HOME FORECLOSURES IN ALLEGHENY COUNTY
2006-2007
The Department of Human Services (DHS) is responsible for providing and administering human services to Allegheny County residents. DHS is dedicated to meeting these human services needs, most particularly to the county’s most vulnerable populations, through an extensive range of prevention, early intervention, crisis management, and after-care services provided through its program offices.

DHS services include programs serving the elderly; mental health services (includes 24-hour crisis counseling); drug and alcohol services; child protective services; at-risk child development and education; hunger services; emergency shelters and housing for the homeless; energy assistance; non-emergency medical transportation; job training and placement for youth and adults; and services for individuals with mental retardation and developmental disabilities. In 2006, DHS provided services to 182,000 individuals, nearly 16 percent of the population of Allegheny County.

The University Center for Social and Urban Research (UCSUR) was established by the University of Pittsburgh in 1972 to serve as a resource for researchers and educators interested in the basic and applied social and behavioral sciences. As a hub for interdisciplinary research and collaboration, UCSUR promotes a research agenda focused on the social and economic issues most relevant to our society, regional economic analysis and forecasting, the psychosocial impacts of adult development and aging, and environmental resource management. In addition, UCSUR maintains a permanent research infrastructure available to faculty and the community with the capacity to:

- Conduct all types of survey research and data analysis.
- Carry out regional econometric modeling.
- Obtain, format, and analyze spatial data.
- Acquire, manage, and analyze large secondary and administrative data sets including census data.
- Design and carry out descriptive, evaluation, and intervention studies.
The Pittsburgh Neighborhood and Community Information System (PNCIS) is a property information system that collects integrated information on community conditions and provides it to local stakeholders. The PNCIS empowers community leaders through the regular, direct use of information on a wide array of topics and issues.

The PNCIS integrates more than 50 key address-level indicators from multiple data sources to provide a dynamic view of neighborhood conditions. Consistent neighborhood data is available to all participating organizations, and the PNCIS provides one point of contact for users and data providers. By coordinating all data collection and data processing, participating organizations are able to spend their time analyzing information, not gathering it.

The project’s Web site provides data and an interactive map to its users. The Pittsburgh Partnership for Neighborhood Development (PPND) has entered into data sharing agreements with the City of Pittsburgh and the Urban Redevelopment Authority, guaranteeing continued access to information by PNCIS users.

CONTACT INFORMATION
Allegheny County Department of Human Services
Office of Community Relations
One Smithfield Street, First Floor
Pittsburgh, PA 15222-2225
Phone: 412-350-6787
Fax: 412-350-5891
<table>
<thead>
<tr>
<th>Contents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Brief</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>4</td>
</tr>
<tr>
<td>Causes of Foreclosure</td>
<td>4</td>
</tr>
<tr>
<td>Costs to Communities</td>
<td>5</td>
</tr>
<tr>
<td>Where Pennsylvania Fits</td>
<td>7</td>
</tr>
<tr>
<td>Methodology</td>
<td>10</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>11</td>
</tr>
<tr>
<td>Many Faces to the Foreclosure Crisis</td>
<td>11</td>
</tr>
<tr>
<td>Economic Trends</td>
<td>13</td>
</tr>
<tr>
<td>Unemployment</td>
<td>13</td>
</tr>
<tr>
<td>Wages and Income</td>
<td>13</td>
</tr>
<tr>
<td>Price Inflation</td>
<td>14</td>
</tr>
<tr>
<td>Population Trends</td>
<td>14</td>
</tr>
<tr>
<td>Housing Market Trends</td>
<td>14</td>
</tr>
<tr>
<td>Median Home Prices</td>
<td>14</td>
</tr>
<tr>
<td>Home Price Appreciation</td>
<td>16</td>
</tr>
<tr>
<td>Mortgage Rates</td>
<td>16</td>
</tr>
<tr>
<td>Current Foreclosures in Allegheny County</td>
<td>18</td>
</tr>
<tr>
<td>DHS Clients and Foreclosures</td>
<td>24</td>
</tr>
<tr>
<td>Public Policy and Community Interventions</td>
<td>25</td>
</tr>
<tr>
<td>Conclusions and Recommendations</td>
<td>27</td>
</tr>
<tr>
<td>References</td>
<td>28</td>
</tr>
<tr>
<td>Appendix A: Allegheny County Employment Trends</td>
<td>33</td>
</tr>
<tr>
<td>Appendix B: Allegheny County Population Trends</td>
<td>36</td>
</tr>
<tr>
<td>Appendix C: Mortgage Rate Comparisons</td>
<td>36</td>
</tr>
<tr>
<td>Appendix D: Matching Clients Across Data Sources:</td>
<td>37</td>
</tr>
<tr>
<td>DHS Matching Algorithm</td>
<td>37</td>
</tr>
</tbody>
</table>
FORECLOSURES AS A COMMUNITY PROBLEM

The mortgage foreclosure crisis has affected the entire nation. The second quarter of 2008 brought a 14 percent increase in U.S. foreclosures over the first quarter, and a 121 percent spike in foreclosures over the corresponding period in 2007; estimates suggest that one in every 171 homes in the United States were in foreclosure between April and June, 2008. If this pace continues, the country is on track to see at least 2.6 million foreclosures by the end of the year.

Foreclosures don’t just affect individual families who lose their homes. The costs to communities are staggering: estimates indicate that 2006 foreclosures have cumulatively cost Pittsburgh nearly $115 million as individuals suffer from loss of home equity, access to stable housing, and credit ratings; communities experience depressed home values and increased crime; and municipalities lose property tax revenue while bearing the brunt of costs associated with foreclosed and vacant buildings – demolition, building inspections, and legal fees.

Across the nation, some communities have been hit harder than others. For this analysis, we sought to examine the issue in Allegheny County as well as in a number of other communities across the country, both regions that were similar to Pittsburgh (such as Cincinnati and Cleveland) and those that have been hit hardest by foreclosures (Denver and Las Vegas).

The foreclosure crisis isn’t just one problem – it bears different features depending on the housing characteristics of the population and community affected. Regions that have recently experienced rapid growth, such as Las Vegas, were particularly susceptible to the housing bubble and subsequent burst, which left many homeowners facing foreclosure – in the second quarter of 2008, one out of every 43 homes in Nevada was in foreclosure. In those communities, inflated housing prices led homeowners to borrow larger loans than they could afford, often at adjustable rates; when housing prices plummeted, those owners were left with mortgages that exceeded the value of their home. On the other hand, in communities with dwindling populations and lower home appreciation, homeowners are facing low demand for their properties. In Cleveland, for instance, a “perfect storm” of subprime lending practices, regulatory environment, and existing high-poverty and high-unemployment climate created the large-scale wave of foreclosures. Additionally, given the City of Cleveland’s low demand for housing, the foreclosures have had the secondary result of dropping home prices – a 75 percent drop from mid-year 2007 to mid-year 2008.

Allegheny County, and Pennsylvania more generally, has not felt the foreclosure crisis as acutely as many other regions, in part due to a number of protective characteristics:
• Allegheny County has seen gradual and steady increases in home values, but has not experienced the bubble and burst that other, fast-growing communities have seen. Housing has remained affordable.

• Unemployment is low and while income increases have been modest, they have consistently outpaced inflation.

• Pennsylvania residents on average tend to be older and have good credit history; they also have not taken out as many sub-prime loans as residents of other areas.

• Pennsylvania’s past experience with foreclosures led to the creation of the Homeowners’ Emergency Mortgage Assistance Program (HEMAP), a state-wide program that provides protection to borrowers as risk of foreclosure. HEMAP has helped many Pennsylvanians avoid foreclosure during the current crisis.

Many municipalities are creating data-driven intervention and prevention programs to help residents avoid foreclosure. In Virginia’s Loudoun and Fairfax counties, law enforcement officers are using GIS maps as guides, targeting their patrols to vacant homes that may be susceptible to increased criminal activity. In Cleveland, researchers at Case Western Reserve University have developed a GIS-driven “early warning system” for foreclosures, identifying variables that may indicate foreclosure to aid community development efforts. Researchers at the University of Memphis have established a five-category typology of foreclosure that explains how different paths to foreclosure are associated with different neighborhood zones, allowing them to create customized interventions. The Association of Community Organizations for Reform Now (ACORN) has prepared papers on the costs of foreclosures, tailored to nearly 100 metropolitan areas, for homeowners, their neighbors, lenders, investors, and the local government; those papers are being used to create policy recommendations on key issues like foreclosure prevention, affordable housing, municipal maintenance for vacant properties, and lending regulation.

SIGNIFICANT FINDINGS

Foreclosure trends in Allegheny County

To better understand how the foreclosure crisis has affected Allegheny County residents, we examined where foreclosures were common and looked for trends in geographic location, homeownership, household income, race, and number of individuals in poverty. The picture that emerged was striking; foreclosures disproportionately hit neighborhoods with moderately high homeownership rates and high concentrations of low-income and minority residents:
In 2007, the foreclosure rate was 15.7 foreclosures per 1,000 households for both the City of Pittsburgh and Allegheny County. In the census tracts that have been hit hardest by foreclosures, the foreclosure rate are, on average, three times as high – in the most vulnerable census tracts, the foreclosure rate surpassed 70 foreclosures per 1,000 homes.

25 percent of the county’s foreclosures were clustered in 36, or 9 percent, of the county’s 414 census tracts. Furthermore, 50 percent of the county’s foreclosures were concentrated in 98, or 24 percent, of the county’s census tracts.

Within the City of Pittsburgh, half of the tracts with the highest foreclosure rates have median household incomes lower than the city average of $29,782; four of the ten tracts have a higher percentage of minority individuals than the city average of 31 percent.

Within Allegheny County at large, nine out of the top ten tracts have median incomes lower than the county average of $44,382 and a higher percentage of minority individuals than the county average of 15.7 percent.

Foreclosure trends among DHS clients
In order to determine whether foreclosures have affected DHS clients, we compared the names of defendants in foreclosure to clients in the DHS Data Warehouse, using first and last name.* Nearly 40 percent of defendants in foreclosure had received DHS services at some point; half of those were actively using services at the time of their foreclosure. Since DHS serves approximately 17.2 percent of Allegheny County’s residents these findings suggest that those in foreclosure are more likely to access human services than the general population.

RECOMMENDATIONS
• Train DHS staff to look for warning signs of foreclosure, such as utility shut-offs or unopened mail, in the clients they see.
• Expand budgeting and money management programs to reach more parents involved in child welfare (i.e. Office of Children, Youth, and Families) and clients receiving services from the Area Agency on Aging (AAA).
• Warn clients receiving AAA services of hazards of home refinance and expand marketing of reverse mortgage programs as a source of revenue for seniors who have equity in their homes.
• Ensure that first-time homebuyer programs include budgeting; planning for repairs, job loss, and medical emergencies; and other information about the responsibilities of home ownership.
• Expand affordable housing options in the rental market.

* In order to triangulate community and social problems it is helpful to integrate numerous data sources. To match data, we use an algorithm to compare external data sources with our DHS client data. This matching algorithm goes through a series of steps to confirm a client’s presence in both data directories, looking at his or her social security number, first and last name, date of birth, and gender. In cases where the data may not match exactly, this process take further steps to confirm identity, using Soundex, a phonetic algorithm for indexing names by pronunciation, and anagrams of social security numbers. For a detailed description of the matching algorithm, please see Appendix D.
• Broaden data-sharing exchanges with external organizations, and expand data-sharing agreements to include PA Housing Finance Agency so that DHS clients who have received Act 91 notices may be referred to counseling agency.

In 2007, 2.2 million homes were in foreclosure across the nation, up 75 percent from 2006. The second quarter of 2008 brought a 14 percent increase in U.S. foreclosures over the first quarter, and a 121 percent spike in foreclosures over the corresponding period in 2007; estimates suggest that one in every 171 homes in the United States were in foreclosure between April and June, 2008. If this pace continues, the country is on track to see at least 2.6 million foreclosures by the end of 2008.

The foreclosure crisis has been described by national leaders as a community problem. In his September 2007 testimony before the House Committee on Financial Services, Federal Reserve Chairman Ben Bernanke said, “The consequences of default may be severe for homeowners, who face the possibility of foreclosure, the loss of accumulated home equity, and reduced access to credit. In addition, clusters of foreclosures can lead to declines in the values of nearby properties and do great damage to neighborhoods.”

CAUSES OF FORECLOSURE
The recent surge of foreclosures has been mainly attributed to irresponsible lending practices and sub-prime mortgages. Irresponsible lending occurs when banks lend to borrowers who cannot afford the loans. Often those borrowers (who may have poor or no credit history) are offered sub-prime loans, which do not meet Fannie Mae or Freddie Mac federal guidelines.* These sub-prime loans typically have adjustable rates that can inflate payments, ultimately making them unaffordable to borrowers.

The prevalence of sub-prime loans is a highly accurate predictor of foreclosure activity. In his testimony before Congress, Christopher Walker, Director of Research and Assessment for the Local Initiatives Support Corporation (LISC), demonstrated that “high cost loans tend to be closely tied to the number ... and dollar volume of the unpaid principal balance ... of foreclosures”; in fact, even without additional data, sub-prime loan status can predict more than 78 percent of foreclosures. In Pennsylvania, 60 to 75 percent of foreclosures originated from sub-prime loans, a disproportionately high percentage given that in 2002 less than 10 percent of all loans made in Pennsylvania were sub-prime.

* The Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) are government-sponsored enterprises. Both are stockholder-owned companies authorized to make loans and loan guarantees. Fannie Mae and Freddie Mac buy mortgages on the secondary market, pool them, and sell them as mortgage-backed securities to investors on the open market. As of summer 2008, Fannie Mae and Freddie Mac owned or guaranteed about half of the country’s $12 trillion mortgage market.
Although sub-prime loans represent the most influential factor in the current foreclosure crisis, several other issues have also contributed. The Hennepin County Bar Association has reported the following factors can help trigger a foreclosure:13

- **Life events**: an unexpected event, such as a medical emergency or a layoff, reduces a family’s income and renders them unable to afford their mortgage payments.

- **Stagnant housing market**: Low demand for new homes and depreciation in home values can compound foreclosures when paired with other factors like extenuating life events — when people try to sell their newly unaffordable homes but cannot find a buyer, they can become delinquent on bills.

- **Fraud**: Borrowers, lenders, or appraisers can perpetrate fraud, which saddles borrowers with higher mortgage payments than they can afford — borrowers may misrepresent their ability to repay loans, lenders may present false or misguided loan terms and rates to borrowers, or appraisers may intentionally inflate the prices of the homes so that real estate agents receive larger commissions.

- **Frequent refinancing**: Refinancing is often accompanied by high hidden costs like penalty payments, closing and transaction fees, and larger overall interest costs over the life of the loan.

- **Uninformed borrowers**: Confusing loan terms and the complex legal obligations associated with mortgage contracts make it easier for unscrupulous lenders to take advantage of borrowers.

- **Predatory lending**: Predatory lenders lure borrowers into loans that they cannot afford, and then profit off these high-risk loans through their adjustable interest rates, high fees, and drastic penalties.

**COSTS TO COMMUNITIES**

Foreclosures have the most immediate effect on the homeowners who lose their properties. However, foreclosures also incur major costs to the community and municipality in which they occur, both in terms of capital and community well-being.

In Pittsburgh, a conservative estimate of the costs associated with the 1,459 foreclosures in 2006 totals $114 million. Lenders take the brunt of these costs ($46.4 million14), but individual homeowners, local government, and community members and neighbors are all significantly affected ($10.5 million, $28.1 million, and $29.8 million, respectively).

**Individual and family costs**15

Foreclosures cause individual and family homeowners the loss of home equity, access to stable housing, and credit ratings. ($7,200/family)
Community costs
Foreclosed properties are less likely to be maintained or upgraded and their run-down appearance can damage property values for surrounding homes. Even when foreclosed homes are well-maintained, the excess supply of houses on the market can dampen home prices. Compounding this problem, the discounted prices that foreclosed homes fetch on the market (e.g. at a sheriff’s sale) can lower the “comparable” prices for the neighborhood, further depressing home values for the community. In Chicago, researchers discovered that each foreclosure on an urban block lowered property values by 1 percent or by 1.4 percent in low-income neighborhoods. More recent estimates suggest that 20 or more foreclosures depress surrounding property values by as much as 3.7 percent.

When foreclosed homes are sold off to investors, they are often rented or remain vacant, which makes the surrounding community more prone to criminal activity. One study showed that an increase in the foreclosure rate to 2.8 per 100 housing units in one year corresponds to 6.7 percent increase in violent crime. Clusters of foreclosures magnify these effects. ($10,000/foreclosure)

Municipality costs
Municipalities often must pick up the tab for demolition of foreclosed and vacant buildings, building inspections, and legal fees associated with foreclosures. The costs to local government are compounded by the loss of property tax associated with the foreclosed home. ($27,000/foreclosure)

Vacancy and Crime
The connection between vacancies and crime has been the topic of numerous studies, perhaps the most well-known of which was George Kelling and Catherine Coles’ 1996 report in which they first posited their “broken windows” theory; this theory asserts that areas that are visibly unhealthy become hotbeds for crime. In his 1993 study, William Spelman of the University of Texas found that vacant or abandoned buildings in low-income neighborhoods attracted crime – 83 percent showed evidence of illegal activities such as prostitution and drug use. Dan Immergluck and Geoff Smith found a significant correlation between crime and foreclosures using a regression analysis – their research showed that a 1 percent increase in the foreclosure rate leads to 2.3 percent increase in the crime rate.

The ramifications of foreclosures on crime then, become evident – foreclosures create vacancies in neighborhoods, which then in turn attract squatters, looting, drug dealers, prostitution, and fire-setting. In areas with high foreclosure rates, we expect to see high vacancy rates and corresponding increases in criminal activity over time. To study how this phenomenon has affected Allegheny County, we used 2007 crime data from the City of Pittsburgh Police Department and May 2006 vacancy data from the United States Postal Service.
As we expected, we observed a positive and significant relationship between tract foreclosure rate and tract vacancy rate (measured as vacancies per 1,000 housing units). We did not find significant relationships between crime rate and foreclosure rate or vacancy rate.

We attribute this lack of significant findings to two primary causes. First, the foreclosure crisis has been relatively slow to hit the region, so foreclosures have not yet had the same impact as in other communities across the country. Second, the data we used matched vacancies from mid-2006 to crime from 2007; perhaps the close temporal proximity of those data sets did not allow for the time it takes for urban blight to take hold. However, ongoing examination of the relationship between crime, foreclosure, and vacancy may yield results more aligned with the expectations of the "broken windows" theory.

**WHERE PENNSYLVANIA FITS**

According to a report issued by The Reinvestment Fund, in 2003 Pennsylvania had the ninth-highest foreclosure rate for prime loans in the country, and fourth-highest foreclosure rate for sub-prime loans. Between 2000 and 2003, the number of foreclosure filings in the 14 counties studied increased by 33 percent. However, RealtyTrac reported that in 2006 Pennsylvania dropped to fourteenth nationally for total foreclosures, and in 2007 fell further, to thirty-third. By the second quarter of 2008, Pennsylvania had lost a bit of ground, rising up to thirty-first in the nation. Pennsylvania saw a 63 percent increase in foreclosures between the second quarters of 2007 and 2008; this is a more modest increase than in many other regions of the country, but still represents a serious challenge for homeowners in the state.

The Reinvestment Fund report attributed Pennsylvania’s improved positions to:

- Affordable housing;
- Low unemployment;
- Slow appreciation in home values and slow growth in sales;
- High home ownership rate;
- Low divorce rate;
- Above-average credit scores; and
- Pennsylvania Housing Finance Agency’s Homeowners’ Emergency Mortgage Assistance Program (HEMAP).

Foreclosure trends varied across Pennsylvania. Within the state, Allegheny County had one of the highest increases in foreclosures among the Pennsylvania counties studied — between 2000 and 2003, the number of foreclosures filed increased by more than 60 percent, nearly double the selected statewide rate. The rate of foreclosures increased over that time as well, from 7.13 per 1,000 housing units in 2000 to 11.42 per 1,000 in 2003.
In the second quarter of 2008, 10,407 properties were reported to be in foreclosure in Pennsylvania, or one in every 524 homes across the state. In the City of Pittsburgh, one in every 383 homes was in foreclosure, an increase of nearly 90 percent over the corresponding period of 2007.\(^\text{26}\)

**Pennsylvania’s Historic Experience with Foreclosures**

The national “bank and thrift crisis” of the 1980s and early 1990s, during which many banks failed or weakened, prompted significant federal legislation that restricted banking and lending practices.\(^\text{27}\) In turn, the mortgage industry adapted; bank-employed loan underwriters who had previously had discretion over loan decisions were replaced by national credit reporting agencies which imposed stringent lending practices and limited eligibility. When it became more difficult for borrowers to secure loans from banks, many turned to subprime lenders, paying more for loans and taking on adjustable-rate mortgages that often proved unaffordable.\(^\text{28}\)

Pennsylvania residents were not immune to this national trend; when the steel mills closed their doors to laborers in the 1980s, layoffs triggered a foreclosure epidemic. Foreclosures became such a problem that in January 1983, one Allegheny County judge halted mortgage foreclosures in the county, “citing the 'critical' state of the local economy and the finances of many families.”\(^\text{29}\) Pennsylvania’s state legislature passed Act 91 in 1983, which created the Homeowners’ Emergency Mortgage Assistance Program (HEMAP).

HEMAP allows homeowners to apply for temporary loan assistance when they become delinquent on mortgage payments through “no fault of their own,” such as by a loss of a job, high medical expenses, or other life-altering experience. The Reinvestment Fund asserts that the HEMAP program has helped mitigate the effects of the current sub-prime mortgage crisis on the Commonwealth, noting that each year, several thousand people receive assistance thereby avoiding foreclosure. Adding those households to Pennsylvania foreclosure numbers would trigger a significant statewide rise.\(^\text{30}\)
Pennsylvania’s Foreclosure Procedure

In Pennsylvania, the mortgaged property is considered the security backing the loan. In order to foreclose on a property, a lender must follow a statewide judicial process. The process begins when the borrower fails to make payments for at least 60 days. At that time, the lender can initiate the foreclosure process by sending a Notice of Intent to Foreclose. In addition, the lender may also send an Act 91 notice that informs the borrower of the Homeowners’ Emergency Mortgage Assistance Program. If the borrower pays all dues and fees within 30 days, the default is “cured.” However, if the borrower is either unable or unwilling to resolve the debt, the entire balance of the mortgage becomes due immediately.

The lender can then file a suit to obtain a court order to foreclose on the property. The lender files a complaint and a Lis Pendens with the Court of Common Pleas in the county in which the property is located. If the court finds in favor of the lender, an “order of sale” is issued. This states that the property will be auctioned off at a Sheriff’s foreclosure sale.

The borrower has until one hour before the foreclosure sale to cure the default by paying the amount due. Once the sale is complete, the borrower has no rights of redemption. The home now belongs to the winner of the auction.

Figure 1-1: Pennsylvania Foreclosure Procedure – First Steps
DATA SOURCES
Many of the sources used in this study are free and publicly available. In cases where the data were difficult to access or analyze, it was helpful to partner with other organizations studying this issue.

Data Sources and Types
• United States Census Bureau
  ▪ Demographics
  ▪ Income
  ▪ Housing Units
• Home Mortgage Disclosure Act – Federal Financial Institutions Examination Council
  ▪ Loan information
  ▪ Finance information
• Bureau of Labor Statistics
  ▪ Unemployment
• Bureau of Economic Analysis
  ▪ Income and wages
• Office of Federal Housing Enterprise Oversight
  ▪ Housing Price Index
• Federal Housing Finance Board
  ▪ Mortgages rates
  ▪ Loan types
• United States Postal Service
  ▪ Vacancies
• National Association of Realtors
  ▪ Housing prices

Figure 1-2: Pennsylvania Foreclosure Procedure: Final Steps
• Allegheny County Court Records – Pittsburgh Neighborhood and Community Information System
  ▫ 2006 – November 2007 foreclosures
• Allegheny County Department of Human Services
  ▫ Client data
• City of Pittsburgh Police Department
  ▫ 2007 Crime

Aggregation
Much of the foreclosure data used included names and addresses. For reasons of confidentiality, the data were aggregated to the census tract level. Therefore, there is a possibility that the analysis suffers from the reflection problem: the aggregated data may not accurately describe the individuals who went through foreclosure. However, the aggregated data do describe the communities that are experiencing the problem.

Data Matching
In order to triangulate community and social problems, it is helpful to integrate numerous data sources. For example, understanding the relationship between individuals in mortgage foreclosure and their use of DHS services (historically or actively) may point to strategies to prevent and/or mitigate these foreclosures.

To match data, we use an algorithm to compare external data sources with our DHS client data. This matching algorithm goes through a series of steps to confirm a client’s presence in both data directories, looking at his or her social security number, first and last name, date of birth, and gender. In cases where the data may not match exactly, this process takes further steps to confirm identity, using Soundex, a phonetic algorithm for indexing names by pronunciation, and anagrams of social security numbers. For a detailed representation of the matching algorithm, please see Appendix D.

MANY FACES TO THE FORECLOSURE CRISIS
The foreclosure crisis has affected communities in different ways, depending on factors like unemployment, trends in home values and sales, income, and mortgage types. A comparison of Pittsburgh, Cleveland, and Las Vegas illustrates how those factors have yielded very different experiences with foreclosures.
Data Analysis

- Pittsburgh, like Cleveland has a much more conservative ratio of home prices to income than Las Vegas (three to one, versus six to one). Because their properties were valued at such a high rate compared to their income, Las Vegas homeowners were more susceptible to foreclosure.
- Housing prices in Pittsburgh have appreciated gradually over time, with no bubble and no burst. In contrast, Las Vegas had explosive appreciation between 2003 and 2008, but then saw a large drop in home values.
- Pittsburgh homeowners do not have nearly as many adjustable rate mortgages as homeowners in growing cities like Las Vegas, and also have fewer high-priced loans.

<table>
<thead>
<tr>
<th></th>
<th>PITTSBURGH</th>
<th>CLEVELAND</th>
<th>LAS VEGAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Housing Price (2007)</td>
<td>$111,600</td>
<td>$102,100</td>
<td>$247,600</td>
</tr>
<tr>
<td>Per Capita Income (2006)</td>
<td>$43,333</td>
<td>$39,134</td>
<td>$38,281</td>
</tr>
<tr>
<td>Housing price to Income Ratio (Approximate)</td>
<td>3:1</td>
<td>3:1</td>
<td>6:1</td>
</tr>
<tr>
<td>5 yr. Appreciation (1Q 2003 to 1Q 2008)</td>
<td>22.8%</td>
<td>7.4%</td>
<td>65.1%</td>
</tr>
<tr>
<td>Appreciation (2006 to 2007)</td>
<td>3.6%</td>
<td>-1.7%</td>
<td>-12.1%</td>
</tr>
<tr>
<td>Loans w/ Adjustable Rates (3Q 2007)</td>
<td>7%</td>
<td>3%</td>
<td>48%</td>
</tr>
<tr>
<td>High-Priced Loans (2006)</td>
<td>25.3%</td>
<td>26.4%</td>
<td>31.9%</td>
</tr>
<tr>
<td>Foreclosures (2007; FC per HH)</td>
<td>.15%</td>
<td>0.95%</td>
<td>2.27%</td>
</tr>
<tr>
<td>Foreclosure Rank (2008; 1Q)</td>
<td>87th</td>
<td>18th</td>
<td>3rd</td>
</tr>
</tbody>
</table>

Table 3-1: Foreclosure Variables Across Regions

Other factors, like low unemployment, competitive incomes that have outpaced inflation, and negative population growth, have also prevented Allegheny County from suffering the foreclosure crisis as acutely as many other regions across the nation.
ECONOMIC TRENDS

In the 1980s Allegheny County was economically devastated by the closing of steel mills that had long sustained the region's economy. However, the county has since adapted to the economic changes, transforming itself into a center for health care, education, and technology.

To better understand the economic conditions in the county, we collected data on local unemployment, income, and population. In addition, we compared Allegheny County to benchmark counties and Metropolitan Statistical Areas (MSAs),* and to counties with high foreclosures, in order to demonstrate how the county fits into the national picture. The counties/MSAs chosen are:

- Hamilton County, OH (Cincinnati area)
- Cuyahoga County, OH (Cleveland area)
- Denver County, CO
- Clark County, NV (Las Vegas area)

Unemployment

Over the past five years, Allegheny County has experienced a drop in both total employment and unemployment rate, due in part to the county's declining labor force and population. However, the 2007 unemployment rate of 4.1 percent is the lowest the county has seen since 1999, and represents a significant improvement from 2003, when it reached 5.6 percent.

Since 1990, Allegheny County has consistently maintained lower unemployment rates than both the national and statewide averages. Nevertheless, Allegheny County follows the same trends in unemployment as the comparative regions listed above, as well as the state and nation, peaking and falling at approximately the same intervals. See Appendix A.

Wages and Income

During the same timeframe, the work force in Allegheny County has benefited from consistent increases in average wage per job and per capita income.* Between 1990 and 2006, both wages and per capita income increased approximately 4 percent per year. In 1990, the average wage per job in Allegheny County was $24,358; by 2006, that number had nearly doubled to $44,265. See Appendix A.

Since 1990, Allegheny and Clark Counties have both had an average annual increase in wages per job of nearly 4 percent, outperforming Hamilton and Cuyahoga Counties. Denver County has seen a higher increase than the other counties (4.5%). See Table 3-2.

* Metropolitan Statistical Area (MSA): Census designations for areas surrounding major urban centers. The Pittsburgh MSA is comprised of Allegheny County and several surrounding counties (Beaver, Butler, Fayette, Washington, and Westmoreland).

* Average Wage per Job: Pre-tax monetary disbursements made to employees, including salary, tips, bonuses, etc. Per Capita Income: Total income received from all sources, including salaries, government transfer receipts, and return on investments.
Table 3-2: Average Annual Wages per Job Increase 1990-2006

<table>
<thead>
<tr>
<th></th>
<th>Average Annual Wages per Job Increase 1990-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny</td>
<td>3.8%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>3.7%</td>
</tr>
<tr>
<td>Cuyahoga</td>
<td>3.4%</td>
</tr>
<tr>
<td>Denver</td>
<td>4.5%</td>
</tr>
<tr>
<td>Clark</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Not surprisingly, per capita income closely mirrors average wages per job; increases over time for these two indicators have also been similar. See Appendix A.

Price Inflation
To determine whether increases in Allegheny County’s wages and incomes are significant in the face of inflation, they were measured against the Philadelphia area’s Consumer Price Index (CPI).* Philadelphia was used because it was the closest metropolitan area for which data from the Bureau of Labor Statistics was available. Allegheny County’s per capita income and average wage increase has consistently beaten the CPI. See Appendix A.

POPULATION TRENDS
Population plays an important role in the housing market because it is tied to the size of the workforce and the demand for housing. In areas with shrinking populations, demand for housing is weaker than in areas with population growth. Pittsburgh’s population has been dwindling since the steel mills closed, weakening the local demand for housing.

Between 1990 and 2000, Allegheny County’s population dropped about 4 percent, from 1.34 million to 1.28 million. Furthermore, the American Community Survey estimates that the population has continued to drop each year since 2000. Estimates from 2007 suggest that Allegheny County’s population dropped nearly 5 percent since 2000, 9 percent since 1990. See Appendix B.

HOUSING MARKET TRENDS
Fluctuations in foreclosures are closely linked to the performance of the housing market. Increases in housing prices necessitate borrowers to take out larger loans and make higher loan payments. If increases in income do not keep pace with rising home prices, more homeowners will be unable to make their mortgage payments and, ultimately, are forced into foreclosure.

Median Home Prices
The National Association of Realtors collects data on median housing prices by Metropolitan Statistical Area (MSA). We collected data on the years 2005-2008; however, the 2008 data is preliminary and should be considered as such.

* Consumer Price Index: Measures the changes in price for consumer goods and services. It covers food, housing, apparel, transportation, medical care, recreation, education, communication, etc.
In the Pittsburgh MSA, the median housing price increased modestly from $116,100 in 2005 to $120,700 in 2007. However, preliminary data for 2008 show a steep decline to $111,600, nearly an 8 percent decrease from 2007.

Pittsburgh’s general trend of median housing prices during this period has been comparable to that of other MSAs, but there has been notable variation between regions in the specific prices and price fluctuations. Las Vegas has shown a much greater decline than Pittsburgh, in both average price loss ($57,100) and in percent change (18.7%). Cleveland’s decline in housing prices from 2005 to 2008 is also expected to be dramatic (average loss of $36,800, or 26.5%). Denver and Cincinnati are expected to see more modest declines (9.6% and 11.9% drops, respectively). See Figure 3-1 and Table 3-3.

<table>
<thead>
<tr>
<th>Median Housing Price by MSA 2005-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
</tr>
<tr>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Cincinnati</td>
</tr>
<tr>
<td>Cleveland</td>
</tr>
<tr>
<td>Denver</td>
</tr>
<tr>
<td>Las Vegas</td>
</tr>
</tbody>
</table>

**Figure 3-1: Median Housing Prices by MSA, 2005-2007**

<table>
<thead>
<tr>
<th>Changes in Median Housing Prices, 2005-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Cincinnati</td>
</tr>
<tr>
<td>Cleveland</td>
</tr>
<tr>
<td>Denver</td>
</tr>
<tr>
<td>Las Vegas</td>
</tr>
</tbody>
</table>

**Table 3-3: Median Housing Price Change by MSA, 2005-2008**
Data Analysis

Home Price Appreciation

Home appreciation data was calculated using the Office of Federal Housing Enterprise Oversight's House Price Index. The House Price Index tracks single-family home price changes in re-sales and refinances of loans purchased or securitized by Fannie Mae or Freddie Mac. Freddie Mac also maintains data on the 30-year prime interest rate, which are contrasted against the housing appreciation. See Figure 3-2.

Pittsburgh has only experienced depreciation in home values three times since 1977. Aside from the steep drop in the early 1980s, homes have consistently appreciated between 2 and 10 percent.

Pittsburgh’s housing market is distinct for its lack of a price bubble and subsequent burst. The Las Vegas bubble has been highly publicized, and the statistics confirm both the inflated appreciation and the dramatic decline. Pittsburgh has maintained higher appreciation rates over the past five years than Cleveland, another city that did not have a period of extreme price growth. See Figure 3-2.

Mortgage Rates

Mortgage rates have played a major role in the current foreclosure crisis. Lenders typically charge lower initial interest rates on adjustable rate mortgages (ARMs), making them attractive to borrowers. However, interest rates for ARMs fluctuate based on a number of indexes* and can increase dramatically between adjustment periods, which may be every month, quarter, year, three years, or five years. When interest rates are adjusted, borrowers may wind up with higher monthly payments than they can afford. In addition, high loan-to-price ratios and effective rates can put a strain on borrowers, making foreclosure more likely.

* Among the most common indexes are the rates on one-year Constant-Maturity Treasury (CMT) securities, the Cost of Funds Index (COFI), and the London Interbank Offered Rate (LIBOR). Some lenders use their own cost of funds as an index, rather than using other indexes. (Federal Reserve Board: Consumer Handbook on Adjustable-Rate Mortgages)
The Federal Housing Finance Board (FHFB) tracks mortgage rates by MSA. Their quarterly data from 2007-2008 demonstrate how pervasive adjustable rate mortgages are in Las Vegas, which also has a high foreclosure rate. In contrast, Pittsburgh has far fewer adjustable rate mortgages. See Figure 3-3.

The adjusted effective rate is the interest rate paid by borrowers once adjustments are made to an ARM. It is calculated as the value of the index specified in the loan agreement plus the margin (e.g., if the index value rises to 8% and the margin is 2%, the adjusted effective rate is 10%). The FHFB annual data show that effective rates have been nearly identical in Denver, Cleveland, and Pittsburgh, rising quickly from 1978 to a high of around 15 percent in 1982, then dropping consistently in the next 20 years to a low around 5 percent in 2004. Las Vegas and Cincinnati data are not available. See Appendix C.

Annual data for the Loan-to-Price Ratios show a distinction between the Denver MSA and Cleveland and Pittsburgh MSAs. Since 1978, Denver’s loan/price ratio has been erratic, but has gradually declined; in contrast, Cleveland’s and Pittsburgh’s loan/price ratio has increased. In 2003, Denver homeowners borrowed 73 percent of the home’s total sale price, whereas Pittsburgh homeowners borrowed 78 percent and Cleveland homeowners borrowed 82 percent. See Appendix C.
Summary
As we have seen, regional differences have had significant influence on the way foreclosures affect a community. In Las Vegas, median housing prices were much higher than in Cleveland or Pittsburgh; however, Las Vegas’ combination of numerous adjustable rate mortgages and highly erratic home appreciation led to much higher rates of foreclosures than in the other cities studied. Differences can even be seen at a local level; Allegheny County homeowners face different challenges associated with foreclosures based on their municipality and neighborhood.

CURRENT FORECLOSURES IN ALLEGHENY COUNTY
While Allegheny County has not seen an explosion in foreclosures as several other regions have, foreclosures are still a problem, particularly to specific communities within the region. Since conditions both regionally and nationally continue to worsen, it’s probable that Allegheny County will see more foreclosures in the future, when a large number of adjustable rate mortgages reset.

Characteristics of High-Foreclosure Communities
Several studies have shown that foreclosures disproportionately affect low-income and minority homeowners. This phenomenon is true in Pennsylvania, where areas with more highly clustered foreclosures tend to have low housing values and family incomes, and higher percentages of minority residents. The Pittsburgh and Allegheny County foreclosure rates* are both 15.7 foreclosures per 1,000 homes, but because foreclosures tend to cluster in neighborhoods, some communities are hit much harder than others. To examine community trends, we calculated the foreclosure rate for each census tract within Allegheny County and the City of Pittsburgh.

Foreclosures were most common in neighborhoods “on the brink” — these communities are not the most impoverished in the region, nor do they have the highest concentration of minorities; typically, those neighborhoods have low home ownership rates, which precludes the risk of foreclosure. Rather, communities with the highest foreclosure rates have relatively high home ownership, lower-than-average median incomes and higher-than-average concentrations of minority residents. See Table 3-4.

* Foreclosure Rate = (number of foreclosures / number of housing units) * 1,000
Foreclosure Rate = Foreclosures per 1,000 Housing Units
There was a negative correlation with median household income; the lower the income, the more foreclosures. However, as previously noted, homeownership is a prerequisite for foreclosure activity; in highly impoverished communities, foreclosures are practically nonexistent because most residents do not own their homes.

Stemming from this principle, there was a significant positive correlation with the percentage of residents in the same household for five years or more, and the percentage of owner-occupied units. This is simply an indication of a tract’s rate of homeownership.

There were negative correlations with the percentage of foreign-born individuals and of individuals who do not speak English at least “well.” In other words, foreclosures were less common in neighborhoods with larger foreign-born populations. While this finding may run counter to the national trend, it makes sense in Allegheny County, where many foreign-born residents relocated to the region to pursue higher education and competitive, high-income jobs in academia, the health care industry, and the technology research field. In Allegheny County, 21 percent of all foreign-born residents have at a college degree, compared to only 17.5 percent nationally. Further, 34.5 percent of foreign-born Allegheny County residents hold graduate degrees (i.e. master’s, professional, or doctoral degrees), more than three times the national average.

In 2007, the percentage of foreign-born individuals in poverty was greater than the population as a whole (13.4% vs. 11.7%, mirroring the national trend); however, per capita income for these individuals was higher than average ($27,537 vs. $24,674), which runs counter to the national trend.
Finally, there was a positive correlation with the percentage of minority residents. Because of the overrepresentation of minorities among residents in poverty, though, we see that communities with the highest concentration of minorities tend to have few foreclosures. See Table 3-5.

<table>
<thead>
<tr>
<th>Community</th>
<th>Percentage of homes in foreclosure</th>
<th>Percentage of residents in poverty</th>
<th>Percentage of residents that are of African American descent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Terrace Village</td>
<td>0%</td>
<td>55%</td>
<td>98%</td>
</tr>
<tr>
<td>2  Homewood North</td>
<td>2%</td>
<td>34%</td>
<td>96%</td>
</tr>
<tr>
<td>3  Northview Heights</td>
<td>0%</td>
<td>70%</td>
<td>96%</td>
</tr>
<tr>
<td>4  Middle Hill</td>
<td>1%</td>
<td>34%</td>
<td>95%</td>
</tr>
<tr>
<td>5  Bedford Dwellings</td>
<td>0%</td>
<td>62%</td>
<td>95%</td>
</tr>
<tr>
<td>6  Lincoln-Lemington-Belmar</td>
<td>2%</td>
<td>24%</td>
<td>94%</td>
</tr>
<tr>
<td>7  East Hills</td>
<td>2%</td>
<td>37%</td>
<td>94%</td>
</tr>
<tr>
<td>8  Homewood West</td>
<td>2%</td>
<td>14%</td>
<td>94%</td>
</tr>
<tr>
<td>9  Homewood South</td>
<td>0%</td>
<td>39%</td>
<td>93%</td>
</tr>
<tr>
<td>10 Garfield</td>
<td>1%</td>
<td>67%</td>
<td>92%</td>
</tr>
</tbody>
</table>

Table 3-5: Census tracts ranked by percent of minority residents

**Allegheny County:**
Our findings showed that 25 percent of the county’s foreclosures were clustered in 36, or 9 percent, of the county’s 414 census tracts. Furthermore, 50 percent of the county’s foreclosures were concentrated in 98, or 24 percent, of the county’s census tracts. See Figure 3-4 and Table 3-6.
Figure 3-4: Rate of Foreclosed Homes in Allegheny County by Census Tract

Allegheny County Properties in Mortgage Foreclosure
By Municipality 2006-Nov. 2007
Foreclosures per Thousand Housing Units

Legend
- Municipality
- Rate Per Thousand Units
  - 0-5
  - 7-15
  - 17-24
  - 26-37
  - 30-71

Allegheny County Mortgage Foreclosures by Municipality
2006-November, 2007 Foreclosures Per Thousand Housing Units
Table 3-6: Top 10 Allegheny County Census Tracts by Foreclosure Rate, Excluding City of Pittsburgh (2000 County averages: home ownership=67%; median household income=$38,329; percent in poverty=11.2%; percent minority=16%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald Borough</td>
<td>10</td>
<td>35.6</td>
<td>$32,239</td>
<td>8.1%</td>
<td>12.2%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Mt. Oliver Borough</td>
<td>73</td>
<td>39.2</td>
<td>$27,990</td>
<td>16.9%</td>
<td>19.3%</td>
<td>56.2%</td>
</tr>
<tr>
<td>East Pittsburgh Borough</td>
<td>30</td>
<td>27.1</td>
<td>$21,286</td>
<td>24.2%</td>
<td>22.0%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Oakdale Borough</td>
<td>23</td>
<td>35.9</td>
<td>$46,574</td>
<td>1.8%</td>
<td>2.6%</td>
<td>83.8%</td>
</tr>
<tr>
<td>East McKeesport Borough</td>
<td>14</td>
<td>29.5</td>
<td>$28,431</td>
<td>4.5%</td>
<td>8.3%</td>
<td>64.4%</td>
</tr>
<tr>
<td>Versailles Borough</td>
<td>25</td>
<td>26.7</td>
<td>$24,552</td>
<td>4.2%</td>
<td>16.6%</td>
<td>52.5%</td>
</tr>
<tr>
<td>Elizabeth Borough</td>
<td>23</td>
<td>30.3</td>
<td>$30,556</td>
<td>5.3%</td>
<td>10.2%</td>
<td>62.4%</td>
</tr>
<tr>
<td>McKees Rocks Borough</td>
<td>94</td>
<td>27.6</td>
<td>$22,278</td>
<td>17.5%</td>
<td>25.3%</td>
<td>50.3%</td>
</tr>
<tr>
<td>Pitzazz Borough</td>
<td>52</td>
<td>27.4</td>
<td>$25,688</td>
<td>2.1%</td>
<td>12.0%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Coraopolis Borough</td>
<td>85</td>
<td>27.3</td>
<td>$32,321</td>
<td>15.3%</td>
<td>9.7%</td>
<td>55.6%</td>
</tr>
</tbody>
</table>

City of Pittsburgh:

In the Pittsburgh census tracts hit hardest by foreclosures, median household income ranges from $22,500 (Allentown) to $42,500 (Perry North); half of these tracts have median household incomes lower than the city average of $29,782. Four of the ten tracts have a higher percentage of minority individuals than the city average of 31 percent. There also exists a wide range in the percentage of individuals below the poverty line: a quarter of residents in Perry South and Allentown live below the poverty line, compared to 13 percent in Perry North and 22 percent city-wide.

Average purchase loan amount is a measure of the health of the neighborhood’s housing market. It is calculated using Home Mortgage Disclosure Act data from 2006, and suggests that foreclosures affect both weak and average housing markets. The average home purchase loan for census tracts within the City of Pittsburgh is approximately $73,000.
Figure 3-5: Percent of Foreclosed Homes in Pittsburgh, by Neighborhood

Table 3-7: Top Ten Pittsburgh Census Tracts by Foreclosure Rate (note: some neighborhoods, like Sheraden, cover more than one census tract)

(2006 City averages: median household income=$31,779; percent minority=34.9%; percent in poverty=22.2%; home ownership=52.8%; home purchase loan=$73,000)
DHS CLIENTS AND FORECLOSURES

In order to determine the service use patterns of those in foreclosure, we compared the names of defendants in foreclosure to clients in the DHS Data Warehouse, using first and last name.* We found that individuals in foreclosure use more services than would be expected based on general usage patterns for the county.

Of the 12,494 defendants in foreclosure, 4,646 had received services from DHS actively or in the past (37%). Of those, 2,214 foreclosure defendants were actively accessing DHS services, making up nearly 18 percent of the total number of foreclosure defendants. Since DHS serves approximately 17.2 percent of Allegheny County’s residents, these findings suggest that DHS clients have been more susceptible to foreclosures than the general public. See Figure 3-6.

Effects of foreclosures on DHS consumers

- 12,494 people named as defendants in foreclosure proceedings between 2006 and Nov. 2007 obtained from Pittsburgh Neighborhood and Community Information System
- 4,646 matches against DHS’s data warehouse of service consumers
- 2,214 of consumers were actively accessing resources
- Expected 9.7%, the county service rate in 2005

* In order to triangulate community and social problems, it is helpful to integrate numerous data sources. To match data, we use an algorithm to compare external data sources with our DHS client data. This matching algorithm goes through a series of steps to confirm a client’s presence in both data directories, looking at his or her social security number, first and last name, date of birth, and gender. In cases where the data may not match exactly, this process takes further steps to confirm identity, using Soundex, a phonetic algorithm for indexing names by pronunciation, and anagrams of social security numbers. For a detailed representation of the matching algorithm, please see Appendix D.

Of county residents in foreclosure who had ever accessed DHS services:
- 46 percent accessed Mental Health services;
- 27.1 percent were parents involved with the child welfare system (Office of Children, Youth, and Families parents); and
- 13.1 percent accessed services in the Area Agency on Aging (AAA).

Of county residents in foreclosure who were actively accessing DHS services:
- 23.1 percent were accessing Mental Health services;
- 24.9 percent were accessing AAA services; and
- 8 percent were accessing Drug and Alcohol services.
Although most extremely low-income individuals in Allegheny County do not own their own homes, the mortgage foreclosure crisis may still present a serious challenge to their housing stability. When homeowners go into foreclosure and lose their homes, many turn to the rental market. While there is a surplus of affordable housing for individuals making 30 percent or more of median household income, there is a serious shortage of affordable housing for extremely low-income households making less than that amount. In fact, researchers from the University of Pittsburgh estimated in 2003 that affordable housing may be out of reach for approximately 15,000 low-income households in Allegheny County. This shortage may be exacerbated by the increased demands for rental properties triggered by foreclosures; the surplus of affordable units may contract, pushing moderate- and lower-income renters further down in the market. This may, in turn push very low-income renters out of the market entirely, intensifying demand for DHS housing and homelessness services.

Renters are also at risk of eviction if their landlord goes into foreclosure. In her testimony before the House Committee on Oversight and Government Reform, Dr. Vicki Been noted that in New York City, “60 percent of the properties going into foreclosure in 2007 were two- to four-family or multifamily buildings, representing at least 15,000 renter households (or approximately 38,000 individuals).” If foreclosed properties are sold at auction, most of the households will face eviction, often without much advance notice. Low-income renters are particularly vulnerable in this situation, as many may not have savings or discretionary income to cover the costs associated with moving and securing a new home (e.g. first month’s rent, security deposit).

PUBLIC POLICY AND COMMUNITY INTERVENTIONS
Across the nation, communities are taking action to curb the damage caused by the current foreclosure crisis. Increasingly, demographic data is being matched with information about foreclosures to create complex maps and predictive models of how foreclosures affect different regions. On the policy side, local and state governing bodies, along with community-based organizations, are establishing prevention and intervention programs to help homeowners keep their properties in the face of foreclosure.

Data-driven Interventions:
Maps created using geographic information systems (GIS) software have helped local governments and community groups to analyze the specific nature of the foreclosure problem in their region by identifying where foreclosures occur and who is affected by them.

† Affordable housing is defined by the U.S. Department of Housing and Urban Development as units with rents at or below 30% of household income, excluding units that are moderately or severely inadequate. Families that pay more than 30% of their household income on rent have less income available for other necessities like food, medical care, and education.
Many of the programs that have resulted from these types of analysis focus on the connection between foreclosure, vacancy, and crime—law enforcement officials in particular are using maps to identify potential hotbeds of criminal activity. For example, in Virginia’s Loudoun and Fairfax counties, law enforcement officers are “targeting vacant houses on regular patrols, using maps of foreclosed properties as guides, while working with community watch groups to identify trouble spots.”

In Cleveland, researchers at Case Western Reserve University’s Center for Urban Poverty and Community Development are using GIS to develop a foreclosure “early warning system,” which will identify variables that may indicate foreclosure, including tax delinquency, low water usage, and vacancy. Community development groups and local government use that information to target their efforts to prevent foreclosure. Officials in Boston use GIS data to focus the foreclosure intervention efforts of police, inspection services, and neighborhood development groups on streets with high foreclosure activity.

The Association of Community Organizations for Reform Now (ACORN) uses GIS to prepare papers on the costs of foreclosures, tailored to nearly 100 metropolitan areas, for homeowners, their neighbors, lenders, investors, and the local government. They also use GIS to map census tracts that have a high number of sub-prime loans and estimated future foreclosures in order to help stakeholders target outreach and advocacy efforts. ACORN’s papers are being used to create policy recommendations on key issues like foreclosure prevention, affordable housing, municipal maintenance for vacant properties, and lending regulation.

Legislation and Public Policy Initiatives:
Municipal governments have taken numerous different approaches to dealing with foreclosures. The City of Philadelphia has declared a moratorium on foreclosure sales and has mobilized the sheriff’s office to block such sales.

The Neighborhood Stabilization Act of 2008 (H.R. 5818), sponsored by California Representative Maxine Waters, would authorize the Secretary of Housing and Urban Development to make loans to States to acquire foreclosed housing and to make grants to States for related costs.

In Pennsylvania, the state Housing Finance Agency manages two programs that help homeowners facing foreclosure—REFinance to an Affordable Loan, or REAL; and Homeowner Equity Recovery Opportunity, or HERO. In July 2008, Pennsylvania Governor Edward Rendell signed five bills designed to “protect homebuyers, strengthen oversight of the mortgage industry and end key lending practices that leave homeowners vulnerable to foreclosure.”
• H.B. 2179 requires that all mortgage brokers pass background checks, complete training in mortgage law, pass a state competency test, and be licensed with the state Department of Banking.
• S.B. 483 bans lenders from including prepayment penalties on mortgages under $217,873 in order to protect the average borrower from falling victim to high transaction costs and escalating mortgage payments.
• S.B. 484 gives homebuyers more information to assess mortgage lenders by reversing previous Banking Department policy and giving that department more freedom to quickly release pertinent information to the public.
• S.B. 485 expands consumer protection against inflated appraisals by adding the Attorney General and the Secretary of Banking to the state’s appraisers’ board, and by increasing the maximum penalty for appraiser misconduct to $10,000 per violation.
• S.B. 486 requires that a copy of every foreclosure notice be sent to the Pennsylvania Housing Finance Agency so that the state can better monitor foreclosure activity, identify community trends in foreclosures, and potentially develop more effective interventions.

The North Carolina legislature passed H.B. 1817, the North Carolina Predatory Lending Law, in 2008 to protect consumers, clearly define sub-prime loan regulations, strengthen mortgage broker responsibilities to potential borrowers, and prohibit many of the abusive lending practices that have contributed to the foreclosure crisis.42

Lawmakers from the states of California, Connecticut, Florida, and Illinois, and the city of San Diego, are suing Countrywide Financial Corp. in attempts to stop foreclosures, accusing the lender of fraudulent and predatory practices.43

CONCLUSIONS AND RECOMMENDATIONS
Allegheny County has not felt the damage of the mortgage foreclosure crisis as acutely as many other regions in the country, for numerous reasons. The region has low unemployment rate coupled with wage increases that consistently outpace inflation. Housing prices have risen consistently but gradually, without the bubble and burst experienced in other housing markets. Residents are protected by a strong state law, the HEMAP program, which helps them avoid foreclosure during difficult financial periods.

Despite these protective characteristics, though, the County is not immune to foreclosures. Analysis of county foreclosures between 2006 and 2007 showed that they tend to be concentrated in specific neighborhoods and municipalities, but affect both rich and poor, minority and white communities. Because each community and population group faces unique challenges with foreclosures, and is differently equipped to deal with them, each will need different intervention and prevention methods.
Individuals in foreclosures accessed DHS services at a greater rate than expected, and many were either child welfare-involved parents or individuals who accessed aging support services. DHS needs to take steps to ensure that clients have access to information about the prevention and assistance programs in the County.

**Recommendations:**

- Train DHS staff to look for warning signs of foreclosure, such as utility shut-offs or unopened mail, in the clients they see.
- Expand budgeting and money management programs to reach more parents involved in child welfare (i.e. Office of Children, Youth, and Families) and clients receiving services from the Area Agency on Aging (AAA).
- Warn clients receiving AAA services of hazards of home refinance and expand marketing of reverse mortgage programs as a source of revenue for seniors who have equity in their homes.
- Ensure that first-time homebuyer programs include budgeting; planning for repairs, job loss, and medical emergencies; and other information about the responsibilities of home ownership.
- Expand affordable housing options in the rental market.
- Broaden data-sharing exchanges with external organizations, and expand data-sharing agreements to include PA Housing Finance Agency so that DHS clients who have received Act 91 notices may be referred to counseling agency.


11 Walker, Christopher. Testimony before the House Oversight and Government Reform Committee (Domestic Policy Subcommittee) and the House Financial Services Committee Housing (Community Opportunity Subcommittee). “Targeting Federal Aid to Neighborhoods Distressed by the Subprime Mortgage Crisis.” 22 May 2008.


References


34 Foster, Angela Williams and David Y. Miller. “A Study of Affordable Housing: Supply and Demand in Allegheny County.” University of Pittsburgh Graduate School of Public and International Affairs. February 2003.


Appendix A:

Allegheny County Employment Trends

Figure A-1: Allegheny County Employment Trends, 1990-2007

Figure A-2: Allegheny County, Pennsylvania, and National Unemployment Rates, 1990-2007

Figure A-3: Unemployment Rates by Metropolitan Statistical Area, 1990-2007
Appendix A:

Allegheny County Employment Trends

### Table A-1: Average Wages and Per Capita Income, Allegheny County 1990-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage</th>
<th>% Change</th>
<th>Per Capita Income</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>$24,368</td>
<td></td>
<td>$22,226</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>$26,536</td>
<td>4.8%</td>
<td>$22,926</td>
<td>3.1%</td>
</tr>
<tr>
<td>1992</td>
<td>$27,033</td>
<td>5.9%</td>
<td>$24,061</td>
<td>5.0%</td>
</tr>
<tr>
<td>1993</td>
<td>$27,684</td>
<td>2.4%</td>
<td>$24,576</td>
<td>2.1%</td>
</tr>
<tr>
<td>1994</td>
<td>$28,400</td>
<td>2.5%</td>
<td>$25,397</td>
<td>3.3%</td>
</tr>
<tr>
<td>1995</td>
<td>$29,473</td>
<td>3.3%</td>
<td>$26,641</td>
<td>4.5%</td>
</tr>
<tr>
<td>1996</td>
<td>$30,633</td>
<td>3.9%</td>
<td>$27,787</td>
<td>4.7%</td>
</tr>
<tr>
<td>1997</td>
<td>$32,130</td>
<td>4.9%</td>
<td>$29,304</td>
<td>5.5%</td>
</tr>
<tr>
<td>1998</td>
<td>$33,270</td>
<td>3.5%</td>
<td>$30,856</td>
<td>5.3%</td>
</tr>
<tr>
<td>1999</td>
<td>$35,065</td>
<td>5.4%</td>
<td>$32,639</td>
<td>5.5%</td>
</tr>
<tr>
<td>2000</td>
<td>$36,336</td>
<td>3.7%</td>
<td>$34,609</td>
<td>6.4%</td>
</tr>
<tr>
<td>2001</td>
<td>$37,616</td>
<td>3.5%</td>
<td>$35,631</td>
<td>3.0%</td>
</tr>
<tr>
<td>2002</td>
<td>$38,336</td>
<td>1.9%</td>
<td>$36,629</td>
<td>2.5%</td>
</tr>
<tr>
<td>2003</td>
<td>$39,338</td>
<td>2.6%</td>
<td>$37,534</td>
<td>2.8%</td>
</tr>
<tr>
<td>2004</td>
<td>$41,016</td>
<td>4.3%</td>
<td>$39,241</td>
<td>4.5%</td>
</tr>
<tr>
<td>2005</td>
<td>$42,199</td>
<td>2.9%</td>
<td>$40,610</td>
<td>3.5%</td>
</tr>
<tr>
<td>2006</td>
<td>$44,265</td>
<td>4.9%</td>
<td>$43,333</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

**Average Increase**: $1,171 3.8% $1,242 4.3%

Table A-1: Average Wages and Per Capita Income, Allegheny County 1990-2006

### Figure A-4: Wage per Job by County 1990-2006

Figure A-4: Wage per Job by County 1990-2006
Appendix A:

Allegheny County Employment Trends

Per Capita Income by County 1990-2006

Figure A-5: Per Capita Income by County 1990-2006

Average Annual per Capita Income Increase 1990-2006

<table>
<thead>
<tr>
<th>Allegheny</th>
<th>Hamilton</th>
<th>Cuyahoga</th>
<th>Denver</th>
<th>Clark</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3%</td>
<td>3.9%</td>
<td>3.4%</td>
<td>4.9%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Table A-2: Average Annual per Capita Income Increase

Growth in Personal Income, Wages, and CPI

Figure A-6: Growth in Personal Income, Wages, and CPI 1999-2006
Appendix B: Allegheny County Population Trends

### Allegheny County Population Loss 1990-2007

![Graph showing population loss from 1990 to 2007](image)

Figure B-1: Population of Allegheny County 1990-2007

Appendix C: Mortgage Rate Comparisons

### Effective Rates by MSA, 1978-2003

![Graph showing effective mortgage rates](image)

Figure C-1: Effective Rates by MSA, shown as a percentage, 1978-2003
Appendix C:
Mortgage Rate Comparisons

Figure C-2: Loan-to-Price Ratio by MSA, 1978-2003

Table C-1: Relationship between Foreclosure Rate and Census Data