To: Planning Board  
From: CDD Staff  
Date: May 19, 2017  
Re: Short-Term Housing Rentals Zoning Petitions  

Overview  

There are two zoning petitions currently before the City Council regarding the use of residential properties for short-term rental occupancy. One petition is signed by a group of residents including Latoyea Hawkins Cockrill, et al., while the other petition has been submitted by the City Council. The petitions address a similar topic but the proposals are substantively different. For the convenience of the Planning Board and members of the public, they have been scheduled to be heard at the same Planning Board meeting.

This memo, which has been compiled collaboratively by staff from various CDD divisions, provides some background information on the proposals and summarizes some key points of each, and also analyzes available information about short-term rental use in Cambridge to highlight some broader policy implications.

Background  

Cambridge, along with many other cities worldwide, has experienced the increased phenomenon of residential properties being rented to visitors for short-term stays. This activity has been facilitated by online services that have grown in recent years, with the company AirBnB providing the most well-known platform for transactions between “hosts” and “guests.”

The City Council’s Public Safety Committee and Housing Committee held public hearings in 2016 to discuss this topic and potential regulatory approaches. At those hearings, many residents spoke of the benefits of allowing residential units to be used for short-term accommodations, including the economical use of space to provide additional income for residents, and a more “home-like” guest experience for visitors to the city.

Many residents also voiced concerns and complaints, including impacts on the overall availability of permanent housing for residents, and nuisances experienced by residents caused by additional short-term guests in their buildings or neighborhoods. Similar issues have been raised in many other communities as well.

One of the challenges in assessing the impact of these short-term rental services is that they can facilitate many different types of arrangements, from homeowners hosting guests in an otherwise unused bedroom to businesses that acquire or lease and then manage multiple properties as short-term rentals. This issue is illustrated further in the data analysis provided later in this memo.
Zoning Considerations

One of the core zoning issues raised by short-term housing rental is how it fits within our current classification system for “transient” and “nontransient” occupancy of residential space. Within our current land use framework, transient occupancy implies that a person or group of people are temporarily residing in a place that is not intended to be their primary residence, typically for a duration of less than a month, while nontransient occupancy implies that a person or group of people are residing in a place that is intended to be their primary residence for a longer duration or an indefinite period of time, either as owner-occupants or through a lease or similar rental agreement.

The uses currently classified as “Transient Accommodations” in Article 4.000 of the Zoning Ordinance include “Tourist house in an existing dwelling,” in which the owner resides along with a number of guests (such a traditional bed-and-breakfast), and “Hotel or motel.” These uses are regulated differently in different zoning districts (see table below), but are both generally prohibited in lower-scale residential and mixed-use districts, and may require a special permit in some other districts. (Although “Lodging House” is also listed as a use under Transient Accommodations in Article 4.000, that use is more typically regarded as a nontransient residence intended for multiple unrelated people, though it may be rented “by the room” and include shared kitchen and/or bathroom facilities.)

<table>
<thead>
<tr>
<th>Use</th>
<th>Allowed As-Of-Right</th>
<th>Requires Special Permit</th>
<th>Not Allowed</th>
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</table>
| Tourist house in an existing dwelling | • Residence: C, C-1, C-1A, C-2, C-2A, C-2B, C-3, C-3A, C-3B  
• Office: O-1, O-2, O-2A, O-3, O-3A  
• Business: BB, BB-1, BB-2, BC | • Business: BA, BA-4  
• Industry: IA-1, IA-2, IA, IB-1, IB-2, IB, IB | • Residence: A-1, A-2, B  
• Business: BA-1, BA-2, BA-3  
• Open Space |
| Hotel or motel                | • Business: BB, BB-1, BB-2, BC  
• Office: O-2, O-2A, O-3, O-3A  
• Overlay Districts: Harvard Square, Central Square, Massachusetts Avenue (Residence C-2, C-2A, C-2B, C-3, C-3A portions) | • Residence: C-1A, C-2, C-2A, C-2B, C-3, C-3A, C-3B  
• Business: BA, BA-4  
• Industry: IA, IB, IC | • Residence: A-1, A-2, B, C, C-1  
• Office: O-1  
• Business: BA-1, BA-2, BA-3  
• Industry: A-1, A-2, B-1, B-2  
• Open Space |

Source: Cambridge Zoning Ordinance, Section 4.30, Table of Use Regulations
Residential use types not listed under Transient Accommodations include “family” housing – the most typical residential use category, including single-family, two-family, and multifamily – which consists of separate dwelling units with eating, cooking, and living facilities, intended for occupancy by a household of one or more people but not a group of four or more unrelated people (except in the case of certain groups protected by Fair Housing laws). As an accessory use, current zoning also allows for nontransient lodging of up to two people (“boarders” or “roomers”) within a single-family, two-family, or attached townhouse dwelling. Other residential use types include elderly congregate housing and mobile home parks, while institutional group housing such as dormitories are categorized as institutional use types.

**Zoning Proposals**

Both zoning proposals provide a definition of “Short-Term Rental” as an accessory or incidental use of a dwelling unit, and a system of allowances, limitations, and other requirements for short-term rental use. Both proposals seem to imply that the short-term rental of all or part of a dwelling unit, in accordance with the proposed requirements, would not change its overall classification as a dwelling unit according to zoning. Some (though not all) of the key provisions of each proposal are summarized in the chart on the following page.

In general, the Cockrill, et al., Petition is the more expansive proposal, allowing short-term rental use of all types of dwelling units. The City Council Petition seems more tailored to allow homeowners or tenants to rent part or all of homes that they occupy to temporary guests, and to also allow homeowners living in two-family or smaller multifamily buildings to rent a unit within their building to temporarily visiting families, but to otherwise prevent residences from being used by large numbers of guests in a way that might be more characteristic of a commercial guest facility. One specific provision in the City Council Petition maintains the general restriction to “family” occupancy of a dwelling unit, which would limit the number of unrelated people that an owner is allowed to rent to at any given time.

While the Cockrill, et al., Petition would potentially allow more guests in more residential properties throughout the city, it does propose some limitations that are not present in the City Council petition. These include allowing short-term rental use in residential districts only (meaning it would not be allowed in commercial/mixed use districts, such as the City’s major squares and commercial corridors), and limiting short-term rental use of units that are not owner-occupied to 180 days in a year.

Each petition also sets forth provisions related to matters such as safety, trash and recycling, noise and other nuisances, advertising/listing requirements, and communication/contact requirements. Not all are included in the table on the following page, and many are matters that are not typically regulated through the Zoning Ordinance, and should be reviewed further.

While the core policy question is how the City wishes to allow or limit this type of use, an important secondary consideration is how the proposed policy fits within the current framework of the Zoning Ordinance. Therefore, it will be helpful for City departments (including the Law Department and Inspectional Services) to carefully review any proposal before adoption to ensure it does not create inconsistencies or ambiguities with other definitions or standards elsewhere in the Zoning Ordinance or in other laws and regulations. One potential concern is how the creation of a “short-term rental” classification affects our current classification of transient accommodations, including “Tourist house”
and “Hotel or motel.” If there is ambiguity among those classifications, it could result in unintended consequences for property owners and the City.

**Summary of Key Aspects of Short-Term Rental Zoning Petitions (not all proposed standards listed)**

<table>
<thead>
<tr>
<th>Definition of “Short Term Rental”</th>
<th>Cockrill, et al., Petition</th>
<th>City Council Petition</th>
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<td>“The accessory use of all or part of a residential dwelling unit by rental for temporary occupancy for dwelling, sleeping, or lodging.”</td>
<td>“Any rental in a residential dwelling stipulated to be less than 30 consecutive days and used for residential purposes only.”</td>
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| Areas where short-term rental use is allowed | Allowed in Residence A1, A2, B, C, C-1, C-1A, 2, 2A, 2B, 3, 3A, 3B districts. | Allowed in all districts where residential uses are allowed |

| Types of housing in which short-term rental use is allowed | Owner-occupied and non-owner occupied dwelling units | Dwelling units occupied by the owner or primary leaseholder, and up to one “owner-adjacent” dwelling unit in a building of four units or less where the owner resides in the building |

<table>
<thead>
<tr>
<th>Limitations</th>
<th>• If unit is not owner-occupied, limited to 180 days of short-term rental per year</th>
<th>• “Proprietor” may rent one owner-occupied unit and one owner-adjacent unit</th>
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<tr>
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<td>• Multiple reservations must not “occur concurrently” within the same dwelling</td>
<td>• If owner does not live in the unit being rented, it must be rented as a “whole unit” and not separate rooms</td>
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<td>• Rentals must comply with “existing limits on unrelated individuals cohabitating”</td>
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<td></td>
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<td>• May not be rented by the hour of durations less than 10 hours</td>
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<td></td>
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<td>• “Commercial meetings and uses” prohibited</td>
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</tbody>
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<tr>
<th>Procedural requirements</th>
<th>Non-owner occupied units must be registered and comply with regulations promulgated by ISD</th>
<th>All units must be registered with License Commission</th>
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<td>“Short-term rental platforms” must develop a mechanism to communicate with City re: emergencies or violations</td>
<td>All units must comply with ISD and Fire Department codes</td>
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<td>Abutting residents and property owners must be notified</td>
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Analysis of Data from the AirBnB Short Term Rental Housing Platform

CDD performed an analysis of available data on AirBnB, one of several short-term rental platforms that contains listings in Cambridge. While other short term providers are active in Cambridge, AirBnB appears to control the largest single share of the market. We believe an analysis of the AirBnB listings and data provides a reasonable snapshot of overall conditions and trends for short term rentals in Cambridge.

CDD obtained data through a third party source (TomSlee.net), which scraped data from the AirBnB website, compiling data for all active listings from a single day. (A more detailed description of this information is provided starting on page 7.) CDD also reviewed data provided by AirBnB to the City Council, dated August 2016 and April 2017.

Highlights

The analysis suggests the presence of at least three issues with policy implications to be considered:

Short Term Rental Platforms Already Have a Large Presence in Cambridge

- AirBnB reported that 1,100 full unit listings hosted a trip in 2016, which constitutes about 2.1% of the overall housing stock in Cambridge of 52,820 units.
- We found 920 hosts with a total of 1,442 listings in our point-in-time analysis – 711 listings were for shared or private rooms, and 731 were for full apartments or homes.

Commercial Hosts Play a Significant Role in the Short Term Rental Market

In analyzing data we obtained, we found that:

- 77 hosts (8% of all hosts) have three or more listings of any type, and together control 466 listings (32% of all listings).
- 31 hosts (6% of all hosts) have three or more whole unit listings, and together control 197 whole unit listings (27% of all such listings).
- The 10 hosts with the most full unit listings control 118 listings of any type (16% of all such listings), with one host alone offering more than 30 listings.
- The April 2017 report from AirBnB also indicates that 6% of hosts have three or more full unit listings, though it is not possible to determine the exact number of listings using the information provided.

We further researched listings controlled by the ten largest AirBnB hosts found in the one-day snapshot, including both full units and bedrooms. We found that all ten are commercial real estate operators of one type or another, with at least six being professional management companies. Four of these hosts also list AirBnB units in other communities in the area, and three of these list units in other cities such as New York City, Washington, D. C., and San Francisco. In total, these seven hosts control 1,941 listings, of which 172 are located in Cambridge.
Short Term Rentals May Have a Meaningful Effect on Rental Costs

AirBnB estimates the number of units held off the market for short term rentals as the number that generate income above an estimated annual apartment rent in Cambridge. By this measure, at least 140 units are held off the market for full time rentals according to AirBnB’s assumptions.

AirBnB’s standard assumes that full unit listings must generate more than $34,596 in income in one year, their estimated median annual rent for a Cambridge unit, to be considered off the market. This standard does not adequately account for all cases where hosts rent more than one full unit listing and does not account for the role of commercial operators. Using the data we collected, a more appropriate minimum standard would include at least the 209 full unit listings offered by hosts with more than one such listing, the amount in excess of a single unit assumed to be occupied by each host.

An alternative measure is the number of full units rented for more than 90 days in a single year. Excluding those units rented for 90 days or less excludes less-than-full-year rentals (e.g., summer rentals) that may not remove units from the rental market. AirBnB reports that 37% of full units listed year-round in 2015 and 36% in 2016 were rented for more than 90 days. Applying this ratio to the 940 full unit listings that AirBnB noted as active as of January 1st suggests that as many as 338 units may not be available on the rental market, as they are rented for more than 90 days during the year through AirBnB. Note that AirBnB does not state the size of the pool of units used to calculate these percentages. If AirBnB provided data on all full unit listings during a given year, the estimated number of units removed from the market would be more accurate.

AirBnB calculates the effect on the Cambridge housing market using the total number of housing units in Cambridge reported by the American Community Survey (ACS). A more appropriate measure would limit the comparison to the rental housing stock. The 2011-2015 ACS reports a rental housing stock of 29,520 units.

Using rental housing as the standard of comparison, the numbers reported above suggest that at least 0.5% to 1.0% of the rental housing stock is held off the market for short term rentals through AirBnB. This compares to a rental housing vacancy rate of 3.3% reported by the 2011-2015 ACS and an overall vacancy rate of 1.57% reported by the U. S. Postal Service for the first quarter of 2017. Vacancy rates of less than 5% suggest an imbalance of supply and demand, which tends to lead to increases in housing prices.
Summary of September 30, 2016 AirBnB Listing Data

Using a third party website (TomSlee.net), we obtained data from the AirBnB website for all active Cambridge listings on September 30, 2016. It should be noted that the conclusions drawn from this information depend on the reliability of information provided on the AirBnB platform – for example, it does not account for the possibility of single hosts using multiple AirBnB accounts.

- On that date for Cambridge, AirBnB reported 920 hosts renting 1,442 listings:
  - 731 are full apartments or homes.
  - 711 are shared or private rooms.
  - Attesting to the accuracy of this information, data provided by Airbnb from the same time period (August 2016) found 1,610 listings, of which 770 were entire home and 840 were private or shared rooms.

- Clusters of AirBnB listings are found in Kendall Square and within ½ mile of Central Square. Although these listings are held by multiple users, in the Kendall Square/East Cambridge area most listings are in larger residential buildings.

MAP Z.12:
AirBnB Listings of any Type per Acre: September 2016

Sources, data: Airbnb Data, Collected by Tom Slee (http://tomslee.net) 9/30/2016.
1 Natural breaks classes are based on natural groupings inherent in the data. Class breaks are identified that best group similar values and that maximize the differences between classes.
• Among entire unit listings:
  o 448 units are offered by hosts listing just one unit, totaling 61% of the full units listed and 86% of all hosts listing full units.
  o 86 units, or 12%, are listed by hosts offering two full units in Cambridge.
  o 39 units, or 5%, are listed by hosts offering three full units in Cambridge.
  o 12 units, or 2%, are listed by hosts offering four full units in Cambridge.
  o 146 units, or 20%, are listed by hosts offering five or more full units in Cambridge.
  o There are 209 more full units listed than there are hosts listing full units.

![Figure 2.14: Unique Full Unit Listings per Host: September 2016](https://example.com/figure2_14.png)

**Sources, top figures:** ‘Request for Information: Airbnb Data in Cambridge’, Prepared by Airbnb 9/15/2016.
**Sources, bottom figure:** Airbnb Data, Collected by Tom Slee (http://tomslee.net/) 9/30/2016.

• Among private and shared room listings:
  o 369 hosts list one room, totaling 52% of the rooms listed and 77% of the hosts listing bedrooms.
  o 342, or 48%, are offered by the 14% of hosts listing two or more rooms in Cambridge.
  o 212, or 30%, are offered by the 9% of hosts listing three or rooms within Cambridge.
  o There are 236 more rooms listed than there are hosts listing rooms.

• There is some amount of double counting of listings, with some units listed both by the room and as an entire unit.

• Overall, the 77 hosts with three or more listings control 466 of all listings, or 32%.

• We examined the 10 largest hosts in detail. They control 172 listings of any type, or 12% of the total number of listings. While there is uncertainty around some of these hosts, the majority of these 10 hosts appear to be professional real estate management businesses of some sort. These 10 hosts also include landlords listing multiple properties that they own, and in one case, a tenant subletting bedrooms in units that are rented specifically to be listed through AirBnB.
The following findings were also made regarding these 10 largest hosts:

- 7 of the top 10 hosts have listings in other cities, including 3 with listings in other parts of the country; overall they control 1,758 listings in other communities.
- The Top 10 hosts offering rooms control 118 listings, or 16% of the total room listings.
- The top 10 hosts offering full unit control 106 listings, or 15% of the total full unit listings.