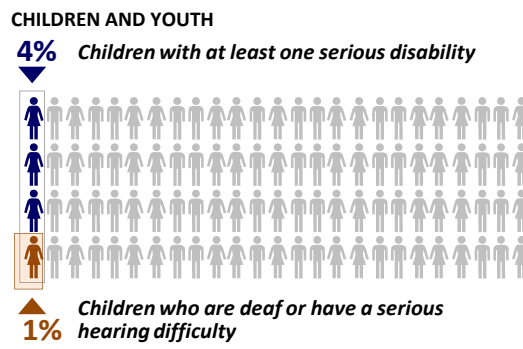
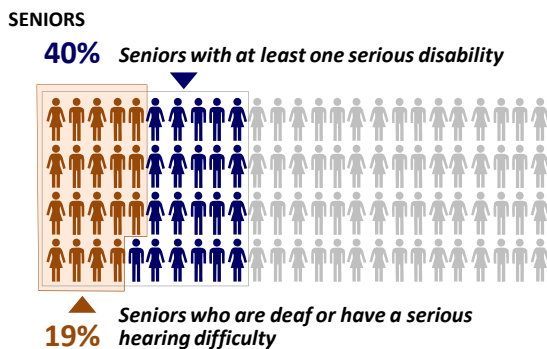
- Among them were **262,000** Washington residents who said yes to the question about hearing difficulty — **4 percent** of the state's population.



Most with serious hearing difficulties are older

Age, of course, has a striking relationship to disability:

- **40 percent** of seniors have at least one serious disability, and almost **19 percent** of the seniors in Washington are deaf or have a serious hearing difficulty.
- Among children and youth, the comparable rates are **4 percent** and less than **1 percent**, respectively.



Those with serious hearing difficulty are more likely to be men

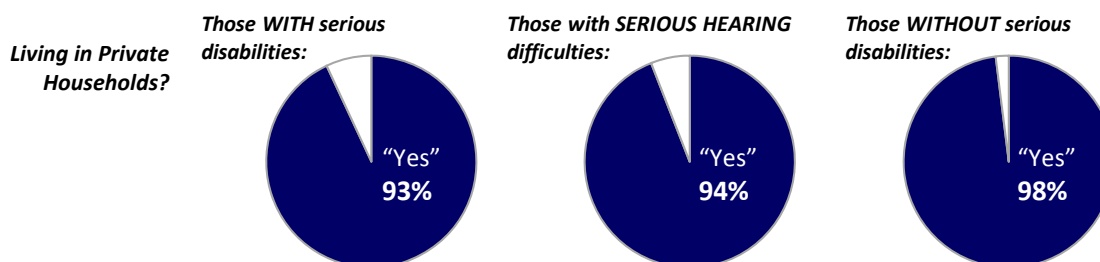
- **5 percent** of all Washington males have hearing difficulties compared to **3 percent** of all females.

The vast majority of those with serious hearing difficulties live in private households

In Washington State, 143,662 persons lived in “group quarters” during 2008, including institutions, nursing homes, military bases, community residential facilities, jails and prisons. **41** percent (59,334) of the people living in group quarters had a serious disability of some kind. Among those are the **15,700** persons with a serious hearing disability.

However, as among the general population, most people with disabilities do not live in group quarters; they live in a family home or apartment. **93** percent (756,212) of the persons with serious disabilities live in households and **94** percent (246,781) of the people with serious hearing difficulties live in households (compared to **98** percent of the population without serious disabilities).

Probably because of the association with age, people with serious disabilities and hearing problems live in smaller households than persons without disabilities. The average household size for persons with hearing disabilities is **2.31**; for persons with any type of disability is **2.58**; for persons without disabilities is **3.39**.



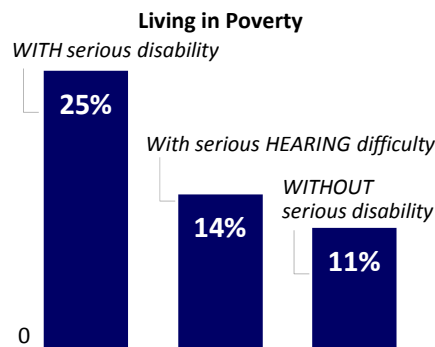
American Indians and African Americans are more likely to have a serious disability, and American Indians are also more likely to have a serious hearing difficulty

- **56** percent of American Indian seniors and **49** percent of the African American seniors have at least one serious disability (compared with **40** percent of all Washington seniors).
- **30** percent are of American Indian seniors and **11** percent of all African American seniors are deaf or have a serious hearing difficulty (compared with **14** percent of all Washington seniors).

Those with serious hearing difficulties are more likely to be poor

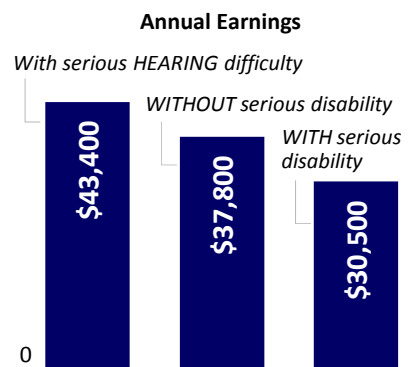
Persons with serious disabilities are more than twice as likely to be in poverty (**25** percent) than persons without disabilities (**11** percent).

Serious hearing difficulties are not as strongly associated with poverty; **14** percent of the people with hearing difficulties are in poverty.



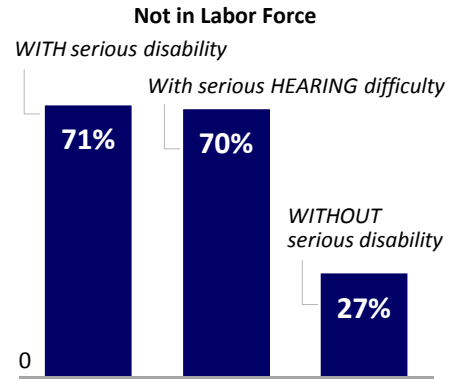
Those with serious hearing difficulties earn lower incomes

Persons with serious hearing disabilities earn on average **\$37,800** in wages or income from personal business or farm. This is less than the average employed person without disabilities (**\$43,400**) but more than the average employed person with disabilities (**\$30,500**). Again—this is likely to be an age-related finding, since persons with hearing disabilities, if still working, are more likely to be earning near their peak salaries.



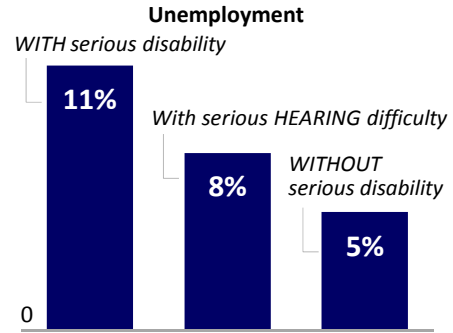
Those with serious hearing difficulties are more likely to not be part of the labor force

Persons with serious disabilities (**71** percent) and hearing difficulties (**70** percent) are much more likely than those without disabilities (**27** percent) to not be in the labor force. This is partly because they are older, and more likely to be retired. And some of those with serious disabilities have clear employment barriers and may be living on disability grants or pensions and be among those in poverty.



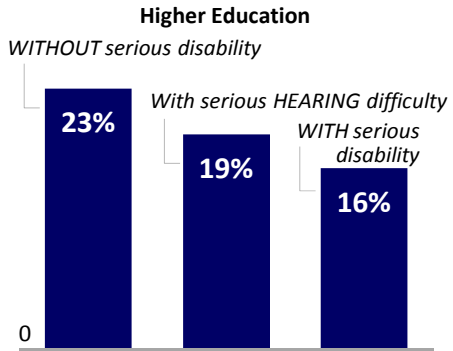
Those with serious hearing difficulties are more likely to be unemployed

Unemployment among persons in civilian labor force aged 16 or over is **twice** as high in persons with serious disabilities (**11.2** percent) than among persons without disabilities (**5** percent). Unemployment among persons with serious hearing difficulties (**7.7** percent) is lower than for all persons with disabilities, but still 50 percent higher than among non-disabled.



Those with serious hearing difficulties are more likely to finish high school, less likely to finish college

Among those over 25, persons with disabilities were more likely to have completed high school (**80** percent) than persons without disabilities (**70** percent), but were less likely to obtain a bachelor's degree or higher (**16** percent and **23** percent, respectively). Those with hearing difficulties were midway between these two groups: **19** percent have earned a bachelor's degree or higher.



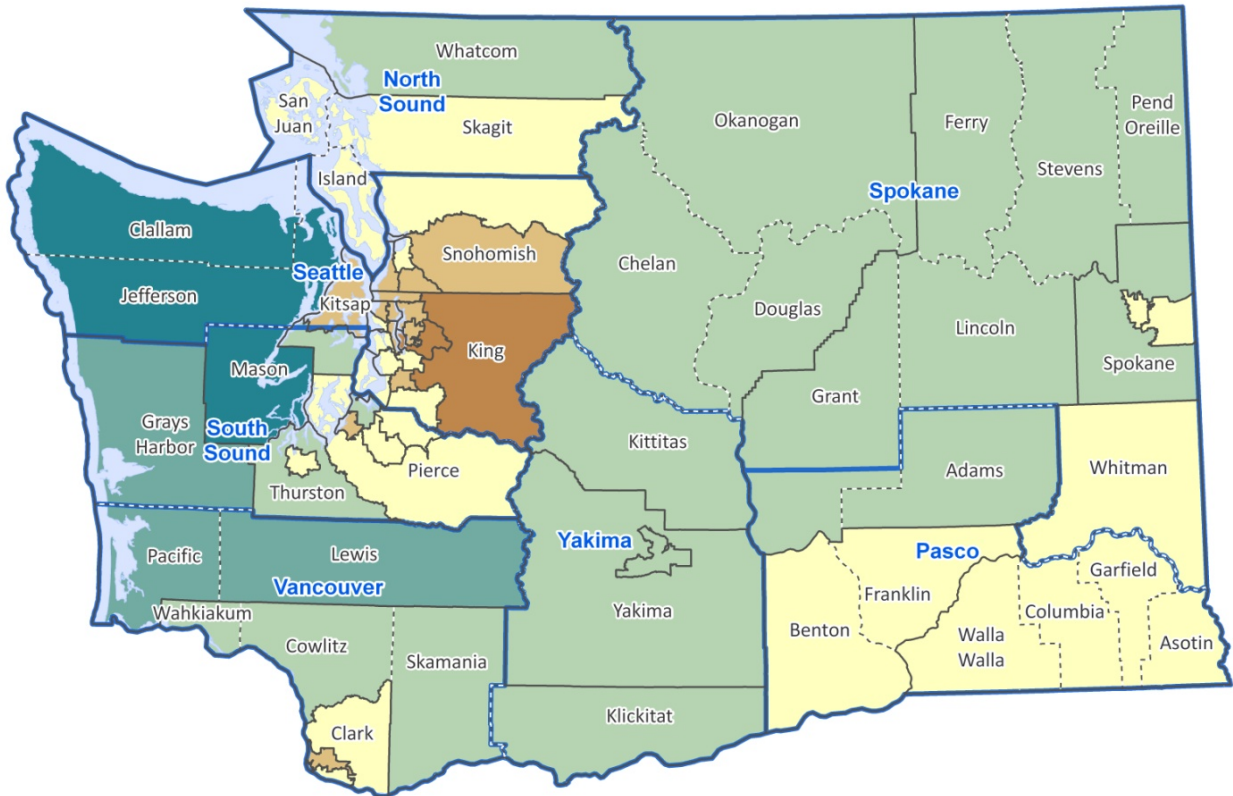
Rural and urban numbers and concentrations of people with serious hearing difficulties

Most Washington residents with serious hearing difficulties live in urban areas (74% -- or 187,329 people).

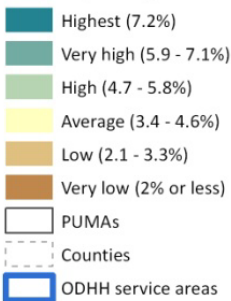
However, both persons with serious disabilities (22 percent) and serious hearing difficulties (26 percent) are more likely than those without disabilities (19 percent) to live in rural areas. Children and youth with serious hearing difficulties are even more likely to be rural residents (33 percent) compared to adults (29 percent) and seniors (24 percent) with serious hearing difficulties. Areas with very high prevalence of serious hearing difficulty or deafness include the Olympic peninsula and the rural south-west. Moderately high prevalence occurs in most of rural Eastern Washington. Urban King, Snohomish and Kitsap counties have low or very low prevalence of serious hearing difficulties.

Persons with serious hearing difficulty or deafness as a percent of the general population

By PUBLIC USE MICRODATA AREA



Percent by PUMA, 2008



DATA NOTES: Persons with serious hearing difficulty or deafness as a percentage of the total population, by Public Use Microdata Area (PUMA). PUMAs are statistical areas with at least 100,000 residents created by the US Census Bureau for data reporting and analysis. Large urban counties may have several PUMAs. In rural areas, a single PUMA can cover several counties.

Prevalence was mapped based on standard deviations (SD) from the mean:
 Highest over 2.5 SD • Very high 1.5 to 2.5 SD • High 0.5 to 1.5 SD
 Average -0.5 to 0.5 SD • Low -0.5 to -1.5 SD • Very low under -1.5 SD

SOURCES: The 2008 American Community Survey (ACS) conducted by the US Census Bureau (see <http://www.census.gov/acs/www/>). County and PUMA boundaries from US Census Bureau 2009 TIGER files.

Map generated by Washington State Department of Social and Health Services • Planning, Performance and Accountability • Research and Data Analysis Division • Geographic Research and Information Team • Olympia, Washington • December 2010.

Comparisons with national estimates of the deaf and hard of hearing

Until 2008, when the American Community Survey began to separate vision and hearing difficulties, it was impossible to generate any direct state, county or city estimates of persons with serious hearing difficulties. Therefore, the Deaf community has used national surveys to estimate local need.

Ross Mitchell, of the Gallaudet Research Institute, analyzed several national health and program participation surveys to produce national estimates of the prevalence of deafness and severe hearing disability. These estimates can be applied to local populations. He primarily analyzed the Survey on Income and Program Participation (SIPP) and the National Health Interview Survey (NHIS) (Mitchell 2005, <http://research.gallaudet.edu/Demographics/deaf-US.php>).

Mitchell's summary produced the following national estimates:

- 2 to 4 of every 1,000 people are “functionally deaf.”
- 9 to 22 out of every 1000 people are deaf or have a serious hearing impairment.
- 37 to 140 out of every 1000 people have some kind of hearing loss.

This paper reports a prevalence rate that fits neatly into this series:

- **About 40 out of every 1000 people are deaf or have serious difficulty hearing.**

The differences between the estimates shown in Mitchell's paper reflect the exact questions and methodology of each survey. The SIPP estimates are generally the lower ones; they ask about hearing loss that cannot be corrected with hearing aids.

All of these are self-reported conditions (or, for children, reported by their parents). None are directly based on hearing tests or audiometric scales.

Why use the American Community Survey?

There are several advantages to the American Community Survey that led the authors to choose it over the national surveys.

- The ACS is administered to a large representative sample of Washington residents. This allows us to report directly on local differences that cannot be readily estimated from national surveys. For example, the high prevalence of serious hearing difficulty among American Indian residents could not be discerned from the national surveys.
- The ACS is repeated each year. This will allow us to track the prevalence of disability as the baby boom cohort ages and other demographic conditions change.
- Several years of ACS data can readily be combined to allow for estimates at the county and city scale. This is not possible yet, because the new questions only began in 2008 but it will be possible in two or three more years.

The ACS has many data limitations, and there is still much to be learned from the national surveys, which ask more detailed questions. The ACS does not distinguish between “deafness” and “serious hearing difficulty.” It does not include actual hearing tests. It does not discuss the onset of the hearing difficulty—or the extent of that difficulty. It does not ask directly about participation in the Deaf community. However, for prevalence and description, it is by far the best option.

People with both serious hearing and vision difficulty

The 2008 American Community Survey for Washington State asked about each member of the household: “Is this person deaf or does he/she have serious difficulty hearing?” and “Is this person blind or does he/she have serious difficulty seeing even when wearing glasses?”

The following estimates are based on the persons for whom that answer to BOTH questions was “yes”—the persons with serious hearing and vision difficulty.

In general, conditions were worse for those who had serious hearing and vision difficulty, compared with those who had serious hearing difficulty as a total group. They were more likely to be living in poverty, less likely to have completed high school or attained other degrees, less likely to be in the labor force, and if employed, they earned less money.

Seven out of 1000 Washington residents (46,174 persons) had both serious hearing and vision difficulty. Of those people:

- ***Demographics of those with serious hearing and vision difficulty***
 - 61 percent (28,068 persons) were 65 or older.
 - 47 percent (21,803 persons) were male.
 - 79 percent (36,505 persons) were white and not Hispanic.
 - 21 percent were persons of minority race or ethnicity.
- ***Education of those 43,307 persons older than 25 with serious hearing and vision difficulty***
 - 24 percent (10,432 persons) had not completed high school.
 - 37 percent (15,832 persons) had a high school degree or diploma and no other school.
 - 20 percent (8,742 persons) had some college but no college degree.
 - 8 percent (3,337 persons) had an associate degree but no higher degree.
 - 9 percent (3,996 persons) had a bachelor’s degree, no post-bachelor’s degrees.
 - 2 percent (968 persons) had a graduate or professional degree.
- ***Employment, income and poverty status of those with serious hearing and vision difficulty***
 - 88 percent of civilian persons aged 16 or older (39,314 persons) were not in the labor force.
 - 9 percent of civilians aged 16 or older (4,087 persons) were employed.
 - 2.5 percent of civilian persons aged 16 or older (1,127 persons) were unemployed.
 - The unemployment rate of civilian persons with serious hearing and vision difficulty was 6.6%
 - Among those employed, the average earned income was \$25,563.
 - Average household income, however, was \$44,182
 - 29 percent (9,304 persons) lived in households below 100% of the Federal Poverty Level (FPL).
 - 46 percent (14,433 persons) lived in households between 100% and 250% of the FPL.

TABLE 1.

COUNTS: Demographic and socio-economic characteristics of Washington residents by disability status

	Vision difficulty only						
	Hearing difficulty only						Total
	Both hearing and vision difficulty			Total			
	Persons without disabilities			Persons with disabilities			
	Total persons			PERSONS WITH HEARING DIFFICULTY			
POPULATION	6,549,224	815,546	5,733,678	262,481	46,174	216,307	99,517
<i>Age</i>							
Children, 0 to 17 years old	1,547,510	60,605	1,486,905	9,663	1,892	7,771	7,984
Adults, 18 to 64 years old	4,221,407	443,559	3,777,848	107,344	16,214	91,130	60,408
Seniors, 65 years old and over	780,307	311,382	468,925	145,474	28,068	117,406	31,125
<i>Gender</i>							
Male	3,267,465	408,259	2,859,206	159,121	21,803	137,318	44,752
Female	3,281,759	407,287	2,874,472	103,360	24,371	78,989	54,765
<i>Race and Hispanic Origin (*)</i>							
White, not Hispanic, one race only	4,922,150	656,622	4,265,528	225,112	36,505	188,607	74,712
Hispanic, any race	642,959	48,333	594,626	10,336	2,647	7,689	8,309
Black, one or more races	293,436	37,980	255,456	6,011	1,703	4,308	5,581
American Indian or Alaska Native, one or more races	191,064	36,501	154,563	9,850	2,009	7,841	6,276
Asian, one or more races	527,678	40,209	487,469	11,196	3,252	7,944	5,789
Pacific Islander, one or more races	44,420	3,084	41,336	680	0	680	498
Average household size	3.27	2.58	3.39	2.31	2.34	2.31	2.75
Persons in households	6,405,562	756,212	5,649,350	246,781	39,657	207,124	92,794
Persons in group quarters	143,662	59,334	84,328	15,700	6,517	9,183	6,723
Number of households	1,958,887	293,105	1,665,782	106,612	16,947	89,664	33,743
Education	6,287,561	717,564	5,569,997	247,049	43,307	203,742	86,937
Less than high school	1,838,368	140,215	1,698,153	47,660	10,432	37,228	17,258
High-school diploma or equivalent	1,229,475	218,126	1,011,349	76,070	15,832	60,238	25,122
Some college, no degree	1,356,710	190,294	1,166,416	59,708	8,742	50,966	25,056
Associate degree	453,337	54,523	398,814	17,420	3,337	14,083	7,013
Bachelor's degree	935,395	75,893	859,502	30,178	3,996	26,182	7,852
Graduate or professional degree	474,276	38,513	435,763	16,013	968	15,045	4,636
Ability to speak English	1,006,479	92,804	913,675	24,853	6,433	18,420	16,593
Speak English well or very well	769,842	56,391	713,451	15,943	3,723	12,220	9,133
Speak English poorly or not at all	236,637	36,413	200,224	8,910	2,710	6,200	7,460
Employment status	5,118,706	763,545	4,355,161	253,883	44,528	209,355	91,965
Employed	3,217,870	194,308	3,023,562	69,994	4,087	65,907	27,421
Unemployed	184,287	24,509	159,778	5,811	1,127	4,684	3,906
Not in labor force	1,716,549	544,728	1,171,821	178,078	39,314	138,764	60,638
Income							
Average household income	\$83,034	\$55,343	\$86,642	\$58,745	\$44,182	\$61,502	\$53,593
Average personal earnings	\$42,537	\$30,503	\$43,412	\$37,824	\$25,563	\$38,811	\$30,751
Poverty status	5,683,794	621,632	5,062,162	219,411	31,734	187,677	74,541
At or below 100% of poverty level	732,435	154,358	578,077	31,537	9,304	22,233	20,759
101 to 250% of poverty level	1,492,483	234,036	1,258,447	73,061	14,433	58,628	31,023
251% of and above	4,191,311	387,596	3,803,715	146,350	17,301	129,049	43,518
Residing in	6,405,562	718,820	5,686,742	237,155	37,748	199,407	88,385
Owner-occupied housing	4,379,308	448,214	3,931,094	167,895	22,823	145,072	48,856
Renter-occupied housing	2,026,254	270,606	1,755,648	69,260	14,925	54,335	39,529
Citizenship	6,549,224	815,546	5,733,678	262,481	46,174	216,307	99,517
US citizen	6,091,315	782,763	5,308,552	253,649	43,827	209,822	93,165
Not a US citizen	457,909	32,783	425,126	8,832	2,347	6,485	6,352

*The sum of all racial-ethnic groups may not equal 100% because all categories except "White, not Hispanic, one race only" may include multiple races.

NOTES: "Hearing difficulty" indicates that the respondent is deaf or has serious difficulty hearing. "Visual difficulty" indicates that the respondent is blind or has serious difficulty seeing even with corrective lenses. In 2008 ACS, hearing or visual disability status was determined for persons of any age (in earlier ACS surveys and 2000 Census it was determined for persons ages 5 years and over). Level of education is determined for persons 25 years old and over; Ability to speak English is determined for persons 5 years old and over who speak other language(s) at home; Employment status is determined for civilian persons 16 years old and over. **DATA SOURCES:** The data come from the 2008 American Community Survey (ACS) conducted by the US Census Bureau (<http://www.census.gov/acs/www/UseData/Compass/presentations.html>). The 2008 ACS microdata have been accessed via DataFerrett, an online data extraction program developed by the US Census Bureau (<http://dataferrett.census.gov/>).

TABLE 2.

PERCENT SHARE: Demographic and socio-economic characteristics of Washington residents by disability status

	Vision difficulty only						
	Persons without disabilities			Hearing difficulty only		Total	
				Both hearing and vision difficulty			
	Persons with disabilities			PERSONS WITH HEARING DIFFICULTY			
Total persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0
POPULATION	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Age</i>							
Children, 0 to 17 years old	23.6	7.4	25.9	3.7	4.1	3.6	8.0
Adults, 18 to 64 years old	64.5	54.4	65.9	40.9	35.1	42.1	60.7
Seniors, 65 years old and over	11.9	38.2	8.2	55.4	60.8	54.3	31.3
<i>Gender</i>							
Male	49.9	50.1	49.9	60.6	47.2	63.5	45.0
Female	50.1	49.9	50.1	39.4	52.8	36.5	55.0
<i>Race and Hispanic Origin (*)</i>							
White, not Hispanic, one race only	75.2	80.5	74.4	85.8	79.1	87.2	75.1
Hispanic, any race	9.8	5.9	10.4	3.9	5.7	3.6	8.3
Black, one or more races	4.5	4.7	4.5	2.3	3.7	2.0	5.6
American Indian or Alaska Native, one or more races	2.9	4.5	2.7	3.8	4.4	3.6	6.3
Asian, one or more races	8.1	4.9	8.5	4.3	7.0	3.7	5.8
Pacific Islander, one or more races	0.7	0.4	0.7	0.3	0.0	0.3	0.5
<i>Households & group quarters</i>							
Persons in households	97.8	92.7	98.5	94.0	85.9	95.8	93.2
Persons in group quarters	2.2	7.3	1.5	6.0	14.1	4.2	6.8
Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than high school	29.2	19.5	30.5	19.3	24.1	18.3	19.9
High-school diploma or equivalent	19.6	30.4	18.2	30.8	36.6	29.6	28.9
Some college, no degree	21.6	26.5	20.9	24.2	20.2	25.0	28.8
Associate degree	7.2	7.6	7.2	7.1	7.7	6.9	8.1
Bachelor's degree	14.9	10.6	15.4	12.2	9.2	12.9	9.0
Graduate or professional degree	7.5	5.4	7.8	6.5	2.2	7.4	5.3
Ability to speak English	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Speak English well or very well	76.5	60.8	78.1	64.1	57.9	66.3	55.0
Speak English poorly or not at all	23.5	39.2	21.9	35.9	42.1	33.7	45.0
Employment status	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employed	62.9	25.4	69.4	27.6	9.2	31.5	29.8
Unemployed	3.6	3.2	3.7	2.3	2.5	2.2	4.2
Not in labor force	33.5	71.3	26.9	70.1	88.3	66.3	65.9
<i>Unemployment rate, percent</i>	5.4	11.2	5.0	7.7	21.6	6.6	12.5
Poverty status	100.0	100.0	100.0	100.0	100.0	100.0	100.0
At or below 100% of poverty level	12.9	24.8	11.4	14.4	29.3	11.8	27.8
101 to 250% of poverty level	26.3	37.6	24.9	33.3	45.5	31.2	41.6
251% of and above	73.7	62.4	75.1	66.7	54.5	68.8	58.4
Residing in	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owner-occupied housing	68.4	62.4	69.1	70.8	60.5	72.8	55.3
Renter-occupied housing	31.6	37.6	30.9	29.2	39.5	27.2	44.7
Citizenship	100.0	100.0	100.0	100.0	100.0	100.0	100.0
US citizen	93.0	96.0	92.6	96.6	94.9	97.0	93.6
Not a US citizen	7.0	4.0	7.4	3.4	5.1	3.0	6.4

*The sum of all racial-ethnic groups may not equal 100% because all categories except "White, not Hispanic, one race only" may include multiple races.

NOTES: "Hearing difficulty" indicates that the respondent is deaf or has serious difficulty hearing. "Visual difficulty" indicates that the respondent is blind or has serious difficulty seeing even with corrective lenses. In 2008 ACS, hearing or visual disability status was determined for persons of any age (in earlier ACS surveys and 2000 Census it was determined for persons ages 5 years and over). Level of education is determined for persons 25 years old and over; Ability to speak English is determined for persons 5 years old and over who speak other language(s) at home; Employment status is determined for civilian persons 16 years old and over. **DATA SOURCES:** The data come from the 2008 American Community Survey (ACS) conducted by the US Census Bureau (<http://www.census.gov/acs/www/UseData/Compass/presentations.html>). The 2008 ACS microdata have been accessed via DataFerrett, an online data extraction program developed by the US Census Bureau (<http://dataferrett.census.gov/>).

TABLE 3.

DISABILITY PREVALENCE RATES among Washington residents by demographic and socio-economic characteristics

	Vision difficulty only						
				Hearing difficulty only			
				Both hearing and vision difficulty			
	Persons without disabilities			Total			
Persons with disabilities		PERSONS WITH HEARING DIFFICULTY					
POPULATION	Total persons	12.5	87.5	4.0	0.7	3.3	1.5
<i>Age</i>							
Children, 0 to 17 years old	100.0	3.9	96.1	0.6	0.1	0.5	0.5
Adults, 18 to 64 years old	100.0	10.5	89.5	2.5	0.4	2.2	1.4
Seniors, 65 years old and over	100.0	39.9	60.1	18.6	3.6	15.0	4.0
<i>Gender</i>							
Male	100.0	12.5	87.5	4.9	0.7	4.2	1.4
Female	100.0	12.4	87.6	3.1	0.7	2.4	1.7
<i>Race and Hispanic Origin (*)</i>							
White, not Hispanic, one race only	100.0	13.3	86.7	4.6	0.7	3.8	1.5
Hispanic, any race	100.0	7.5	92.5	1.6	0.4	1.2	1.3
Black, one or more races	100.0	12.9	87.1	2.0	0.6	1.5	1.9
American Indian or Alaska Native, one or more races	100.0	19.1	80.9	5.2	1.1	4.1	3.3
Asian, one or more races	100.0	7.6	92.4	2.1	0.6	1.5	1.1
Pacific Islander, one or more races	100.0	6.9	93.1	1.5	0.0	1.5	1.1
<i>Households & group quarters</i>							
Persons in households	100.0	11.8	88.2	3.9	0.6	3.2	1.4
Persons in group quarters	100.0	41.3	58.7	10.9	4.5	6.4	4.7
Education							
Less than high school	100.0	7.6	92.4	2.6	0.6	2.0	0.9
High-school diploma or equivalent	100.0	17.7	82.3	6.2	1.3	4.9	2.0
Some college, no degree	100.0	14.0	86.0	4.4	0.6	3.8	1.8
Associate degree	100.0	12.0	88.0	3.8	0.7	3.1	1.5
Bachelor's degree	100.0	8.1	91.9	3.2	0.4	2.8	0.8
Graduate or professional degree	100.0	8.1	91.9	3.4	0.2	3.2	1.0
Ability to speak English							
Speak English well or very well	100.0	7.3	92.7	2.1	0.5	1.6	1.2
Speak English poorly or not at all	100.0	15.4	84.6	3.8	1.1	2.6	3.2
Employment status							
Employed	100.0	6.0	94.0	2.2	0.1	2.0	0.9
Unemployed	100.0	13.3	86.7	3.2	0.6	2.5	2.1
Not in labor force	100.0	31.7	68.3	10.4	2.3	8.1	3.5
Income							
Average household income	100.0	66.7	104.3	70.7	53.2	74.1	64.5
Average personal earnings	100.0	71.7	102.1	88.9	60.1	91.2	72.3
Poverty status							
At or below 100% of poverty level	100.0	21.1	78.9	4.3	1.3	3.0	2.8
101 to 250% of poverty level	100.0	15.7	84.3	4.9	1.0	3.9	2.1
251% of and above	100.0	9.2	90.8	3.5	0.4	3.1	1.0
Residing in							
Owner-occupied housing	100.0	10.2	89.8	3.8	0.5	3.3	1.1
Renter-occupied housing	100.0	13.4	86.6	3.4	0.7	2.7	2.0
Citizenship							
US citizen	100.0	12.9	87.1	4.2	0.7	3.4	1.5
Not a US citizen	100.0	7.2	92.8	1.9	0.5	1.4	1.4

*The sum of all racial-ethnic groups may not equal 100% because all categories except "White, not Hispanic, one race only" may include multiple races.

NOTES: "Hearing difficulty" indicates that the respondent is deaf or has serious difficulty hearing. "Visual difficulty" indicates that the respondent is blind or has serious difficulty seeing even with corrective lenses. In 2008 ACS, hearing or visual disability status was determined for persons of any age (in earlier ACS surveys and 2000 Census it was determined for persons ages 5 years and over). Level of education is determined for persons 25 years old and over; Ability to speak English is determined for persons 5 years old and over who speak other language(s) at home; Employment status is determined for civilian persons 16 years old and over. **DATA SOURCES:** The data come from the 2008 American Community Survey (ACS) conducted by the US Census Bureau (<http://www.census.gov/acs/www/UseData/Compass/presentations.html>). The 2008 ACS microdata have been accessed via DataFerrett, an online data extraction program developed by the US Census Bureau (<http://dataferrett.census.gov/>).

TABLE 4.

COUNTS AND RATES: Disability prevalence among Washington residents by age and race | ethnicity

	Persons without disabilities			Persons with disabilities			Total	
	Total persons			PERSONS WITH HEARING DIFFICULTY				
				Hearing difficulty only		Vision difficulty only		
				Both hearing and vision difficulty				
NUMBER OF PERSONS, All Ages	6,549,224	815,546	5,733,678	262,481	46,174	216,307	99,517	
<i>Children (between 0 to 17 years)</i>								
White only, not Hispanic	1,011,476	42,741	968,735	7,213	1,390	5,823	5,510	
Hispanic, any race	255,227	7,425	247,802	1,359	502	857	1,196	
Black, one or more races	106,448	5,023	101,425	178	0	178	649	
American Indian or Alaska Native, one or more races	60,523	3,481	57,042	323	79	244	472	
Asian, one or more races	138,283	3,081	135,202	669	0	669	309	
Pac Islander, one or more races	16,018	225	15,793	0	0	0	51	
<i>Adults (between 18 and 64 years)</i>								
White only, not Hispanic	3,220,888	343,463	2,877,425	86,718	10,643	76,075	43,336	
Hispanic, any race	368,503	32,497	336,006	6,524	1,585	4,939	5,014	
Black, one or more races	170,689	25,016	145,673	3,975	1,350	2,625	3,805	
American Indian or Alaska Native, one or more races	116,684	25,203	91,481	5,630	1,376	4,254	4,824	
Asian, one or more races	346,866	19,454	327,412	4,419	1,123	3,296	3,609	
Pac Islander, one or more races	26,511	2,194	24,317	457	0	457	390	
<i>Senior (65 years or older)</i>								
White only, not Hispanic	689,786	270,418	419,368	131,181	24,472	106,709	25,866	
Hispanic, any race	19,229	8,411	10,818	2,453	560	1,893	2,099	
Black, one or more races	16,299	7,941	8,358	1,858	353	1,505	1,127	
American Indian or Alaska Native, one or more races	13,857	7,817	6,040	3,897	554	3,343	980	
Asian, one or more races	42,529	17,674	24,855	6,108	2,129	3,979	1,871	
Pac Islander, one or more races	1,891	665	1,226	223	0	223	57	
PREVELANCE RATES								
<i>Children (between 0 to 17 years)</i>								
White only, not Hispanic	100.0%	4.2%	95.8%	0.7%	0.1%	0.6%	0.5%	
Hispanic, any race	100.0%	2.9%	97.1%	0.5%	0.2%	0.3%	0.5%	
Black, one or more races	100.0%	4.7%	95.3%	0.2%	0.0%	0.2%	0.6%	
American Indian or Alaska Native, one or more races	100.0%	5.8%	94.2%	0.5%	0.1%	0.4%	0.8%	
Asian, one or more races	100.0%	2.2%	97.8%	0.5%	0.0%	0.5%	0.2%	
Pac Islander, one or more races	100.0%	1.4%	98.6%	0.0%	0.0%	0.0%	0.3%	
<i>Adults (between 18 and 64 years)</i>								
White only, not Hispanic	100.0%	10.7%	89.3%	2.7%	0.3%	2.4%	1.3%	
Hispanic, any race	100.0%	8.8%	91.2%	1.8%	0.4%	1.3%	1.4%	
Black, one or more races	100.0%	14.7%	85.3%	2.3%	0.8%	1.5%	2.2%	
American Indian or Alaska Native, one or more races	100.0%	21.6%	78.4%	4.8%	1.2%	3.6%	4.1%	
Asian, one or more races	100.0%	5.6%	94.4%	1.3%	0.3%	1.0%	1.0%	
Pac Islander, one or more races	100.0%	8.3%	91.7%	1.7%	0.0%	1.7%	1.5%	
<i>Seniors (65 years or older)</i>								
White only, not Hispanic	100.0%	39.2%	60.8%	19.0%	3.5%	15.5%	3.7%	
Hispanic, any race	100.0%	43.7%	56.3%	12.8%	2.9%	9.8%	10.9%	
Black, one or more races	100.0%	48.7%	51.3%	11.4%	2.2%	9.2%	6.9%	
American Indian or Alaska Native, one or more races	100.0%	56.4%	43.6%	28.1%	4.0%	24.1%	7.1%	
Asian, one or more races	100.0%	41.6%	58.4%	14.4%	5.0%	9.4%	4.4%	
Pac Islander, one or more races	100.0%	35.2%	64.8%	11.8%	0.0%	11.8%	3.0%	

*The sum of all racial-ethnic groups may not equal 100% because all categories except "White, not Hispanic, one race only" may include multiple races.

NOTES: "Hearing difficulty" indicates that the respondent is deaf or has serious difficulty hearing. "Visual difficulty" indicates that the respondent is blind or has serious difficulty seeing even with corrective lenses. In 2008 ACS, hearing or visual disability status was determined for persons of any age (in earlier ACS surveys and 2000 Census it was determined for persons ages 5 years and over). Level of education is determined for persons 25 years old and over; Ability to speak English is determined for persons 5 years old and over who speak other language(s) at home; Employment status is determined for civilian persons 16 years old and over. **DATA SOURCES:** The data come from the 2008 American Community Survey (ACS) conducted by the US Census Bureau (<http://www.census.gov/acs/www/UseData/Compass/presentations.html>). The 2008 ACS microdata have been accessed via DataFerrett, an online data extraction program developed by the US Census Bureau (<http://dataferrett.census.gov/>).

TABLE 5.

URBAN/RURAL COUNTS AND RATES: Disability status of urban and rural Washington residents

With a hearing difficulty					
	Washington	Urban Areas	Rural Areas	Percent Urban	Percent Rural
0-17 years	10,086	6,715	3,371	67%	33%
18-64 years	101,352	71,833	29,519	71%	29%
65+ years	143,181	108,781	34,400	76%	24%
All ages	254,619	187,329	67,290	74%	26%

With a vision difficulty					
	Washington	Urban Areas	Rural Areas	Percent Urban	Percent Rural
0-17 years	10,325	7,893	2,432	76%	24%
18-64 years	65,860	53,355	12,505	81%	19%
65+ years	53,729	43,313	10,416	81%	19%
All ages	129,914	104,561	25,353	80%	20%

With any disability					
	Washington	Urban Areas	Rural Areas	Percent Urban	Percent Rural
0-17 years	59,183	47,280	11,903	80%	20%
18-64 years	437,137	339,442	97,695	78%	22%
65+ years	297,244	232,459	64,785	78%	22%
All ages	793,564	619,181	174,383	78%	22%

No disability					
	Washington	Urban Areas	Rural Areas	Percent Urban	Percent Rural
0-17 years	1,510,357	1,207,776	302,581	80%	20%
18-64 years	3,758,215	3,060,260	697,955	81%	19%
65+ years	484,013	373,993	110,020	77%	23%
All ages	5,752,585	4,642,029	1,110,556	81%	19%

With any disability and in poverty					
	Washington	Urban Areas	Rural Areas	Percent Urban	Percent Rural
0-17 years	15,163	12,516	2,647	83%	17%
18-64 years	115,752	95,767	19,985	83%	17%
65+ years	33,821	28,378	5,443	84%	16%
All ages	164,736	136,661	28,075	83%	17%

Median earnings					
	Washington	Urban Areas	Rural Areas	Ratio, Urban to State	Ratio, Rural to State
All persons:	\$ 30,895	\$ 30,984	\$ 30,538	100%	99%
With a disability:	\$ 22,526	\$ 21,969	\$ 24,700	98%	110%
<i>Male</i>	\$ 27,224	\$ 26,552	\$ 30,246	98%	111%
<i>Female</i>	\$ 17,064	\$ 17,363	\$ 15,088	102%	88%

NOTES: "Hearing difficulty" indicates that the respondent is deaf or has serious difficulty hearing. "Visual difficulty" indicates that the respondent is blind or has serious difficulty seeing even with corrective lenses. In 2008 ACS, hearing or visual disability status was determined for persons of any age (in earlier ACS surveys and 2000 Census it was determined for persons ages 5 years and over).

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Poverty status is determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old; Median earnings are determined for persons 16 years old and over with earnings in the past 12 months.

ATTENTION! The data in Table 5 are representative of civilian noninstitutionalized population only, while the data in Tables 1 through 4 are for the total population, including persons in institutions such as nursing homes, and the military. As a result, there are some differences between numbers in Tables 1 through 4 versus Table 5.

DATA SOURCES: The data come from the 2008 American Community Survey (ACS) conducted by the US Census Bureau (<http://www.census.gov/acs/www/UseData/Compass/presentations.html>). The 2008 ACS summary Tables B18102, B18103, B18108, C18130, and B18140 were accessed via the American FactFinder (<http://factfinder.census.gov/>).

DATA SOURCES

The data come from the 2008 American Community Survey (ACS) conducted by the US Census Bureau (<http://www.census.gov/acs/www/UseData/Compass/presentations.html>). The ACS collects data throughout the entire year; questionnaires are sent to 3 million addresses nationwide every year. Due to a small sample size, *annual* estimates are available only for geographic areas with 65,000+ residents.

The 2008 ACS microdata data have been accessed via DataFerrett, an online data extraction program developed by the US Census Bureau (<http://dataferrett.census.gov/>). The 2008 ACS summary Tables B18102, B18103, B18108, C18130, and B18140 were accessed via the American FactFinder (<http://factfinder.census.gov/>).

DEFINITIONS

Disability is identified when a person has serious difficulty in one or more of six areas of functioning: *vision*, *hearing*, *ambulation* (walking or climbing stairs), *cognition* (concentrating, remembering, or making decisions), *self-care* (dressing and bathing), and *independent living* (doing errands alone such as visiting a doctor’s office or shopping). In the 2008 ACS, people under 5 years were classified as having a disability if they were reported to have either a hearing or vision difficulty. People aged 5 to 14 were classified as having a disability if they were reported to have any one of the six limitations except the independent living limitation. People aged 15 and over were classified as having a disability if they reported any one of the six limitations.

Data Limitation—The 2008 ACS questions on disability represent a major break from earlier years of the ACS. The Census Bureau does not recommend any comparisons of the 2008 disability data to disability data from the 1999-2007 ACS and the 2000 Census (see “2006 ACS Content Test Evaluation Report Covering Disability” (http://www.census.gov/acs/www/AdvMeth/content_test/P4_Disability.pdf)).

Employment status for persons 16 years old and over is reported for the *reference week*: the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week is not the same for all respondents since the interviewing was conducted over a 12-month period. Employment status is determined for civilian labor force.

Income and **Poverty status** are reported for the *past 12 months* rather than a single calendar year. As a result, the data cover a period of 23 months: from January 2007 through November 2008 (respondents answering the survey in January 2008 reported their income for January through December of 2007 while respondents answering it in December 2008 reported their income for December 2007 through November 2008).

Poverty status is determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. The Census Bureau uses dollar thresholds that vary by family size and number of children to determine who is in poverty. If a family’s total income is less than the appropriate threshold, then that family and every individual in it are considered to be in poverty. The same logic applies to people living alone. The poverty thresholds are revised annually to account for inflation. The thresholds are the same for all parts of the U.S.; they are not adjusted for regional, state, or local variations in the cost of living.

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