

How were the indicators selected for the Foreclosure-Response.org website?

*The Urban Institute
November 20, 2009*

The level, distribution, and root causes of foreclosures vary from place to place, and small area data can help communities understand the patterns and begin to craft informed strategies. Ideally, localities would have current, reliable, and low-cost data from local sources to monitor foreclosures and the housing market in general. For areas without extensive data capacity, national publicly available data sources offer several indicators that can provide a starting point. No single indicator does it all, but the ones below can shed some light on the foreclosure story for your area.

[LISC Foreclosure Needs Scores](#)

First, local policy officials and nonprofit service providers need to know which areas in their community have been hardest hit to effectively assess the problem and target their efforts. The best place to start is the newly-available Foreclosure Needs Score created by the Local Initiatives Support Corporation (LISC). The score is a summary measure of how the foreclosure crisis affects each ZIP code relative to all other ZIP codes within the same state. This score takes into account four factors that are predictive of either foreclosures or neighborhood destabilization. Three of these factors: subprime lending, mortgage delinquencies, and foreclosures are equally weighted in the calculation. The scores are then adjusted by a fourth factor, the residential vacancy rate, because higher vacancies signal less potential demand from the private housing market for the foreclosed homes. This could lead to homes remaining vacant longer, compounding the effects of foreclosure on a neighborhood. For a more detailed explanation of how the LISC score was calculated please [see the methodology available here](#).

This summary score, based on data from June 2008, will give you the most recent overall picture of the crisis that is available on this website for small areas. However, one limitation of the score is that it cannot be compared across state lines. Also, the risk score is only available for ZIP codes, so if you need to look at smaller areas such as census tracts or larger areas like cities and counties, you will need to use an alternate source of data, such as the [Home Mortgage Disclosure Act](#), to determine which areas are affected most by the foreclosure crisis.

In addition to the summary risk score, you may focus on an individual risk factor from the Foreclosure Needs Score. In this case, you can look at ZIP code level indices for [mortgage delinquencies](#), [subprime lending](#), and [foreclosures](#). In most cases, we expect a single ZIP code to fall into about the same relative position compared to other ZIP codes in its state on all of these risk factors. But in some places, combining all of the indicators may mask or distort the

level of need for areas that rank high by one measure, but low on another. For this reason, we recommend that you scan the results of the individual risk factors to confirm the same general locations still rise to the top.

The first two factors suggest where foreclosures are most likely to occur in the future. The [delinquency component score](#) shows where the most borrowers are having difficulty making payments already, a precursor to default and the foreclosure process. The [subprime component score](#) shows the patterns of loans that have terms such as high interest rates, reset clauses, or balloon payments. These loans are more risky, and have a foreclosure rate of more than 10 percentage points higher than prime loans, even in low poverty areas ([see Walker and Winston 2008](#)). In areas with high price run-ups in recent years or lower income minority communities, subprime lending may play a larger role as the trigger for foreclosures. However, if you live in a community where you suspect more foreclosures are stemming from job loss or reduced income, the delinquency component score will be the better measure for you. The third factor, [foreclosure component score](#), reveals which areas have already had high levels of foreclosure as opposed to areas that might be affected in the future.

[HMDA High-Cost Purchase Indicators](#)

Unfortunately, the LISC scores are only calculated for ZIP codes. If you need to drill down into smaller areas or compare larger places like counties, you must turn to an alternate data source. The [Home Mortgage Disclosure Act](#) (HMDA) requires the collection of information about most home purchase mortgages and refinance loans from banks, and is available for census tracts, cities, counties, metropolitan areas, states, and the nation. The [density of high-cost purchase loans](#) in an area, drawn from the HMDA data, can be used as a close proxy for foreclosures. An analysis by LISC for ZIP codes in 20 states found that the number of high-cost loans in 2005 and 2006 was about 80 percent correlated with the number of foreclosures in March 2008. High-cost loans have higher interest rates and are more likely to be at risk of foreclosure than loans with lower interest rates.

Density is calculated by dividing the number of high-cost loans by the number of housing units in a given area. This measure is used instead of a simple percentage of loans to avoid placing emphasis on areas with high shares of high-cost lending, but relatively few loans overall. Dividing by the number of housing units also allows for better comparison of impact across areas of different sizes. Unfortunately, the Decennial Census 2000 is the most recent tract-level data publicly available for housing units. This can result in extreme indicator values for tracts that have seen substantial new construction since 2000. In rare cases, the number of loans from 2004 to 2006 exceeded the number of housing units that existed in 2000. In these cases, knowing the local area will be critical to judging whether the indicator likely reflects foreclosure-related need or if the estimated current number of housing units is large enough to reduce the indicator to a more moderate level.

HMDA does not document the number of units in multifamily buildings, so for both the numerator (high-cost loans) and denominator (housing units), we only include single-family homes, condominiums, manufactured homes, and other properties with less than five units in this indicator. We believe this is a good representation of the homeownership market for all areas and this is used as the denominator for all of the HMDA indicators on this website.

However, we know that about ten percent of the census tracts in the country have more than 40 percent of their housing units in larger rental buildings. If these kinds of neighborhoods are in your area of interest, an alternative measure of potential foreclosure impact is the number of high-cost loans divided by the *total* number of housing units (available in the downloadable data). Using this calculation, the impact in multifamily areas will appear much lower. As a caution, there may still be housing units in multifamily buildings undergoing foreclosure that we cannot account for using the HMDA data. Additionally, we only include first-liens on properties and conventional loans (those not issued by a government program, such as FHA).

While more recent data are available, we use the sum of all loans from 2004 to 2006 for the high-cost indicators because it is the peak period of the housing boom and by 2007, the housing and credit markets had already started to tighten up and the number of high-cost loans decreased by about one-third. Using the three years of data also helps to smooth out year-to-year variation for smaller areas like census tracts.

Although not included on the interactive data pages, the data available for download from the Foreclosure-Response.org website also includes a set of indicators for high-cost refinance loans that resembles the ones for home purchase loans, describe above. For the median census tract, refinance loans accounted for six out of ten home mortgage loans from 2004-2006. In general, we expect the areas with concentrations of purchase high-cost loans to match those where high-cost refinancing took place: using only the home purchase volume, researchers can predict the refinancing volume about 75 percent of the time. But in some places, high-cost refinancing will be the dominant driver behind overall high-cost lending volume, and, thus foreclosure problems. In 10 percent of the tracts, refinancing represented about three-quarters of all the high-cost originations from 2004 to 2006. We do not know how borrowers using high-cost loans to refinance differ from those using them to buy a home, but it seems likely that these differences could influence the effectiveness of foreclosure mitigation programs. For example, borrowers using high-cost loans to refinance their mortgages may have had substantial equity in their homes. In some neighborhoods, these borrowers are likely to be low-income and elderly.

All of the indicators discussed so far combine loans for owner-occupied and rental properties. Looking at the patterns of the [density of high-cost investor loans](#), also drawn from 2004 to 2006 HMDA data, shows where properties that are more likely at risk of foreclosure but are not owner-occupied are located. This indicator can suggest where renters in small

properties (1-4 units) may be particularly affected. In many areas, renters are not protected from eviction if their landlord is foreclosed upon, and many do not receive any warning before the sheriff shows up at the door with an eviction notice. Preliminary research by LISC also suggested links between the prevalence of investor high cost loans and real-estate owned (REO) properties ([see Walker and Winston 2008](#)).

This connection suggests that owners who are not occupying the home and have another place of residence may be more willing to walk away from properties when they owe more on their mortgage than the property is worth. While investors may have more resources to draw on to avert the foreclosure, they do not have access to many counseling programs or work-out arrangements offered to owners living in the property. ([See related section of the Foreclosure-Response.org Policy Guide on preventing foreclosures.](#)) Similar to the high-cost purchase indicator described above, this density measure divides the number of high-cost loans that are not owner-occupied by the number of housing units. For reporting purposes, second homes, vacation homes, and rental properties are not considered owner-occupied, so the indicator will have different interpretations in inner-city neighborhoods than in resort towns or retirement areas.

[Housing Market Conditions](#)

Once you have identified the places vulnerable to foreclosures, you next need to know the housing market conditions in these areas to craft a strategy appropriate to the neighborhood's circumstances. Areas with a lot of private market activity and demand for housing may quickly absorb any foreclosures and public acquisition of properties may not be necessary. Buying up a handful of properties in areas that have very little market activity, high foreclosure rates and few community assets may not be as an effective strategy for stabilizing neighborhoods as buying the same number of properties in an area with some market activity and amenities to attract new residents. The weaker neighborhoods may require more comprehensive interventions to improve conditions for current residents and rebuild their market potential. ([See related section of the Foreclosure-Response.org Policy Guide on developing a coordinated response strategy.](#))

As with foreclosures, having access to home sales data from local, publicly available sources is the ideal situation to monitor neighborhood housing markets. However, the HMDA data we have on this website also contains a number of useful indicators. The first indicator of market activity is the [density of home purchase loans](#), which signals the demand for residential housing. In this case, using the most recent available data, from 2008, will show the mortgage activity level as the housing market began to decline. This presents a more realistic picture of the market potential today than the demand seen in 2006 at the peak of the housing boom. Another measure of demand in the local housing market is the [median home purchase loan amount](#). While the housing prices nationally have declined since 2008, trends in individual neighborhoods will vary across the region – perhaps with some prices still increasing.

The mortgage loan amount can be used along with the mortgage volume data to plan the right neighborhood action. As a caution, the median amount will not have much meaning in places with very few sales, because those sales may not be representative of the area as a whole. In addition, understanding the mortgage amounts can also be one input in determining a fair price for purchasing a prospective foreclosure property.

Lastly, the [density of investor loans](#) reveals the role that investors have played in the area's housing markets. As mentioned earlier, second homes and rental properties are both included in this measure, so you will need to have local knowledge of the market to interpret the meaning of a high number. This indicator also does not include loans for large multi-family rental properties, which are often financed differently than properties with a smaller number of units. In census tracts with large multi-family rental properties this indicator may not accurately reflect the density of rental housing overall. However, high levels of non-owner-occupied housing may reveal market demand that is more speculative and volatile than areas with buyers choosing the neighborhood as a good place to live. They also may be areas with less resident pressure to keep up maintenance on vacant foreclosed properties. Localities could target these areas to increase homeownership with programs such as down-payment assistance for first-time homebuyers, or turning publicly-owned properties over to nonprofit developers for rehabilitation.