INSTITUTE FOR HOUSING STUDIES AT DEPAUL UNIVERSITY

State of Rental Housing in Cook County Data and Methodology

This report brings together data products from the United States Census Bureau, including the American Community Survey (ACS) Public Use Microdata Sample (PUMS) data for the years 2000 through 2015 and American FactFinder summary data from 2000 through 2015. Please note, the time period of this report overlaps Census Bureau population estimates as ACS data prior to 2012 use 2000 Census population estimates while data from 2012 and after use 2010 Census population estimates.

The American Community Survey is a survey conducted every year by the Census Bureau based on a geographically stratified sample of about 1 percent of the United States population. PUMS data is a publicly available package of the original survey responses. PUMS data may be used to develop custom tables and conduct original analysis using standard statistical software. PUMS data are provided to the public at the Public Use Microdata Area (PUMA) level, which is a special geography that generally contains between 40,000 and 100,000 households. The 34 submarkets that IHS maps in this report are based on PUMA geography. Depending on the size of the geography that is being analyzed, ACS data are available in 1-year and 5-year varieties. In order to produce statistically valid estimates at smaller geographies, the Census Bureau combines multiple years of survey responses to increase the sample size. Each year, the Census Bureau publishes 1-year estimates for places with populations above 65,000 and 5-year estimates for smaller geographies.

For this analysis, the PUMS data was processed using IBM SPSS 19 and the standard weights provided by the United States Census Bureau. All estimates are based on 1-year PUMS data. Any estimates presented at the PUMA level, such as the map in this report, are based on averages from 2013 through 2015 using 1-year PUMS data.

Income levels were calculated using household median income for the Chicago-Naperville-Joliet metropolitan statistical area (MSA) tables using American FactFinder tables generated using 1-year ACS estimates. The Chicago-Naperville-Joliet MSA includes the Illinois counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will, the Indiana counties of Jasper, Lake, Newton and Porter and Kenosha County in Wisconsin. This report also uses an additional AMI category, splitting "Greater than 120% AMI" into categories for "120-200% AMI" and "Greater than 200% AMI." Table 1 displays median income values by year, followed by Table 2 displaying income levels for 2015.

Table 1. Chicago Metropolitan Statistical Area Household Median Income

Year	2007	2011	2012	2013	2014	2015
Median Household Income	\$59,255	\$57,267	\$59,261	\$60,564	\$61,598	\$63,153
Source: American Community Survey Data 1-Year, 2007, 2011-2015						

Table 2. 2015 Income Levels based on Chicago Metropolitan Statistical Area Household Median Income

<30% AMI	30-50% AMI	50-80% AMI	80-120% AMI	120-200%	>200% AMI	
\$0.00-	\$18,946.00-	\$31,577.00-	\$50,523.00-	\$75,784.00-	\$126,307.00 and	
\$18,945.99	\$31,576.99	\$50,522.99	\$75,783.99	\$126,306.99	Greater	
Source: American Community Survey Data 1-Year, 2015						

Rent Burden calculates the annual percentage of household income spent toward rent payments. This report classifies any household with zero or negative values for household income as "Severely Burdened." Additionally zero or missing values for monthly rent payments are classified as "No Burden," as are households with missing values for household income. This methodology is in line with comparable analysis, including the Joint Center for Housing Studies at Harvard University's annual report on the national rental housing market¹.

The affordability gap represents the difference between the number of renter households that demand affordable housing and the available supply of affordable rental housing. In this analysis, housing affordability is marked to the federal poverty threshold for a four-person household in a given year. An affordable unit is a unit with gross rent less than or equal to 30 percent of the income of a household earning 150 percent of the poverty level. A household that demands affordable housing is any household with income less than or equal to 150 percent of the poverty level, or a household paying gross rent that is already affordable. The affordability gap is the difference between these two figures. This report provides affordability gap data for the 34 PUMA-level submarkets in Cook County as well as an aggregate total at the county level. The table below displays the figures used to calculate affordable units and households that demand affordable rental housing.

Table 3. Federal Poverty Level and Affordable Monthly Rent

Year	Federal Poverty Threshold	150% of Poverty Level	Affordable Gross Monthly Rent		
2007	\$21,203	\$31,805	\$795.11		
2011	\$23,021	\$34,532	\$863.29		
2012	\$23,492	\$35,238	\$880.95		
2013	\$23,844	\$35,766	\$894.15		
2014	\$24,230	\$36,345	\$908.63		
2015	\$24,257	\$36,386	\$909.64		
Source: US Census Bureau, 2007, 2011-2015					

¹ Joint Center for Housing Studies of Harvard University. *America's Rental Housing-Expanding Options for Diverse and Growing Demand.* Cambridge, MA, 2015.

<www.jchs.hardvard.edu/sites/jchs.hardvard.edu/files/americas_rental_housing_2015_web.pdf>.