

Affordability Risk Index Guide

IHDA / Strategic Planning and Research

Oct. 6, 2015

Summary of the Affordability Risk Index:

The Affordability Risk Index is a new tool that is intended to provide a point-based incentive in the QAP for developers to preserve affordability in areas that are becoming less affordable at a faster rate. This is a census tract-based tool and census tracts where affordability loss risk is greatest receive the highest points in this index.

Unlike other metrics currently used, the Affordability Risk Index uses US Census data to measure change over time (between 2000 and 2013) across various factors typically assumed to indicate affordability loss. Those factors are: Median Household Income; Median Home Value; Families Below the Federal Poverty Level; Housing Unit Vacancy; Renter Tenancy; Individuals Employed in Management; Business, Science and Arts Occupations; and Individuals with a 4-year Degree (Bachelor's) or Higher. **Areas identified by the Index as having significant changes across these factors (either positive or negative change depending on the factor), will score points as identified below in this document.**

A listing of all census tracts in the State of Illinois and their respective Affordability Risk Index score can be found on the IHDA website along with an interactive map visualizing these tracts.

Factors and Calculations:

Affordability Risk Index Factors were chosen based on research on datasets typically used to measure decreasing affordability of an area. The latest available American Community Survey (ACS) 2009-2013 data was used to contrast change from the 2000 decennial census data. The Longitudinal Tract Database provided 2000 U.S. Census data that was adjusted to fit into the 2010 census tracts used by the latest ACS data and thereby easily compare with it. Using these two datasets, the factors were calculated as follows:

Median Household Income

Median household income for each census tract from the 2000 decennial census data were multiplied by a factor of 1.37811525 (obtained from the Bureau of Labor Statistics), in order to compensate for inflation and adjust 1999 dollars (used in the 2000 decennial census data) to 2012 dollars (used in the 2009-2013 ACS data). Census tracts were grouped by geographic set-aside (with the those in Lake, Will, McHenry, Kane, DuPage and suburban Cook counties being "Chicago Metro" regardless of AHPAA applicability status) and set-aside averages were calculated for each. The relative change between the data sets was calculated for each census tract as well as the relative change between the set-aside averages. Any census tract indicating a relative change at a level greater than its set-aside average met this threshold.

Median Home Value

Median home values for each census tract from the 2000 decennial census data were multiplied by a factor of 1.37811525 (obtained from the Bureau of Labor Statistics), which would adjust 1999 dollars (used in the 2000 decennial census data) to 2012 dollars (used in the 2009-2013 ACS data) and compensate for inflation. Census tracts were grouped by geographic set-aside (with the those in Lake, Will, McHenry, Kane, DuPage and suburban Cook counties being "Chicago Metro" regardless of AHPAA applicability status) and set-aside averages were calculated for each. The relative change between the data sets was calculated for each census tract as well as the relative change between the set-aside averages. Any census tract indicating a relative change at a level greater than its set-aside average met this threshold.

Families below the Federal Poverty Level

The number of families living below the federally defined poverty level was divided by the number of total families for each census tract. The relative change between the datasets was calculated for each census tract as well as the relative change between the State averages. Overall the State saw an increase in the rate of families living below the poverty line. Any census tracts indicating a relative change at a level less than the State average, including those indicating a decline in family poverty rates, met the threshold for scoring (1) one or (2) points (a score of 2 points would be achieved if the census tract also saw a decline in vacancy or had a 2013 level below 3.5%; see Housing Unit Vacancy below). For points 3, 4, and 5, census tracts with a poverty rate below the State average poverty rate under the 2013 ACS data, as well as indicating a relative change less than the State average relative change from the first threshold, meet the next threshold.

Housing Unit Vacancy

The number of total vacant housing units was divided by the number of total housing units for each census tract. A negative trend in housing unit vacancy or a 2013 housing vacancy rate below 3.5% are the threshold for this factor. Any census tract for which the data indicated either decline in vacancy or a 2013 housing vacancy rate below 3.5% met this threshold.

Renter Tenancy

The number of total renter occupied households was divided by the number of total occupied households for each census tract. The relative change between the datasets was calculated for each census tract as well as the relative change between the State averages. Overall the State saw an increase in renter tenancy. Any census tracts indicating a relative change at a level less than the State average, including those indicating a decline in renter tenancy, met this threshold.

Individuals Aged 16 and Over Employed in Management, Business, Science and Arts Occupations

The number of total individuals employed in management, business, science and arts occupations was divided by the total number of individuals aged 16 and over for each census tract. The relative change between the datasets was calculated for each census tract as well as the relative change between the State averages. Overall the State saw an increase in the rate of individuals over the age of 16 employed in these occupations. Any census tracts indicating a relative change at a level higher than the State average met this threshold.

Individuals Aged 25 and Over with a 4-year Degree (Bachelor's) or Higher

The number of total individuals with a four-year degree or higher was divided by the total number of individuals aged 25 and over for each census tract. The relative change between the datasets was calculated for each census tract as well as the relative change between the State averages. Overall the State saw an increase in the rate of individuals over the age of 25 with a 4-year degree or higher. Any census tracts indicating a relative change at a level higher than the State average met this threshold.

Additional Process Notes:

Census tracts 17031990000 and 17097990000 from the ACS data were removed since they contained blank values and were also not included in the Longitudinal Tract Database.

Census tracts with ACS data values with a "+" such as "\$1,000,000+" for median home value, were set to the value listed, e.g., \$1,000,000.

For some of the census tracts that would otherwise be considered "Other Metro," the ACS data only listed the census-designated place as "unincorporated." For those where specific census-designated places were provided, they were labeled "Other Metro" if the place qualified; all others are listed as "Non Metro."

Median Household Income and Median Home Value were adjusted for inflation. 2000 U.S. decennial census data was adjusted from 1999 dollars to 2012 dollars used by 2013 ACS data by multiplying by a factor of 1.37811525 (obtained from the U.S. Department of Labor's Bureau of Labor Statistics).

Point Scores in the OAP:

1 point - Family poverty rate meets first threshold (relative rate of change is below the State average relative rate of change)

2 points - Family poverty rate meets first point threshold above and housing unit vacancy has declined or is below 3.5%

3 points - Family poverty rate is less than the State average **and** the relative rate of change is below the State average relative rate of change); housing unit vacancy has declined or is below 3.5%; and 2 of the other factor thresholds are met

4 points - Family poverty rate is less than the State average **and** the relative rate of change is below the State average relative rate of change); housing unit vacancy has declined or is below 3.5%; and 3 of the other factor thresholds are met

5 points - Family poverty rate is less than the State average **and** the relative rate of change is below the State average relative rate of change); housing unit vacancy has declined or is below 3.5%; and 4 of the other factor thresholds are met

Reference:

US 2010 Census Project, Brown University. Longitudinal Tract Database. Retrieved from <<http://www.s4.brown.edu/us2010/Researcher/Bridging.htm>>.

U.S. Census Bureau. American Community Survey, 2009-2013. Data retrieved July 15, 2015 using American Fact Finder.

U.S. Bureau of Labor Statistics. Consumer Price Index Inflation Calculator. Data retrieved July 15, 2015.

U.S. Census Bureau. Census 2000. Data retrieved July 15, 2015 using American Fact Finder.