



REPORT | 5 APRIL 2017

# Airbnb, Housing, and the City of Cambridge

## INTRODUCTION

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Since our founding in 2008, Airbnb has become an economic lifeline that makes it possible for long-time residents to pay the bills, save for retirement and stay in the city they love. Ordinary people and families are taking what is typically one of their greatest possessions, their homes, and using it to generate supplemental income. Airbnb is committed to working with communities, including right here in Cambridge, to foster responsible home sharing and the economic opportunity it creates for families, businesses, and neighborhoods.

Like many in the community, we share the belief that Cambridge's continued growth and prosperity depend on ensuring that neighborhoods remain inclusive and affordable for all residents. We also welcome the discussion about the role that home sharing can play in advancing those goals.

In that spirit, the following report examines the impact of Airbnb on the Cambridge housing market. The data shows that barely 2 percent of all housing units in the city hosted a trip on Airbnb last year, and of those, nearly two-thirds were rented for fewer than 90 days a year. These figures highlight how the majority of Cambridge hosts are using Airbnb as a supplemental source of income to remain in the communities they call home.

## CAMBRIDGE HOST STORY

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A native of Jamaica Plain, 56 year-old Margaret (Meg) Reategui has lived in Cambridge with her husband since 1994.

The summer of 2016 was an unusual time for her family. Meg's husband was returning to work part-time after recovering from a severe illness, and Meg was also taking some time off professionally following the passing of her brother.

"We were definitely in a period of transition... emotionally and financially," said Reategui. "Retirement is in the near future, and we needed a change that would boost our spirits, bring more joy into our home, and also give us an opportunity to build our nest egg."

A friend of Meg's in the nearby town of Somerville had been hosting via Airbnb for a few years, and always speaking well of her experience recommended that Meg to give home sharing a try.

After giving their spare guest room and bathroom a few friendly touches, the Reateguis welcomed their first Airbnb guest in August 2016, and their proximity to notable universities and a few tech companies has opened their home to travelers from across the globe -- including countries like Denmark, India and Switzerland.

Sharing the benefits of home sharing with her Cambridge community has also become a priority for Meg as an Airbnb host. She regularly encourages guests to patronize local businesses by distributing info cards for her favorite restaurants, nail salon and acupuncturist.

"The extra income from Airbnb has definitely allowed us to live more comfortably given what we experienced over the last year," added Meg. "We've earned money towards making improvements to our home and added to our retirement savings. And the opportunity to meet and entertain so many interesting and diverse visitors has been great for our household and neighborhood overall."

## KEY FINDINGS

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### FINDING 1: Airbnb ‘entire home’ listings represent a tiny fraction of the total housing stock in Cambridge.

While Airbnb has grown in recent years, listings still represent a tiny fraction of the overall housing stock in Cambridge. Of the 48,415<sup>1</sup> housing units in Cambridge, only 1,100 entire home listings hosted at least one trip in 2016-- just 2.2% of Cambridge housing units. In fact, **only 1,900 entire home listings have ever hosted a trip via Airbnb -- a figure which represents less than 4% of Cambridge housing units.**

TABLE 1  
AIRBNB ENTIRE HOME LISTINGS IN CAMBRIDGE AS PERCENT OF CAMBRIDGE HOUSING STOCK

Airbnb entire home listings in Cambridge that...	Number of entire home listings	Number of entire home listings as percent of Cambridge housing units
Have ever been displayed on Airbnb.com	2,700	5.5%
Have ever hosted a trip	1,900	3.9%
Have hosted a trip in the past year (2016)	1,100	2.2%
Are active listings, as of January 1, 2017 (i.e. displayed on Airbnb.com). <sup>2</sup>	940	1.9%
Are active booked listings, as of January 1, 2017 (i.e. displayed on Airbnb.com and have accepted at least one booking). <sup>3</sup>	780	1.6%
Number of listings that rented “full-time” (above the break-even threshold of 172 nights) (TABLE 3). <sup>4</sup>	140	0.29%

<sup>1</sup> 2011-2015 American Community Survey 5-Year Estimates<sup>1</sup>, Table DP04, April 2017.

<sup>2</sup> Active listings are listings that are displayed on Airbnb.com, regardless of whether the listing hosts a trip, has availability, or is subsequently removed from the website.

<sup>3</sup> Active booked listings are listings that, as of January 1, 2017, are displayed on Airbnb.com and have accepted at least one booking ever.

<sup>4</sup> As explained below (p.5), the typical Airbnb listing in Cambridge would have to be rented for at least 172 nights a year to generate as much income as the average rental unit in the city. These “full-time” rentals *may or may not* be responsible for removing long-term housing from the market.

## FINDING 2: Most ‘entire home’ listings are only shared occasionally.

Not only do Airbnb listings represent a small share of the overall housing stock, but the vast majority of those listings are shared. In 2016, 43% of entire home listings in Cambridge were rented for less than 30 days, and 63% were rented less than 90 days. These figures suggest that most hosts are sharing their own space on a part-time basis, *not* removing units that would otherwise be available on the long-term rental market.

Figure 1: Percentage of Hosts by Number of Active Entire Home Listings (as of January 1, 2017)

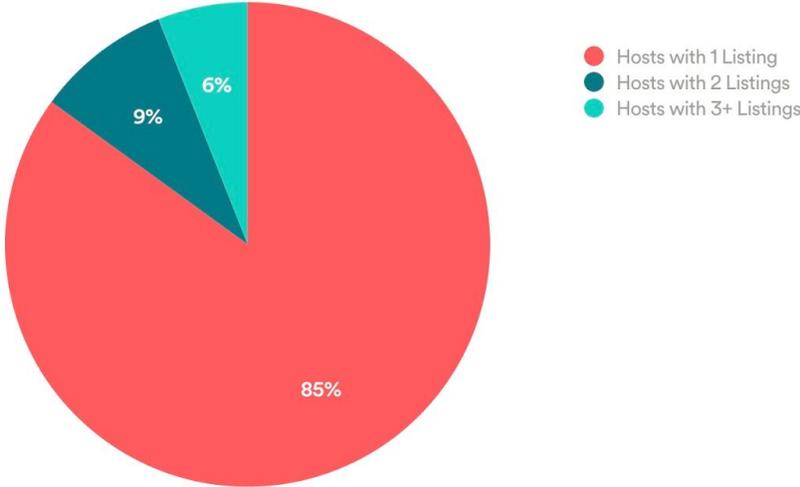


TABLE 2 shows how frequently entire home listings in Cambridge

hosted guests in 2016.<sup>5</sup> 57% of the entire home listings that hosted guests in Cambridge last year were hosted for fewer than 60 nights during the entire year; 80% were hosted for less than half the year.

TABLE 2  
2016 HOSTING FREQUENCY FOR ENTIRE HOME LISTINGS ON AIRBNB IN CAMBRIDGE

Number of nights hosted annually	Percent of entire home Airbnb listings in Cambridge
1 - 30	43%
31 - 60	14%
61 - 90	7%
91 - 120	7%
121 - 180	9%
181 - 270	13%
More than 270	7%

<sup>5</sup> To best represent annual hosting patterns, listings without at least a year’s worth of hosting behavior are excluded from the analysis. Excluding newly-activated listings avoids artificially inflating the lower end of the histogram for number of nights hosted.

While we cannot know for certain why hosts are hosting only occasionally, we know that 85 percent of Cambridge hosts with entire home listings have only one such listing (FIGURE 1). **As a result, we can hypothesize that, in most cases, the entire home listing is a primary home being rented while the resident is traveling for work or vacation, or otherwise away from their home.**

In addition to hosts who share their primary home, hosts also rent spaces that would not be available on the long-term rental market, such as a small bedroom over a garage without a kitchen, or a portion of a dwelling with a separate entrance.” Notably, even these types of listings are tagged as “entire home” listings on Airbnb.<sup>6</sup>

### **FINDING 3: Most Cambridge hosts make modest, supplemental income from sharing their homes.**

Most hosts who share entire home listings in Cambridge earn modest supplemental income. When comparing the average long-term rental income with Airbnb earnings, we see that most hosts make less significantly less money hosting on Airbnb than they could by renting to a tenant month-to-month.

The typical entire home Airbnb listing in Cambridge earned \$9,200 in 2016<sup>7</sup>, which amounts to about \$770 per month. In comparison, average monthly rent in Cambridge is \$2,883.<sup>8</sup> As a result, in order to earn as much as the average rental in Cambridge, the typical entire home Airbnb listing would have to be rented for 172 nights in a given year (the break-even threshold).

**In 2016, only 140 listings (0.29% of the total number of Cambridge housing units) were rented for more than 172 nights, reaffirming how the vast majority of Airbnb listings in Cambridge are not being pulled off the long-term housing market for use as “full-time” short-term rentals.**

Again, we cannot know for certain why hosts do not rent on Airbnb enough to earn more than long-term renting, but we can hypothesize that, in most cases, the entire home listing is a

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<sup>6</sup> Classification of listings as either entire home/apt, private room, or shared room is self-reported by hosts.

<sup>7</sup> The annual earnings per typical listing are calculated as the median earnings across all entire home listings that hosted at least one trip in the past year (2016). To avoid deflating the median by newly-created listings, only listings that were active at the beginning of the study period (January 1, 2016) are included, to best represent the typical annual earnings. (Without controlling for newly-created listings, the median annual earnings per entire home listing is \$9,200). The median is taken instead of the average because the distribution of host earnings is not normally distributed, but heavily right-tailed. With a right-tailed distribution, the median is a better measure of central tendency than the mean (average). The average is skewed upwards by the right tail (to about \$16,500).

<sup>8</sup> Long-term rental rates in Cambridge are taken from [Rent Jungle](#). April 4, 2017.

primary home being rented while the resident is traveling for work or vacation, or otherwise away from her home.

TABLE 3  
COMPARISON OF TYPICAL AIRBNB INCOME PER LISTING VERSUS AVERAGE LONG-TERM RENTAL INCOME PER HOUSING UNIT

	Average annual rent in Cambridge	Typical annual Airbnb income for entire home listing in Cambridge	Number of Airbnb listings rented above break-even threshold of 172 nights	Units as % of all housing units
Entire City, All Bedrooms	\$2,883 x 12 months = \$34,596/year	\$9,200	140	0.29%

This analysis illustrates that most Airbnb hosts are not renting their entire unit listings at a rate that incentivizes taking the listing off the long-term housing market.

A more detailed analysis might consider neighborhood variation in rental rates and Airbnb activity, variation in rental offerings (studio suites versus one-bedroom units versus two-bedroom units), and adjustments for the operating costs of short-term hosting versus long-term landlording; but the findings are likely to reaffirm the same bottom line: **Cambridge residents use Airbnb occasionally, earn modest amounts of money, and are not “full-time”, “commercial” operators who take housing off the long-term rental market.**

## **FINDING 4: Entire home listings on Airbnb are not a driver of housing prices.**

Cambridge has a significant housing shortage, with census-reported rental vacancy rates at 3.3% (TABLE 4). In Cambridge, as elsewhere, rising demand for housing with unmatched growth in supply has driven housing prices up and reduced vacancies. Zoning policies, employment patterns, public investment, economic health, and a number of other underlying factors also contribute to changes in housing prices.

Vacancy rates in Cambridge since 2013 have been relatively constant, according to U.S. census data (TABLE 4). Rental vacancy rates have fluctuated around the 2.5% to 3.3% range; homeowner vacancy rates have fluctuated around the 0.8% to 2.6% range. The rental vacancy rate has increased since 2013.

TABLE 4  
CAMBRIDGE VACANCY RATES FROM 2013-2015<sup>9</sup>

	2015	2014	2013
Total Housing Units	48,415	47,825	47,654
Rental Vacancy Rate	3.3%	3.3%	2.5%
Homeowner Vacancy Rate	0.8%	1.7%	2.6%

With 940 entire home listings--less than 2% of the Cambridge housing stock--with most of those listings being rented for fewer than 60 days a year, it is unlikely that home sharing is a material driver of housing prices.

## CONCLUSION

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Airbnb welcomes the ongoing discussion about home sharing and housing in Cambridge and across the Commonwealth of Massachusetts.

We believe that reasonable regulation can ensure that Cambridge hosts can continue to earn modest but meaningful supplemental income that helps to support their families and make ends meet, which protecting the long-term housing market across the city.

## APPENDIX

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### Additional Notes on Methodology

Host earnings includes the listing price plus the cost of any additional guests and excludes service fees, taxes, and cleaning fees. The framework is meant to reflect the total host revenue, which is most comparable to rent collected by landlords.

This analysis includes only entire home listings, which are the best Airbnb proxy for housing units. Not all entire home listings are necessarily housing units that could (legally) accommodate a long-term tenant.

All Airbnb bookings are included in the analysis, including short-term rentals (rentals for fewer than 30 consecutive days) and long-term stays (rentals for 30 consecutive days or longer).

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<sup>9</sup> 'American Community Survey 5-Year Estimates' Table DP04, April 2017.