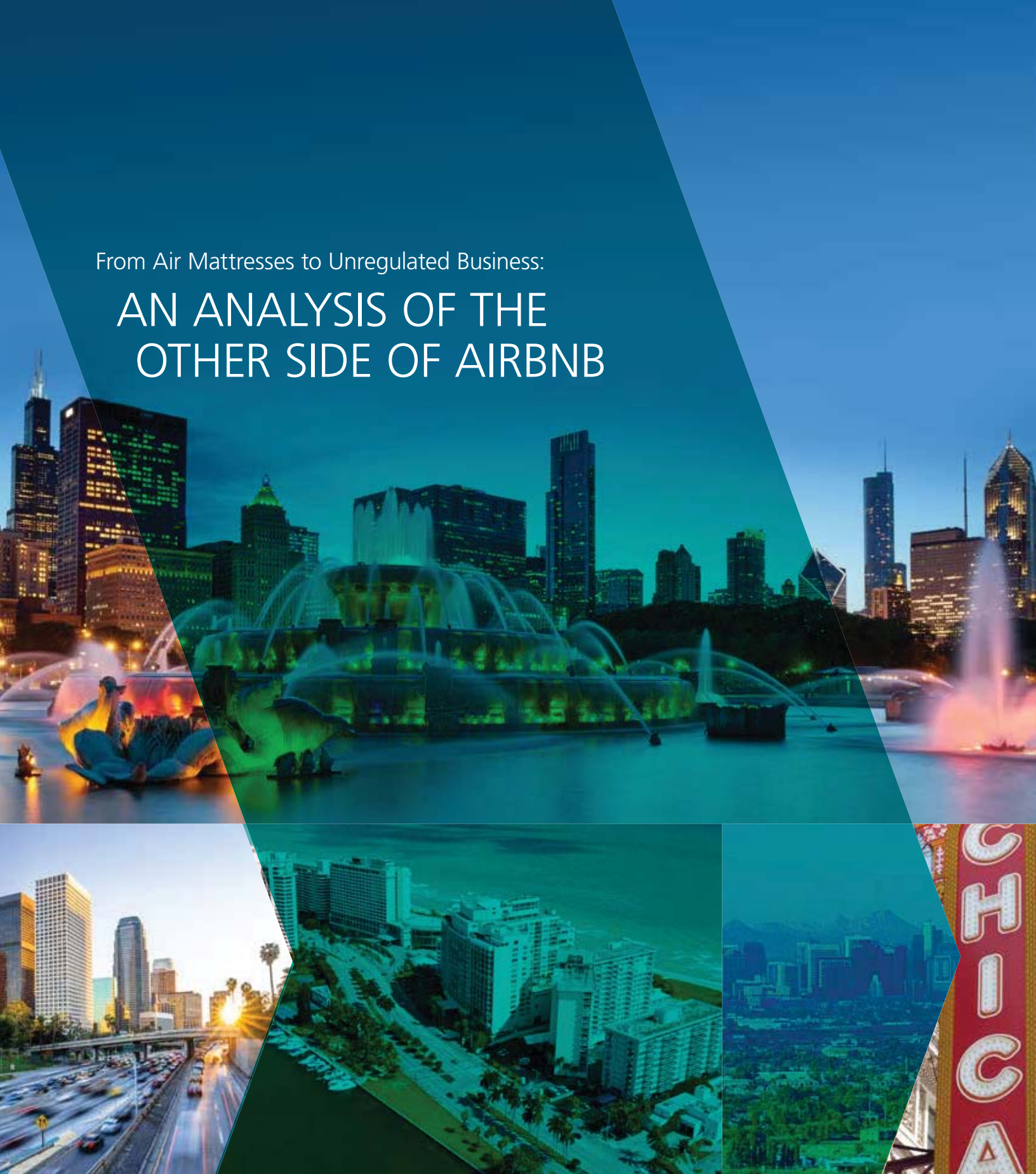


From Air Mattresses to Unregulated Business:
**AN ANALYSIS OF THE
OTHER SIDE OF AIRBNB**



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;

\$500 Million



\$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.



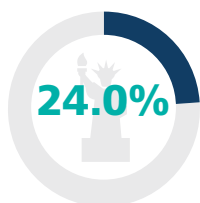
The **growth in Airbnb hosts accelerated over the summer** months and then remained steady.



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

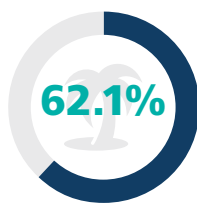
East Coast: New York and Miami
West Coast: Los Angeles and San Francisco

By The Numbers



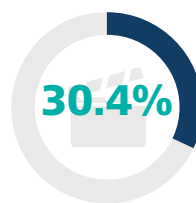
New York

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



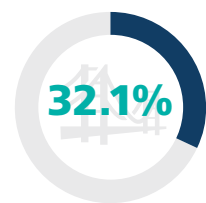
Miami

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.

	CITY-BY-CITY MARKET BREAKDOWN	FULL-TIME OPERATORS				ALL OPERATORS					MULTI-UNIT OPERATORS	
		Count No.	Revenue	Full-Time %	Revenue %		Count No.	Revenue	Host %	Revenue %	Host %	Revenue %
Houston	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%		
	3+ unit Full-Time Operators	0	\$0	0.0%	0.0%	3+ unit Hosts	76	\$3,148,533	8.6%	29.4%		
	Variable Full-Time Operators	25	\$2,595,440									
	Total Full-Time Operators	30	\$2,826,438	3.4%	26.4%	Total Hosts	882	\$10,706,643				
Los Angeles	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%
	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%		
	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%		
	Variable Full-Time Operators	477	\$72,067,522									
	Total Full-Time Operators	577	\$79,619,092	4.4%	30.4%	Total Hosts	13,246	\$261,751,695				
Miami	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%		
	Variable Full-Time Operators	277	\$44,566,095									
	Total Full-Time Operators	311	\$47,341,874	6.2%	38.6%	Total Hosts	5,044	\$122,675,254				
New York	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%
	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%		
	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									
	Total Full-Time Operators	909	\$107,471,333	3.2%	24.0%	Total Hosts	28,070	\$448,706,772				
Philadelphia	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%
	2 unit Full-Time Operators	2	\$155,410	1.2%	9.6%	2 unit Hosts	161	\$1,624,239	8.8%	11.4%		
	3+ unit Full-Time Operators	2	\$148,439	1.9%	4.2%	3+ unit Hosts	108	\$3,538,479	5.9%	24.9%		
	Variable Full-Time Operators	34	\$3,479,128									
	Total Full-Time Operators	41	\$3,868,558	2.2%	27.3%	Total Hosts	1,827	\$14,192,898				
Phoenix	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%		
	3+ unit Full-Time Operators	0	\$0	0.0%	0.0%	3+ unit Hosts	85	\$13,669,909	4.9%	32.4%		
	Variable Full-Time Operators	22	\$2,096,961									
	Total Full-Time Operators	24	\$2,173,624	1.4%	5.1%	Total Hosts	1,732	\$42,214,120				
San Antonio	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%
	2 unit Full-Time Operators	1	\$39,876	2.3%	6.6%	2 unit Hosts	43	\$600,637	14.7%	16.4%		
	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									
	Total Full-Time Operators	14	\$702,498	4.8%	19.2%	Total Hosts	294	\$3,664,124				
San Diego	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%
	2 unit Full-Time Operators	3	\$281,949	0.8%	3.5%	2 unit Hosts	361	\$8,043,009	10.3%	14.9%		
	3+ unit Full-Time Operators	3	\$537,446	1.3%	4.1%	3+ unit Hosts	229	\$13,160,360	6.5%	24.5%		
	Variable Full-Time Operators	89	\$11,585,325									
	Total Full-Time Operators	106	\$12,928,691	3.0%	24.0%	Total Hosts	3,500	\$53,808,333				
San Francisco	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%
	2 unit Full-Time Operators	24	\$3,253,153	2.5%	12.3%	2 unit Hosts	959	\$26,410,758	9.8%	14.4%		
	3+ unit Full-Time Operators	3	\$561,336	0.6%	1.7%	3+ unit Hosts	510	\$32,393,175	5.2%	17.7%		
	Variable Full-Time Operators	216	\$32,003,207									
	Total Full-Time Operators	308	\$40,208,822	3.1%	21.9%	Total Hosts	9,832	\$183,213,462				
Washington	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%
	2 unit Full-Time Operators	4	\$420,709	1.2%	6.7%	2 unit Hosts	344	\$6,291,187	8.7%	12.5%		
	3+ unit Full-Time Operators	1	\$273,800	0.5%	2.3%	3+ unit Hosts	201	\$11,719,951	5.1%	23.3%		
	Variable Full-Time Operators	88	\$12,419,081									
	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.