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From Air Mattresses to Unregulated Business: An Analysis of the Other Side of Airbnb

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A NATIONAL VIEW: EXECUTIVE SUMMARY

As the popularity of short-term rental platforms grows in the public arena, this analysis takes a closer look at the hosts dominating one of the most trafficked platforms, Airbnb. The company, valued at some \$25 billion, has a reported 2 million listings worldwide. In media interviews and public materials, Airbnb suggests that its hosts largely use the platform to supplement their income. It states that "a typical listing earns \$5,110 a year, and is typically shared less than 4 nights per month." ¹

But that does not represent the full picture.

This analysis represents the first comprehensive look at the commercial activity being conducted on Airbnb. The analysis of hundreds of thousands of data points reveals a notable trend with respect to two overlapping groups of hosts, multiple-unit operators who rent out two or more units, and full-time operators who rent their unit(s) 360 or more days per year. These two subsets of operators generate a substantial amount of Airbnb's revenue. Hosts who rent fewer than 360 days, but still far more than occasionally (for instance, more than 180 days), also contribute greatly to Airbnb's bottom line.

This analysis also includes additional, city-level analyses that provide greater detail about the commercial activity being conducted on Airbnb in the 14 major metropolitan areas studied.

1. https://www.airbnbaction.com/data-on-the-airbnb-community-in-nyc/

Data Source

The data used in this analysis were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and the length of time they are renting their units.

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, conducted the analysis and developed the key findings. They examined over 448,000 lines of data and over 10.2 million variables.

This study was primarily funded by the American Hotel & Lodging Educational Foundation. Additional funds provided by the American Hotel & Lodging Association. Penn State University received no funding for the study.

Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

Multi-unit operator: Any host renting out two or more units.

Variable operator: Host renting a variable number of units (1, 2, or more) 360 days or more days per year

Mega-operator: Any host renting out three or more units.

KEY FINDINGS

Two overlapping groups of operators, multiple-unit operators and full-time operators, are a growing percentage of total Airbnb hosts and generate a very significant share of the company's revenue in major U.S. cities. The analysis revealed the following key findings in the 14 cities studied from October 2014 through September 2015.

Multi-Unit Hosts

There is a rapid expansion of multi-unit operators, defined as hosts renting out two or more units, on Airbnb. We found this to be the case in all 14 of the cities we analyzed, which also represent some of the largest cities in the country.



Multiple-unit operators (2+ units) account for nearly 40% of the revenue on Airbnb in the 14 cities studied:



\$1.3 billion Revenue

That translates to **over \$500 million of the \$1.3 billion in revenues Airbnb generated**from whole units in those cities.

Full-Time Hosts

A growing number of hosts are using the Airbnb platform to operate full-time businesses. 26% of Airbnb's revenue is derived from this group of full-time hosts. They are becoming bigger and more prominent.



2,772 full-time operators (renting **360+days per year** just like a hotel) **recorded \$347,479,616 in revenue** or a very high average of \$125,353 per host during the time period studied.



The growth in Airbnb hosts accelerated over the summer months and then remained steady.



The cities with the largest number of full-time operators include:

East Coast:New York and Miami

West Coast: Los Angeles and San Francisco

By The Numbers



New York

Nearly a quarter (24%) of Airbnb's revenue (\$107,471,333) came from full-time hosts who made up 3% of operators.



Miami

Almost two-thirds (62%) of Airbnb's revenue (\$76,159,487) came from multi-unit hosts who made up 30% of operators.



Los Angeles

Almost a **third (30%) of Airbnb's revenue**(\$79,619,092) came from full-time hosts who made up 4% of operators.



San Francisco

Almost a third (32%) of Airbnb's revenue (\$58,803,933) came from multi-unit hosts who made up 14.9% of operators.

NATIONAL TRENDS

Airbnb host revenue has increased significantly. The total 14-city sample shows that monthly operator revenue increased from \$93.2 million in October of 2014 to \$139.0 million in September of 2015, representing a 49% increase. Monthly revenue peaked during the summer of 2015 when there was \$150,228,110 revenue in July and \$145,544,831 in August, though revenue remained near those levels in September 2015, as well, at \$139,007,806.

The highest revenue growth rate was from multi-unit operators who rent out 2 units on Airbnb. In the 12 months studied, the revenue derived from these operators rose 102%, from \$13.2 million in October 2014 to \$26.7 million in September 2015. At the same time, the number of these operators increased 62%, from 2,215 in October 2014 to 3,590 in September 2015.

The rate of growth of mega-operators (those renting out three or more units) was the largest, increasing from 1,397 in October 2014 to 2,319 in September 2015, a 66% increase. These operators generated \$21.1 million in revenue in October 2014 and \$31.4 million in September 2015, a 49% increase over 12 months.

These mega-operators generated a very substantial share of revenue. They represented 6.5% of all operators, but generated nearly a quarter (24.6%) of revenue (\$328,299,944) during the period studied.

The broader subgroup of multi-unit operators who rented two or more units represented 16.1% of total hosts, generating 39.3% of revenue.

Full-time operators offering units at least 360 days over the 12 months from October 2014 through September 2015 generated an even more disproportionate share of revenue. They represented only 3.5% of operators, but generated 26.0% of revenue.

Appendix 1: Full-Time and Multi-Unit Operators Data Tables

In order to produce this analysis, John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, reviewed Airbnb listing data in 14 major cities from October 2014 through September 2015. The tables below provide a detailed snapshot of the data and calculations reflected in the analysis.

APPENDIX: DATA TABLES

January 2016 Report

In order to produce the January 2016 report entitled, "From Air Mattresses to Unregulated Business: An Analysis of the Other Side of Airbnb," researchers from Penn State's School of Hospitality Management reviewed Airbnb listing data in 14 major U.S. Cities from October 2014 through September 2015. The tables below provide a detailed snapshot of the data and calculations reflected in the report.

Glossary Of Terms:

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

Multi-unit operator: Any host renting out two or more units.

Variable operator: Host renting a variable number of units (1, 2, or more) 360 or more days per year.

	TOTALS	FULL-TIME (PERATORS			ALL OPERATO	RS				MULTI-UNIT OPERATORS	
		Count No.	Revenue	Full-Time %	Revenue %		Count No.	Revenue	Host %	Revenue %	Host %	Revenue %
	1 unit Full-Time Operators	416	\$22,891,122	0.6%	2.8%	1 unit Hosts	66,755	\$809,982,372	83.9%	60.7%	16.1%	39.3%
	2 unit Full-Time Operators	152	\$15,922,024	2.0%	8.1%	2 unit Hosts	7,780	\$196,852,874	9.8%	14.7%		
tals	3+ unit Full-Time Operators	44	\$7,639,523	0.9%	2.3%	3+ unit Hosts	5,071	\$328,299,944	6.4%	24.6%		
	Variable Full-Time Operators	2,160	\$301,026,947									
<u> </u>	Total Full-Time Operators	2,772	\$347,479,616	3.5%	26.0%	Total Hosts	79,606	\$1,335,135,189				
	1 unit Revenue per Host		\$55,027					\$12,134				
	2 unit Revenue per Host		\$104,750					\$25,303				
es	3+ unit Revenue per Host		\$173,626					\$64,740				
Average	Variable Operator Revenue per Host		\$139,364									
	Total Operators		\$125,353					\$16,772				

	CITY-BY-CITY MARKET BREAKDOWN	FULL-TIME OF	PERATORS			ALL OPERATO	RS				MULTI-UI OPERATO	
	DREARDOWN	Count No.	Revenue	Full-Time %	Revenue %		Count No.	Revenue	Host %	Revenue %	Host %	Revenue %
	1 unit Full-Time Operators	19	\$711,913	0.6%	2.7%	1 unit Hosts	2,985	\$26,423,587	89.9%	67.4%	10.1%	32.6%
	2 unit Full-Time Operators	13	\$1,042,731	5.8%	20.8%	2 unit Hosts	224	\$5,022,280	6.7%	12.8%		
	3+ unit Full-Time Operators	1	\$56,437	0.9%	0.7%	3+ unit Hosts	111	\$7,778,646	3.4%	19.8%		
ustin	Variable Full-Time Operators	90	\$10,115,235									
ΑΓ	Total Full-Time Operators	123	\$11,926,316	3.7%	30.4%	Total Hosts	3,320	\$39,224,513				
	1 unit Full-Time Operators	16	\$773,853	0.6%	2.9%	1 unit Hosts	2,487	\$26,235,888	89.8%	55.4%	10.2%	44.6%
ے	2 unit Full-Time Operators	3	\$288,580	2.0%	2.7%	2 unit Hosts	148	\$10,527,526	5.3%	22.2%		
	3+ unit Full-Time Operators	0	\$0	0.0%	0.0%	3+ unit Hosts	134	\$10,625,288	4.8%	22.4%		
ston	Variable Full-Time Operators	60	\$9,783,562									
Bo	Total Full-Time Operators	79	\$10,845,995	2.9%	22.9%	Total Hosts	2,769	\$47,388,702				
	A SELET O	4.5	¢ coo 400	0.40/	2.20/	4 500	2.654	t20 447 020	0.4.50/	64.60/	45.50/	20.40/
	1 unit Full-Time Operators	16	\$683,103	0.4%	2.2%	1 unit Hosts	3,651	\$30,447,930	84.5%	61.6%	15.5%	38.4%
0	2 unit Full-Time Operators	6	\$557,918	1.3%	8.0%	2 unit Hosts	445	\$6,981,545	10.3%	14.1%		
\Box	3+ unit Full-Time Operators	2	\$201,775	0.9%	1.7%	3+ unit Hosts	226	\$12,018,824	5.2%	24.3%		
jica	Variable Full-Time Operators	87	\$10,314,479									
$\frac{1}{2}$	Total Full-Time Operators	111	\$11,757,275	2.6%	23.8%	Total Hosts	4,321	\$49,448,299				
	1 unit Full-Time Operators	3	\$65,000	0.4%	0.2%	1 unit Hosts	696	\$5,534,623	85.7%	71.3%	14.3%	28.7%
	2 unit Full-Time Operators	0	\$0	0.0%	0.0%	2 unit Hosts	85	\$1,137,909	10.5%	14.7%		
S	3+ unit Full-Time Operators	0	\$0	0.0%	0.0%	3+ unit Hosts	31	\$1,092,282	3.8%	14.1%		
<u>a</u>	Variable Full-Time Operators	19	\$1,353,418									
Da	Total Full-Time Operators	22	\$1,418,418	2.7%	18.3%	Total Hosts	812	\$7,764,814				

	CITY-BY-CITY MARKET BREAKDOWN	FULL-TIME O	PERATORS			ALL OPERATO	ORS				MULTI-UI OPERATO	
	DREARDOWN	Count No.	Revenue	Full-Time %	Revenue %		Count No.	Revenue	Host %	Revenue %	Host %	Revenue %
	1 unit Full-Time Operators	4	\$168,366	0.5%	2.6%	1 unit Hosts	730	\$6,360,134	82.8%	59.4%	17.2%	40.6%
_	2 unit Full-Time Operators	1	\$62,632	1.3%	5.2%	2 unit Hosts	76	\$1,197,976	8.6%	11.2%		
O	3+ unit Full-Time Operators	0	\$0	0.0%	0.0%	3+ unit Hosts	76	\$3,148,533	8.6%	29.4%		
nsı	Variable Full-Time Operators	25	\$2,595,440									
Houston	Total Full-Time Operators	30	\$2,826,438	3.4%	26.4%	Total Hosts	882	\$10,706,643				
	1 unit Full Time Operators	58	\$2,847,357	0.5%	9.4%	1 unit Hosts	10,671	\$138,965,233	80.6%	53.1%	19.4%	46.9%
es	1 unit Full Time Operators										13.470	40.970
ge	2 unit Full-Time Operators	28	\$2,417,853	1.9%	6.5%	2 unit Hosts	1,450	\$36,929,224	10.9%	14.1%		
Angeles	3+ unit Full-Time Operators	14	\$2,286,359	1.2%	2.7%	3+ unit Hosts	1,126	\$85,857,238	8.5%	32.8%		
Los ,	Variable Full-Time Operators	477	\$72,067,522	4.40/	20.40/	T . 10 .	42.246	£264 754 605				
ĭ	Total Full-Time Operators	577	\$79,619,092	4.4%	30.4%	Total Hosts	13,246	\$261,751,695				
	1 unit Full-Time Operators	15	\$677,886	0.4%	1.5%	1 unit Hosts	3,518	\$46,515,767	69.8%	37.9%	30.2%	62.1%
	2 unit Full-Time Operators	13	\$1,049,999	1.7%	5.8%	2 unit Hosts	744	\$18,220,593	14.8%	14.9%		
-=	3+ unit Full-Time Operators	6	\$1,047,895	0.8%	1.8%	3+ unit Hosts	781	\$57,938,894	15.5%	47.2%		
aп	Variable Full-Time Operators	277	\$44,566,095									
Miami	Total Full-Time Operators	311	\$47,341,874	6.2%	38.6%	Total Hosts	5,044	\$122,675,254				
	1 unit Full-Time Operators	176	\$10,505,238	0.7%	3.5%	1 unit Hosts	24,062	\$303,868,908	85.7%	67.7%	14.3%	32.3%
V	2 unit Full-Time Operators	54	\$6,351,213	2.1%	9.0%	2 unit Hosts	2,582	\$70,318,507	9.2%	15.7%	1 113 70	32.370
York	3+ unit Full-Time Operators	11	\$2,457,792	0.8%	3.3%	3+ unit Hosts	1,426	\$74,519,356	5.1%	16.6%		
>	Variable Full-Time Operators	668	\$88,157,090	0.070	3.5 /0	3+ unit 1103t3	1,420	\$74,515,550	5.170	10.070		
New	Total Full-Time Operators	909	\$107,471,333	3.2%	24.0%	Total Hosts	28,070	\$448,706,772				
2	Total Full-Time Operators	909	\$107,471,555	3.2 /0	24.0 /0	10tai 1103t3	20,070	3440,700,772				
<u>a</u> .	1 unit Full-Time Operators	3	\$85,580	0.2%	0.9%	1 unit Hosts	1,558	\$9,030,180	85.3%	63.6%	14.7%	36.4%
9	2 unit Full-Time Operators	2	\$155,410	1.2%	9.6%	2 unit Hosts	161	\$1,624,239	8.8%	11.4%		
de	3+ unit Full-Time Operators	2	\$148,439	1.9%	4.2%	3+ unit Hosts	108	\$3,538,479	5.9%	24.9%		
Philadelphia	Variable Full-Time Operators	34	\$3,479,128									
P	Total Full-Time Operators	41	\$3,868,558	2.2%	27.3%	Total Hosts	1,827	\$14,192,898				
	1 unit Full-Time Operators	2	\$76,663	0.1%	0.3%	1 unit Hosts	1,491	\$24,996,727	86.1%	59.2%	13.9%	40.8%
	2 unit Full-Time Operators	0	\$0	0.0%	0.0%	2 unit Hosts	157	\$3,547,484	9.1%	8.4%		
Ξ	3+ unit Full-Time Operators	0	\$0	0.0%	0.0%	3+ unit Hosts	85	\$13,669,909	4.9%	32.4%		
Ser	Variable Full-Time Operators	22	\$2,096,961									
Phoenix	Total Full-Time Operators	24	\$2,173,624	1.4%	5.1%	Total Hosts	1,732	\$42,214,120				
0	1 unit Full-Time Operators	4	\$103,973	1.8%	4.7%	1 unit Hosts	223	\$2,224,479	75.8%	60.7%	24.2%	39.3%
ntonio	2 unit Full-Time Operators	1	\$39,876	2.3%	6.6%	2 unit Hosts	43	\$600,637	14.7%	16.4%	211270	33.370
<u>ئ</u> و	3+ unit Full-Time Operators	1	\$68,245	3.6%	8.1%	3+ unit Hosts	28	\$839,008	9.5%	22.9%		
₹	Variable Full-Time Operators	8	\$490,404	5.0 /0	0.170	3 F dille Hooks	20	4033,000	3.3 /0	22.5 /0		
San	Total Full-Time Operators	14	\$702,498	4.8%	19.2%	Total Hosts	294	\$3,664,124				
•												
	1 unit Full-Time Operators	11	\$523,971	0.4%	1.6%	1 unit Hosts	2,910	\$32,604,964	83.1%	60.6%	16.9%	39.4%
o O	2 unit Full-Time Operators	3	\$281,949	0.8%	3.5%	2 unit Hosts	361	\$8,043,009	10.3%	14.9%		
Diego	3+ unit Full-Time Operators	3	\$537,446	1.3%	4.1%	3+ unit Hosts	229	\$13,160,360	6.5%	24.5%		
San	Variable Full-Time Operators	89	\$11,585,325									
Sa	Total Full-Time Operators	106	\$12,928,691	3.0%	24.0%	Total Hosts	3,500	\$53,808,333				
0	1 unit Full-Time Operators	65	\$4,391,125	0.8%	3.5%	1 unit Hosts	8,362	\$124,409,528	85.1%	67.9%	14.9%	32.1%
ıcis	2 unit Full-Time Operators	24	\$3,253,153	2.5%	12.3%	2 unit Hosts	959	\$26,410,758	9.8%	14.4%		
Francisco	3+ unit Full-Time Operators	3	\$561,336	0.6%	1.7%	3+ unit Hosts	510	\$32,393,175	5.2%	17.7%		
T T	Variable Full-Time Operators	216	\$32,003,207									
San	Total Full-Time Operators	308	\$40,208,822	3.1%	21.9%	Total Hosts	9,832	\$183,213,462				
_	1 unit Full-Time Operators	24	\$1,277,093	0.7%	3.9%	1 unit Hosts	3,412	\$32,364,423	86.2%	64.2%	13.8%	35.8%
to	2 unit Full-Time Operators	4	\$420,709	1.2%	6.7%	2 unit Hosts	344	\$6,291,187	8.7%	12.5%		
ng	3+ unit Full-Time Operators	1	\$273,800	0.5%	2.3%	3+ unit Hosts	201	\$11,719,951	5.1%	23.3%		
Washington	Variable Full-Time Operators	88	\$12,419,081					, , =,==				
Na	Total Full-Time Operators	117	\$14,390,683	3.0%	28.6%	Total Hosts	3,957	\$50,375,561				
			, , , , , , , , , , , , , , , , , , , ,					, , , , , , , , , , , , , , , , , , , ,				

All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.



In January, 2016, the American Hotel & Lodging Association (AH&LA) released an analysis providing a view of the commercial activity being conducted on Airbnb in the nation's largest metropolitan statistical areas (MSAs). John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University, conducted the analysis of over 448,000 lines of data and over 10.2 million variables and developed the key findings, which include:

- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who list properties for rent full-time, or for 360 days or more during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb the Phoenix MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and the length of time they are renting their units.

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Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: PHOFNIX REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a disproportionate share of the company's revenue in the Phoenix MSA.

Number of Days Operator Lists Unit for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	1,478	\$41,246,320	85.33%	97.71%
180+ Days / Year	245	\$9,112,300	14.15%	21.59%
360+ Days / Year	24	\$2,173,623	1.39%	5.15%



Almost a quarter (21%) of Airbnb's Phoenix-area revenue – more than \$9 million – comes from operators who list properties for rent more than 180 days a year.



Almost all of Airbnb's revenue in the Phoenix area – 97% or more than \$41 million – comes from operators who list units for rent for more than 30 days per year.



More than a third (41%) of Airbnb's revenue in the Phoenix region – \$17 million – comes from operators who list multiple units for rent.

The five Phoenix area ZIP codes with the most properties listed on Airbnb account for nearly \$8 million, or 19% of Airbnb's revenue in the Phoenix MSA.

ZIP Code	Neighborhoods	Host Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
85251	Scottsdale, Las Viviendas, Desert Cove, Waterfront	191	235	\$3,100,631
85254	Greenway Park, Cactus Glen, Desert Trails	76	142	\$1,657,416
85260	Northsight, Encata, Sundown Vista	75	91	\$1,268,313
85281	Tempe, University Heights, Lindon Park	82	85	\$1,072,307
85006	Coronado, Avalon, Kenwood	54	70	\$794,527
Total		478	623	\$7,893,194

If Airbnb operators in the Phoenix area followed the same tax rubric as other local lodging businesses in the City of Phoenix, in the 12 months between October 2014 and September 2015 they would have owed municipal governments in the region more than \$5 million in local taxes.

City of Phoenix Lodging Taxes								
State Sales Tax	City Sales Tax	Total Phoenix Tax Rate	Airbnb's Phoenix Regional Revenue	Airbnb's Estimated Tax Obligation				
7.27%	5.3%	12.57%	\$42,214,119	\$5,306,314				

APPENDIX: PHOENIX METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

ZIP Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	ZIP Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
85251	235	\$3,100,631	85251	191	\$3,100,631
85254	142	\$1,657,416	85281	82	\$1,072,307
85260	91	\$1,268,313	85254	76	\$1,657,416
85281	85	\$1,072,307	85260	75	\$1,268,313
85006	70	\$794,527	85018	62	\$1,683,640
85018	69	\$1,683,640	85250	55	\$673,071
85014	63	\$916,822	85006	54	\$794,527
85250	61	\$673,071	85016	52	\$912,988
85016	54	\$912,988	85258	49	\$940,262
85258	54	\$940,262	85014	48	\$916,822

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	1,732	\$42,214,120	_	-
30+ days	1,478	\$41,246,321	85.33%	97.71%
60+ days	921	\$31,215,121	53.18%	73.94%
90+ days	665	\$27,106,524	38.39%	64.21%
120+ days	456	\$12,216,520	26.33%	28.94%
180+ days	245	\$9,112,301	14.15%	21.59%
360+ days	24	\$2,173,624	1.39%	5.15%



In 2016, the American Hotel & Lodging Association (AH&LA) released an analysis providing a view of the commercial activity being conducted on Airbnb in the nation's largest metropolitan statistical areas (MSAs). John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University, conducted the analysis of over 448,000 lines of data and over 10.2 million variables and developed the key findings, which include:

- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more, during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the Los Angeles MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and the length of time they are renting their units.

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, conducted the analysis and developed the key findings. They examined over 448,000 lines of data and over 10.2 million variables.

This study was primarily funded by the American Hotel & Lodging Educational Foundation. Additional funds provided by the American Hotel & Lodging Association. Penn State University received no funding for the study.

Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: LOS ANGELES REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a disproportionate share of the company's revenue in the LA region.

Number of Days Operator Lists Unit for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	11,096	\$257,583,147	83.77%	98.41%
180+ Days / Year	2,941	\$181,547,646	22.20%	69.36%
360+ Days / Year	577	\$79,619,092	4.36%	30.42%



Almost all of Airbnb's revenue in the LA-area – 98% or more than \$250 million – comes from operators who list units for rent more than 30 days per year.



Almost three-fourths (69%) of Airbnb's LA-area revenue – more than \$180 million – comes from operators who list properties for rent more than 180 days per year.



More than 30% of Airbnb's revenue in the LA area came from the 4.4% of operators who listed properties for rent for more than 360 days per year.

The five LA area ZIP codes with the most properties listed on Airbnb account for nearly \$81 million, or 31% of Airbnb's revenue in the LA metropolitan area.

ZIP Code	Neighborhoods	Host Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
90291	Venice, Venice Beach, Oakwood	1,082	1,582	\$32,857,565
90046	West Hollywood, Hollywood Hills, Laurel Canyon	883	1,125	\$18,028,931
90028	Hollywood	595	964	\$14,806,487
90026	Angelino Heights, Silver Lake, Echo Park	606	702	\$10,065,162
90036	Fairfax, La Brea, Miracle Mile	402	544	\$7,972,326
Total		3,568	4,917	\$83,730,471

If Airbnb in the LA region followed the same tax rubric as other local lodging businesses in the City of Los Angeles, in the 12 months between October 2014 and September 2015 they would have owed municipal governments in the region more than \$41 million in local taxes.

City of Los Angeles Lodging Taxes								
Room Tax	Assessment Tax	Tourism Fee	· · · · · · · · · · · · · · · · · · ·	Airbnb's LA Regional Revenue	Airbnb's Estimated Tax Obligation			
14%	.2%	1.5%	15.7%	\$261,751,695	\$41,095,016			

APPENDIX: LOS ANGELES METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

ZIP Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	ZIP Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
90291	1,582	\$32,857,565	90291	1,082	\$32,857,565
90046	1,125	\$18,028,931	90046	883	\$18,028,931
90028	964	\$14,806,487	90026	606	\$10,065,162
90026	702	\$10,065,162	90028	595	\$14,806,487
90036	544	\$7,972,326	90027	414	\$5,058,872
90068	485	\$8,263,758	90069	408	\$7,737,891
90027	476	\$5,058,872	90036	402	\$7,972,326
90069	473	\$7,737,891	90068	402	\$8,263,758
90405	438	\$6,782,431	90405	397	\$6,782,431
90292	402	\$7,001,520	90292	313	\$7,001,520

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	13,246	\$261,751,695	_	-
30+ days	11,096	\$257,583,147	83.77%	98.41%
60+ days	8,089	\$245,573,376	61.07%	93.82%
90+ days	6,004	\$229,957,872	45.33%	87.85%
120+ days	4,659	\$213,790,685	35.17%	81.68%
180+ days	2,941	\$181,547,646	22.20%	69.36%
360+ days	577	\$79,619,092	4.36%	30.42%



In 2016, the American Hotel & Lodging Association (AH&LA) released an analysis providing a view of the commercial activity being conducted on Airbnb in the nation's largest metropolitan statistical areas (MSAs). John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University, conducted the analysis of over 448,000 lines of data and over 10.2 million variables and developed the key findings, which include:

- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the Chicago MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and the length of time they are renting their units.

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, conducted the analysis and developed the key findings. They examined over 448,000 lines of data and over 10.2 million variables.

This study was primarily funded by the American Hotel & Lodging Educational Foundation.
Additional funds provided by the American Hotel & Lodging Association. Penn State University received no funding for the analysis.

Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: CHICAGO REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a disproportionate share of the company's revenue in the Chicago region.

Number of Days Operator Lists Unit(s) for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	3,210	\$47,602,833	74.29%	96.27%
180+ Days / Year	635	\$28,828,196	14.7%	58.3%
360+ Days / Year	111	\$11,757,274	2.57%	23.78%



More than half (58%) of Airbnb's Chicago-area revenue – almost \$29 million – comes from operators who list properties for rent more than 180 days per year.



Almost all of Airbnb's revenue in the Chicago region – 96% or more than \$47 million – comes from operators who list units for rent more than 30 days per year.



Operators listing multiple units for rent drove more than one-third (38%) of Airbnb's revenue in the Chicago region – \$19 million.

The five Chicago area ZIP codes with the most properties listed on Airbnb account for more than \$20 million, or 41% of Airbnb's revenue in the Chicago metropolitan area.

ZIP Code	Neighborhoods	Host Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
60657	Lake View, Boystown	391	434	\$3,291,856
60611	Magnificent Mile, Streeterville	314	419	\$4,622,857
60614	Lincoln Park, Sheffield Neighbors, Old Town Triangle	364	411	\$4,179,342
60610	Old Town, Gold Coast	324	393	\$4,415,188
60622	Wicker Park, West Town	291	333	\$3,671,681
Total		1,684	1,990	\$20,180,924

APPENDIX: CHICAGO METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

Zip Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Zip Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
60657	434	\$3,291,856	60657	391	\$3,291,856
60611	419	\$4,622,857	60614	364	\$4,179,342
60614	411	\$4,179,342	60610	324	\$4,415,188
60610	393	\$4,415,188	60611	314	\$4,622,857
60622	333	\$3,671,681	60647	297	\$2,906,511
60647	324	\$2,906,511	60622	291	\$3,671,681
60654	271	\$2,296,983	60654	247	\$2,296,983
60613	265	\$2,233,421	60613	245	\$2,233,421
60601	258	\$2,913,019	60601	211	\$2,913,019
60640	211	\$1,538,997	60640	184	\$1,538,997

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	4,321	\$49,448,299.10	_	-
30+ days	3,210	\$47,602,834	74.29%	96.27%
60+ days	2,173	\$43,882,554	50.29%	88.74%
90+ days	1,505	\$39,414,950	34.83%	79.71%
120+ days	1,092	\$35,595,780	25.27%	71.99%
180+ days	635	\$28,828,197	14.70%	58.30%
360+ days	111	\$11,757,275	2.57%	23.78%



In 2016, the American Hotel & Lodging Association (AH&LA) released an analysis providing a view of the commercial activity being conducted on Airbnb in the nation's largest metropolitan statistical areas (MSAs). John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University, conducted the analysis of over 448,000 lines of data and over 10.2 million variables and developed the key findings, which include:

- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more, during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties and/or renting properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the Miami MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and length of time that hosts rent out their unit(s).

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, conducted the analysis and developed the key findings. They examined over 448,000 lines of data and over 10.2 million variables.

This study was primarily funded by the American Hotel & Lodging Educational Foundation. Additional funds provided by the American Hotel & Lodging Association. Penn State University received no funding for the study.

Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: MIAMI REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a large percentage of the company's revenue in the Miami region.

Number of Days Operator Lists Unit(s) for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	4,533	\$121,727,626	89.87 %	99.23%
180+ Days / Year	1,412	\$93,584,435	27.99%	76.29%
360+ Days / Year	311	\$47,341,874	6.17%	38.59%



Three-quarters (76%) of Airbnb's Miami-area revenue, over \$93 million, came from operators who listed properties for rent more than 180 days per year.



62%

Operators listing multiple residential units for rent drove nearly two-thirds (62%, the highest percentage of any city studied) of Airbnb's revenue in the Miami region, or more than \$76 million.



39%

Full-time operators listing residential properties for rent 360 days or more per year generated more than \$47 million – 39% of Airbnb's revenue, the highest percentage of any city studied – in the Miami area.

The five Miami-area ZIP codes with the most properties listed on Airbnb from October 2014 through September 2015, accounted for more than \$79 million, or 65% of Airbnb's revenue in the Miami metropolitan area.

ZIP Code	Neighborhoods	Airbnb Operator Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Airbnb Revenue 10/14 – 9/15
33139	South Beach, South Pointe, City Center	1,427	2,930	\$45,687,010
33140	Bayshore, Mid-Beach	365	833	\$11,534,012
33160	Golden Beach, Eastern Shores, Sunny Isles Beach	319	704	\$8,742,640
33141	North Beach, North Bay Village	368	617	\$7,520,232
33131	Downtown Miami, Brickell Key	287	424	\$5,859,474
Total		2,766	5,508	\$79,343,367

If Airbnb in the Miami region followed the same tax rubric as other local lodging businesses in the City of Miami, in the 12 months between October 2014 and September 2015 Airbnb operators in the metropolitan area would have owed almost \$16 million in taxes.

City of Miami Lodging Taxes					
Florida State Sales Tax		City of Miami Hotel Room Occupancy Tax	_	Airbnb's Miami Regional Revenue (10/14 – 9/15)	Airbnb's Estimated Tax Obligation
7%	3%	3%	13%	\$122,675,254	\$15,947,783

APPENDIX: MIAMI METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

Zip Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Zip Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
33139	2,930	\$45,687,010	33139	1,427	\$45,687,010
33140	833	\$11,534,012	33141	368	\$7,520,232
33160	704	\$8,742,640	33140	365	\$11,534,012
33141	617	\$7,520,232	33160	319	\$8,742,640
33131	424	\$5,859,474	33131	287	\$5,859,474
33019	376	\$3,633,028	33132	235	\$4,555,822
33132	356	\$4,555,822	33019	182	\$3,633,028
33130	225	\$2,100,584	33137	168	\$1,738,627
33137	191	\$1,738,627	33130	160	\$2,100,584
33304	148	\$1,459,188	33133	93	\$1,659,930

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	5,044	\$122,675,254	_	-
30+ days	4,533	\$121,727,627	89.87%	99.23%
60+ days	3,505	\$118,179,990	69.49%	96.34%
90+ days	2,745	\$112,926,256	54.42%	92.05%
120+ days	2,154	\$106,338,476	42.70%	86.68%
180+ days	1,412	\$93,584,435	27.99%	76.29%
360+ days	311	\$47,341,874	6.17%	38.59%



In 2016, the American Hotel & Lodging Association (AH&LA) released an analysis providing a view of the commercial activity being conducted on Airbnb in the nation's largest metropolitan statistical areas (MSAs). John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University, conducted the analysis of over 448,000 lines of data and over 10.2 million variables and developed the key findings, which include:

- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more, during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties and/or renting properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the Boston MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and length of time that hosts rent out their unit(s).

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, conducted the analysis and developed the key findings. They examined over 448,000 lines of data and over 10.2 million variables.

This study was primarily funded by the American Hotel & Lodging Educational Foundation. Additional funds provided by the American Hotel & Lodging Association. Penn State University received no funding for the study.

Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: BOSTON REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a large percentage of the company's revenue in the Boston region.

Number of Days Operator Lists Unit(s) for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	1,882	\$39,218,458	67.97%	82.76%
180+ Days / Year	431	\$24,846,265	15.57%	52.43%
360+ Days / Year	79	\$10,845,995	2.85%	22.89%



Almost all of Airbnb's revenue in the Boston region – 83% or almost \$40 million – comes from operators who list units for rent more than 30 days per year.



More than half (52%) of Airbnb's Boston-area revenue – almost \$25 million – comes from operators who listed properties for rent more than 180 days per year.



Operators listing multiple units for rent drove almost half (45%) of Airbnb's revenue in the Boston region – \$21 million.

The five Boston-area ZIP codes with the most properties listed on Airbnb from October 2014 through September 2015 accounted for more than \$13 million, or 28% of Airbnb's revenue in the Boston metropolitan area.

ZIP Code	Neighborhoods	Airbnb Operator Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Airbnb Revenue 10/14 – 9/15
02139	Mid-Cambridge, East Cambridge, Riverside, Cambridgeport	205	254	\$3,427,482
02116	Back Bay, Bay Village, Columbus	179	250	\$2,629,783
02138	North Cambridge, Cambridge Highlands, West Cambridge	204	239	\$2,974,939
02118	Central, Fenway, South End, North Dorchester	142	183	\$ 2,486,161
02114	West End, Beacon Hill	134	158	\$1,926,928
Total		864	1,084	\$13,445,293

APPENDIX: BOSTON METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

Zip Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Zip Code	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
02139	254	\$3,427,482	02139	205	\$3,427,482
02116	250	\$2,629,783	02138	204	\$2,974,939
02138	239	\$2,974,939	02116	179	\$2,629,783
02118	183	\$2,486,161	02118	142	\$2,486,161
02114	158	\$1,926,928	02114	134	\$1,926,928
02215	140	\$1,398,817	02130	120	\$1,711,627
02115	131	\$1,286,826	02115	117	\$1,286,826
02130	128	\$1,711,627	02215	103	\$1,398,817
02143	110	\$1,146,935	02143	97	\$1,146,935
02127	92	\$1,184,940	02127	86	\$1,184,940

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	_	-	_	-
30+ days	1,882	\$39,218,459	67.97%	82.76%
60+ days	1,260	\$35,998,268	45.50%	75.96%
90+ days	896	\$32,824,978	32.36%	69.27%
120+ days	675	\$29,909,247	24.38%	63.11%
180+ days	431	\$24,846,265	15.57%	52.43%
360+ days	79	\$10,845,995	2.85%	22.89%



In 2016, the American Hotel & Lodging Association (AH&LA) released an analysis providing a view of the commercial activity being conducted on Airbnb in the nation's largest metropolitan statistical areas (MSAs). John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University, conducted the analysis of over 448,000 lines of data and over 10.2 million variables and developed the key findings, which include:

- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more, during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties and/or renting properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the New York City MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and length of time that hosts rent out their unit(s).

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

John W. O'Neill, MAI, ISHC, Ph.D., professor of hospitality management and director of the Center for Hospitality Real Estate Strategy in the School of Hospitality Management at Penn State University and Yuxia Ouyang, doctoral student, conducted the analysis and developed the key findings. They examined over 448,000 lines of data and over 10.2 million variables.

This study was primarily funded by the American Hotel & Lodging Educational Foundation. Additional funds provided by the American Hotel & Lodging Association. Penn State University received no funding for the study.

Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: NEW YORK CITY REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a large percentage of the company's revenue in the New York City region.

Number of Days Operator Lists Unit(s) for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	21,623	\$432,861,637	77.03%	96.47%
180+ Days / Year	4,712	\$265,478,756	16.79%	59.17%
360+ Days / Year	909	\$107,471,333	3.24%	23.95%



More than half (59%) of Airbnb's New York City revenue – over \$265 million – comes from operators who listed units for rent more than 180 days per year.



24%

Nearly one-quarter of Airbnb's revenue in the New York City area – 24% or more than \$107 million – comes from operators who list units for rent full-time.



Operators listing multiple units for rent drove almost one-third (32%) of Airbnb's revenue in the New York City region – \$145 million.

The five New York City-area ZIP codes with the most properties listed on Airbnb from October 2014 through September 2015 accounted for more than \$95 million, or 21% of Airbnb's revenue in the New York MSA.

ZIP Code	Neighborhoods	Airbnb Operator Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Airbnb Revenue 10/14 – 9/15
11211	Williamsburg	1,349	1,443	\$18,905,453
10011	Chelsea	1,120	1,181	\$18,095,204
10003	Union Square, Gramercy Park	1,090	1,165	\$20,175,660
10002	Lower East Side	1,036	1,115	\$19,363,658
10009	East Village	1,013	1,100	\$18,598,365
Total		5,608	6,004	\$95,138,340

If Airbnb operators in the New York City area followed the same tax rubric as other lodging businesses in New York City, in the 12 months between October 2014 and September 2015 they would have owed municipal governments in the region more than \$75 million.

City of New York Lodging Taxes										
State Tax	City Sales Tax	Transportation District Surcharge	Hotel Room Occupancy Tax	Total Tax Rate	NY Unit Fee	Occupancy Tax	Total Fee/ Night	Sold Room Nights	Airbnb's NYC Regional Revenue	Airbnb's Estimated Tax Obligation
4%	4.5%	.375%	5.88%	14.75%	\$1.50	\$2.00	\$3.50	2,582,659	\$448,706,771	\$75,223,555

APPENDIX: NEW YORK CITY METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

Zip Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Zip Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
11211	1,443	\$18,905,453	11211	1,349	\$18,905,453
10011	1,181	\$18,095,204	10011	1,120	\$18,095,204
10003	1,165	\$20,175,660	10003	1,090	\$20,175,660
10002	1,115	\$19,363,658	10002	1,036	\$19,363,658
10009	1,100	\$18,598,365	10014	1,018	\$19,070,874
10014	1,085	\$19,070,874	10009	1,013	\$18,598,365
10019	1,027	\$20,378,469	10019	897	\$20,378,469
10012	926	\$18,464,117	10012	870	\$18,464,117
10016	765	\$10,386,529	11238	711	\$7,532,799
11238	764	\$7,532,799	10016	708	\$10,386,529

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	28,070	\$448,706,772	_	-
30+ days	21,623	\$432,861,638	77.03%	96.47%
60+ days	14,789	\$398,392,112	52.69%	88.79%
90+ days	10,403	\$358,837,333	37.06%	79.97%
120+ days	7,681	\$323,158,044	27.36%	72.02%
180+ days	4,712	\$265,478,757	16.79%	59.17%
360+ days	909	\$107,471,333	3.24%	23.95%



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- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more, during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties and/or renting properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the Philadelphia MSA.

Data Source

The data used in this report were sourced from Airdna, which tracks Airbnb revenues and operations and provides pricing and revenue data to Airbnb operators. Airdna conducts a continuous search of the Airbnb web site, resulting in each Airbnb listing being analyzed once every seven days.

The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and length of time that hosts rent out their unit(s).

Kalibri Labs, a hospitality research firm, sorted the data, which included Airbnb operators from October 2014 through September 2015.

Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

Additional Information:

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Glossary of Terms

Host: Person or entity renting out at least one residential unit on the Airbnb platform.

Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: PHILADELPHIA REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a large percentage of the company's revenue in the Philadelphia region.

Number of Days Operator Lists Unit(s) for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	1,167	\$13,383,017	63.98%	94.29%
180+ Days / Year	232	\$8,152,419	12.72%	57.44%
360+ Days / Year	41	\$3,868,558	2.25%	27.26%



More than half (57%) of Airbnb's Philadelphia revenue – over \$8 million – comes from operators who listed properties for rent more than 180 days per year.



27%

Over one-quarter of Airbnb's revenue in the Philadelphia area – 27% or almost \$4 million – comes from operators who listed units for rent full time.



Operators listing multiple units for rent drove over one-third (36%) of Airbnb's revenue in the Philadelphia region – over \$5 million.

The 5 Philadelphia-area ZIP codes with the most properties listed on Airbnb from October 2014 through September 2015 accounted for more than \$7 million, or nearly half of Airbnb's revenue in the Philadelphia metropolitan area.

ZIP Code	Neighborhoods	Airbnb Operator Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Airbnb Revenue 10/14 – 9/15
19103	Rittenhouse Square	286	426	\$3,486,012
19130	Fairmount District	167	176	\$835,173
19146	Devils Pocket	160	169	\$1,094,784
19147	Queen Village	152	168	\$1,229,632
19107	Center City	147	156	\$970,012
Total		912	1,095	\$7,615,613

APPENDIX: PHILADELPHIA METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

Zip Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Zip Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
19103	426	\$3,486,012	19103	286	\$3,486,012
19130	176	\$835,173	19130	167	\$835,173
19146	169	\$1,094,784	19146	160	\$1,094,784
19147	168	\$1,229,632	19147	152	\$1,229,632
19107	156	\$970,012	19107	147	\$970,012
19106	102	\$845,872	19106	92	\$845,872
19104	85	\$372,382	19123	77	\$331,873
19123	80	\$331,873	19104	73	\$372,382
19125	67	\$365,342	19125	62	\$365,342
19143	66	\$459,728	19143	60	\$459,728

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	1824	\$14,192,897.67	_	-
30+ days	1167	\$13,383,017.20	63.98%	94.29%
60+ days	765	\$12,137,080.23	41.94%	85.52%
90+ days	565	\$11,123,496.71	30.98%	78.37%
120+ days	409	\$10,081,476.51	22.42%	71.03%
180+ days	232	\$8,152,418.70	12.72%	57.44%
360+ days	41	\$3,868,557.65	2.25%	27.26%



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- ▶ More than a quarter (26%) of Airbnb's revenue in 14 of the nation's largest markets \$347 million came from operators who listed properties for rent full-time, or for 360 days or more, during 12 months from October 2014 through September 2015.
- ▶ Based on a rigorous analysis of Airbnb listing data in 14 major U.S. metropolitan areas over the course of a full year, commercial operators in the nation's largest cities generate a substantial share of the company's revenue by renting out multiple residential properties and/or renting properties year-round.
- ▶ The number of people renting out two or more residential properties on Airbnb appears to be growing, and nearly 40% of the company's revenue in 14 of the nation's largest cities is generated by these "multi-unit operators," totaling more than half a billion dollars a year.

The following analysis provides greater detail about the commercial activity being conducted on Airbnb in the San Francisco MSA.

Data Source

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The data cover 14 of the nation's largest metropolitan statistical areas (MSAs): New York, Chicago, Los Angeles, Philadelphia, Miami, Houston, Dallas, Phoenix, San Antonio, San Diego, San Francisco, Boston, Austin and Washington, D.C. The research focuses on hosts who rent multiple units and length of time that hosts rent out their unit(s).

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Exclusions: All data exclude all shared rooms and units and unique units, such as boats, tree houses, and tents.

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Glossary of Terms

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Full-time operator: Any host renting out unit(s) 360 or more days per year.

KEY FINDINGS: SAN FRANCISCO REGION

The data show that Airbnb operators listing residential properties for rent for the bulk of the year drive a large percentage of the company's revenue in the San Francisco region.

Number of Days Operator Lists Unit(s) for Rent	Number of Operators 10/2014 – 9/2015	Revenue Generated 10/2014 – 9/2015	% of Airbnb Operator Population 10/2014 – 9/2015	% of Airbnb's Revenue 10/2014 – 9/2015
30+ Days / Year	7,423	\$176,846,967	75.50%	96.53%
180+ Days / Year	1,908	\$117,074,238	19.41%	63.90%
360+ Days / Year	308	\$40,208,821	3.13%	21.95%



Nearly two-thirds (64%) of Airbnb's San Francisco-area revenue – over \$117 million – comes from operators who listed properties for rent more than 180 days per year.



Nearly one-quarter of Airbnb's revenue in the San Francisco area – 22% or more than \$40 million comes from operators who list units for rent full-time.



Operators listing multiple units for rent drove almost one-third (32%) of Airbnb's revenue in the San Francisco region – \$58 million.

The five San Francisco-area ZIP codes with the most properties listed on Airbnb from October 2014 through September 2015 accounted for more than \$97 million, or over half of Airbnb's revenue in the San Francisco MSA.

ZIP Code	Neighborhoods	Airbnb Operator Count 10/2014 – 9/2015	Property Count 10/2014 – 9/2015	Airbnb Revenue 10/14 – 9/15
94110	Mission District, Bernal Heights	797	891	\$17,144,886
94109	Russian Hill	651	705	\$9,261,121
94117	Haight-Ashbury	526	591	\$11,954,364
94114	The Castro, Noe Valley	506	567	\$11,536,424
94107	Potrero Hill	393	424	\$7,474,730
Total		2,873	3,178	\$57,371,525

If Airbnb operators in the San Francisco area followed the same tax rubric as other lodging businesses in San Francisco, in the 12 months between October 2014 and September 2015 they would have owed municipal governments in the region more than \$30 million.

San Francisco Area Lodging Taxes					
Room Tax	CA Tourism Fee		Total City of San Francisco Lodging Tax Rate	Airbnb's San Francisco Revenue	Airbnb's Estimated Tax Obligation
14%	.28%	2.25%	16.53%	\$183,213,462	\$30,285,185

APPENDIX: SAN FRANCISCO METROPOLITAN STATISTICAL AREA DATA TABLES

Revenue Analysis by ZIP Code

Zip Code	Property Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Zip Code	Host Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015
94110	891	\$17,144,886	94110	797	\$17,144,886
94109	705	\$9,261,121	94109	651	\$9,261,121
94117	591	\$11,954,364	94117	526	\$11,954,364
94114	567	\$11,536,424	94114	506	\$11,536,424
94107	424	\$7,474,730	94107	393	\$7,474,730
94103	420	\$7,285,869	94103	387	\$7,285,869
94123	400	\$6,395,859	94123	370	\$6,395,859
94115	372	\$6,792,783	94115	334	\$6,792,783
94102	354	\$5,152,180	94102	300	\$5,152,180
94133	258	\$5,350,587	94133	233	\$5,350,587

Number of Days Operator Lists Unit(s) for Rent	Operator Count 10/2014 – 9/2015	Revenue 10/2014 – 9/2015	Percent of Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015	Percent of Revenue From Operators Who List Unit(s) for Multiple Days 10/2014 – 9/2015
Total	9,832	\$183,213,462	_	-
30+ days	7423	\$176,846,967.03	75.50%	96.53%
60+ days	5224	\$164,595,098.98	53.13%	89.84%
90+ days	3865	\$151,447,719.66	39.31%	82.66%
120+ days	2913	\$137,881,690.99	29.63%	75.26%
180+ days	1908	\$117,074,237.91	19.41%	63.90%
360+ days	308	\$40,208,821.50	3.13%	21.95%