

Pet Ownership Calculator

Most communities do not have data on the number of households that own dogs, cats, birds, or horses, nor do they have data on the numbers of these pets in their communities. The following formulas can be used to estimate the number of pet-owning households and pet populations in your community.

These formulas will give you an approximation of the number of pet-owning households and pet populations. These formulas assume that the demographics and rates of pet ownership in your community are similar to national, state, and regional demographics and rates of pet ownership. However, because these formulas use sample survey data, they should not be considered 100% accurate.

To use the formulas below you need to know the total number of households in the community in which you are estimating. If you only know the population of the community, you can estimate the number of households by dividing the population of the community by the average number of members per household. In 2011, the U.S. Census Bureau's Current Population Survey estimated that there were 2.6 members per household.

Estimate the Number of Pet-owning Households

To estimate the number of pet-owning households in your community, multiply the total number of households in your community by the percentage of households that owned pets. For dogs and cats, you may replace the national percentage with the percentage for the state in which the community is located. For birds and horses you may replace the national percentage with the percentage for the region in which the community is located.

The demographics of the state or region may be more similar to the demographics of your community but as indicated above the state and regional estimates have a greater degree of statistical error associated with them than the national estimates. Therefore, without additional analysis, it is undetermined whether an estimate for the number of pet-owning households in your community will be more accurate by using the national estimates, regional estimates, or state estimates.

Formulas for estimating the number of pet-owning households using national percentages	
All Pets	Number of pet-owning households = $.568 \times$ total number of households
Dogs	Number of dog-owning households = $.384 \times$ total number of households
Cats	Number of cat-owning households = $.254 \times$ total number of households
Birds	Number of bird-owning households = $.028 \times$ total number of households
Horses	Number of horse-owning households = $.007 \times$ total number of households

Estimate the Number of Pets

There are two alternative methods for estimating the number of pets in your community. You can multiply the total number of households in your community by a factor determined by multiplying the percentage of households that own pets by the number of pets owned per household. Alternatively, you can multiply the number of pet-owning households determined above by the mean number of pets owned per household.

As with the number of households, state or regional values may be substituted for the national values if desired. (The number of dogs, cats, birds, or horses per household for states or regions can be determined by dividing the total population of the state or region by the total number of pet-owning households in each state or region.) However, the same caution mentioned previously must be noted. Without additional analysis, it is unknown whether the error in the estimate introduced by differences between national and community demographic and pet-ownership characteristics is greater than or less than the error introduced by the larger error inherent in the smaller state or regional samples.

Formulas for estimating the number of pet-owning households using national percentages	
Dogs	Number of dogs = 0.614 x total number of households in your community
	Number of dogs = 1.6 x number of dog-owning households
Cats	Number of cats = 0.457 x total number of households in your community
	Number of cats = 1.8 x number of cat-owning households
Birds	Number of birds = 0.058 x total number of households in your community
	Number of birds = 2.1 x number of bird-owning households
Horses	Number of horses = 0.015 x total number of households in your community
	Number of horses = 2.1 x number of horse-owning households

EXAMPLE

A city/community has a population of 50,000.

To estimate the number of **dog-owning households**:

- Divide total population by the average number of people per household from the Census:
 - $50,000 \div 2.6 = 19,231$ households
 - $19,231 \times .384 = 7,385$ dog-owning households

To estimate the number of **dogs in the city/community**:

- $19,231 \times 0.614 = 11,808$ dogs
- Alternatively:*
 $1.6 \times 7,385 = 11,816$ dogs