

Housing Profile for O'Brien County



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IOWA STATE UNIVERSITY
University Extension

Introduction and Author Information

Introduction

This report is intended to provide a baseline for analysis of a county's housing situation. While housing has recently gained a lot of negative attention due to the housing crisis, housing is a reliable indicator of the economic strength of a community, region, and state. Monitoring housing trends both on the supply and demand side can aid decision makers in planning and assessing development and growth strategies. It is important to note that there are many important housing issues not addressed in this report that can be addressed. For example, this report does not address homelessness or those who might be precariously housed and does not analyze affordability or sustainability.

There is a multitude of analysis and data not included in this report that can be performed at the community or regional level. The Housing Analysis and Research Program (HARP) was designed to provide custom market analysis, needs assessments, and other research into housing issues. This program utilizes sophisticated data collection and analysis methods, GIS mapping, community visits and focus groups, as well as additional economic analysis. Because housing is interrelated with land use planning, business establishments, transportation, and the economy of an area, analysis requires a multi-disciplinary approach to housing issues. Iowa State University Extension Community and Economic Development in conjunction with other departments on campus has the expertise and experience to conduct analysis. Analysis is available for government agencies, communities, non-profit organizations, developers, or any other parties interested in housing research. Author and contact information is provided below for anyone interested in additional research or with questions about the information contained in this report.

Author Information

These reports were developed as a project of Iowa State University Extension Community Economic Development and the Department of Economics.

For additional information please contact:

Meghan O'Brien
Extension Economist and Program Specialist
Department of Economics
171 Heady Hall, Iowa State University
Ames, Iowa
50011
515-294-4095
515-290-2367

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Stock and Growth of Housing Units

Stock of Housing Units

The growth and stock of housing units for an area are determined using data from the U.S. Census Bureau's Decennial Census and Annual Population and Housing Estimates Program. Rapid growth in housing stock can indicate an area that is experiencing economic growth or it may indicate an area where there is speculative housing development. Data showing the estimated number of housing units for O'Brien County between 2000 and 2007 can be found in the table below.

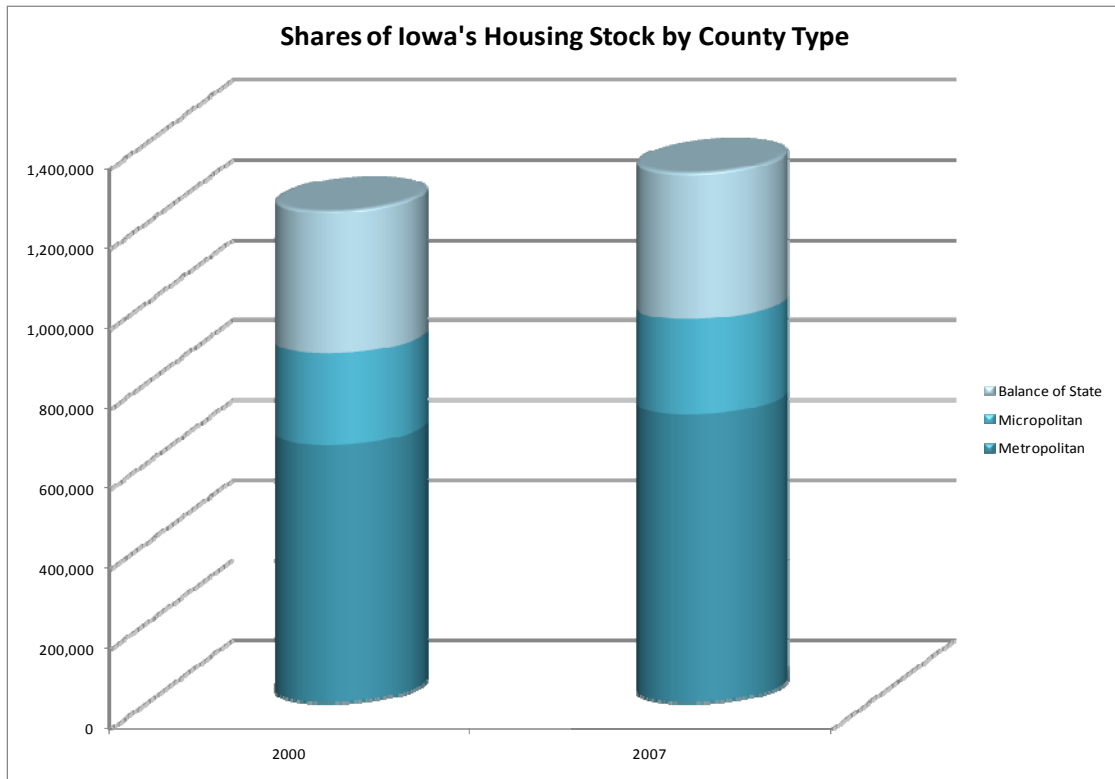
Table 1. Number of Housing Units, 2000 Decennial Census and Annual Housing Estimates

	2000	2001	2002	2003	2004	2005	2006	2007
O'Brien County	6,518	6,549	6,574	6,594	6,619	6,662	6,666	6,673
State of Iowa	1,234,848	1,245,996	1,258,746	1,271,927	1,291,637	1,306,516	1,320,331	1,329,596

Change in Iowa's Housing Units 2000-2007: 7.88%
 Change in O'Brien County's Housing Units 2000-2007: 2.52%

Iowa's counties are designated by their respective degrees of urbanization. Iowa's metropolitan counties are those with a central city of 50,000 or more or which have a strong economic relationship with the core metro county. Micropolitan counties are those with an urbanized population of 10,000 or more and the balance of state counties represent Iowa's more rural and less populous counties. Figure 1 illustrates the share of total housing stock by county type. O'Brien County is classified in the Balance of State category.

Figure 1. Housing Units by Urbanization Level



Growth in Housing Stock

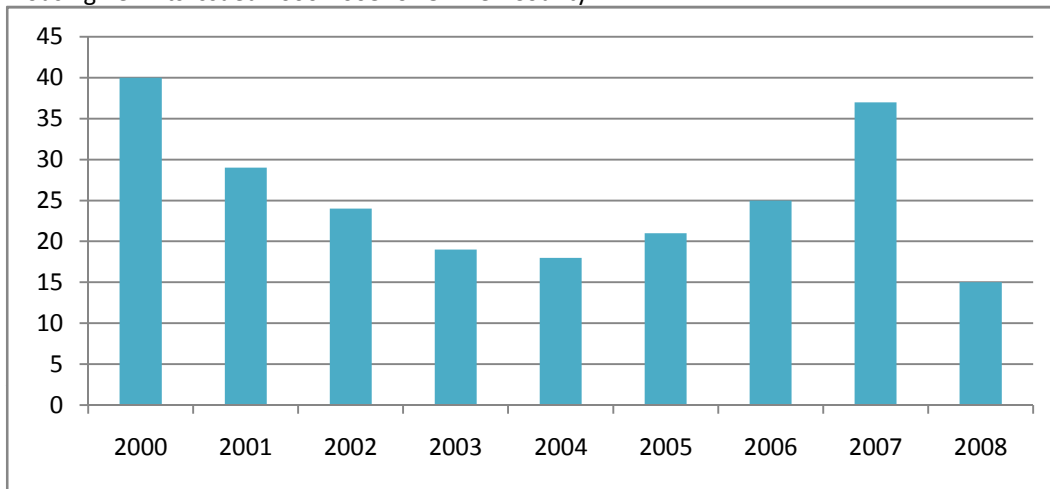
Growth in Housing Units

The number of housing permits issued provide good proxy for the supply of new housing stock in an area.

Table 2. Number of Housing Permits (Units) Issued for O'Brien County. Source: State Data Center

2000	2001	2002	2003	2004	2005	2006	2007	2008
40	29	24	19	18	21	25	37	15

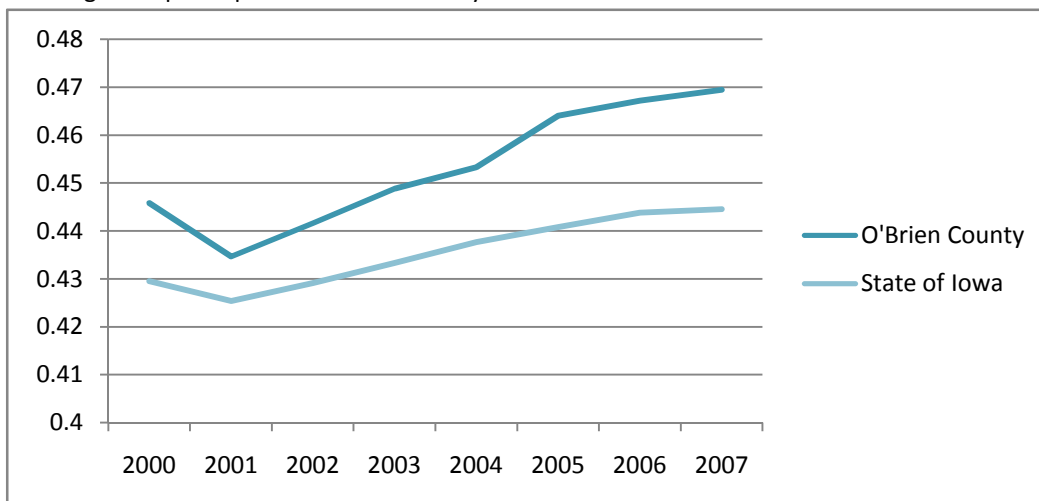
Figure 2. Housing Permits Issued 2000-2008 for O'Brien County.



Units per Capita

While it is households that demand housing it is instructive to view the number of housing units given an area's total population to monitor trends in growth in terms of sustainability. A high rate of growth in housing per capita could indicate a housing mismatch, overbuilding, a lag in market adjustment, or a change in household composition. The figure below shows the change per capita for O'Brien County and Iowa as a whole.

Figure 3: Housing Units per Capita for O'Brien County and Iowa 2000-2007.



Housing Permits and Valuation

Valuation of Housing Permits

Changes in the valuation of housing permits indicate trends in the type of housing supplied. If an area is experiencing a growth in the average valuation per permit, this could indicate that people are seeking more expensive housing and that there may be a shortage of existing housing in a certain price range. Where the average permit value is increasing over time, we would expect to find job growth and income growth to equate this supply with demand.

Table 3. Value of Permits in Thousands of 2008 Dollars Issued for O'Brien County. Source: State Data Center

2000	2001	2002	2003	2004	2005	2006	2007	2008
5,781	4,295	5,279	3,930	3,457	4,103	4,602	6,051	2,805

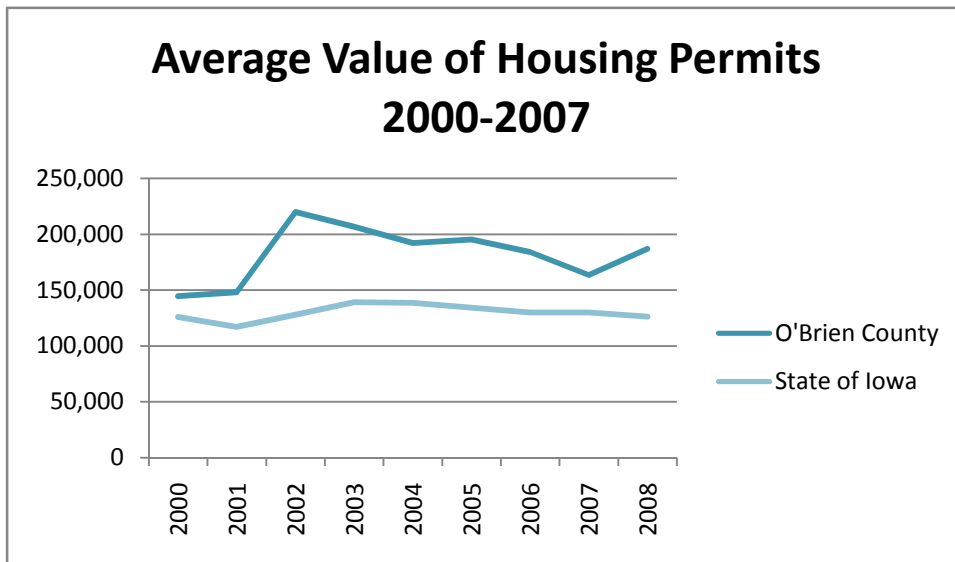
Table 4. Value of Average Permit in 2008 Dollars Issued for O'Brien County.

2000	2001	2002	2003	2004	2005	2006	2007	2008
144,535	148,098	219,954	206,842	192,070	195,386	184,078	163,531	187,000

Table 5. Value of Average Permit in 2008 Dollars Statewide.

2000	2001	2002	2003	2004	2005	2006	2007	2008
125,887	117,077	128,008	139,094	138,411	134,338	129,890	130,018	126,200

Figure 4. Average Value per Residential Housing Unit Permit for O'Brien County.



Age and Condition of Housing Stock

Age of Housing Stock

Aging housing stock can indicate the need for remodeling, retrofitting, or new housing if an area is expecting an increase in demand for housing. Because housing is intimately tied to economic growth, areas that may have aging housing stock may also be facing economic decline and population loss indicating that new housing won't be required. Aging housing stock is particularly troublesome in areas with higher concentrations of elderly people whom very often find older homes unlivable as mobility issues become more pronounced. Another potential problem associated with aging housing stock is the higher energy costs associated with older homes, which potentially makes them less affordable as energy costs rise. The table below shows the composition of housing stock by the different decades in which it was built for O'Brien County and its peer Balance of State Counties. Housing stock for a county that is older than its peer group average could indicate economic decline, population loss, blight, or policies that deter new housing growth or encourage preservation of historic buildings.

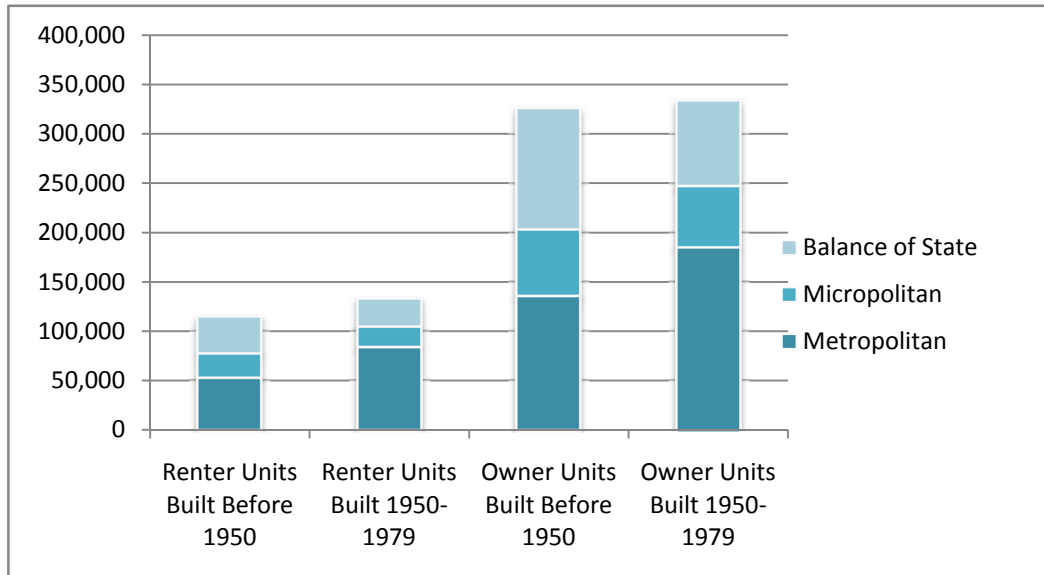
Table 6. Housing Stock by Year Built for Renter Occupied Housing, 2000 Census.

	Total Renter Units	Renter Units Built Before 1950	Percent of Renter Units before 1950	Renter Units Built 1950-1979	Percent of Renter units 1950-1979
O'Brien County	1,390	649	46.7%	611	44.0%
Balance of State	78,076	37,643	48.2%	28,827	36.9%

Table 7. Housing Stock by Year Built for Owner Occupied Housing, 2000 Census.

	Total Owner Units	Owner Units Built Before 1950	Percent of Owner Units before 1950	Owner Units Built 1950-1979	Percent of Owner units 1950-1979
O'Brien County	4,611	2,244	48.7%	1,799	39.0%
Balance of State	246,951	122,350	49.5%	86,709	35.1%

Figure 5. Shares of Units by Type of County and Tenure



Indicators of Housing Market Equilibrium

Housing Market Equilibrium

There are different types of disequilibrium in the housing market; some are referred to as gaps, some as mismatches and some truly represent an excess in supply or demand. A housing mismatch is a type of disequilibrium that isn't a market failure in most cases. It is a situation where the existing housing stock needs to be modified to meet demand this might be deemed a mismatch. Where there is not enough affordable housing or there is not enough housing units available of a certain type there might be a gap that the market can fill. Across Iowa gaps can be observed in housing needs that don't necessarily get addressed by the market. Often times this is because there is a so called "value gap" where the investment and cost exceeds the return for economic reasons.

Vacancies

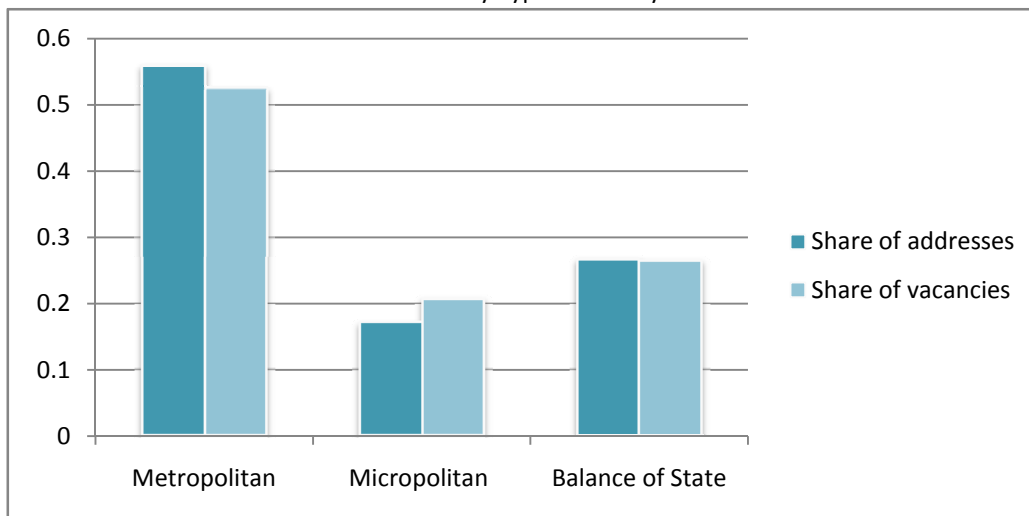
The U.S. Postal Service through a contract with HUD provides data on the number of residential vacancies at the census tract level. Aggregating this data allows a look at what areas might be experiencing higher rates of housing stress than state average. This data coupled with other indicators can provide some indication as to where excess capacity might exist. The table below shows vacancy info for O'Brien County and its peer group in the 3rd quarter of 2009.

Table 8. Vacancy Information for O'Brien County, 3rd quarter 2009, U.S. Postal Service.

	Number of Residential Addresses	Number Vacant	Vacancy Rate	Average Days Vacant	Previously Vacant/ now not	Re-entry Rate
O'Brien County	6,757	142	2.10%	584	4	2.82%
Balance of State	363,587	9,502	2.61%	363	127	1.34%

Higher vacancy rates can be indicative of a number of things including excess capacity, population loss, blight, or an area with greater amounts of new construction. Resort areas tend to have higher vacancy rates due to the seasonality of occupation. The rate at which previously vacant properties become habitated, or the re-entry rate, can indicate whether vacancies are a long term trend due to decline or a short term trend due to growth. The figure below illustrates that metropolitan counties have a lower share of vacancies relative to their share of addresses, while micropolitan counties have a higher incidence than expected. The more rural counties have roughly equal shares of vacancies and addresses.

Figure 6. Relative Shares of Addresses and Vacancies by Type of County.



Population and Growth Trends

Background

Determinants of housing demand are largely demographic although economic factors, primarily income, are important. Population, population growth, and numerous characteristics of households all help determine overall housing demand. It must be emphasized that households and their composition are fundamentally determinant of housing demand, rather than individuals, because people organize themselves into households by choice and naturally, due to the structure of families.

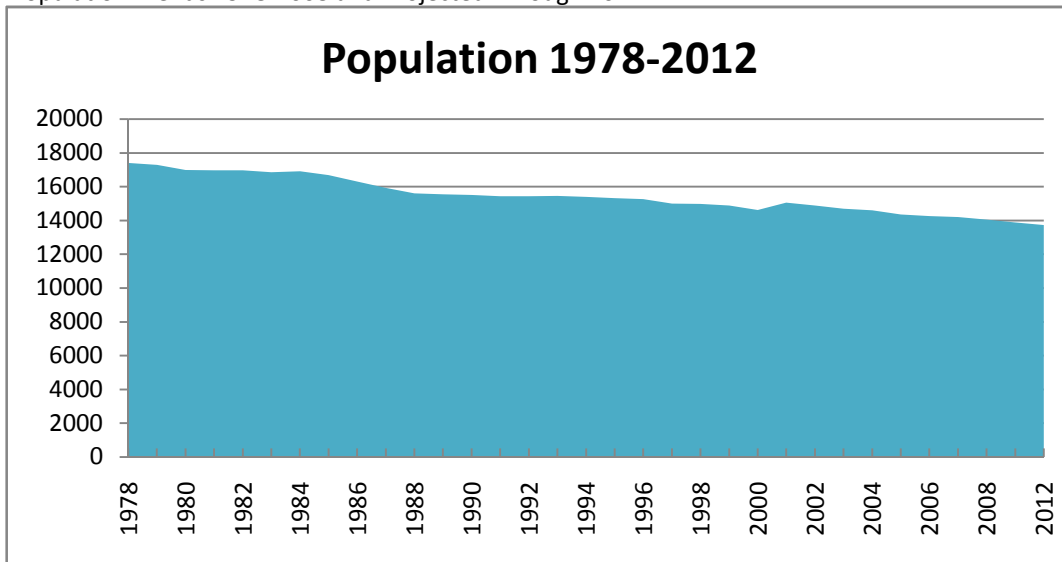
Population

Monitoring trends in population growth or decline can help determine what future housing needs might be for an area. Population trends for O'Brien County are shown below. 2010 and 2012 projections are from Woods and Poole. Areas experiencing rapid population growth may outgrow their existing housing stock fairly rapidly, while areas that experience negative population growth might have an excess supply of housing stock and a mismatch in the types of housing demanded versus what is existing. The table below shows population trends for O'Brien County and its peer group counties.

Table 9. Population Trends and Expected Changes.

	2000	2008	2010	2012	Percentage Change 2000-2012
O'Brien County	15,066	13,952	13,887	13,743	-8.78%
Balance of State Counties	820,844	782,404	781,049	778,703	-5.13%

Figure 7. Population Trends 1978-2008 and Projected Through 2012.



Household Composition and Trends

Households

Iowa's average household size has been declining over the last three decades while the overall number of households has been increasing. The figures below illustrate the trends in household size and number of households relative to the number of housing units.

Figure 8: Iowa's Housing Units and Number of Households 1980-2007, U.S. Census Estimates.

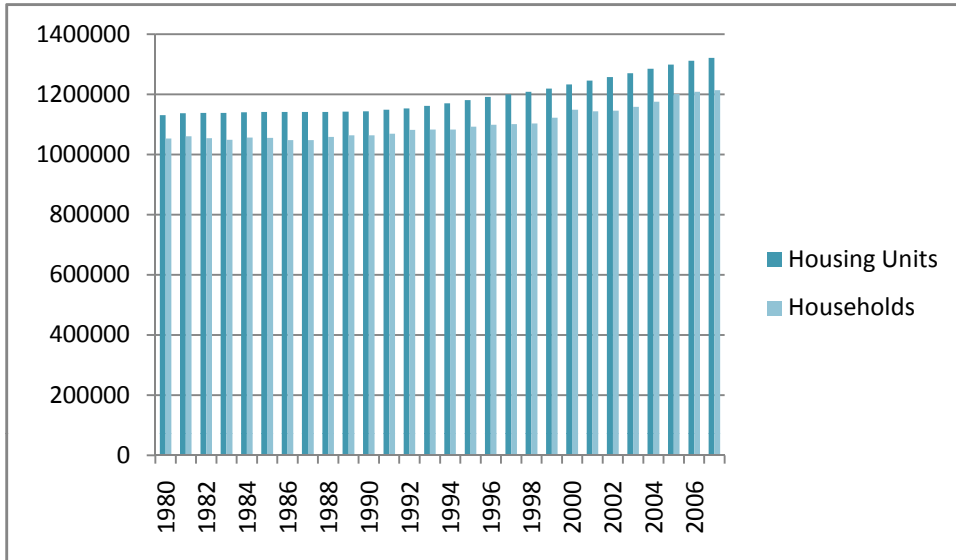
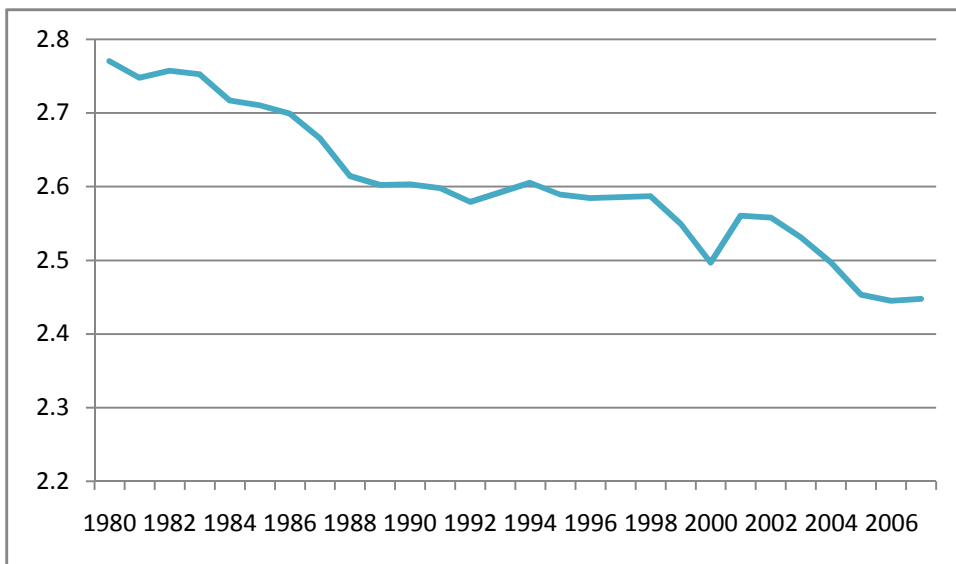


Figure 9: Iowa's Average Household Size, U.S. Census Estimates.



Household Composition and Age

Household Composition

Across the state of Iowa the number of households has risen consistently since 1970 while the average household size has consistently fallen. This has important implications in assessing an area's housing needs. An increase in the number of households, particularly if it is rapid and spurred by economic growth, indicates that there will be increased demand for housing stock. A consistent decline in the size of the household indicates that existing stock may not meet the needs of the new households demanding housing. A more rapid decline in household size may indicate a need for smaller housing units of differing design, particularly when the demographics of the households are considered. For example, if an area is experiencing declining household size greater than the state average, this may be due to an aging population and the loss of families with children. This could indicate a need for modification of existing housing stock to make it more livable for elderly. It might also indicate a need for additional multi-family housing.

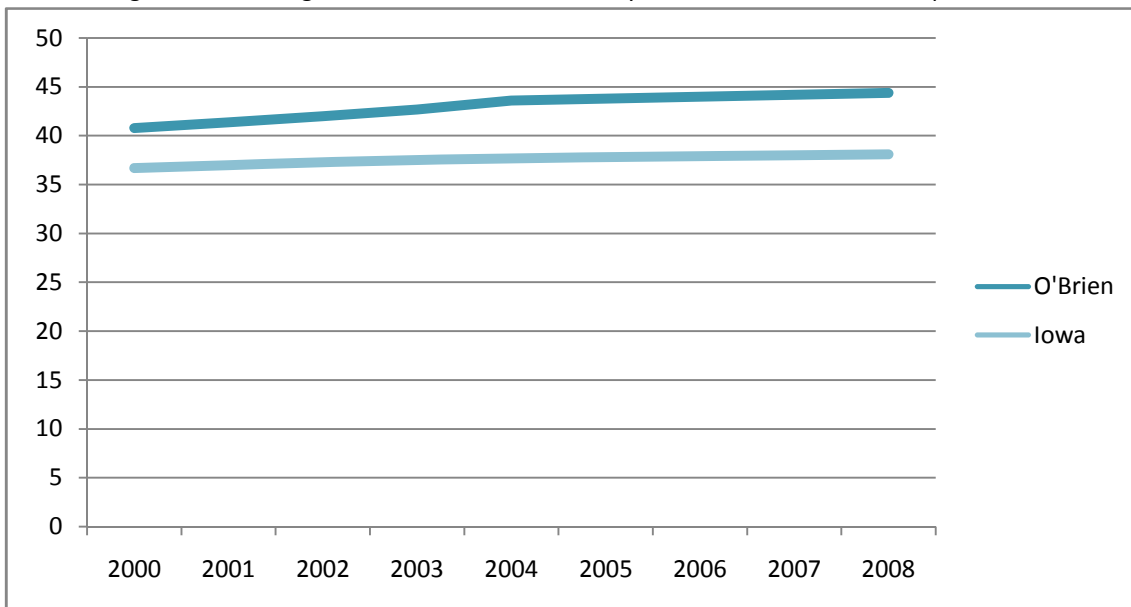
Table 10. Household Composition for O'Brien County, 2000 Census.

	1970	1980	1990	2000
Number of Households	5,669	6,254	5,980	6,001
Persons in Households	17,134	16,511	14,896	14,511
Household Size O'Brien County	3.0	2.6	2.5	2.4
Household Size Statewide	3.1	2.7	2.5	2.5

Age

The median age of an area can help predict housing needs moving forward when viewed in light of its trend. Areas with rapidly increasing median ages may be experiencing the loss of individuals most likely to live in child bearing households due to economic conditions. These areas may not experience demand for new housing and may face excess capacity in their housing stock or a mismatch in the type of housing demanded by an aging population. Across the nation the median age is rising due to the "Boomer" Generation, however, some areas are seeing a decline in median age as retirees move away and young professionals move in. It is important to compare an area to the rest of the state to assess whether the change in median age is following trends due to the Baby Boomers or whether it signifies a change in the structural nature of the economy and other population trends and migration patterns. The figure below shows the change in median age for Iowa as well as O'Brien County from 2000 through 2008.

Figure 10. Changes in Median Age for Iowa and O'Brien County 2000-2008, U.S. Census Population Estimates



School Enrollment and Growth Potential

School Enrollment

Monitoring the changes in overall population and median age provides valuable information about future housing needs and in conjunction with monitoring school district enrollments, can provide a proxy for the type of growth occurring in an area. Rising school district enrollments can indicate increasing housing demand and suggests that analysis of the types of housing available may be in order. The data presented here is aggregated from the individual school district level to the county level.

Table 11. School Enrollment and Change, first year reported in school year, Iowa Department of Education.

	1998	2003	2008	Percent Change 1998-2008
O'Brien County	2,849	2,557	2,379	-18.78%
Iowa	496,214	481,226	487,559	-2.27%
Balance of State	147,891	133,600	127,263	-13.95%

Statewide school enrollments fell by 2.3 percent from 1998-2008, but not all counties were affected similarly. Counties classified as metropolitan saw school enrollment increases of 6.2 percent during this period. Micropolitan counties and Iowa's rural balance of state counties saw decreases in school enrollment during this period of 7 percent and 14 percent respectively. It is useful for an area to compare its trends to the state of Iowa as well as their peer group to get a sense of whether their housing needs and growth potential are following expected trends. The figure below illustrates that while metropolitan counties have gained enrollments fairly continuously since 1996, the rest of Iowa's counties have experienced precipitous declines.

Figure 11: School Enrollment by Type of County, indexed to 1996-1997 school year.



Economic Characteristics

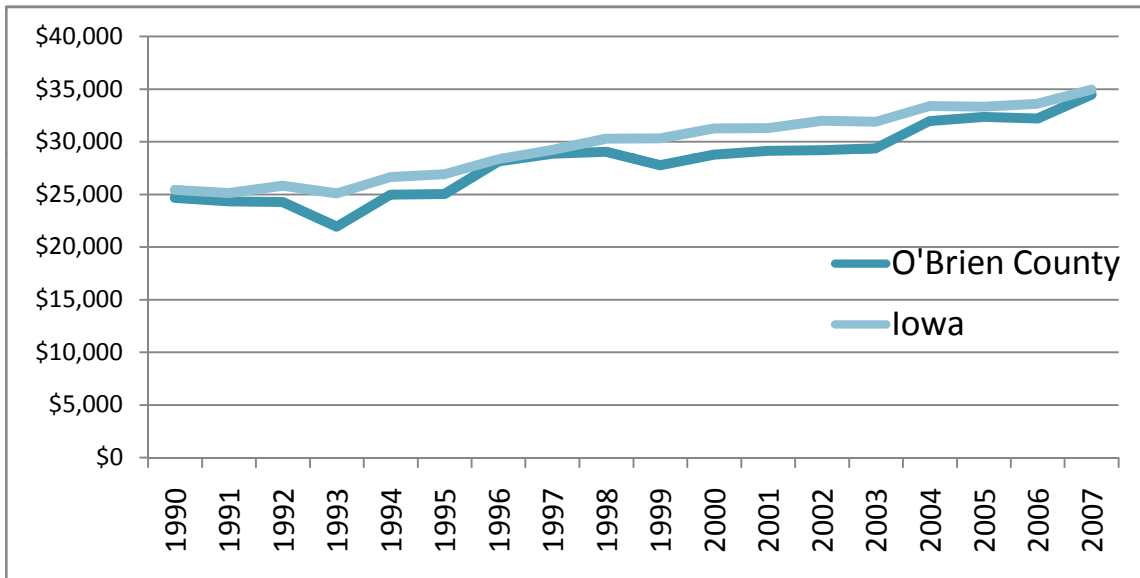
Income: Per Capita

Income is a major factor in the overall demand for housing in an area. Income levels are correlated with home prices as well as type of housing demanded, and income distribution is a predictor of the spatial distribution of housing types. An area's income is useful in understanding housing demand in general but also comparatively. By analyzing the level of income in an area relative to the state average and peer communities or counties, comparison and market analysis becomes more instructive. The table below demonstrates income characteristics for O'Brien County as well as the statewide levels and their respective change over time.

Table 12. Real Per Capita Income (in 2007 dollars), Bureau of Economic Analysis.

	1992	1995	1998	2001	2004	2007	Change 1992-2007
O'Brien County	\$24,262	\$25,010	\$29,032	\$29,129	\$31,941	\$34,467	42.1%
State of Iowa	\$25,821	\$26,890	\$30,281	\$31,260	\$33,361	\$34,916	35.2%

Figure 12. Real Per Capita Income 1990-2007 (in 2007 dollars).



Incomes across Iowa, whether measured at the individual or household level, are not growing uniformly across the state. Household income grew as little as 6 percent in one Iowa county and as much as 40 percent in another. This is what is referred to as a lumpy distribution, meaning that the gains don't accumulate evenly across all areas measured. This has important consequences for planning for those areas that are not growing at the average rate across the state in terms of income, population, and economic growth. This not only impacts housing needs but also requires assessment of other community and economic factors.

Economic Characteristics

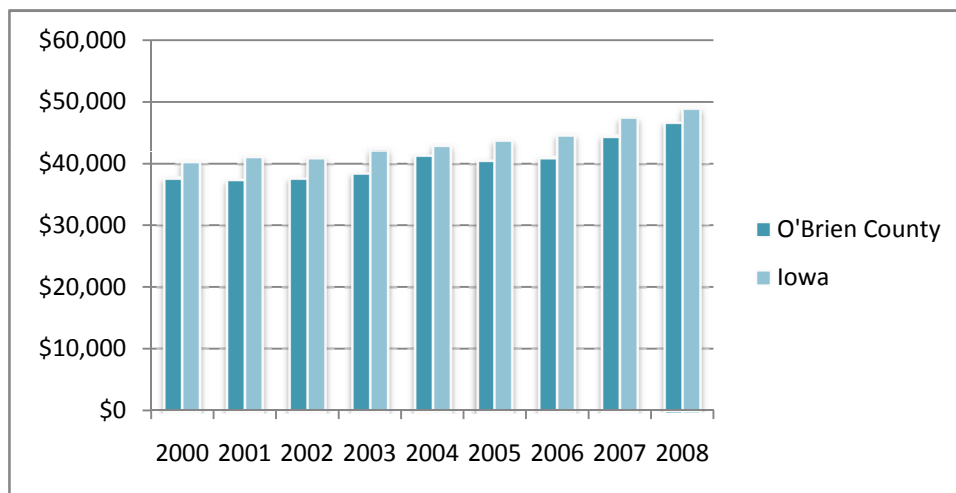
Income: Household

It is households that demand housing and therefore, per capita income is not the only useful basis for analyzing housing markets and the potential for demand. Household income over time provides information about the demand for housing and allows inferences to be made about the affordability of housing and the match between supply and demand in a local area. It is important to bear in mind that because housing is the biggest investment most people ever make it is not just one year or a year over year comparison in incomes that matter but rather, the overall trends in income. Due to the length of investment in housing, typically 15-30 years, it is the expectancy of permanent income that drives housing demand. The table below shows trends in household income since 2000 for both O'Brien County and the state.

Table 13. Real Median Household Income (in 2008 dollars), U.S. Census Bureau Estimates.

	2000	2002	2004	2006	2008	Change 2000-2008
O'Brien County	\$37,747	\$37,641	\$41,389	\$41,063	\$46,584	23.4%
State of Iowa	\$40,443	\$41,052	\$42,865	\$44,560	\$49,007	21.2%

Figure 13. Real Household Income 2000-2008 for O'Brien County and Iowa.



Demand Characteristics

It is important to recognize that the demand for housing is determined by a multitude of factors. A shift in the overall demand for housing whether an increase or decrease, can result from changes in any of these variables. The data presented thus far is intended to help estimate overall demand for housing but there is another element of demand that has to do with the responsiveness to the price of housing. If the price of housing rises whether directly as housing prices rise due to demand or indirectly through rising interest rates, the type of housing people might demand will change. This is particularly true if all else remains constant such as the number of households or long term income expectancies. Economists describe consumers response to price changes with elasticities, which indicates how responsive people are to price changes for certain goods. Estimates of the price elasticity of demand range from a negative .9 to a negative 1.2. This implies that demand for a primary residence is responsive to price in a proportionate manner. A simplistic way to explain this is that if the price of housing increases by 5% we would expect roughly a 5% decline in the number of housing units demanded. There are not viable substitutes for shelter although there are substitutes for different types of housing which explains why housing is not more or less responsive to price changes. It also is considered a necessity to have some type of shelter.

Rental Housing Characteristics

Calculus of Rent vs. Own

Rental housing and owner occupied housing may not be perfect substitutes but the owner occupied housing market does influence the calculus of deciding to rent or own for many people. There are a number of reasons people rent homes that are not related directly to housing prices or interest rates; people who are not expecting permanency in the area they are living due to life circumstances are most likely going to rent. There are a number of people who rent housing because they do not have the resources for a down payment or the ability to pay a mortgage and maintenance on a home. There are also a number of people who choose to rent because the calculus of homeownership suggests that the expected return of homeownership is not worth its investment. This is where interest rates, housing prices, and exogenous factors to the housing market such as the rate of return on other investments factors in. In the current market, more people are choosing to rent because of the tremendous uncertainty surrounding the economy and fears of job loss. There are also a number of people entering the rental housing market due to foreclosures on their homes. It is expected that a negative shock to the owner occupied market should cause more people to enter the market for rental housing, driving up rents and making finding rental housing more competitive.

Rental Costs

Rental costs vary across Iowa given the number of rental units demanded in relation to their supply. Rental costs can vary based on the demand for owner occupied housing, the nature of the workforce in an area, as well as the existence (or absence) of programs aimed at making affordable rental units available in an area.

Table 14. Gross Rents, 2000 Census.

	\$1-\$299	\$300-\$449	\$450-\$599	\$600-\$749	\$750-\$999	\$1,000-\$1,999	\$2,000 or >
Total of County Renter Households	371	382	251	40	14	25	4
Percentage of County Rent Paying Households	34.13%	35.14%	23.09%	3.68%	1.29%	2.30%	0.37%

Fair Market Rents

The U.S. Department of Housing and Urban Development computes fair market rents to determine standard payment amounts for the Housing Choice Voucher Program, rents for expiring Section 8 contracts, as well as initial rents for housing assistance payment contracts. The methodology is such that these calculations give more timely information on the rental market in an area. The standard fair market rent is such that any dollar amount below it would result in 40% standard quality rental units would be rented. Fair market rents for O'Brien County for different types of rental units in 2010 can be found below.

Table 15: Housing and Urban Development Fair Market Rents 2010.

Fair Market Rents for O'Brien County	
0 Bedroom	\$385
1 Bedroom	\$415
2 Bedroom	\$547
3 Bedroom	\$670
4 Bedroom	\$786

Owner Occupied Characteristics

Homeownership

Iowa exhibits higher than average homeownership rates when compared to the national average. Approximately seventy three percent of Iowa's households are considered owner occupied, six percent higher than the national rate. The table below indicates the shares of renter and owner housing for O'Brien County and its county peer group.

Table 16. Owner and Renter Occupied Housing, 2000 Census.

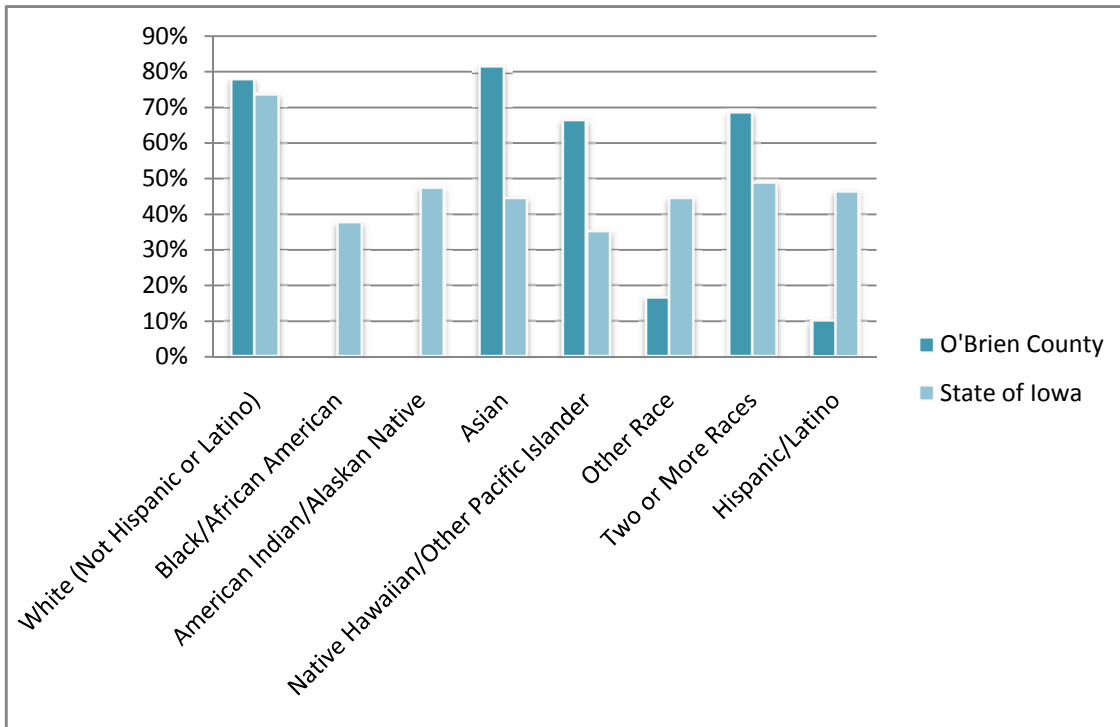
	Number of Housing Units	Number Owner Occupied	Percentage Owner Occupied	Number Renter Occupied	Percentage Renter Occupied
O'Brien County	6,001	4,611	76.8%	1,390	23.2%
Balance of State Counties	325,027	246,951	76.0%	78,076	24.0%

Counties with higher education institutions may exhibit higher rates of renter occupied properties due to the student population. Higher levels of homeownership can be indicative of areas with an aging population, affordable purchase prices, or a larger concentration of families. Homeownership doesn't necessarily signify strong economic growth. Economic strength can be inferred if high rates of homeownership are attributable to strong job markets and stability, but rapidly growing areas may also see a large number of renters who are following new job creation.

Homeownership by Race and Ethnicity

Homeownership rates in Iowa tend to be lower than the national average when minority household status is considered. The figure below illustrates homeownership rates by race and ethnicity for O'Brien County and the state of Iowa.

Figure 14. Homeownership Rates by Race and Ethnicity, 2000 Census Data.



Owner Occupied Values and Costs

Housing Values

Housing values have traditionally risen over time at a modest pace although in a few periods, most recently the years between 2003 and 2007, there has been rapid appreciation in the housing market that has proven unsustainable. The U.S. Census Bureau provides reliable data on housing values for small areas and counties in the Decennial Census. While it seemed that these numbers were obsolete during the housing market boom, the subsequent market correction has returned many areas values back to their 2000 levels which makes this data a useful baseline. Median home values and costs can be found below.

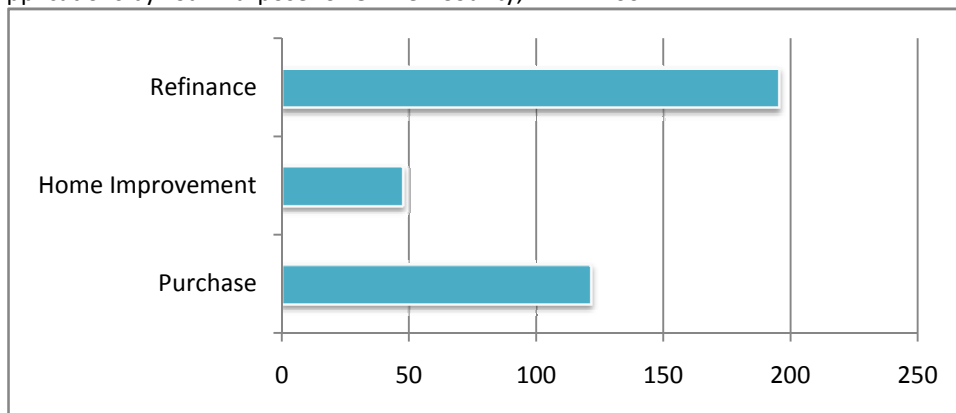
Table 17. Median Home Values and Owner Costs for O'Brien County, 2000 Census.

Values	
Median Value	\$58,300
Percentage of Iowa's Median Value	71%
Costs, Percentage of Households with	
Monthly costs < 15% of Household Income	57.0%
Monthly costs 15-20% of Household Income	18.4%
Monthly costs 20-25% of Household Income	10.7%
Monthly costs 25-30% of Household Income	3.8%
Monthly costs 30-35% of Household Income	2.1%
Monthly costs 35% or > of Household Income	7.5%
Not computed	0.6%

Home Financing

Myriad data is available through the Home Mortgage Disclosure Act which allows for analysis of the types of financing being sought by homebuyers, the rates of denial, as well as spatial elements. The relative shares of applications for purchases, refinances, or home improvement can indicate whether more people are buying homes. Further analysis using zip codes can determine how many are buying a different home in the same area versus how many are moving to the area. This analysis can separate trends in migration and substitution. If an area has a higher amount of home improvement loans than expected there might be outdated housing stock requiring retrofitting or remodeling in order to meet the type of housing being demanded in a local area. The figure below the number of applications received for the three different loan purposes.

Figure 15. Applications by Loan Purpose for O'Brien County, HMDA 2007.



Housing Analysis and Research Program

The HARP program is generally intended to provide research capabilities and technical assistance for communities seeking to better understand their housing needs and create a strategy to address those needs. The program includes demographic and economic analysis, assessment of existing housing stock, a housing needs assessment and assistance in identifying housing issues. The program may utilize leadership training, focus groups, and survey capabilities as part of the research process. The program utilizes the data, analysis, and needs assessment to engage stakeholders in community conversations in order to identify goals and develop a comprehensive housing strategy.

The HARP program seeks to expand understanding of basic housing needs as well as special topics which might include:

- Disaster Recovery
- Sustainability
- Housing Affordability
- Historic Preservation
- Financial and Economic Characteristics of Housing Market
- Barriers to Housing Development
- Mismatch of Existing Housing Stock with Demand
- Housing Accessibility
- Links between Transportation and Housing

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