

SPARE BEDROOM DATA FOR OREGON AND WASHINGTON

The tables below shows numbers of homes with various numbers of bedrooms and various numbers of residents in Oregon and Washington, and in selected regions within these states. Except as noted, these figures are based on 2014-2018 American Community Survey data. We are interested in finding the numbers of spare bedrooms, so each table only shows numbers of homes with more bedrooms than residents. An 'X' in a table indicates homes that have no spare bedrooms and that therefore are not included in the calculations.

I extracted this data using the iPUMS site (<https://sda.usa.ipums.org>). Since the data source doesn't provide exact numbers of bedrooms in houses with 5 or more bedrooms, I treat each house as having the lowest number of bedrooms in the range shown. For example, I treat each 7-11 bedroom house as having exactly 7 bedrooms. To calculate the numbers of spare bedrooms, I assume that each resident gets one bedroom, so the number of spare bedrooms in a home is the number of bedrooms minus the number of residents. All numbers below are approximations based on partial surveys; allow for margins of error.

I. OREGON STATEWIDE DATA

TABLE 1: NUMBERS OF OREGON HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5-6 bedrooms	7-11 bedrooms	12+ bedrooms
1 resident	137,413	131,561	24,062	3,984	1,530	255
2 residents	X	269,149	79,963	13,610	1,353	485
3 residents	X	X	43,704	8,036	1,198	147
4 residents	X	X	X	10,602	963	249
5 residents	X	X	X	X	973	375
6 residents	X	X	X	X	1,102	276
7 residents	X	X	X	X	X	87
8 residents	X	X	X	X	X	203
9 residents	X	X	X	X	X	0
10 residents	X	X	X	X	X	23
11 residents	X	X	X	X	X	7
Number of SPARE bedrooms	137,413	532,271	275,816	83,440	26,674	16,551

TOTAL NUMBER OF SPARE BEDROOMS IN OCCUPIED HOMES IN OREGON: 1,072,165

And how many of these spare bedrooms are in owner-occupied homes vs. rentals? To find out, we can generate the table again with a filter to only show owner-occupied homes:

TABLE 2: NUMBERS OF OREGON OWNER-OCCUPIED HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5-6 bedrooms	7-11 bedrooms	12+ bedrooms
1 resident	66,120	110,848	21,179	3,601	743	90
2 residents	X	230,951	75,312	12,571	1,164	347
3 residents	X	X	38,408	7,385	1,018	147
4 residents	X	X	X	9,375	871	223
5 residents	X	X	X	X	690	350
6 residents	X	X	X	X	761	226
7 residents	X	X	X	X	X	69
8 residents	X	X	X	X	X	112
9 residents	X	X	X	X	X	0
10 residents	X	X	X	X	X	23
11 residents	X	X	X	X	X	7
Number of SPARE bedrooms	66,120	452,647	252,569	76,262	19,104	12,219

TOTAL NUMBER OF SPARE BEDROOMS IN OWNER-OCCUPIED HOMES IN OREGON: 878,921

According to the 2017 data (at <https://factfinder.census.gov>), 61.7% of occupied homes in Oregon are owner-occupied, and the other 38.3% are rentals. But among Oregon's occupied homes, those that are owner-occupied have 82% of the spare bedrooms, whereas rental units have only 18%. Owner-occupied homes tend to be considerably larger and emptier than rental homes, on average.

How many empty bedrooms are there in Oregon's vacant homes? Let's calculate.

The 2017 data (at <https://factfinder.census.gov>) shows 1,733,041 housing units total, including 161,410 vacant units, or 9.3% of the total.

The housing units included 171,001 one-bedroom homes, 481,094 two-bedroom homes, 722,838 three-bedroom homes, 245,106 four-bedroom homes, and 61,591 homes with five or more bedrooms.

Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 9.3% vacancy rate for the state, we can estimate 15,903 vacant one-bedroom homes, 44,741 vacant two-bedroom homes, 67,223 vacant three-bedroom homes, 22,794 vacant four-bedroom homes, and 5,727 vacant homes with five or more bedrooms.

That gives us at least 426,865 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms!
 Adding this to the 1,072,165 spare bedrooms in occupied homes gives us:

TOTAL NUMBER OF EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES IN OREGON: 1,499,030

II. LANE COUNTY AND THE CITY OF EUGENE

(Based on 2013-2017 ACS data)

TABLE 3: NUMBERS OF HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS IN LANE COUNTY, OREGON

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5-6 bedrooms	7-9 bedrooms	10-11 bedrooms	12+ bedrooms
1 resident	13,627	14,167	2,163	333	63	38	24
2 residents	X	27,487	6,372	1,174	104	48	13
3 residents	X	X	3,346	715	75	31	16
4 residents	X	X	X	521	3	32	0
5 residents	X	X	X	X	145	0	0
6 residents	X	X	X	X	82	34	64
7 residents	X	X	X	X	X	18	16
8 residents	X	X	X	X	X	0	14
9 residents	X	X	X	X	X	0	0
10 residents	X	X	X	X	X	X	23
Number of spare bedrooms	13,627	55,821	22,579	6,805	1,579	1,325	1,104

TOTAL NUMBER OF SPARE BEDROOMS IN OCCUPIED HOMES IN LANE COUNTY: 102,840

In Lane County, there were 160,440 housing units total, including 11,688 vacant units, or 7.3% of the total.

--The housing units included 15,853 one-bedroom homes, 44,064 two-bedroom homes, 71,692 three-bedroom homes, 19,324 four-bedroom homes, and 4,346 homes with five or more bedrooms.

--Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 7.3% vacancy rate for the county, we can estimate 1,157 vacant one-bedroom homes, 3,217 vacant two-bedroom homes, 5,234 vacant three-bedroom homes, 1,411 vacant four-bedroom homes, and 317 vacant homes with five or more bedrooms.

--That gives us at least 30,522 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms!
 --Adding this to the total number of spare bedrooms in occupied homes gives us:

TOTAL NUMBER OF EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES IN LANE COUNTY: 133,362

What about just in the city of Eugene?

For the city of Eugene specifically, there were 71,816 housing units total, including 4,481 vacant units, or 6.2% of the total.

--The housing units included 9,431 one-bedroom homes, 19,460 two-bedroom homes, 28,433 three-bedroom homes, 8,875 four-bedroom homes, and 2,055 homes with five or more bedrooms.

--Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 6.2% vacancy rate for the city, we can estimate 585 vacant one-bedroom homes, 1,207 vacant two-bedroom homes, 1,763 vacant three-bedroom homes, 550 vacant four-bedroom homes, and 127 vacant homes with five or more bedrooms.

--That gives us at least 11,123 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms.

--We don't have direct data for the numbers of spare bedrooms in occupied homes in the city of Eugene specifically. But in Lane County as a whole, there were about 3.37 spare bedrooms in occupied homes for each empty bedroom in a vacant home. Assuming that approximately the same ratio holds within the city of Eugene, that gives us 37,485 spare bedrooms in occupied homes, and thus:

A COMBINED TOTAL OF 48,608 EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES WITHIN THE CITY OF EUGENE.

III. THE CITY OF PORTLAND

TABLE 4: NUMBERS OF PORTLAND HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5-6 bedrooms	7-11 bedrooms	12+ bedrooms
1 resident	24,194	15,636	3,598	700	439	84
2 residents	X	28,965	9,711	2,279	257	110
3 residents	X	X	7,144	1,685	185	29
4 residents	X	X	X	1,861	264	81
5 residents	X	X	X	X	186	67
6 residents	X	X	X	X	360	40
7 residents	X	X	X	X	X	0
8 residents	X	X	X	X	X	93

Number of SPARE bedrooms	24,194	60,237	37,360	14,868	6,183	4,014
--------------------------	--------	--------	--------	--------	-------	-------

TOTAL NUMBER OF SPARE BEDROOMS IN OCCUPIED HOMES IN PORTLAND: 146,856

And how many empty bedrooms are there in Portland's vacant homes?

The 2017 data shows 277,499 housing units total, including 16,550 vacant units, or 6% of the total.

The housing units included 45,977 one-bedroom homes, 84,550 two-bedroom homes, 82,115 three-bedroom homes, 34,716 four-bedroom homes, and 10,273 homes with five or more bedrooms.

Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 6% vacancy rate for the city, we can estimate 2,759 vacant one-bedroom homes, 5,073 vacant two-bedroom homes, 4,927 vacant three-bedroom homes, 2,083 vacant four-bedroom homes, and 616 vacant homes with five or more bedrooms.

That gives us at least 39,098 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms!

Adding this to the total number of spare bedrooms in occupied homes gives us:

TOTAL NUMBER OF EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES IN PORTLAND: 185,954

How many more homes in Portland could be used for group living if it were allowed by right in single-family neighborhoods?

Portland's zoning code prohibits more than five unrelated people from sharing a home by right in single-family neighborhoods. How many more homes could be used for group living if this ordinance were repealed, and how many more individuals could be housed?

First scenario: each resident gets a separate bedroom

If the zoning code allowed group living, current owners and occupants of homes with five or more empty bedrooms would have the option of renting out the spare bedrooms to unrelated individuals.

The table above shows that as a very conservative estimate, Portland has at least 1,107 occupied homes with five or more empty bedrooms apiece.

From the table we can determine that these homes include at least 7,561 more bedrooms than residents. So at one additional resident per bedroom, these 1,107 homes could house at least 7,561 more people.

Those numbers include at least 194 occupied homes with ten or more empty bedrooms apiece! These are homes with twelve or more bedrooms apiece, but only one or two occupants. At one additional resident per empty bedroom, these 194 homes alone could house over 2,000 more people!

There are also about 616 vacant homes with five or more bedrooms. If occupied by an average of six residents apiece, these would house 3,696 more people.

Adding the vacant homes to the underoccupied homes, we find 1,723 homes with five or more empty bedrooms apiece, which together could house 11,257 more people if fully occupied.

But not all these big homes are in single-family zones. According to the only stats I've found,

126,139 of Portland's 140,790 single-family houses (90 percent) are in single-family zones. Probably more than 90 percent of the large underoccupied single-family homes are in the single-family zones, because large homes in the multifamily zones can already be used for group living by right! But to be conservative, we'll just figure that 90 percent of the underoccupied homes and spare bedrooms are in the single-family zones. Thus, we can estimate that:

AT ONE RESIDENT PER BEDROOM, LEGALIZING GROUP LIVING IN PORTLAND'S SINGLE-FAMILY ZONES COULD ALLOW FULL OCCUPANCY OF 1,550 MORE HOMES, POTENTIALLY HOUSING UP TO 10,131 MORE PEOPLE.

(The counts of single-family homes by zone are from <https://www.irvingtonpdx.com/topics-of-interest/2016/9/9/the-r25-zone-and-achieving-higher-density-in-portlands-single-family-zones-a-position-paper>. Caveat: The source article is by prominent Irvington NIMBY Jim Heuer, and doesn't explain how he got the data.)

Second scenario: What if residents can share bedrooms?

The calculations above assume that each resident gets his or her own bedroom. But in real-life group living situations such as student housing co-ops, bedrooms are often shared. Let's see what happens if we assume some residents share bedrooms.

The table above shows that Portland has at least 8,226 occupied homes with three or more empty bedrooms apiece. If some of the spare bedrooms were shared by two residents apiece, group living by six or more unrelated people would be an option for these homes.

From the table we can determine that these homes include at least 29,896 more bedrooms than residents. At 1.5 residents per empty bedroom, these 8,226 homes could house at least 44,844 more people.

There are also 2,699 vacant homes with four or more bedrooms apiece, and these homes too could potentially be used for group living with some shared bedrooms. If occupied by just six residents apiece, these would house 16,194 people.

Adding the vacant homes to the underoccupied homes, we find 10,925 homes with three or more empty bedrooms apiece, which together could house 61,038 more people if fully occupied.

As explained above, we'll assume that 90 percent of this capacity is in the single-family zones. This lets us estimate that:

AT 1.5 RESIDENTS PER BEDROOM, LEGALIZING GROUP LIVING IN PORTLAND'S SINGLE FAMILY ZONES COULD ALLOW FULL OCCUPANCY OF 9,832 MORE HOMES, POTENTIALLY HOUSING UP TO 54,934 MORE PEOPLE.

IV. PORTLAND TRI-COUNTY AREA

TABLE 5: NUMBERS OF HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS IN CLACKAMAS, MULTNOMAH, AND WASHINGTON COUNTIES

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5-6 bedrooms	7-11 bedrooms	12+ bedrooms
1 resident	56,367	47,281	10,954	1,898	634	152

2 residents	X	96,055	37,719	7,609	609	354
3 residents	X	X	23,497	5,059	684	48
4 residents	X	X	X	6,643	660	178
5 residents	X	X	X	X	418	231
6 residents	X	X	X	X	640	77
7 residents	X	X	X	X	X	0
8 residents	X	X	X	X	X	130
Number of SPARE bedrooms	56,367	190,617	131,797	47,180	13,041	9,667

TOTAL NUMBER OF SPARE BEDROOMS IN OCCUPIED HOMES IN CLACKAMAS, MULTNOMAH, AND WASHINGTON COUNTIES: 448,669

How many empty bedrooms are there in these three counties' vacant homes?

The 2017 data (at <https://factfinder.census.gov>) shows 724,865 housing units total, including vacant units, or 5.5% of the total.

The housing units included 87,456 one-bedroom homes, 194,424 two-bedroom homes, 262,931 three-bedroom homes, 120,016 four-bedroom homes, and 32,971 homes with five or more bedrooms.

Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 5.5% vacancy rate for the three counties, we can estimate 4,810 vacant one-bedroom homes, 10,693 vacant two-bedroom homes, 14,461 vacant three-bedroom homes, 6,600 vacant four-bedroom homes, and 1,813 vacant homes with five or more bedrooms.

That gives us at least 105,044 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms!

Adding this to the total number of spare bedrooms in occupied homes gives us:

TOTAL NUMBER OF EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES IN CLACKAMAS, MULTNOMAH, AND WASHINGTON COUNTIES: 553,713

V. PORTLAND-VANCOUVER-HILLSBORO METRO AREA

TABLE 6: NUMBERS OF HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS IN THE PORTLAND-VANCOUVER-HILLSBORO METRO AREA

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5-6 bedrooms	7-9 bedrooms	10-11 bedrooms	12+ bedrooms
1 resident	73,193	69,087	14,746	2,455	756	22	152
2 residents	X	140,063	52,294	9,651	806	69	376
3 residents	X	X	32,781	6,992	726	30	53
4 residents	X	X	X	8,957	760	32	178

5 residents	X	X	X	X	732	31	252
6 residents	X	X	X	X	693	0	77
7 residents	X	X	X	X	X	14	0
8 residents	X	X	X	X	X	0	163
9 residents	X	X	X	X	X	9	0
Number of SPARE bedrooms	73,193	278,237	181,607	61,714	15,907	1,358	10,211

TOTAL NUMBER OF SPARE BEDROOMS IN OCCUPIED HOMES IN THE PORTLAND-VANCOUVER-HILLSBORO METRO AREA: 622,227

How many empty bedrooms are there in the metro area's vacant homes?

The 2017 data (at <https://factfinder.census.gov>) shows 966,346 housing units total, including 53,978 vacant units, or 5.6 % of the total.

The housing units included 102,929 one-bedroom homes, 249,334 two-bedroom homes, 373,344 three-bedroom homes, 164,932 four-bedroom homes, and 44,816 homes with five or more bedrooms.

Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 5.6% vacancy rate for the metro area, we can estimate 5,764 vacant one-bedroom homes, 13,962 vacant two-bedroom homes, 20,907 vacant three-bedroom homes, 9,236 vacant four-bedroom homes, and 2,509 vacant homes with five or more bedrooms.

That gives us at least 145,898 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms!

Adding this to the total number of spare bedrooms in occupied homes gives us:

TOTAL NUMBER OF EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES IN THE PORTLAND-VANCOUVER-HILLSBORO METRO AREA: 768,125

VI. WASHINGTON STATEWIDE

Mysteriously, the American Community Survey data does not count more than 10 bedrooms per home in Washington state, whereas it counts up to 12 in Oregon. But the Washington ACS data does distinguish between 5-bedroom homes and 6-bedroom homes, whereas the Oregon ACS data does not. In the table below, we'll treat any home shown to have 10+ bedrooms as having exactly 10.

TABLE 7: NUMBERS OF WASHINGTON HOMES WITH VARIOUS NUMBERS OF BEDROOMS AND RESIDENTS

Homes with	2 bedrooms	3 bedrooms	4 bedrooms	5 bedrooms	6 bedrooms	7-9 bedrooms	10+ bedrooms
1 resident	225,963	194,394	50,056	8,303	657	1,616	571
2 residents	X	423,402	163,706	30,503	919	2,997	1,003

3 residents	X	X	99,482	20,909	576	1,854	710
4 residents	X	X	X	27,169	758	1,953	658
5 residents	X	X	X	X	759	1,859	730
6 residents	X	X	X	X	X	1,290	445
7 residents	X	X	X	X	X	X	264
8 residents	X	X	X	X	X	X	97
9 residents	X	X	X	X	X	X	211
Number of SPARE bedrooms	225,963	812,190	577,062	193,708	10,964	42,964	28,708

TOTAL NUMBER OF SPARE BEDROOMS IN OCCUPIED HOMES IN WASHINGTON: 1,891,559

And how many empty bedrooms are there in Washington's vacant homes?

The 2017 data (at <https://factfinder.census.gov>) shows 3,025,516 housing units total, including 269,816 vacant units, or 8.9% of the total.

The housing units included 349,467 one-bedroom homes, 776,385 two-bedroom homes, 1,137,661 three-bedroom homes, 519,956 four-bedroom homes, and 145,095 homes with five or more bedrooms.

Our data doesn't show separate vacancy rates for homes with specific numbers of bedrooms. But using the overall 8.9% vacancy rate for the state, we can estimate 31,102 vacant one-bedroom homes, 69,098 vacant two-bedroom homes, 101,251 vacant three-bedroom homes, 46,276 vacant four-bedroom homes, and 12,913 vacant homes with five or more bedrooms.

That gives us at least 722,720 empty bedrooms in vacant homes--not counting studio apartments, and not counting bedrooms beyond the fifth in homes with six or more bedrooms!

Adding this to the 1,891,559 spare bedrooms in occupied homes gives us:

TOTAL NUMBER OF EMPTY BEDROOMS IN VACANT AND OCCUPIED HOMES IN WASHINGTON: 2,614,279