About this Paper

TRF created a data warehouse and mapping tool for the Pennsylvania Housing Finance Agency (PHFA). In follow-up to this work, PHFA commissioned TRF to analyze and present particular attributes of the data TRF had collected to highlight how this tool could be used. Other papers in the series address housing issues associated with rental affordability, the needs of the elderly, the needs of persons with disabilities, and the relationship between race and homeownership.

Home Prices and Appreciation

Summary

Pennsylvania is an affordable place to buy a home and more Pennsylvanians own their own home today than did in 2000. Home sale volume remains steady, despite a slowing housing market across the country, and home appreciation in many parts of the state has been quite strong. The rate of mortgages going into foreclosure in Pennsylvania is well below the recent peak foreclosure rate of 2003 – but the number of homeowners who are "burdened" by their housing costs is on the rise. A rising foreclosure rate is however likely to become more evident as those with little home equity or adjustable rate mortgages face growing financial pressures.

As of 2005, the U.S. Census estimated that 71.5% of households in Pennsylvania owned their own home. This is slightly higher than the Pennsylvania homeownership rate in 2000 and higher than the national rate of 66.9%, and rates in most surrounding states.

Although homes in many parts of the state increased in value at extreme rates during the last five years, the average home in Pennsylvania – valued at $131,900 in 2005 – remains lower than both the national average and those of neighboring states. The changing housing market and the significant drop in the number of existing home sales that occurred across the nation during the last year has not impacted Pennsylvania thus far. Home sales are decreasing in Pennsylvania but the drop is minimal compared to surrounding states.

Many more homeowners, however, are burdened by their housing costs than were in 2000. This is likely attributable to a combination of factors: incomes that did not keep pace with the rise in home values; homebuyers who took out larger mortgages in 2005 than they did in 2000; and the price of residential energy, particularly that of natural gas, which has risen substantially over this time period.

At the end of the 2nd quarter of 2006, the mortgage foreclosure rate in Pennsylvania was 1.54% and has been declining since early 2003. An analysis of subprime loans in Pennsylvania suggests that mortgage holders with little equity in their homes and/or adjustable rate mortgages may soon face growing financial pressures and run an increased risk of foreclosure.

By 2006, the median-income family in Pennsylvania could afford the monthly mortgage, property taxes and home insurance on the average priced home in 78% of communities analyzed by TRF. If property taxes are excluded from the calculation 88% of communities would be affordable.

For families earning less than the median income, fewer communities are affordable places to buy today's priced home. Although concentrated in central and western Pennsylvania, these affordable areas are scattered throughout Pennsylvania. Except for a few older areas, southeastern Pennsylvania is essentially the least affordable to income groups at or near the median.

Home sales have been strong in Pennsylvania and grew 16.5% between 2003 and 2005. And while sales of existing homes dropped across the nation in the last year, Pennsylvania's market remains relatively stable.

According to the National Association of Realtors®, 255,000 existing homes sold in Pennsylvania in 2005. Growth in existing home sales since 2003 was one of the highest in the region and surpassed the increase in national sales.

Neighboring states experienced a sharp drop in sales volume over the last year but Pennsylvania sales have been consistent. In New Jersey, for example, sales of existing homes dropped 24% between the third quarter of 2005 and the third quarter of 2006 – in Pennsylvania sales only dropped by 4.5%.

The median home value in Pennsylvania, however, continues to be the lowest in the region and is appreciating at a slow rate compared to neighboring states. Values and appreciation rates vary widely across the state.

Percent Change in Home Sales: 2003-2005

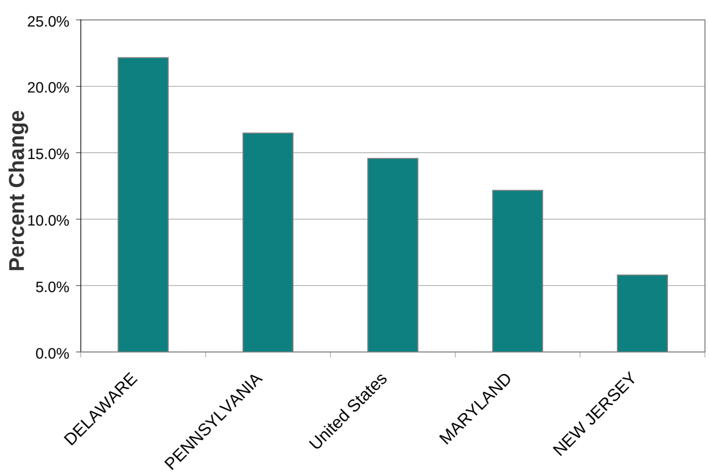


figure 1

According to the U.S. Census, the median home value in the nation was $167,500 in 2005 and represented a 40% increase since 2000. In Pennsylvania, the median home value was $131,900 – an appreciation (not counting inflation) of 35%. Compared to neighboring states, Pennsylvania had both the lowest home value and slowest rate of appreciation, making Pennsylvania the most affordable in the region to purchase and retain a home. Claritas, Inc. estimates suggest that one-third of the state's census tracts did better than the state's overall appreciation rate.[1] Some of the greatest appreciation occurred in the state's lower-valued areas, for example, Fishtown in Philadelphia, Upper Darby in Delaware County, and Lackawaxen and Dingman in Pike County.

	2005 III	2005 IV	2006 I	2006 II	2006 III	Percent Change
U.S.	7,180	6,943	6,790	6,687	6,270	-12.67%
DE	20.8	18.8	18	18.7	18.7	-10.10%
MD	136.4	128.4	126.3	116.2	110	-19.35%
PA	256.7	270.6	223.5	241.6	245.1	-4.52%
NJ	187.4	176.4	167.9	157.9	143	-23.69%
OH	286.9	293.6	295.4	277.1	269.1	-6.20%

(Numbers in the thousands.)

figure 2

Some higher-priced areas that experienced higher than average increases include Fairmount and Northern Liberties in Philadelphia, Whitemarsh in Montgomery County, East Goshen in Chester County and Radnor in Delaware County, experienced higher than average increases.

State College, parts of Carisle and sections of Monroe County are representative of the few areas which actually lost value or stayed the same.

Median Home Values: 2003-2005

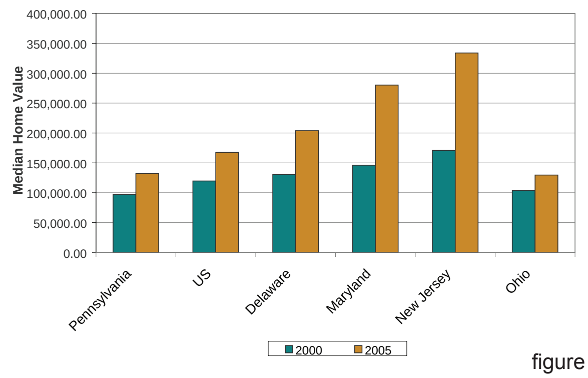


figure 3

Over 45% of the housing units in Pennsylvania are valued between $50,000 and $150,000. Another 42% have values above $150,000 – and 12% are valued below $50,000.

Percent of Housing Units by Housing Value; 2005

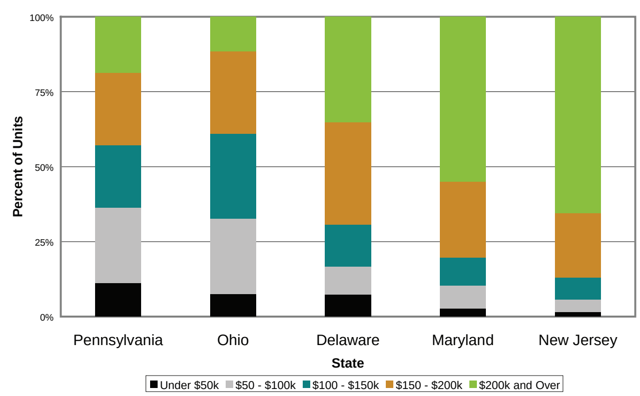


figure 4

Figure 4 demonstrates the extent to which Pennsylvania has a more affordable housing stock than neighboring states.

Home values vary widely across the state. According to Claritas[1] estimates for 2005, the most expensive housing is located in neighborhoods of Philadelphia like Chestnut Hill, Lower Merion in Montgomery County and Sewickely Heights in Allegheny County. Sections of Philadelphia and Pittsburgh, Johnstown, Reading and Shamokin offered the least expensive housing.

This variation is similarly reflected in the prices of homes that are for sale. In August of 2006, for example, 65,000 homes in Pennsylvania were listed for sale on realtor.com. The highest asking prices are concentrated in southeastern, northeastern and western Pennsylvania (see figure 5).

Mortgage Trends

Home Purchase

In 2005, according to Home Mortgage Disclosure Act (HMDA) statistics, 184,917 mortgages were originated for the purchase of a home in Pennsylvania. This represents an increase of 25% since 2000. In 2005, Pennsylvania's median purchase mortgage was $121,000 – an increase of 42% since 2000. Like home values, purchase mortgage amounts vary widely across the state from parts of southeastern Pennsylvania where median mortgage amounts are above $500,000 to Central Pennsylvania where median amounts are as low as $18,000 (See map 3).

Home Refinance and Home Equity

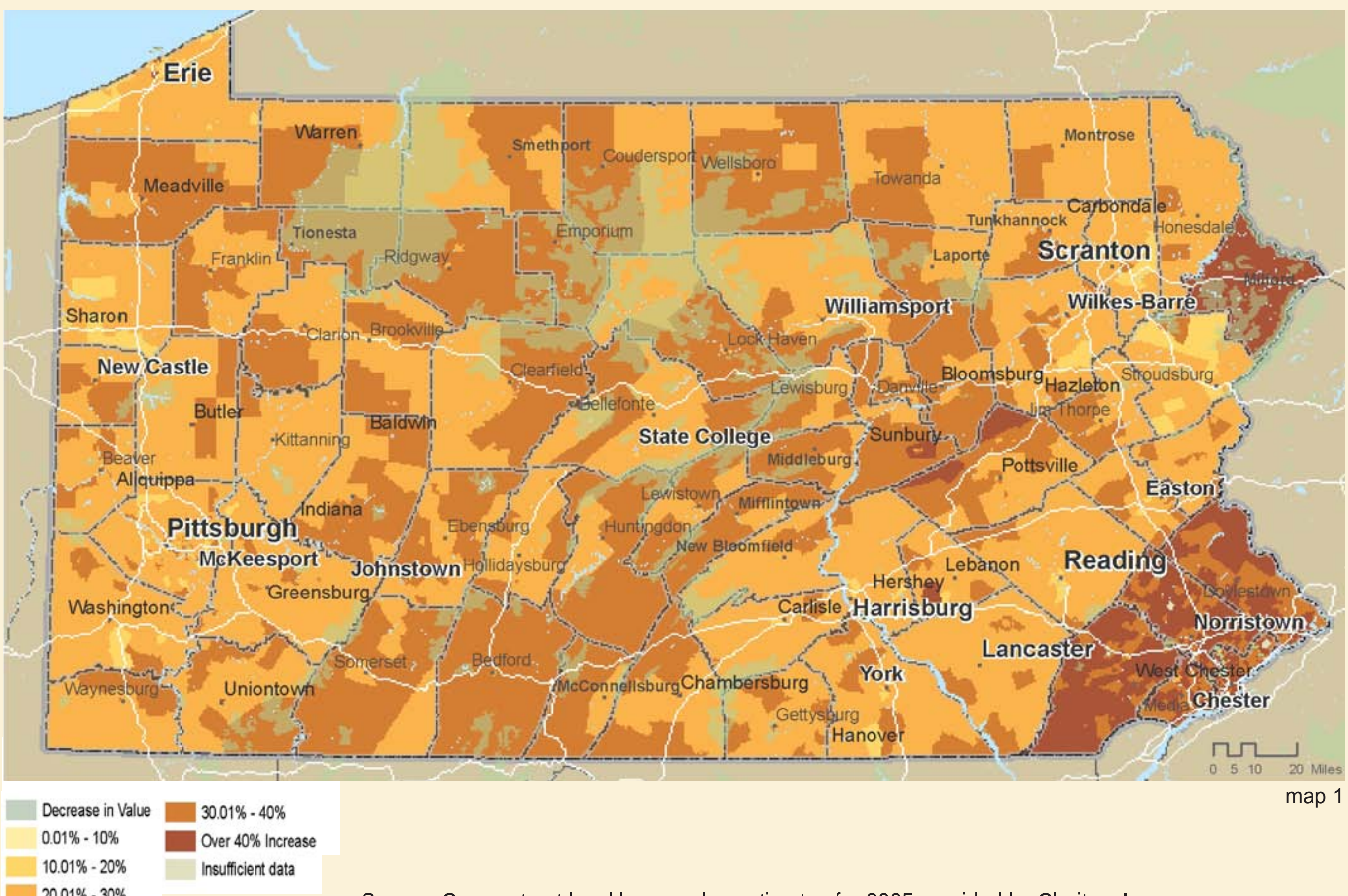
Refinancing activity was quite strong in Pennsylvania during 2000 and 2005, tapering off in 2003 as the interest rate envi-

What do these prices look like across the state?

House Price Range in 2005 (Claritas)	Percent of Census Tracts in PA	Examples of Places
<$50,000	8%	Areas of Philadelphia & Pittsburgh; Johnstown, Reading, Shamokin
$50,000-$100,000	33%	Latrobe in Westmoreland; Darlington in Beaver; Ridgeway in Elk
$100,000-$150,000	30%	Waterford in Erie; Bethelehem in Lehigh; Carbondale in Lackawanna
$150,000-$200,000	14%	Peters Twp in Washington; W. Lampeter in Lancaster; Allentown in Lehigh
$200,000-$250,000	7%	Lower Paxton in Dauphin; Doylestown in Bucks; Upper Milford in Lehigh
$250,000+	8%	Neighborhoods in Philadelphia like Chestnut Hill; Lower Merion in Montgomery Co.; Sewickley Heights in Allegheny County.

figure 5

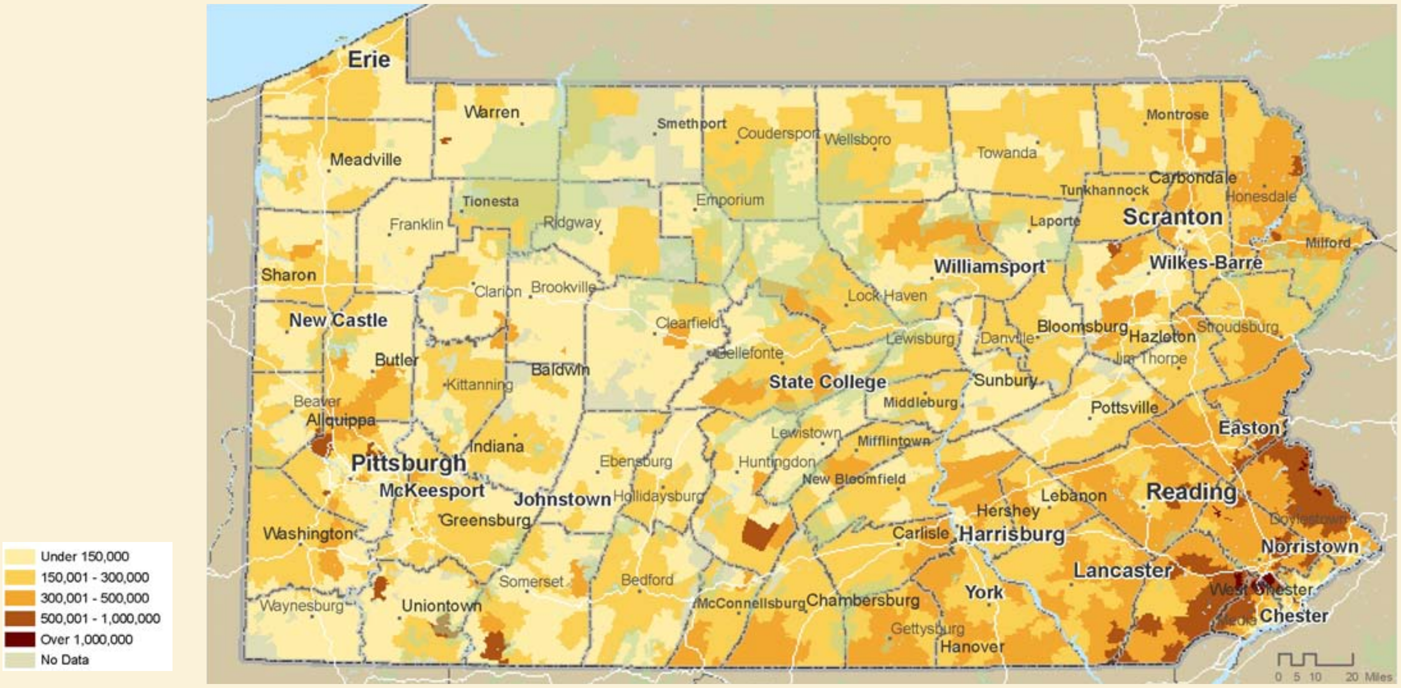
Percent Change in Median Value of Owner-Occupied Housing Units, 2000-2005



map 1

Source: Census tract level home value estimates for 2005 provided by Claritas, Inc.

Average Asking Price By Zipcode, August 2006



Source: TRF calculations based on realtor.com listings.

map 2

ronment changed. Even with the drop, 236,642 homeowners refinanced their home in 2005 – 1.5 times more than did so in 2000. Refinance amounts changed dramatically during the time period as well. In 2000, the median refinance loan was for $50,000 – by 2005, the median amount had risen to $100,000.

The volume of home equity loans did not increase at the same rate as either home purchases or refinances, but the median amount for these improvement loans increased from a median of $15,000 in 2000 to $25,000 in 2005.

Subprime Mortgage Characteristics and Foreclosures [2]

A sample of subprime loans in Pennsylvania reveals that although the loans tend to fall within standard debt-to-income ratios and credit scores, a high percentage are adjustable rate mortgages and have higher than average loan-to-price ratios.

Subprime lending accounts for an estimated 9% of the total purchase mortgage market and 19% of the total refinance market in Pennsylvania (as of 2004). In comparison to prime borrowers, borrowers with subprime loans tend to have one or more of the following traits: lower-income; FICO (Fair Isaac Corporation) scores below 620; high loan-to-value ratios; collateral property that fails to meet one or more critical appraisal standard; incomplete or unverifiable documentation of income, savings, down payment sources and/or employment; housing and other debt that exceeds 45% of monthly gross income. As a result, subprime borrowers are evaluated as representing a greater loss risk than prime borrowers and are more likely to receive a loan with a higher interest rate and less advantageous terms than a prime borrower.

The risky nature of these loans is becoming more pronounced as housing market factors change. The Mortgage Bankers Association stated in a recent (October 2006) release:

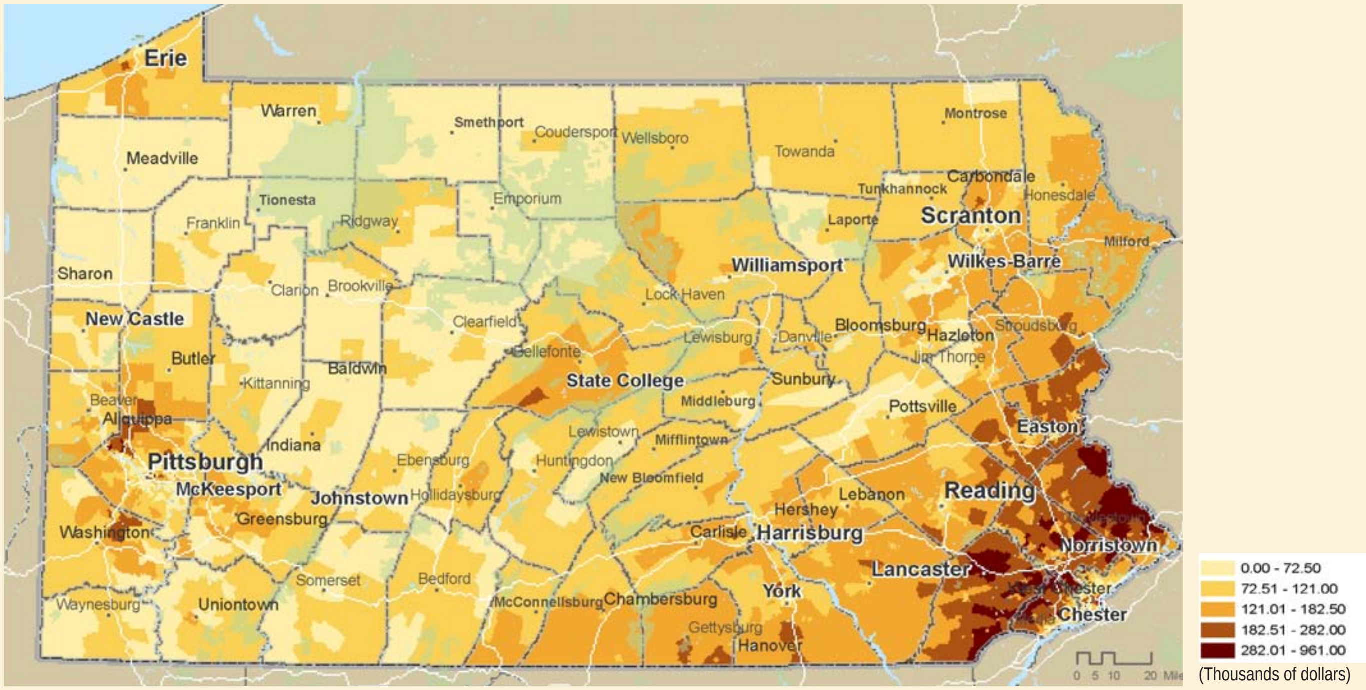
"In previous quarters we indicated a number of factors including the aging of the loan portfolio, increasing short-term interest rates, and high energy prices have been putting upward pressure on delinquency rates. To this point, generally healthy economic growth and labor markets have kept delinquency rates from rising. However, we are seeing increases in delinquency rates for subprime loans, particularly for subprime ARMs. It is not surprising that subprime borrowers are more susceptible to these changes."

A review of a sample of loans in Pennsylvania reveals:

Debt-to-Income Ratios

In Pennsylvania, the sample of subprime loans fares well against debt-to-income standards as debt-to-income ratios ranged from an average of 35% in Philadelphia to 39% in Berks County.

Median Loan Amount (Thousands), 2005



Source: TRF calculations of Home Mortgage Disclosure Act (HMDA) data.

map 3

Debt-to-income ratios are a standard method for determining how large a mortgage payment a household can affordably sustain. The ratio tells a lender what percentage of the homebuyer's monthly income is available for a mortgage payment after the homeowner pays all of their other monthly debt obligations (i.e. car loan payment, student loans, etc.). Accepted ratios vary across conventional lenders but tend to be around 36%. FHA, which accepts higher ratios, has a limit of 43%. PHFA's debt ratios currently stand at 38% for manually underwritten loans and 50% for automated underwritten loans.

Credit Scores

Among the sample of subprime loans in Pennsylvania, average credit scores ranged from 599 in parts of Fayette County to 641 in Bucks and Montgomery counties.

Credit scores are another standard method for helping a lender determine what type of loan to offer a homebuyer. Generally, higher credit scores will enable buyers to obtain more advantageous interest rates and loan terms. Credit scores generally range from 300 to 850. Lower scores represent higher risk consumers who carry a greater possibility of default and foreclosure. According to Experian, a repository of consumer credit information, the average credit score in Pennsylvania in October 2006 was 692 – higher than the national average of 675.

Homebuyers with subprime loans tend to have credit scores lower than 620. Among the sample of subprime loans in Pennsylvania, average credit scores ranged from 599 in parts of Fayette County to 641 in Bucks and Montgomery counties. This range seems reasonable and suggests that borrowers in this subprime pool with credit scores above 620 may have had another financial reason for needing the subprime product, such as a lack of savings, undocumented income or a desire for a specific jumbo loan product *(See figure 6)*. Or they may have been able to qualify for a prime loan.

Loan-to-Price Ratios

Loan-to-Price ratios in this subprime sample are higher than both the average national and Pennsylvania rates.

Data from the Federal Housing Finance Board indicates that in 2005, the average conventional single family mortgage loan in Pennsylvania had a loan-to-price ratio of 76.9% – essentially the same as the national average of 76.6%. In the sample of subprime loans, loan-to-price ratios varied from an average of 75% in Bucks and Montgomery counties to 83% in the City of Reading. These ratios are only representative of the primary purchase mortgage and do not take into account the possibility that some of these borrowers may have secured a second loan at the time of purchase (as in an 80/20) [3] – making their overall loan-to-price ratio even higher than is indicated in this data.

In general, high loan-to-price ratios suggest that borrowers had little savings to put into the purchase of their home and research suggests that these borrowers are more likely to go into default as a result.

Adjustable Rate Mortgages

High percentages of subprime loans in the sample for Pennsylvania have adjustable rate mortgages. This suggests that **numerous homeowners will be subject to a significant increase in the interest rate on their loan – and higher monthly mortgage payments – in the short term.**

According to the Federal Housing Finance Board, 12% of all conventional home purchase mortgages nationally in 2000 had adjustable rates. By 2005, 30% did. In Pennsylvania, these rates are much lower. In 2000, 14% had adjustable rates in Pennsylvania; by 2005 only 12% did.

High percentages of loans in the sample of subprime loans, however, have adjustable rates. In Allentown and Monroe County for example, over 50% of the subprime loans had adjustable rates. In parts of Warren and Venango counties, 36% had adjustable rates – quite high when compared to the Pennsylvania conventional loans, in general.

Mortgage Foreclosures

According to the Mortgage Bankers Association, the **mortgage foreclosure rate in the 2nd quarter of 2006 in Pennsylvania was 1.54%** compared to a national rate of .99%.

In keeping with national trends, the rate has been declining since the beginning of 2003, but it continues to run higher than both the national rate and the rates of surrounding states. *(See figure 6.)*

Credit Scores

3 - Digit Zip Code	Average Credit Score (Highest)	3 - Digit Zip Code	Average Credit Score (Lowest)
189XX - Bucks/ Montgomery	641	154XX - Fayette	599
175XX - Lancaster	635	191XX - Phila	607
193XX - Chester	635	161XX - Armstrong/ Indiana	610
170XX - Juniata/ Dauphin	635	152XX - Allegheny	611

figure 6

Unfortunately, uniform foreclosure or sheriff sale statistics are not available for all counties in Pennsylvania and make statewide analysis difficult. A review of the FHA foreclosure inventory and that of PHFA , however, reveal:

FHA

• Between 2001 and 2005, 12,437 properties were acquired and sold by FHA in Pennsylvania. Most of the properties had FHA loans that were originally endorsed in the mid-1990s.

• The number of properties acquired and sold by FHA has been declining since 2003. In 2003, FHA acquired and sold 2,848 properties; in 2005 it acquired and sold 2,195 properties.

• HUD foreclosure properties are scattered around Pennsylvania as most zip codes had fewer than 20 during this time period. Areas with significantly more FHA foreclosure properties include parts of Philadelphia, Allentown, York and Reading.

PHFA

As of October 2006, 42,339 Pennsylvania homeownership loans were being serviced by PHFA, of these .63% were in foreclosure and 8.82% were delinquent. PHFA's percentage of loans in foreclosure (.34%) is a fraction of the nationally conventional foreclosure rate. These percentages are lower than they were one year before and have been declining since December 2005.

While these PHFA loans in foreclosre are scattered throughout Pennsylvania, half of all loans belong to households in ten counties (each with over 1,000 loans): Allegheny, Delaware, Erie, Lancaster, Lehigh, Luzerne, Lycoming, Montgomery, Philadelphia and Westmoreland. Of these, two counties have both foreclosure and delinquency rates that are higher than the state average: Philadelphia and Erie.

Housing Burdens

More homeowners are paying more than 30% of their income for housing costs.[4]

In 2000, the U.S. Census reported that 20.8% of homeowners in Pennsylvania were "burdened" by the costs of owning a home. These costs include mortgage, property tax and utility payments. The Census now estimates that in 2005, 31% of homeowners are "burdened." It is reasonable to assume that lower income households are more likely to face housing cost burdens than any other income group.

This growing burden is likely attributable to rising mortgage debt, a slow growth in incomes and increasing home energy costs. Between 2000 and 2005, the median household income in Penn-

Total Mortgage Foreclosure Rate, 1979-2006 (Q2)

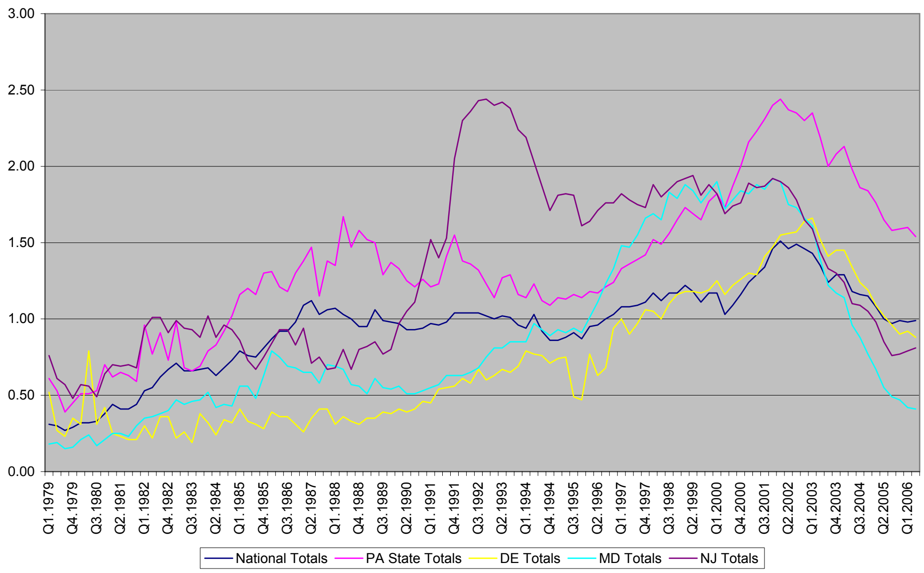


figure 7

sylvania rose by 11% – compared to a 35% rise in the median home value. Home energy costs are also a significant contributing factor. The price of residential natural gas in Pennsylvania has almost doubled since 1990. As reported by the Energy Information Agency, residential gas price in 1990 was $6.36 per million Btu – by 2004 (the most recent year for which data was available), the price per million Btu had increased to $11.65. The impact on Pennsylvania is significant as an estimated 51% of households heat their home with a utility gas according to the 2000 Census. (Another 3% use a bottled or tank gas and another 25% use fuel oil – these groups are likely impacted as well.)

Research suggests that even if a household is not burdened by their mortgage payment, they are more likely to miss payments and go into default when other expenses, such as utilities, rise.

Affordability

Monthly mortgage payments generally include a combination of principal, interest, taxes and insurance. Using the average price listed in realtor.com in August of 2006 for each school district in the state, TRF calculated the estimated monthly mortgage a homebuyer would likely need to make, the likely property tax payment and estimated insurance payment.

Mortgage Payments: TRF calculated the mortgage payment of the average priced home in each school district using an interest rate of 6.44% assuming the homebuyer sought a 30-year conventional mortgage in August of 2006. This was the going interest rate according to the Mortgage Bankers Association of America.

Property Taxes: TRF then estimated the annual property tax that would be due on the average priced home in each school district using the common level ratio and county, municipality and school district tax rates as reported by the Department of Community and Economic Development for the year 2005. Since three entities levy property taxes in Pennsylvania (counties, municipalities and school districts) TRF created an additional geography called the "tax unit" to understand property taxes. Multiple school districts may serve a single municipality and multiple municipalities may be served by the same school district. As a result, the exact location of a property is important for estimating taxes.

Insurance: TRF estimated the annual property insurance due on the average priced home in each school district based on the value of the home using values similar to those reported in the U.S. Census Public Use Microdata Sample (5%).

TRF then sought to find where housing was affordable to a variety of income groups important to PHFA. Given current debt-to-income guidelines, TRF assumed that if the combined payment of these three costs was greater than 40% of a household's income – buying that home was unaffordable.

TRF analyzed 2,340 places in Pennsylvania – areas where counties, municipalities and school districts overlap to determine where households of various income levels could afford to purchase the average home listed on realtor.com in August of 2006. That analysis revealed:

For a family of four earning $60,000 a year in 2006,[5] the average home for sale in 78% of the places in Pennsylvania would likely be affordable.

The least affordable areas for a median income household are generally those with the highest for-sale prices, for instance, Bryn Athyn in Montgomery County, Pen Argyl School District in Northampton County and Chaddsford and Radnor in Delaware County.

Generally, places that are considered affordable have their asking prices in the mid $200,000s. These include Philadelphia, Sharon Hill in Delaware County, parts of Butler County, East Stroudsburg in Pike County, Norristown School District in Montgomery County and Montrose in Susquehanna. Except for some of these older boroughs, much of southeastern Pennsylvania is beyond the reach of the median income household *(See map 4).*

Were it not for property taxes, another 10% of places in Pennsylvania would be affordable to the median income family. These include a number of areas in Allegheny and Butler counties in western Pennsylvania, Coatesville School District in Chester County, Ridley School District, Prospect Park, Glenolden and Norwood in Delaware County, as well as parts of York, Lancaster and Erie counties.

Families Earning 80% of AMI

For a family of four earning 80% of the area median income (as defined by HUD in FY2006) 61% of the places in Pennsylvania would likely be affordable.

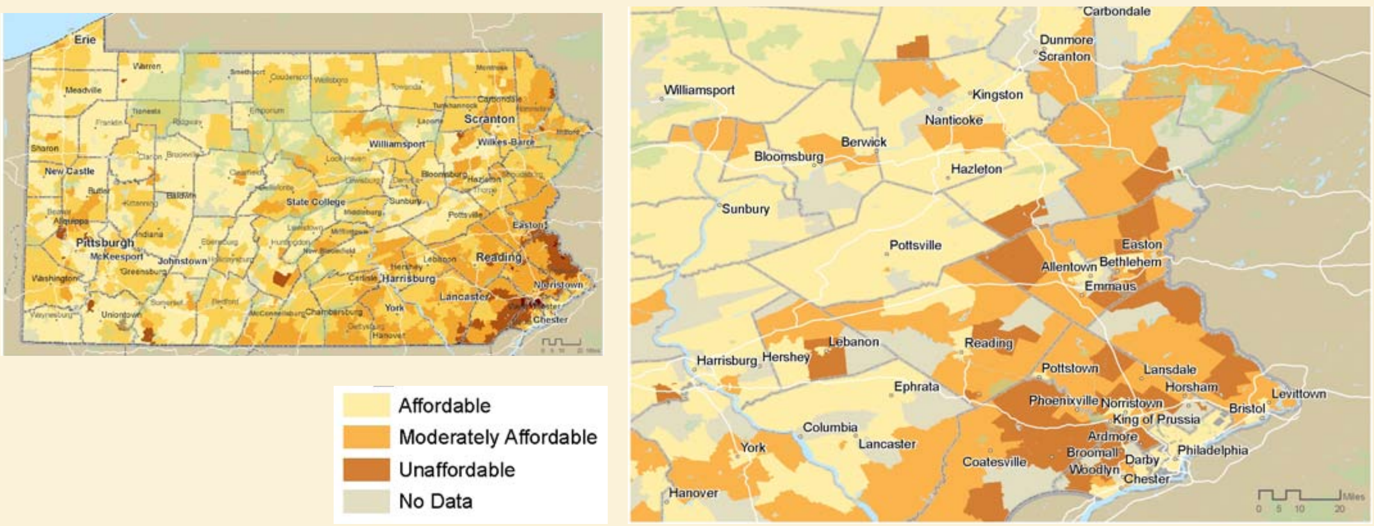
Families Earning 50% of AMI

For a family of four earning 50% of the area median income (as defined by HUD in FY2006) 27% of the places in Pennsylvania would likely be affordable.

Families Earning 30% of AMI

For a family of four earning 30% of the area median income (as defined by HUD in FY2006) 6% of the places in Pennsylvania would likely be affordable. These tend to be places scattered in Elk, Clearfield, Indiana and Cambria counties.

Housing Affordability Index for Median Income ($60,000) PA Family



Source: TRF calculations based on estimated mortgage, property tax and insurance payment on typical home for sale in August 2006.

map 4

Endnotes: (1) Claritas is a marketing information resources company dedicated to helping companies engaged in consumer and business-to-business marketing. (2) Data in this section represent TRF's analysis of summary results from a Center for Responsible Lending analysis of a private proprietary dataset of securitized subprime loans. (3) In a transaction involving an "80/20" loan the borrower actually has two loans, one for 80% of the home's value and one for 20% of the home's value. Typically, the 20% loan substitutes for a downpayment and carries a shorter term and higher interest rate than the 80% loan. The 80/20 loan allows the borrower to avoid the monthly costs associated with private mortgage insurance without the usual 20% downpayment. (5) Source: HUD FY2006 Median Family Income for Pennsylvania. (4) The U.S. Census reports on the number of households that pay more than 30% of their income towards housing costs. Current industry accepted debt-to-income guidelines, however, consider 40% to be a more accurate definition of affordable. Census data is not, however, available at this higher cutoff point.

The Reinvestment Fund

The Reinvestment Fund (TRF) is a national innovator in capitalizing distressed communities and stimulating economic growth for low- and moderate-income families. TRF identifies the point of impact where capital can deliver its greatest financial and social influence. TRF's investments in homes, schools and businesses reclaim and transform neighborhoods, driving economic growth and improving lives throughout the Mid-Atlantic region. Since its inception in 1985, TRF has made more than $530 million in community investments. TRF's Policy and Information Services Division has emerged as a highly regarded source of unbiased information for public officials and private investors in the mid-Atlantic region. To learn more about TRF, visit www.trfund.com.