

To: Alderman Daniel La Spata

From: Nicholas Zettel, 1<sup>st</sup> Ward Policy Director

Re: A Preliminary Description of Household Change and AirBNB in Chicago and the 1<sup>st</sup> Ward (edited for clarity July 2, 2020)

### **Why is this important for 1<sup>st</sup> Ward residents?**

- The 1<sup>st</sup> Ward is home to approximately 10% of Chicago's AirBNB units (one out of every ten AirBNB units are in the 1<sup>st</sup> Ward).
- 1<sup>st</sup> Ward Census Block Groups with the most AirBNB units lost more than 200 households (overall) between 2009 – 2013 and 2014 – 2018, but are host to more than 260 AirBNB units.
- Citywide, the Census Block Groups with the highest number of AirBNB units also demonstrated the highest estimated increase in rents. In the 1<sup>st</sup> Ward, that increase in estimated rents was even larger than the Citywide average.
- Citywide, Census Block Groups with 2 to 20 AirBNB units lost nearly 7,000 rental households (compared to Citywide rental growth trends), but gained more than 6,000 AirBNB units. The 1<sup>st</sup> Ward lost more than 1,000 rental households (compared to Citywide rental growth trends), but gained more than 800 AirBNB units.
- In general, the 1<sup>st</sup> Ward is not exhibiting rental growth at the rate of the entire City. However, the rate of growth of owner-occupied households in the 1<sup>st</sup> Ward is much higher than the Citywide average.

Research Description: In Chicago, anecdotal stories about AirBNB hypothesize that the practice of converting housing to short-term rental uses increases rent, and removes housing from the market. Recent data compiled by "Inside AirBNB" provide an opportunity to assess some of these anecdotes. By mapping "Inside AirBNB" data within U.S. Census Block Group boundaries, it is possible to connect the spatial distribution of AirBNB units to demographic estimate data available from the American Community Survey. Prior to assessing racial, ethnic, and other socioeconomic data, this memo describes the basic relationship between AirBNB units, the shift between renter households and owner households in Chicago, and average rent.

Table One:

A Relationship Between Air BNB and Household Change in Chicago  
 Estimates of Household Change, Tenure Change, and Rent Change Based on AirBNB Unit Count

Air BNB Class	Household Change	Owner HH Change	Renter HH Change	AirBNB Units
More than 20 AirBNB	10,118	5,382	4,736	2,425
13 to 20 AirBNB	1,047	110	937	1,879
5 to 12 AirBNB	3,159	1,796	1,363	3,022
2 to 4 AirBNB	3,166	2,533	633	1,150
1 AirBNB	3,281	263	3,018	326
0 AirBNB	5,465	-3,026	8,491	0

Air BNB Class	Expected Renters	Actual Renters	Difference	Average 2013 Rent	Average 2018 Rent	Difference
More than 20 AirBNB	44,216	47,550	3,334	\$1,375	\$1,590	16%
13 to 20 AirBNB	48,228	47,636	-592	\$1,169	\$1,339	15%
5 to 12 AirBNB	139,406	136,349	-3,057	\$1,051	\$1,169	11%
2 to 4 AirBNB	125,165	121,830	-3,335	\$934	\$987	6%
1 AirBNB	73,757	74,436	679	\$878	\$893	2%
0 AirBNB	174,095	177,066	2,971	\$859	\$866	1%

U.S. Census Bureau, American Community Survey (ACS) Estimates (2009 - 2013; 2014 - 2018)  
 Estimates are based on Block Group boundaries, which are the smallest geographies for ACS data  
 Air BNB data are from "Inside AirBNB", linked to Census Block Groups

Table Two:

A Relationship Between Air BNB and Household Change in Chicago's 1st Ward  
 Estimates of Household Change, Tenure Change, and Rent Change Based on AirBNB Unit Count

Air BNB per Block Group	Household Change	Owner HH Change	Renter HH Change	AirBNB Units
More than 20 AirBNB	-232	223	-455	264
13 to 20 AirBNB	-334	-420	86	337
5 to 12 AirBNB	646	568	78	232
2 to 4 AirBNB	80	129	-49	20
1 AirBNB	0	0	0	0
0 AirBNB	0	0	0	0

Air BNB per Block Group	Expected Renters	Actual Renters	Difference	Average 2013 Rent	Average 2018 Rent	Change
More than 20 AirBNB	4,484	3,887	-597	\$1,111	\$1,379	24%
13 to 20 AirBNB	7,737	7,578	-159	\$1,158	\$1,414	22%
5 to 12 AirBNB	7,940	7,766	-174	\$1,029	\$1,294	26%
2 to 4 AirBNB	1,669	1,567	-102	\$916	\$1,155	26%
1 AirBNB	0	0	0	\$0	\$0	0
0 AirBNB	0	0	0	\$0	\$0	0

U.S. Census Bureau, American Community Survey (ACS) Estimates (2009 - 2013; 2014 - 2018)  
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Citywide Policy Areas: Based on initial descriptions of U.S. Census American Community Survey estimates and “Inside Air BNB” data, there are two relationships between short-term rental uses and demographic change that should be investigated in Chicago:

- (1) A market study of rental buildings in areas with a high concentration of short-term rental units should be conducted to assess the affordability of housing in these areas. Potential policy to review: Can the Affordability Requirements Ordinance be amended to provide for an impact fee for short-term rental units?
- (2) Business Affairs and Consumer Protection, Department of Planning and Development, and Department of Housing ought to corroborate existing short-term rental units with existing condominium buildings, in order to determine the number of condominium units that are rented on short-term rental platforms. Potential policy to review: Can condominium buildings with Declarations that prohibit short-term rental and hotel uses be automatically entered onto lists that prohibit short-term rental licensing?

In general, the City of Chicago should investigate the shifting household tenure between rental and ownership households, in order to assess the impact of this demographic shift on affordable housing. While there ought to be no inherent benefit assumed to either renting or owning a home, the increased growth in rental housing may impact the availability of affordable homes to rent or purchase.

Additionally, the Air BNB data suggest that there are Block Groups in Chicago in which the growth of Air BNB units exceeded the growth of rental housing units, or sometimes exceeded household growth in general. To the extent that it is possible, the City of Chicago should study this relationship: while it cannot be assumed to be a causal relationship, in which each Air BNB unit *directly* replaces another potential unit of housing, this phenomenon should be explored alongside the City’s economic development practices (tourism efforts within neighborhoods; incentives provided to bring corporate headquarters to Chicago; broader economic and occupational restructuring within the City).

#### Detailed Discussion

The following relationships were observed:

- Most Block Groups in Chicago do not have many Air BNB units. The median Block Group in Chicago has one Air BNB listing; approximately 44 percent of Block Groups do not have any Air BNB listings.
- Air BNB listings are densely concentrated within a few areas of the City. Approximately 3 percent of the City’s Block Groups are home to approximately 30 percent of the City’s Air BNB listings.

- In general, the City of Chicago is shifting to a renter household City. Between 2009 – 2013 and 2014 – 2018, renter households increased by approximately 3 percent, while owner households increased by approximately 1 percent.
- In Block Groups with More than 20 AirBNB, the City gained more renters than the average rate, but every other class of Block Group between 2 and 20 Air BNB units saw a slower rate of renter increase than average. This is important because we cannot simply measure the basic increase or decrease of renter households in each Block Group; since the Citywide rate of growth favored renters, each Block Group must be assessed against the Chicago growth rate.
  - In Block Groups with 13 to 20 Air BNB units, the City has 1,879 Air BNB units and lost nearly 600 rental households compared to expected growth.
  - In Block Groups with 5 to 12 Air BNB units, the City has 3,022 Air BNB units and lost more than 3,000 rental households compared to expected growth.
  - In Block Groups with 2 to 4 Air BNB units, the City has 1,150 Air BNB units and lost more than 3,300 rental households compared to expected growth.
- Estimated monthly rent generally increased more in Block Groups with a higher concentration of Air BNB units.
  - In Block Groups with more than 20 Air BNB units, rent increased from approximately \$1,375 per month to approximately \$1,590 per month (16% increase).
  - In Block Groups with 13 to 20 Air BNB units, rent increased from approximately \$1,169 per month to approximately \$1,339 per month (15% increase).
  - In Block Groups with 5 to 12 Air BNB units, rent increased from approximately \$1,051 per month to approximately \$1,169 per month (11% increase).
  - In Block Groups with 2 to 4 Air BNB units, rent increase from approximately \$934 per month to approximately \$987 per month (6% increase).

1<sup>st</sup> Ward Analysis: In relationship to other 1<sup>st</sup> Ward Office research, including demolitions, e-scooter usage, and zoning map amendments, Block Groups in the 1<sup>st</sup> Ward have some of the highest concentrations of Air BNB units in the City of Chicago. Based on “Inside AirBNB” data, approximately 10 percent of Chicago Air BNB units are located within the 1<sup>st</sup> Ward. The concentration of Air BNBs within the 1<sup>st</sup> Ward includes Block Groups with very high numbers of units (Between 13 and 20 units; More than 20 units).

In the City of Chicago, approximately 70 Block Groups have more than 20 Air BNB units; 10 of those Block Groups are located within the 1<sup>st</sup> Ward. In the City of Chicago, approximately 119 Block Groups have between 13 and 20 Air BNB

units; 21 of those Block Groups are in the 1<sup>st</sup> Ward. Thus, approximately half of the Block Groups in the 1<sup>st</sup> Ward have a highly concentrated number of Air BNB units.

Additionally, what is particularly problematic about the relationship between rent tenure, rent increases, and Air BNB units in the 1<sup>st</sup> Ward is that rents have uniformly increased at a notably higher rate within the 1<sup>st</sup> Ward than within the City of Chicago. Furthermore, 1<sup>st</sup> Ward Block Groups have not matched the rental growth in the City, and in fact the 1<sup>st</sup> Ward is shifting to an ownership-tenure area. In this area, the City ought to focus efforts to understand the relationship between a change in ownership tenure (especially via condominium unit) and an increase in Air BNB units. In terms of causal relationship, it may not be Air BNB units that are removing rental units from the market, but ownership units that are replacing rental units, and then Air BNB units in place of some of those owned units. This is a hypothesis that needs to be tested through more detailed, parcel-by-parcel research.

These trends should also be analyzed along with other peculiarities within the 1<sup>st</sup> Ward. For example, while the City of Chicago on average *lost* vacant units between 2009 – 2013 and 2014 – 2018 (ostensibly meaning that more housing units were occupied), 1<sup>st</sup> Ward Block Groups typically *gained* vacant units. The relationship between demolitions, vacant units, increased rents, and Air BNB should be investigated, for the Block Groups with the largest growth of vacant units also have the highest rate of demolitions (as well as 13 to 20 Air BNB units on average).