

Graphic Detail

Geographic Information Systems organize and clarify patterns of human activity 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 want to share it in a future issue of Cityscape, contact David Chase at david.e.chase@hud.gov.

High-Risk Loans and Increasing Vacancy Rates

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Recent turmoil in the housing and mortgage markets has heightened concerns about increasing risk of foreclosures and their impact on neighborhoods and communities. Neighborhoods affected by foreclosures and long-term vacancy can affect the value of homes in surrounding neighborhoods, the quality of life within communities, and the overall local economy. In response to such concerns, the U.S. Department of Housing and Urban Development (HUD) has developed spatial representations (maps) of the distribution of high-risk loans in various metropolitan areas. One such map, exhibit 1, represents Prince George's County, Maryland, a suburb of Washington, D.C. The map combines mortgage data from the Home Mortgage Disclosure Act (HMDA) with a relatively new vacancy data set from the U.S. Postal Service (USPS).

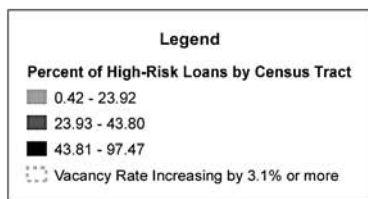
HMDA provides information at the census tract level on the number of loans originated and some of the terms of the loans. From the HMDA data HUD calculates the percentage of high-risk loans; that is, loans with both high-interest rates (more than 3 percentage points above a comparable Treasury security) and high leverage (loan-to-income ratios above 4). These percentages are computed for loans originated between 2004 and 2006. (Tracts with an insignificant number of mortgages are not included.) The tract-level percentages are indicated in gray scale on the map.

The map also illustrates areas that showed a significant increase in vacancy rates between December 2005 and June 2008. These data are based on address service data that USPS provided to HUD. Census tracts with a statistically significant increase (one standard deviation above the mean) in vacancy rates between December 2005 and June 2008 are outlined with a light gray dashed line. The text of the map includes additional details about this calculation.

Several census tracts in Prince George's County, Maryland, and Southwest Washington, D.C., have very high levels of high-risk loans (greater than 44 percent) and significant increases in vacancy rates. Although foreclosures are complex events that cannot be easily predicted with these data alone, it seems likely that these neighborhoods are at risk for increased foreclosures. Similar maps can be constructed for other areas because the data used are all publicly available. HMDA Loan Application Register data can be obtained from the Federal Financial Institutions Examination Council website at <http://www.ffiec.gov/hmdafeedback/hmdaproducts.aspx>. The USPS provides ZIP + 4-level data to HUD every quarter and HUD makes them available publicly at the census tract level. The data can be obtained from HUD at <http://www.huduser.org/datasets/usps.html>. Readers may address comments or questions to david.e.chase@hud.gov.

Exhibit 1

**High-Risk Loans With Change in Vacancy Rate Through June 2008 by Tract
Prince George's County, Maryland, and Surrounding Areas**



Tracts colored medium and dark gray are areas with a significant level of high-risk loans, defined as where the rate spread is 3 percentage points above the Treasury security of comparable maturity and where loan-to-income ratios are equal to or above 4. Tracts colored white are excluded due to a statistically small number of home loans. Source: Home Mortgage Disclosure Act data for 2004 through 2006.

Tracts outlined with light gray are areas with a statistically significant (1 standard deviation above mean) increase in vacancy rates. Vacancy rates for tracts with total addresses below 300 are not shown. Tracts with vacancy rates of less than 5% for June 2008 are also not shown. Vacancy rates are determined by the difference between December 2005 and June 2008 U.S. Postal Service address service data.

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