Graphic Detail

Geographic Information Systems (GIS) organize and clarify the patterns of human activities on the Earth's surface and their interaction with each other. GIS data, in the form of maps, can quickly and powerfully convey relationships to policymakers and the public. This department of Cityscape *includes maps that convey important housing or community development policy issues or solutions. If you have made such a map and are willing to share it in a future issue of* Cityscape, *please contact john.c.huggins@hud.gov.*

Housing Tenure and Affordability Relative to Communities of Opportunity in the Cincinnati Metropolitan Area

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The primary purpose of the Comprehensive Housing Affordability Strategy (CHAS) data is to demonstrate the number of households in need of housing assistance. This number is estimated by examining the number of households that have certain housing problems and have incomes low enough to qualify for U.S. Department of Housing and Urban Development (HUD) programs (primarily 30, 50, and 80 percent of HUD Area Median Family Income (HAMFI). It is also important to consider the prevalence of housing problems among different types of households such as elderly, disabled, and minority households, among others. CHAS data provide counts of the numbers of households that fit these HUD-specified characteristics in HUD-specified geographic areas. In addition to estimating low-income housing needs, CHAS data contribute to a more comprehensive market analysis by documenting issues like lead paint risks, affordability mismatch, and the interaction of affordability with variables like age of homes, number of bedrooms, and building type.
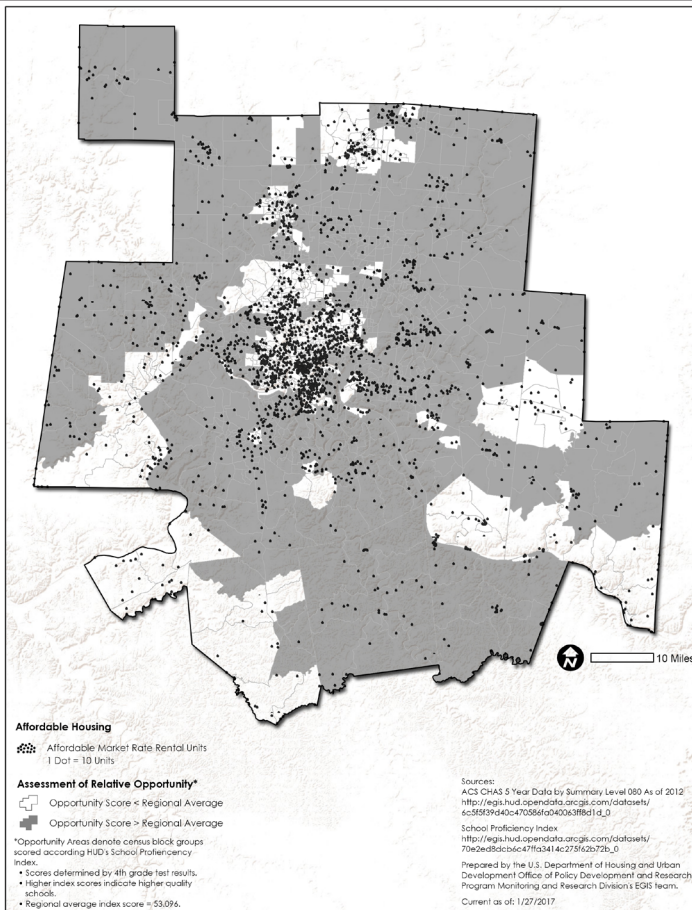
In exhibit 1, CHAS data are used to supply a dot-density illustration of affordable market-rate rental units.[1] The dot-density representation of housing units is further juxtaposed with neighborhood

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[1] *Affordable market-rate rental units* are defined as for rent, with gross rent affordable to a household with income equal to 30 percent of HAMFI, and vacant (available) or occupied by a household with income less than or equal to 30 percent HAMFI.

opportunity scores represented by the HUD School Proficiency Index.[2] The comparison of the two data sets clearly illustrates high concentrations of affordable housing within low-scoring areas of the Cincinnati, Ohio metropolitan urban core. However, the map also indicates light availability of affordable housing within the higher-scoring suburban areas surrounding the city, albeit where transportation options may be sparse.

Exhibit 1

Cincinnati Metropolitan Area Housing Tenure and Affordability Relative to Communities of Opportunity

Affordable Housing

Affordable Market Rate Rental Units
1 Dot = 10 Units

Assessment of Relative Opportunity*

Opportunity Score < Regional Average

Opportunity Score > Regional Average

*Opportunity Areas denote census block groups scored according HUD's School Proficiency Index.
• Scores determined by 4th grade test results.
• Higher index scores indicate higher quality schools.
• Regional average index score = 53,096.

Sources:
ACS CHAS 5 Year Data by Summary Level 080 As of 2012
http://egis.hud.opendata.arcgis.com/datasets/6c5f5f39d40c470056fda040063ff8d1d_0

School Proficiency Index
http://egis.hud.opendata.arcgis.com/datasets/70e2ed8dcb6c47ffa3414c275f62b72b_0

Prepared by the U.S. Department of Housing and Urban Development Office of Policy Development and Research; Program Monitoring and Research Division's EGIS team.

Current as of: 1/27/2017

10 Miles

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[2] *School proficiency* for the area of interest is defined by reading and math proficiency of fourth-graders in neighborhood schools, as reported by the state of Ohio.