HOUSING ARIZONA

93RD ARIZONA TOWN HALL NOVEMBER 2-5, 2008 GRAND CANYON, ARIZONA



BACKGROUND REPORT PREPARED BY
THE DRACHMAN INSTITUTE
COLLEGE OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE
THE UNIVERSITY OF ARIZONA



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October 2008

When you attend the 93rd Arizona Town Hall to be held at the Grand Canyon on November 2-5, 2008, you will be joining approximately 160 citizens from all corners of the state, political persuasions and occupations to discuss and develop consensus on how best to address the myriad issues related to housing Arizona residents.

An essential element to the success and effectiveness of these consensus-driven discussions is the background report that is provided to all participants before the Town Hall convenes. As they have so often done for past Arizona Town Halls, the University of Arizona has prepared a detailed and informative background report that will provide an unparalleled resource for your Town Hall discussions.

Our heartfelt gratitude goes to Corky Poster and Marilyn Robinson who spearheaded this effort, served as contributing authors, marshaled top talent to write individual chapters, and ensured all deadlines were met.

For sharing their wealth of knowledge and professional talents, our thanks go to the many authors who contributed to the report.

The Town Halls could not occur without the financial assistance of our generous sponsors. As of the printing deadline for this report, the presenting sponsors of the 93rd Town Hall include Bank of America and the Navajo Nation. Associate sponsors include St. Luke's Health Initiatives, Local Initiatives Support Corporation, the Gadsden Company, and the Arizona Community Foundation.

When the Town Hall session ends, the University of Arizona's background report will be combined with the recommendations from the Town Hall into a final report. This final report will be widely distributed to Arizona public officials, community and business leaders, and many others. Together, the final report and the work of Town Hall participants will help to create solutions for the future of housing in Arizona.

Sincerely

James R. Condo

ames & Condi

Board Chair, Arizona Town Hall

Ninety-Third Arizona Town Hall November 2-5, 2008

Housing Arizona

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Chapter 1

Introduction

Marilyn Robinson

Marilyn Robinson is a Community Planner with a background in affordable housing and community planning. Over the past twenty years, she has worked with non-profit organizations, as a consultant to government and business, and with the Drachman Institute, to address housing, planning, citizen participation, and community development needs in center-city neighborhoods, the Tucson metropolitan area, and around the state of Arizona. She was Housing Programs Coordinator and Community Development Director with the Tucson Urban League for eleven years. For seven years (1997-2003) she organized and coordinated the Annual Affordable Housing Conference, a State-wide event co-sponsored by the City of Tucson, Pima County, the State of Arizona, and The University of Arizona. She is a member and Secretary of the Board of Directors of the City of Tucson Industrial Development Authority and was appointed by Governor Napolitano to serve as a member and Chair of the Arizona Housing Commission Task Force on Tax-Exempt Mortgage Financing. She has worked for five years with and is the Associate Director of the Roy P. Drachman Institute, the outreach and research arm of the College of Architecture and Landscape Architecture at The University of Arizona. Ms. Robinson earned Master of Urban Planning and Master of Extension Education degrees from The University of Arizona.

A Guide to this Background Report

It was our goal to make this a reader-friendly document. While sixteen chapters may not seem very friendly, we hope you will find each of them easy to read and informative. Each chapter begins with *bullet points* to give you an idea of what you will learn by reading on.

In addition to figures and tables within each chapter, you will find several *appendices* following the last chapter. These were selected to enhance understanding of the subject and we hope you will have a chance to look at them.

Finally, there is a *glossary* at the end of the document to help clarify numerous terms and concepts used throughout with which you may not be familiar.

Housing

The title of this document, "Housing Arizona," indicates a broad topic. Considering that this is the first time that housing has been the central topic of an Arizona Town Hall, we felt it was important and appropriate to provide a document that gives a "big picture" of the subject—history, needs and trends, and social and economic impacts of housing—as well as specifics relating to particular housing issues around the state—including rural housing, Native Nations housing, housing for Arizona's workforce, and housing for homeless and other special needs populations. We also look at issues of the state's aging housing stock, sustainability and "green" technology in housing, and "best practices" for emerging markets around the state. Given the economic conditions that are at the forefront today, we include a chapter on "Foreclosure Trends and Impacts in Arizona."

"Affordable Housing"

While this document is not exclusively about "affordable housing," due to the diversity of Arizona's population and the diversity of housing conditions and needs, we cannot avoid reference to and the need for discussion on this topic. While there are a number of definitions for "affordable housing," many people tend to believe the term refers to "housing for low income people" or even to "public housing." The U.S. Department of Housing and Urban Development (HUD), which provides subsidies for housing including public housing, uses the term "affordable housing" in referring to housing for households earning 80 percent or less of the area median income.

Another use of the term is in reference to "housing that doesn't cost more than 30 percent of the total household income." This includes all housing expenses including rent or mortgage, taxes, and utilities. Michael Stone, in his 1993 book *Shelter Poverty: New Ideas on Housing Affordability*, explained how this 30 percent rule does not truly work at lower incomes, where a family spending that much on housing would have a hard time finding decent housing and making ends meet on what is left. At upper income levels, a family could spend less than 30 percent for good housing and have plenty left for other expenses.

The 30 percent rule for affordability is also discussed in Chapter 6, "Planning Arizona's Housing" and Chapter 7, "A Primer on the Cost of Housing and Affordability." These chapters point out how the cost of transportation is of major importance in determining the true affordability of housing. In April 2008, an interactive mapping website was launched by the Center for Neighborhood Technology (CNT) out of Chicago, in partnership with The Brookings Institution, which shows a truer cost of housing by including transportation costs based on housing location. When you consider transportation costs, some seemingly affordable housing becomes considerably less affordable.

"Understanding transportation costs and having access to good transportation choices can help households significantly lower their cost of living," says CNT President Scott Bernstein. "Our research shows that average transportation costs vary greatly depending on location, from a low of 14 percent of household median income in transit-rich, compact communities, to highs of 28 percent or more in exurban areas where employment, retail, and other amenities are dispersed....The data show that household size and income play a lesser role in determining affordability than do neighborhood characteristics—such as good and frequent transit service, proximity to jobs, and amenities within walking distance...."

"Workforce Housing"

HUD uses the term "workforce housing" for households earning up to 125 percent of the area median income. A more general use of the term refers to "housing for the occupations needed in every community, including teachers, nurses, police officers, fire fighters and many other critical workers." This need for a community to house its workforce is an underlying theme of this document. The work of the Drachman Institute with the Arizona Department

of Housing (ADOH) over the past several years has shown a critical need for safe and decent housing within a community that is affordable to the workers in that community. There are a number of communities around the state where employees must live elsewhere and travel considerable distance to their employment due to this lack of housing within the community. This issue is addressed in several chapters here, including Chapter 6, "Planning Arizona's Housing."

Table 1.1, "Employment Growth and Housing Affordability by Industry," comes from the ADOH report "Arizona's Housing Market....a glance," which was presented at the 2008 Governor's Housing Forum in September. That report also breaks down this information by rural and urban Arizona, included as Appendix A.

Table 1.1: Employment Growth and Housing Affordability by Industry, 2007

Industry	Employment 2001	Employment 2007	Employment Change 2001-2007 Numbers	Employment Change 2001-2007 Percent	Median Hourly Wages Statewide 2007	Can Afford to Buy Median Priced House	Can Afford to Rent 2-BDRM Apartment
Mining	9,600	10,700	1,100	11.5%	\$19.71	No	Yes
Construction	173,600	248,000	74,400	42.9%	\$15.83	No	Yes
Manufacturing	201,700	186,600	(15,100)	-7.5%	\$17.72	No	Yes
Wholesale Trade	95,900	109,300	13,400	14.0%	\$16.53	No	Yes
Retail Trade (Retail store workers)	268,100	330,000	61,900	23.1%	\$11.15	No	No
Transportation, Warehousing and Utilities	76,600	83,100	6,500	8.5%	\$18.20	No	Yes
Information (Publishing, motion pictures and videos, radio and TV stations, and telecommunications)	53,900	43,800	(10,100)	-18.7%	\$18.78	No	Yes
Finance and Insurance	109,300	133,900	24,600	22.5%	\$17.16	No	Yes
Real Estate Rental and Leasing	44,100	53,700	9,600	21.8%	\$13.86	No	No
Professional and Business Services (Legal services, management services, computers services, accounting services, payroll services)	319,900	409,100	89,200	27.9%	\$21.35	No	Yes
Educational Services (Businesses that provide educational services to schools, colleges, and universities plus specialized schools such as computer training, language schools, flight training, cosmetology)	28,300	45,400	17,100	60.4%	\$16.03	No	Yes
Health Care and Social Assistance	191,600	252,200	60,600	31.6%	\$14.68	No	Yes
Leisure and Hospitality	230,000	276,200	46,200	20.1%	\$10.52	No	No
Other Services (Auto repair shops, barber shops, other repair shops)	84,700	105,000	20,300	24.0%	\$12.23	No	No
Government - Federal, State and Local (All government employees including teachers, police)	377,800	421,300	43,500	11.5%	\$18.65	No	Yes
Total Employment	2,265,100	2,708,300	443,200	19.6%	\$14.25	No	No

NOTE: 2007 employment data are the average of January to December numbers.

Source: Arizona Department of Housing and Arizona Department of Commerce - Research Administration

Subsidized Housing

Government uses total household income as a measure to determine eligibility for public housing and various housing subsidies (other than for the home mortgage interest deduction

on federal income tax). For most federal subsidy programs, eligibility is limited to households earning at or below 80 percent of the area median income. Some programs have lower limits including for the "very low income" (50 percent). Chapter 9, "Resources for Affordable Housing," describes various programs and means for subsidizing housing.

Conclusion

Obviously, there is a lot to cover in this "background report" about housing. So, these are broad brush-strokes of the topics, a way to give you a general understanding of the state of housing in Arizona. We hope this will help to frame discussion that will lead to recommendations for improving the availability and quality of housing, both rental and ownership, that is affordable to all Arizonans.

Endnotes

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¹ Center for Neighborhood Technology, <u>www.cnt.org</u>, "Housing + Transportation Affordability Index: A Project of CNT," 2008.

² "Getting Started: Learn About Affordable Housing: What Is It, Who Needs It, and Why?" HousingPolicy.org, September 26, 2008.

Chapter 2

U.S. HOUSING POLICY

Emily Nottingham, PhD

Emily Nottingham recently retired after 30 years of service with the City of Tucson, where she was Director of the Community Services Department. The department was responsible for the City's housing and community development programs. She teaches a class at the University of Arizona in Affordable Housing, and served on many national, state and local boards, including the State of Arizona Housing Commission.

Key Points

- Before 1900, U.S. housing policy was minimal.
- Between 1900 and 1920, building and zoning codes began to protect consumers.
- The New Deal established housing financial safeguards, still in place today.
- U.S. housing policy set a goal of a decent home and a suitable living environment for every American.
- Government housing programs are a menu of approaches to support safe, affordable housing in communities.
- State and local governments are becoming more involved in trying to meet a growing need.

The Roots of U.S. Housing Policy

The year is 1900. John Doe owns a small house in Arizona. If he is like most home owners in the United States, he put at least half down on his 850 square-foot house, and got a loan from the local Building and Loan Association for the rest. His payments on the seven-year mortgage cover only the interest. Next year, the entire mortgage will be due and it will be up to the lender to decide if it is willing to renew the mortgage or cancel it.

Owning a home puts John in the minority, as 54 percent of the households in the United States in 1900 were rentals. John's brother Paul lives in St. Louis, and he rents a room in a boarding house next to the glass factory where he works. His room is 9x10, with a bathroom down the hall. The room is dark, with poor circulation, and the smoke from the factory is bothering his lungs. A family of four is living in the room next door.

In 1900, there was no explicit housing policy in the United States. During the 18th and 19th centuries, government involvement in people's homes focused on the distribution of public land. The federal government bought (or took) land, surveyed it, and sold it, often at discounted prices, in order to encourage families to colonize, move west, reward them for military service, or make money for the federal coffers. In Arizona, the Arizona Land District was created in 1867 with a Land Office at Prescott. They immediately began surveying land for sale. A second Land District, the Gila Land District with an office at Florence, was created in 1873.

The major land program which encouraged homeownership in the West was the Homestead Act of 1861. If you built and lived in a home on 160 acres of land, and farmed the land, you got it for a song. This program, which extended for more than a century, helped populate approximately 123 million acres of the West. Included in this number were 20,000 families who homesteaded 4 million acres in Arizona, or 6 percent of the State. One famous example was Virgil Earp, who used the Homestead Act to purchase 160 acres in Kirkland in 1898, where he built a two-room frame house and a one-room adobe. The desert was not the most popular location for homesteading however, so in 1877 the federal government passed the "Desert Lands Act of 1877" which permitted homesteaders to enter 640 acres of desert land for reclamation. The settler was given three years to conduct water to the land.

Around 1900, there began to be serious public policy debates around housing, both in cities and nationally. Between 1900 and 1920, housing initiatives were driven primarily by advocates' concerns for health and safety in the dense city apartment dwellings. Most reforms were at the local level. The first zoning laws were created, and building codes began to spread across the country. Our St. Louis resident, Paul Doe, would be better protected from disease, and his apartment from fire.

In the 1920s, the Federal Department of Commerce, under the leadership of Herbert Hoover, in conjunction with Realtors and homebuilders, also began to actively encourage homeownership as a healthier alternative to crowded apartment living conditions. This first nation wide campaign touted a home as man's castle, as the picture from the campaign brochure illustrates in Figure 2.1.¹



Figure 2.1: A Home of Your Own, 1922

Source: M.W. Folsom, Chicago

On December 2, 1931, Hoover presided over the first meeting of the Conference on Home Building and Home Ownership. He declared "the sentiment for home ownership is so embedded in the American. . . . To possess one's own home is the hope and ambition of almost every individual in our country." This ethic, built on the concepts that owning a home provides family stability, economic wealth-building, and relief from the stresses of urban life, took hold in the American psyche. However, except for this public awareness campaign and some government-built housing during WWI for defense workers, the federal government severely limited its direct role in housing Americans.

New Deal Legislation

It took the Great Depression, and a mortgage crisis, for the federal government to become directly involved in regulating and supporting housing. As banks and savings and loans faced a crisis of lack of capital, they frequently made the choice to not renew mortgages. As a result, one in four Americans were in danger of losing their homes in 1933. As millions of Americans were also out of work, a unique coalition of construction, homebuilding, and housing advocates coalesced. In response, the governmental controls that still serve as the basis for our housing system were created. The key New Deal systems created were:

- Federal Home Loan Banks, formed in 1932, are government-sponsored enterprises (GSEs), federally chartered but privately capitalized and independently managed. They provide capital to member lending institutions (primarily savings and loans) to allow them sufficient funding to provide more mortgages.
- Fannie Mae, and later Freddie Mac, are also GSEs. They purchase mortgages from the originating lender, forming a major part of the secondary market. Like the capital from the Federal Home Loan Banks, this also supports additional lending. In addition, through most of their history, this provided guidance to lenders to keep loans consistent and less risky.
- Federal Housing Administration (FHA), which insures mortgages, reducing the risk for the lender. FHA is a federal agency, now part of the Department of Housing and Urban Development, and in the early years dictated many of the conditions necessary to secure a mortgage. It was through the FHA that 30-year, self-amortizing mortgages, the keystone of our homeownership system, were created.
- Public Housing, which provides decent, affordable apartments for rent owned by local Public Housing Authorities. There are 22 Public Housing Authorities in Arizona, of which 14 own properties under the Public Housing Program.

These program developments supported improved living conditions, and, in particular homeownership, which became more available for middle class Americans. The homeownership rate in the nation shot up, from 45 percent in the 1920's to over 60 percent by 1956.²

Figure 2.2: Dorothea Lange WPA photo taken on Arizona Highway 87 south of Chandler, Arizona, of a migratory family living in a trailer in an open field. No sanitation, no water. They came from Amarillo, Texas, pulled bolls near Amarillo, picked cotton near Roswell, New Mexico, and in Arizona. They planned to return to Amarillo at close of the picking season for work on WPA.



Post WWII Housing Policy

While all of these fundamental systems were created during the New Deal, there was still no explicitly articulated National Housing Policy. In took another housing crisis—veterans returning from WWII with no place to live—to create a second wave of housing programs, and the first statement of Federal Housing Policy. After WWII, millions of veterans returned to a shortage of housing options, as production had almost ceased during the war. Yet the demand of millions of GI's who were anxious to start families (that would become the baby boom) was extraordinarily high. In one immediate response, the Federal Government created Veteran Administration mortgages to assist the GI's.

The post war pressures on housing contributed to the passage of the next key housing legislation. Again, there developed a coalition among the home building industry and social advocates that resulted in major public policy adoption. The Housing Act of 1949, which contains the only statement of National Housing Policy to this day, states a national goal of:

... the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family . . .

The Act strove to meet that goal by:

- Authorizing urban redevelopment programs, creating some of the nation's most controversial slum clearance, redevelopment projects.
- Expanding FHA mortgage authorization, which contributed greatly to the creation of suburbs as we now know them.
- Committing to build 800,000 new public housing apartments.
- Creating Farmers Home Administration programs for rural homeownership.

The direct federal involvement in specific housing development was greatly expanded by the National Housing Act.

By 1950, John Doe's son, a returning veteran busily starting a family, used a VA loan to purchase a 980 square-foot, two-bedroom home with a 30-year, fixed-rate mortgage. His three children shared a bedroom, and the whole family shared one bath. There was no garage or air-conditioning, but he was pleased to have a home of his own. He devoted about 20 percent of his income to his housing costs.

Since the passage of the National Housing Act, housing programs have continued to evolve, responding to changing conditions and politics. In the 1960s, The War on Poverty gave birth to the Department of Housing and Urban Development, and to an expansion of Indian Housing programs. In the 1970s, a different approach to rental housing became dominant, which supported lower income persons renting in the private market. The Section 8 program, now the largest rental program, was created. The Savings and Loan Crisis of the 1980s changed the face of lending, including the way the secondary market functioned. The 1980s also brought the third of the large rental programs, the Low Income Housing Tax Credit program, which encourages private sector investment in affordable rental housing through tax breaks. The current credit crisis will, no doubt, yield new system changes.

Current Policy

In 2008, Jane Doe (great-grandchild of our example family) owns a 2,000 square-foot home in Chandler. This is a move-up home, as buying and selling of homes has increased dramatically since the 1940s. She used an Adjustable Rate Mortgage (ARM), which allowed her more house, but has increased her mortgage payments over time, and she has taken out a home equity loan to help pay her son's tuition. By owning a home, Jane is now in the majority, with a 69 percent homeownership rate in the U.S.³ Her distant cousin back in St. Louis moved out of the central city into the suburbs, and now rents a two-bedroom, 650 square-foot apartment. It costs more than he can really afford, so he cut out collision insurance for his car, and dental insurance. He enjoys the pool, however. In short, the Doe's live in better living conditions than their ancestors, but it is costing them more.

Today, the patchwork of programs created over the last 70 years, which constitute the National Housing Policy, fall into five categories:

1. *Homeownership Assistance*—There are supply-side homeownership programs, usually consisting of construction by non-profit community development corporations and others, and demand-side, which include homeownership tax credits, homebuyer counseling, and down payment assistance programs.

- 2. **Rental Programs**—Supply-side programs create or renovate housing that is dedicated solely for affordable housing purposes. This includes, for example, Public Housing and Low Income Housing Tax Credits properties. Demand-side is where the family is provided rental assistance and can choose to use it anywhere, such as Section 8 vouchers.
- 3. *Land Use Regulation*—Implemented at the local level, affordable housing is supported by such tools as inclusionary zoning and rent control. It is impacted indirectly by code requirements.
- 4. *Homeless Prevention and Intervention*—Since the passage of the Stuart B. McKinney Homeless Assistance Act in 1987, the federal government has funded homeless programs. Through their choices of what to fund, homeless programs have evolved over the last decade.
- 5. *Fair Housing*—Before the Civil Rights Act of 1963, the federal government was complicit in housing discrimination through its FHA policies. Since that time, there has been significant civil rights legislation and HUD has rigorously funded and enforced Fair Housing Law, which helps disenfranchised people to participate in the housing market.

Among these programs, the federal government continues to have a strong philosophical and monetary commitment to homeownership. The largest housing cost to the federal government is the mortgage interest deduction for homeowners. This deduction cost the government about \$80 billion in 2007, with most support going to households with incomes above \$75,000.4 Through the FHA and the Government Sponsored Enterprises of Fannie Mae and Freddie Mac, the government continues to make home lending more available and reduce its risks. Direct support of affordable homeownership is also available through such programs as tax-exempt single family mortgage programs, down payment assistance, and support of non-profit housing development. Clearly, there became holes in the system last year. This newest mortgage crisis is expected to force a new regulatory environment.

Rental housing programs have in the last few years become more targeted to the extremely low income. Public housing and Section 8 continue to have long waiting lists of families eligible to participate, with each program housing 1.3 million households each. The only expanding rental program is an IRS tax credit for investors in low income apartments. This program, also hit hard by the current credit crisis, is the Low Income Housing Tax Credit program operated by States. In Arizona, it is managed by the State Department of Housing. Programs to fight homelessness remain supported by the federal government. Most communities have developed a network of strategies called the Continuum of Care, which is annually supported with federal funds.

All current housing programs generally have one or more of the following goals:

- Preserve and expand the supply of good-quality housing
- Make existing housing more affordable and available

- Promote diversity in residential neighborhoods
- Help households build wealth
- Strengthen families
- Link housing with essential supportive services
- Promote balanced growth⁵

Program implementation and prioritization differs significantly from one jurisdiction to the next, as housing advocates, officials, and the market respond to local needs. Over the last two decades, states and local communities have become more directly involved in housing. The impetus has commonly been to promote economic and community development. Typical concerns of local and state officials have been:

- Good quality housing available is an incentive for businesses to move to the area.
- Decayed housing pulls down neighborhoods, and causes a lack of property taxes and investment in the communities.
- Housing for poor people concentrated in limited urban communities creates ghetto conditions.

In Arizona, the State created the Department of Housing in 2001, and at the same time created a State Housing Finance Authority, which works in conjunction with local Industrial Development Authorities. The legislation states that "the Department of Housing is responsible for establishing policies, procedures and programs that the department is authorized to conduct to address the affordable housing issues confronting this state, including housing issues of low income families, moderate income families, housing affordability, special needs populations and decaying housing stock."6

Financially, the State supports affordable housing through the State Housing Trust Fund, a fund supported by proceeds from unclaimed property. Many Arizona cities and towns are expanding their concerns about affordable housing beyond simply implementing federally available programs. For example, the City of Tucson and Pima County have created local Housing Trust Funds to support affordable and workforce housing. Many other Arizona towns and counties are investigating ways to support having housing affordable to the people who live or work in their jurisdictions.

Trust Fund

Figure 2.3: Affordable rental housing in Tucson supported by the State Housing

Source: Poster Frost Associates

Conclusion

It has been almost seventy years since the New Deal legislation which created Housing policy in the United States. Over that time, a sophisticated system of mechanisms to support Americans in their effort to properly house their families has developed. However, the National Low Income Housing Coalition estimates that about 35 percent of American families still face serious housing problems, ranging from the inability to afford to buy a house, to struggling to pay the rent, to homelessness. Allowing families to have the options to choose decent shelter without sacrificing their health is still a goal for local, State and Federal governments working in partnership with the private sector. Hopefully, the next generation of the Doe family will be able to afford a decent, safe and sanitary place to live.

Endnotes

¹ A Home of Your Own, 1922, prepared by W. M. Folsom, Chicago, pamphlet.

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Chapter 3

ARIZONA HOUSING NEEDS, TRENDS, AND AFFORDABILITY

Rich Crystal

Rich Crystal has rendered specialized development, financial, and real estate consulting services to clients throughout the west for the past 20 years. Clients have included corporate real estate firms, investment banking institutions, State and municipal governments, private consulting firms, property owners, business firms, non-profit organizations, and quasi-public development organizations. Mr. Crystal holds a bachelor's degree in Geography/Urban Planning and a master's degree in Public Administration. Mr. Crystal is a self-employed real estate broker, has taken the National Association of Securities Dealers Series 7 stock and bond securities training, and is a certified Economic Development Finance professional. Prior to entering consulting, Mr. Crystal served as the Housing and Community Development Director for the Arizona Governor's Office and as the Deputy Director for the City of Phoenix Economic Development Department. Mr. Crystal's strong institutional background with state and local government, the public finance, affordable housing, and economic development communities offers unique expertise advantageous to development, finance, and planning projects.

Key Points

- Currently, the Arizona Department of Economic Security (DES) estimates 6.6 million people reside in Arizona. By 2013, the State's population is anticipated to rise to 7.5 million persons, suggesting demand for varying types of housing over the ensuing five years.
- Despite the 11-17 percent growth in the earning power (median family income) of the Arizona consumer from 2002 to date, overall increases of 17 percent in the U.S. Consumer Price Index (CPI) for the comparable period eliminated any real growth of consumer earning power. As a result, significant hikes in rents and home purchase prices during the period caused a net erosion in consumer housing affordability.
- In 2008, it is estimated that a minimum of 591,000 Arizona households are earning less than 80 percent of the median family income (MFI) and are "in distress." Of these, 53 percent are renters and 47 percent are owners. Most "distress" is attributable to "cost burden" (paying greater than 30 percent of household income for housing costs including utilities).
- From 2000 through the first quarter of 2008, Arizona homeownership affordability indicated that mountain communities tend to be significantly less affordable than their valley counterparts.

Arizona's Demographic Growth

Currently, the Arizona Department of Economic Security (DES) estimates 6.6 million people reside in Arizona, up 29 percent from the 5.1 million population base drawn from the 2000 U.S. Census. By 2013, the State's population is expected to increase by 932,000 or 14 percent to a level of 7.5 million persons. Net in-migration is anticipated to account for 587,000 people or 63-70 percent of the state's population growth, while natural increase will account for the balance.¹

It is estimated that 5.0 million people presently reside within Arizona's two urban counties of Maricopa and Pima, up 28 percent from the 3.9 million population base evident from the 2000 U.S. Census. Official projections predict that this number will be 5.6 million persons by 2013, a further population growth of 13 percent. It is also estimated that 1.6 million persons currently reside in the other thirteen Arizona counties, up 31 percent from the 1.2 million population base derived from the 2000 U.S. Census. By 2013, population in these areas is projected to increase by 271,000 or 17 percent to a level of 1.8 million persons.²

It should be noted that population projections are derived from a variety of dynamic factors, are subject to continued refinement, and continue to be the subject of debate.

Arizona's Household Income Trends

Median family income in each of the Metropolitan Statistical Areas (MSAs) in Arizona from 2002 to the present was compared with the U.S. national average (Figure 3.1). While the Phoenix-Mesa MSA has tracked closely to the national average, the other regions of Arizona tend to consistently fall at least 15 percent below the U.S. average. Despite the 11-17 percent growth in earning power (median family income) of the Arizona consumer during this period, an overall increase of 17 percent in the U.S. Consumer Price Index (CPI) for the comparable period eliminated any real growth of consumer earning power.

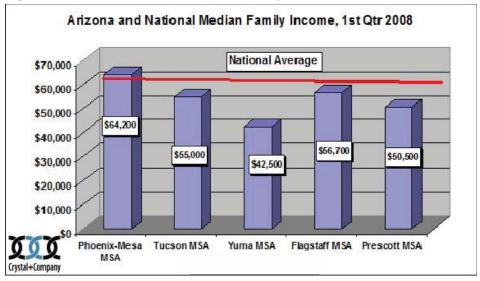


Figure 3.1: Arizona and National Median Family Income, 1st Quarter 2008

Source: U.S. Department of HUD

Current elevated levels of inflation most heavily affect those at the lowest income level, impairing the ability of such households to both acquire and maintain housing. This trend of high inflation is anticipated to continue.³

Arizona's Housing Needs

Affordable housing needs are measured in a variety of ways across the country and in Arizona. The national standard established by the U.S. Department of Housing and Urban Development (HUD) for state and local planning purposes defines individuals or households "in distress" if the following conditions are evident:

- Residing in dwelling units with physical defects (lacking a complete kitchen or bath)
- Residing in overcrowded conditions (greater than 1.01 persons per room)
- Cost burdened (paying more than 30 percent of income for housing including utilities).

In 2008, it is estimated that a minimum of 591,000 households in Arizona are earning less than 80 percent of the median family income (MFI) and are "in distress." Of these, 53 percent (310,000 households) are renters and 47 percent (281,000 households) are owners. Most 'distress' is attributable to cost burden.

The following two charts depict the estimated distribution of households 'in distress' by household type and income bracket for both owners and renters.

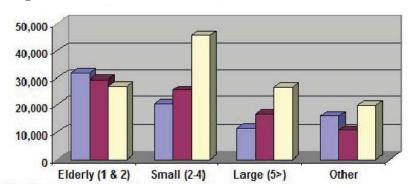
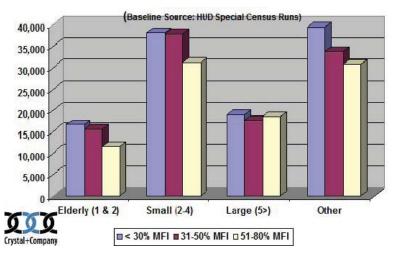


Figure 3.2: Arizona Owner Households in Distress





Source: National Association of Homebuilders, U.S. Department of HUD, 2008

The Housing Opportunity Index (HOI) for a given area is defined as the share of homes sold in that area that would have been affordable to a family earning the local median income based on standard mortgage underwriting criteria. Therefore, there are really two major components: income and housing cost. The HOI is used to gauge the affordability of communities across the country. From 2000 through the first quarter of 2008, the housing opportunity indices in Arizona indicated the following trends⁴:

- Mountain communities (exemplified by the MSAs of Flagstaff and Prescott) tend
 to be significantly less affordable to area residents. This is due to comparatively
 low median family income levels and comparatively high housing costs. Despite
 substantial reductions in purchase prices, a maximum of only 40 percent of
 households in Prescott or Flagstaff are able to afford the median priced dwelling.
- The Phoenix, Tucson, and Yuma MSAs are substantially more affordable than their mountain counterparts. Sizeable purchase price reductions in the past year-and-a-half have strengthened affordability in these valley regions.
- While most MSAs in Arizona were more affordable than the national average from 2000 to 2005, the situation reversed during the boom years from 2005 into 2007.
 Presently, significant reductions in home purchase pricing have brought some of Arizona's MSAs in line with the national average.
- Escalating inflationary pressure has adverse economic consequences for lower income households across the state.

Reductions in home purchase pricing in Arizona and for the nation as a whole are depicted in Figure 3.4.

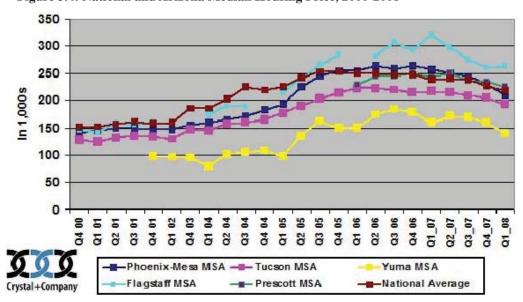


Figure 3.4: National and Arizona Median Housing Price, 2000-2008

Source: National Association of Homebuilders, 2008

Rental Affordability Trends

Discussed earlier, the 11-17 percent growth in earning power (median family income) of the Arizona consumer from 2002 to the present has been totally offset by inflationary pressure measured via the U.S. Consumer Price Index. Thus, the average growth in rents by bedroom type and geographical region between 2002 and 2008 depicted in Figure 3.5 represent the net erosion to the consumer in terms of rental affordability.

Table 3.1: Percentage of Increase in Arizona Metropolitan Statistical Area (MSA) Rents

Crystal+Company	STUDIO	ONE BEDROOM	TWO BEDROOM	THREE BEDROOM	FOUR BEDROOM	HUD MEDIAN FAMILY INCOME
Change '02-'08						
Phoenix-Mesa MSA	21.8%	18.2%	13.4%	18.8%	20.3%	10.9%
Tucson MSA	23.4%	21.0%	18.9%	23.5%	17.5%	11.8%
Yuma MSA	34.8%	37.3%	23.2%	25.8%	53.0%	15.5%
Flagstaff MSA	30.7%	43.8%	25.2%	20.0%	26.0%	17.6%
Prescott MSA	n/a	n/a	n/a	n/a	n/a	n/a

Source: U.S. Dept. of Housing and Urban Development, 2007

Cost Burden

When we look at the impact housing affordability trends in Arizona are having on family consumers, the situation comes into focus. Consistent with an approach used in 2008 Arizona's Housing Market...a glance, prepared by the Arizona Department of Housing, prospective homebuyers are assumed to be carrying acceptable levels of consumer debt, have adequate resources for the minimum down-payment, are creditworthy, and spouse or other second household member earns an income equal to 70 percent of the primary earner's income. Some of the homeownership assumptions are quite optimistic. Consider the affordability prospects faced by family households in the workforce. In several parts of the state, teachers, retail workers, and waitpersons cannot afford to buy or even rent homes, even with second income earners (see Appendix B). Thus, families can slip into distressed situations as they must spend a disproportionate amount of household income on housing.

Impact of Prevailing Market Conditions on Housing Affordability for Lower Income Households

For the last year, the Arizona housing market has been facing issues resulting from the hypermarket of past years such as the sub-prime meltdown and overly motivated investors. In Arizona, like much of the country, the homeownership housing market contains the distressed conditions most strongly evident in Nevada, California, and Florida. Pockets in Texas, the Northwest, and parts of the Southeast appear some of the strongest in the nation. With the

slowing economy, marked in Arizona by job losses and layoffs, many households will not have the needed income to save their homes, even with a new mortgage payment plan. With rising energy and food costs, there is additional strain on household finances.

Other salient points include the following:

- Rental market conditions in Arizona's large metropolitan areas generally tend to be "soft," or characterized by somewhat high vacancy rates. With respect to lower income households, it is likely that the recent emigration of illegal workers from Arizona has softened the rental market at the low end.
- High inventories of foreclosed properties, those at-risk of foreclosure, and unsold builder and resale inventories continue to place downward pressure on home purchase prices statewide.
- Communities with concentrations of foreclosed properties are struggling to deal with the resulting impact on neighborhoods and people.
- While fixed, first mortgage rates are at comparatively moderate levels, escalating inflationary factors may well motivate higher rates going forward.
- Falling home prices and land values will ultimately offer strategic acquisition opportunities for lower income consumers and affordable housing suppliers.
- Increases in energy costs are imposing significant stress on lower income households, as well as motivating heightened demand for infill and mass transit. In any given neighborhood, the balance of jobs to housing supply is rising in importance as are different and affordable modes of mass transit.

Endnotes

¹ Arizona Department of Economic Security, 2006.

² Arizona Department of Economic Security, 2006.

³ Crystal & Company, 2008.

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Chapter 4

HOW HOUSING MATTERS: STRENGTHENING QUALITY OF LIFE

Sherry Ahrentzen, PhD

Sherry Ahrentzen is Associate Director for Research at Arizona State University's Stardust Center for Affordable Homes & the Family. Her research focusing on new forms of housing and residential communities to better accommodate the social and economic diversity of U.S. households has been published extensively in journals and magazines, such as *Journal of Architectural and Planning Research, Harvard Design Magazine, Journal of Social Issues, Planning, Progressive Architecture,* and *Journal of Health Politics, Policy, and Law.* With Karen A. Franck, she edited the book *New Households, New Housing.* She has more than 50 published articles, chapters, and reports and has received more than 30 research grants or contracts, including those funded by the U.S. Department of Housing and Urban Development, the National Science Foundation, National Endowment for the Arts, Fannie Mae Foundation, AIA, National Center for Real Estate Research, Graham Foundation for the Study of the Arts, Urban Land Institute, and others. As Associate Director for Research of the Stardust Center at ASU, Dr. Ahrentzen's efforts are directed towards producing and fostering research that acts as a catalyst for debate, action, and innovation. The Center's research products and forums give constituents reliable information and new insights to inform design, development actions, and policy decisions.

Key Points

- Housing has wide-reaching impacts on our physical and emotional health.
- Stable, affordable housing may provide children with enhanced opportunities for educational success.
- Housing can impact health in the following ways:
 - o Toxicity and contagions lead to respiratory problems
 - o Overcrowding can increase stress
 - Location of housing and lack of recreation facilities can discourage exercise, leading to weight problems.
- Homeownership can improve wealth, stability, and self-esteem. However, studies
 have found that owning a home may limit the ability of low income families to move
 out of less desirable areas, and that homebuyers who could not afford to make needed
 repairs or who were dissatisfied with their neighborhoods did not experience the same
 positive effects of homeownership.

Introduction

Looking at today's news media, it is clear that housing matters greatly to our economic well-being as a nation. Housing as an industry and housing as a commodity are important factors in national and international financial markets, and in crafting public perceptions of the country's economic health.

Less evident in the press, but no less salient, is how homes and neighborhoods matter in the daily lives of people. For many Arizonans, housing is a source of pride, stability and resilience. For others, it is a source of stress. Census data and national surveys show that people of color, the elderly, working families, immigrants, children, and low-income households experience some of the worse housing conditions, whether that be structural inadequacy or high housing costs relative to income. While the current foreclosure situation and credit crunch are fraught with stories of how people are struggling, we tend to forget how our homes affect a child's social and educational development; the stress engendered in trying to make ends meet; a senior's social withdrawal or easy access to friends, healthcare, and social support; the struggle many parents face in deciding whether to substitute "drive time" for "family time"; even how housing impacts our health, lungs, and waistline. Without considering how housing matters in fostering better lives, we lose the opportunity to effectively build and align policies and practices in ways that not only provide shelter but also provide the sinew for strengthening the quality of life in our homes and communities.

For Arizonans, health, safety, education, and making ends meet have been key quality of life issues for the last couple decades.³ Yet in state comparisons, Arizona ranks number 29 for percentage of elderly in poverty; number 23 in overall health; number 20 for percentage of persons without high school diplomas or GEDs; and number 13 for percentage of children in poverty.^{4 5} Research studies in the last couple decades show that certain housing factors can partially contribute to health, education, and other social/economic conditions, as reviewed in the following sections.

How Housing Can Impact Educational Outcomes

While schools, teachers, and parents certainly bear principal responsibility for advancing children's education, a growing body of research suggests that stable, affordable housing may provide children with enhanced opportunities for educational success. The Center for Housing Policy (CHP) recently reviewed this research and identified seven hypotheses that had strong empirical support:

- 1. Stable, affordable housing may contribute to children's educational achievement by reducing the frequency of unwanted moves that lead children to change schools.
- 2. Certain types of housing subsidies may improve individual educational outcomes by allowing families to move to communities with stronger school systems (or to neighborhoods whose conditions offer stronger support for education).
- 3. By enabling families to afford decent-quality homes of their own, affordable housing can reduce overcrowding (and other sources of housing-related stress) that lead to negative developmental and educational outcomes for children.
- 4. Well-constructed, maintained, and managed affordable housing can help families address or escape housing-related health hazards (e.g., lead poisoning and asthma) that adversely impact learning.
- 5. Affordable housing developments may function as a platform for educational improvements by providing a forum for residential-based after-school programs or, more broadly, by anchoring a holistic community development process that includes new or improved schools.
- 6. Homeownership may provide a platform for helping children do better in schools.

7. Affordable housing may support children's educational achievement by reducing homelessness among families with children.

In addition, they identified two patterns with a growing but less conclusive body of research: 1) that affordable housing may facilitate greater parental involvement in their children's education by reducing parental stress and the need to hold multiple jobs; and 2) the development and rehabilitation of affordable housing in distressed neighborhoods may contribute to community revitalization efforts that lead to increases in community support for education.⁶

Among these impacts, that of residential mobility is particularly relevant to many Arizona families. In 2006, 21 percent of Arizonans had moved from the previous year, the majority of those moving within the same county. Eighteen percent of Arizona toddlers (ages 1 to 4) and 13 percent of school-age children (5 to 17 years) had moved within the one-year period.⁷ This is higher than national figures, with average state mobility approximately 14.5 percent for toddlers and 10 percent for school age children.

An extensive review of the empirical research on the impacts of residential mobility on children's educational achievements shows that in certain circumstances residential mobility can reduce academic performance, increase the likelihood of grade retention, and reduce high school completion rates. These effects worsen with cumulative moves, with 'hyper-mobile' students having the greatest academic impairment.⁸ Mobility may impact educational outcomes because of the disruption in children's educational instruction; disruption of peer relationships and social networks that reinforce learning; or the underlying economic hardships that lead to frequent moves in the first place.⁹

Some studies suggest that the impacts of mobility may be weaker, that perhaps half of the mobility effect on education may be due to pre-existing differences before moves, such as a parent's job or familial stress. However, CHP researchers conclude in the report that "all else being equal—residential moves that stem from housing or household instability, rather than choice, have a negative impact, particularly when very frequent or for children in non-intact families." ¹⁰

While educational advancement is a strong societal goal, so is advancement up the economic ladder. A study by Sandra Newman and Joseph Harkness in 2002 surprised many with results from a longitudinal study of growing up in public housing. Comparing the economic advancement of children who grew up in public housing between 1968 and 1982 to that of children who grew up *in similar economic circumstances* but did not live in homes receiving housing assistance, they found that public housing enhanced children's long-term outcomes. The young adults who had grown up in public housing were less likely to depend on welfare and more likely to hold jobs, earning \$1,860 more per year on average than their counterparts who grew up in private housing.

Health and Housing

At the turn of the 20th century, public officials and housing reformers confronted rampant diseases and illnesses stemming from dismal public sanitation and lax building standards. Since then we have expected our zoning and building codes to reinforce physical health standards. Yet the widespread problems of obesity, stress, and other physical and emotional disorders indicate that further solutions are needed.

The 1996 United Nations Habitat Conference decreed that the well-being of children is the ultimate indicator of a healthy habitat. Creating homes that enhance children's health as a threshold should allow many others to live in healthy circumstances as well. But today many children live in homes with factors that increase the risk of asthma, including cockroaches and other pests, dust mites, and mold. Nearly 10,000 children in the U.S. ages 4 to 9 are hospitalized each year for asthma attacks because of cockroach infestation in their homes. While the federal government banned the use of lead-based paint in 1978, tens of thousands of pre-1978 homes still exist today in Arizona, many occupied by children who are at risk of lead poisoning from paint, soil, and water. Lead poisoning can cause illness, brain damage, and other organ damage. Nationwide, 14 million children ages 6 and under live in housing with lead paint, and 1 million suffer from lead poisoning. 13

Housing impacts health in other ways beyond toxicity and contagions. Again, in an extensive review of the research on the various ways in which affordable housing may lead to improved health outcomes, the Center for Housing Policy identified nine key hypotheses:

- 1. Affordable housing may improve health outcomes by freeing up family resources for nutritious food and health care expenditures.
- 2. By providing families with greater residential stability, affordable housing can reduce stress and related adverse health outcomes.
- 3. Homeownership may contribute to health improvements by fostering greater selfesteem, increased residential stability, and an increased sense of security and control over one's physical environment.
- 4. Well-constructed and managed affordable housing developments can reduce health problems associated with poor quality housing by limiting exposure to allergens, neurotoxins, and other dangers.
- 5. Stable, affordable housing may improve health outcomes for individuals with chronic illnesses and disabilities, and the elderly, by providing a stable and efficient platform for the ongoing delivery of health care and other necessary services.
- 6. By providing families with access to neighborhoods of opportunity, certain affordable housing strategies can reduce stress, increase access to amenities, and generate important health benefits.
- 7. By alleviating crowding, affordable housing can reduce exposure to stressors and infectious disease, leading to improvements in physical and mental health.
- 8. Use of "green building" and "transit-oriented development" strategies can lower exposure to pollutants by improving the energy efficiency of homes and reducing reliance on personal vehicles.

9. Use of "green building" and "transit-oriented development" strategies can lower exposure to pollutants by improving the energy efficiency of homes and reducing reliance on personal vehicles.

In addition to these nine research-informed hypotheses, the CHP researchers noted a growing but not yet extensive body of research indicating that experiencing difficulties in maintaining mortgage/rent payments or home repairs may be linked to lower levels of psychological well-being and a greater likelihood of seeing a doctor.

Crowding

Another salient housing issue for Arizonans is health matters stemming from household crowding. When it comes to health impacts, researchers have found that it is residential crowding (defined as the number of people per room) rather than persons per acre that is the critical index. Federal census criteria establish "overcrowded" as households with more than 1 occupant per room; 1.5 persons per room constitutes "severe overcrowding." Among states, Arizona ranks fifth highest in the percentage of homes that are overcrowded (8.6 percent, compared to U.S. median of 3.2 percent).

Crowding results not only in inadequate physical space for residents in a household, but can also mean more household traffic, higher noise levels, and less opportunity for privacy. Individuals may have limited ability to manage daily stressors and successfully maintain supportive relationships, which can lead to increased levels of psychological distress, helplessness and even higher blood pressure. Parents are less responsive to young children in more crowded homes, irrespective of social class, and these relations begin before twelve months of age.

Controlling for socio-economic status (SES), studies have found that both children and their parents report more strained and negative familial interactions in crowded homes. Elementary school children who live in more crowded homes, independent of social class, have higher levels of psychological distress, neuroticism, poorer behavioral adjustment at school, and lower social and cognitive competency.¹⁴

Important to note is that cross-cultural research suggests that the experience of crowding is culturally mediated. Conditions that are stressful for one cultural group may be acceptable to another. Ellen Pader notes that many Mexican families in California prefer to sleep four or more to a room even when extra rooms are available, contrary to normative standards in the U.S.¹⁵ And in a demographic analysis of overcrowded households across the country, researchers found that overcrowding remains at high levels in Asian and Latino households with incomes more than twice the average of all households, strongly suggesting that these household densities are more a matter of preference or familiarity than inability to pay for larger homes.¹⁶ Importantly, however, while persons of different ethnic and cultural heritages may have different thresholds for what they consider "crowded," once household density rises above that threshold, psychological and even physiological stress can occur.¹⁷

"Doubling-up" or home-sharing is sometimes equated with residential crowding, but the health impacts of home-sharing are not so easily substituted or verified. While many households home-share out of desperation or in reaction to emergency situations and end up in deplorable (and often crowded) conditions, there are also households who choose to share a home in order to improve their residential situation. A review of the research on the health consequences of shared housing shows that in those cases where residents had little choice in where they lived, poorer health was expected. Alternatively, in cases documented in a statewide study of Virginia, many households were not only able to reduce their rent burden by sharing a home, but in some circumstances actually improved the quality of homes and neighborhoods in which they lived. What is often lacking for these households is housing that can successfully accommodate shared living so that spatial conflicts are minimized and privacy enhanced.¹⁸

Is Your Home Contributing To Your Waistline?

A *New England Journal of Medicine* report in 2005 startled many Americans when it indicated that for the first time in two centuries, the current generation of children in the U.S. have shorter life expectancies than their parents, due in large part to the rise in childhood obesity which could shorten life spans by two to five years.¹⁹ Obesity is already shortening average life spans by a greater rate than accidents, homicides and suicides combined.

Genes, eating patterns, food availability and other factors all contribute to obesity and its complications such as heart disease and diabetes. But so does physical exercise, particularly that which is regularly maintained. Walking is declining, especially among children. A 2002 survey by the Surface Transportation Policy Project found that 71 percent of Americans said they walked or rode a bike to school as children. Today, only 10 to 17 percent of children do so. The decrease of active living is also prevalent among adults, as is obesity. Obesity prevalence among U.S. adults has increased from 13 percent in the early 1960s to 32 percent in 2004, and currently 66 percent of U.S. adults are overweight or obese. Likely contributors to the decline in physical activity include the growth of laborsaving devices in the home and workplace, suburbanization, an increase in miles traveled by car, and a growing trend toward more sedentary entertainment.

There is steady and increasing evidence that the physical environment of our residential communities—forms and features that allow for safe walking and bicycling as part of daily living—influences the extent to which one engages in exercise as part of our everyday routines, or what is called "active living." The design of our cities, neighborhoods and transportation systems can make it challenging for adults to be physically active. The absence of parks, trails and other recreational facilities—common absences in low-income neighborhoods and communities of color—is a barrier to physical activity.²²

How Important is Home Ownership?

The cultural importance of homeownership in the United States has deep roots. In addition, tax breaks reinforce the desire for homeownership and for the sizeable mortgages required to pay for them. For many homeowners, their home is their shelter and their piggy bank. With rising homeownership rates and home prices in recent years, many households saw their net worth grow. Statistics indicate that the average wealth of home-owning households is ten times greater than that of renter households and that home equity represents approximately 45 percent of the total wealth of home-owning households.²³

There is a pervasive belief that widespread homeownership benefits the nation because homeowners, invested in their communities, make better citizens. In 2002, economists Edward Glaeser and Jesse Shapiro looked at the research evidence on homeownership and concluded that, even after allowing for confounding factors such as income, family size, age, and the like, owners spend more on maintaining their homes, vote more, play a more active part in local politics, and work harder to improve their neighborhoods than non-homeowners.²⁴

In addition, homeownership may contribute to health improvements by fostering greater self-esteem, increased residential stability, and an increased sense of security and control over one's physical environment.²⁵ But it is not clear *why*. One possibility is that homeowners have a greater ability to control their physical environment, leading to both reduced stress and increased life satisfaction. Alternatively, the benefits may be due to other housing conditions associated with homeownership, such as larger and higher quality homes or increased residential stability, rather than homeownership itself.²⁶

This body of research on homeownership has been used to justify federal, state, and local policies that encourage homeownership among households of modest income. But there are also drawbacks of homeownership, particularly for certain households. While research has pointed to the neighborhood stability created by high rates of homeownership, several studies have found that owning a home may limit the ability of low income families to move out of less desirable neighborhoods. Homeownership makes workers less mobile, which slows economic growth and worsens unemployment especially in areas blighted by the decline of locally dominant industries.²⁷

In research examining first-time, predominantly lower-income homebuyers and comparable renters, it was found that homebuyers who could not afford to make needed repairs or who were dissatisfied with their neighborhoods did not experience the same positive effects of homeownership as the research on middle- and high-income homeownership indicates.²⁸ It seems that it is the condition of the house and neighborhood, rather than tenure status which is particularly important to a person's self-esteem. The researchers concluded that homeownership should not be encouraged for households without sufficient resources for home maintenance.

Some have questioned whether this propensity for homeownership has been artificially created or enhanced by industries that construct, finance, and sell homes. Research supporting the benefits of homeownership has largely been conducted on middle- and upper-income households. Do these benefits hold for lower-income homeowners as well? Research from the University of Chicago's General Social Survey indicate that compared to homeowners, apartment residents are more socially engaged, equally involved in community groups, and similarly attached to their communities and religious institutions. At the same time, however, surveys show that large majorities of renters are chasing the dream of homeownership.²⁹

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Chapter 5

HOMEBUILDING AND THE ECONOMY

Marshall Vest

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Key Points

- Homebuilding does not (normally) "drive" the economy. It is the consequence of expanded economic activity—not the source. It is therefore nonsensical to talk about construction activity's "multiplier" effect.
- Homebuilding (and other construction activity) is quite volatile over the business cycle, and is the major reason that Arizona's economy is one of the most volatile of all states.
- Volatility in homebuilding results from Arizona's underlying rapid growth, which requires that a large portion of the economy be devoted to development activity. Including "support" and "supplier" industries, more than 20 percent of Arizona's economy depends on "growth."
- Homebuilding did become a driver during 2004-2006 as money poured into Arizona, thereby creating an "asset bubble." It is now painfully obvious that this was a temporary phenomenon that is not healthy for long-term growth and stability.
- There is little from a policy standpoint that can be done to make Arizona less reliant on construction activity. Growing other parts of the economy in an effort to diversify simply creates demand for additional development activity.

Introduction

When one thinks of the housing industry, the first image that pops into mind is probably of construction workers pouring concrete slabs, assembling "stick-built" houses with skill saws and nail guns, and installing cabinets, plumbing and electrical fixtures into rows and

rows of houses that are part of a large subdivision of new homes. This activity, along with remodeling of existing homes and provision of public infrastructure (in the form of water and sewer treatment facilities, streets, parks, etc.) and coupled with commercial construction (of shopping centers, offices and industrial buildings) comprises a large portion of the economy. Since Arizona is a rapidly growing state, a higher portion of total economic activity is accounted for by such activity than is found in most other states. The portion devoted to construction activity varies significantly over the business cycle. In 2006 during the recent boom, construction employment represented 9.1 percent of total non-farm jobs in Arizona. During recessions, that proportion falls significantly. For example, it fell to 5.4 percent during the 1990-1991 recession and to 5.6 percent during the 1974-1975 recessions (see Figure 5.1).

Construction Jobs as % of Nonfarm Jobs, AZ percent 10 9 6 6 7 7 6 6 5 90 95 00 05

Figure 5.1: Construction Jobs as Percentage of All Non-Farm Jobs in Arizona, 1970-2006

Source: Bureau of Labor Statistics, U.S. Department of Labor, Quarterly Census of Employment and Wages. Accessed 8/4/08 (http://www.bls.gov/cew/)

Construction Volatility

The point here is that the construction industry is different than most other industries as it represents the *investment* component of economic activity. In a growing economy, a large portion of resources are required to build needed infrastructure to accommodate new residents and workers. But when the economy slows, while growth in retailing and services also slows, construction activity has to shrink. If the economy stops growing entirely, the need for construction workers drops dramatically.

Therefore, the construction industry has an *accelerator* effect on growth—it adds significantly to growth and makes the peaks higher during expansions while subtracting from growth and making the bottoms lower during recessions. During 2005, the construction

industry accounted for 22 percent of all newly-created jobs. During 2007, it lost nearly 16,000 jobs while total non-farm jobs increased by 38,000. Arizona's construction activity is volatile because growth varies significantly over the business cycle. In turn, swings in construction activity account for a major portion of the economy's volatility.

The construction industry is only part of the story, however. Other industries are also related to and support the area's growth. These include mortgage lending, title agencies, appraisal, brokerage (both residential and commercial), landscaping, architecture, home improvement centers, material suppliers, etc. If these components are included, we find that in a typical year, close to 20 percent of the economy in Arizona is tied to growth (see Appendix C).

Is Development Activity a Driver of Growth?

Contrary to popular opinion, construction activity is not a driver of growth—at least not normally. Rather, it is a by-product from expansion of basic economic activity. It is the consequence of expanded economic activity—not the source. As such it is nonsensical to calculate multipliers for construction activity. It is a hard pill for some to swallow, but construction activity is part of someone else's multiplier.

The theory of regional economic development states that a local economy is driven by economic activities that import money into the local area through the sales of goods and services to customers who do not live in the area. These are referred to as "basic" or "export" activities. Mining, most types of manufacturing, most agriculture, and tourism are classic examples of basic activities. In the modern economy, many services also have a basic component. Within manufacturing, the largest export-related components are computers, semiconductors, electronic components, and missiles. Soft drink bottlers and cement plants are mostly used by local residents and are not export related. The accommodations industry, along with golf courses, and eating and drinking places have a large export-based component as they support tourism. (Tourism doesn't export anything, but the result is the same—tourists come here to enjoy themselves and leave behind their dollars).

Many economic activities primarily serve local residents. Retail trade, health care, finance, and newspaper publishing are examples of activities that serve primarily local residents. Similarly, most new construction is purchased by local residents and businesses. These activities do not directly bring much new money into the community and thus are not drivers for the local economy. For these activities, dollars changing hands are simply being re-spent over and over; they are not newly imported dollars.

Some construction activity could be considered export-related, such as development of retirement communities that sell to non-Arizona retirees (who pay for the home with dollars earned in their home state), but the numbers are small. This also pertains to construction of a new export-based manufacturing plant.

Aspects of the Current Building Cycle

Regional growth theory holds most of the time, but there are occasions when new development *does* temporarily become a driver, such as the recent bubble in housing from 2004-2006. Asset bubbles follow three stages (manias, panics, and crashes) and unfortunately always end badly. For a time-honored description and history of this phenomenon see the classic book on financial crises by Kindleberger. Low interest rates and a massive expansion of credit were both important contributors to the period of easy money. First, low interest rates boosted conventional measures of housing affordability to all-time highs, which sparked home sales and started prices moving upward. Then innovative mortgage products (such as alt-A and sub-prime loans) provided "easy to qualify" credit, which fueled the fire. As prices surged, eventually doubling in some markets, affordability dropped to the lowest levels seen in decades.

During the mania phase, money poured into Arizona from all corners of the world, driving construction activity and suppliers to their limits. People camped overnight to be first in line for the Saturday morning lottery drawing to see if they would be allowed to buy a house. Bus loads of out-of-state buyers went from project to project, putting down deposits on houses in each. Others pulled equity out of their homes and bought half a dozen others with little or no money down and exotic mortgages. It was common to hear such utterances as "we need to get on board before the train leaves the station." All these are classic signs that a bubble is forming.

As with all asset bubbles, prices eventually stop increasing and investors begin cashing in their profits. Once prices start moving down, panic sets in and more houses come on the market, driving prices down even faster. With prices falling, real buyers become spectators, waiting for the price to fall even further. As prices decline, many new homeowners discover that they owe more on their house than what it is worth. Foreclosures skyrocket, and these houses are offered at fire-sale prices, which drives market prices even lower.

By mid-2008, housing prices had declined by 30 percent in the metro Phoenix area, according to the Standard and Poor's Case-Shiller home price index. Additional declines are expected as some 50,000-60,000 homes remain vacant, according to economists at Arizona Public Service Company, who base their estimates on electrical usage of individual houses. Building activity collapsed sending the number of houses under construction down by more than 70 percent from peak levels. This is typical of the crash stage.

Just as housing drives the economy upward during the mania stage, so too does it drive the economy into recession during the crash. These episodes are thankfully infrequent, occurring only once or twice in a generation. The last time Arizona experienced an asset bubble in single family housing was in the late 1970s. The real estate bubble during the 1980s was primarily in commercial markets and apartments, rather than single family housing.

Policy Considerations

Arizona is one of the nation's most cyclically-sensitive states because it is a growth state. People want to live here. A large portion of resources and economic activity is devoted to supporting that growth. From a policy perspective, efforts to make Arizona less reliant on construction by developing other industries are largely counter-productive at best since creating new jobs in, for example, high tech manufacturing will simply boost the number of people moving here. Diversifying the economy is always a good idea—but it will not lessen Arizona's reliance on construction activity. As long as Arizona continues to be a destination of choice for retirees, job seekers, and those looking for low-cost housing, its economy will remain one of the most volatile of any state.

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Chapter 6

PLANNING ARIZONA'S HOUSING

Arlan Colton, FAICP

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Key Points

- Housing is a core component of greater comprehensive planning of a community, affected by and affecting other components, including jobs, the environment, transportation and other infrastructure, and schools.
- In Arizona, larger community plans must address housing; zoning often perpetuates inefficient separation of housing from other uses.
- Master planned communities, lot splitting, and infill are the most typical housing land use models in Arizona.
- Smart Growth provides an alternative approach regarding community development and the provision of housing.
- Arizona has both unique opportunities and barriers in creating new (and possibly more efficient and effective) housing patterns.

Introduction

In Arizona, virtually every municipality and county is required to plan for the future; the larger the community or unincorporated county, the greater the complexity of each plan. This chapter focuses from the eyes of a community planner on housing—affordable and otherwise—as a core component of land use. From a community planning standpoint, the housing types, the land use patterns, and the price of housing are all critical components of a how a community functions. If we think of a community as a system, the functional components of that system on a broad scale arguably are:

- How and where people are housed
- How and where people work
- How and where people acquire goods and services, including food
- How and where people are educated and receive health care
- How people and property are protected

- How and where people recreate
- How and where the energy to run the community is generated
- How and where the infrastructure—the lines, pipes, communication towers, and plants—interconnects with the other components
- How all the components are financed, internal and external to the community
- How the natural resources of the community are conserved or developed

These elements are taken into consideration when developing General and Comprehensive Plans for a community. General Plans and Comprehensive Plans are two names used for similar documents prepared by cities, towns, and counties. These plans are made up of broad policy statements intended to guide more specific public decisions with regard to land use, transportation, housing, culture, public services, etc.

Zoning in Arizona

Zoning is a primary implementation tool of a General or Comprehensive Plan which shapes the communities we live in. Zoning ordinances are unique to each local jurisdiction, in theory reflecting the policies of the planning document, but often mostly continuing the historic land use patterns of the community. For most Arizona communities and counties, this pattern is characterized by a separation of uses.

Residential uses are separated from non-residential uses, and in many cases higher density residential uses are separated from lower density through some sort of buffering, landscaping, or transitional uses. Zoning ordinances typically reflect a suburban model, and it is not uncommon in Arizona to find that older neighborhoods and downtowns that many people find inviting or defining of "community character" can not be replicated because current zoning codes prohibit them.

At the origins of zoning in the United States—upheld by the U.S. Supreme Court in the early part of the 20th century—was the primarily function of keeping noxious uses such as smokestack industrial uses away from residential neighborhoods. The advent of the streetcar allowed for the creation of suburbs around America's cities along streetcar routes. This pattern grew exponentially with the advent of the automobile. As most of Arizona's communities developed with the automobile, the pattern of low-density, single-family houses and auto-dependent development characterizes most of our communities outside the downtown or central business districts.

Housing Land Use Models

There are many different kinds of housing developments in Arizona; however, the following types are predominant.

The Master Planned Community

There is no doubt that the dominant form of housing in urbanizing and suburbanizing Arizona is the master planned community. These communities range widely in size from hundreds of acres to many thousands of acres. Most are developed either on "greenfield sites" (formerly undeveloped land) or on retired agricultural lands.

Whether marketed to the family or the active adult retiree (or as in some cases, providing a series of neighborhoods for both), the master planned community has its own form of highly developed regulatory framework and governance in the form of the homeowners association (HOA), and may have its own unique zoning rules. Master planned communities are the work of large-scale developers, usually require some type of rezoning, and often require a development agreement with the local government. The developer finances the infrastructure, such as roads, and amenities such as golf courses and trails, within the development. Typically, a number of lots or individual neighborhoods within the community are made available to homebuilders, meaning a number of builders are working in a development at any given time. These communities tend to be primarily or in some cases almost exclusively residential, and the vast majority are primarily or solely automobile dependent. Suburban densities vary by community, but the single-family detached home has been the dominant housing type.



Figure 6.1: Rancho Sahuarita, a Master Planned Community

Source: http://www.ranchosahuarita.com/neighborhood/rs-community-map.pdf

Larger communities often provide at least land for public schools (usually elementary schools) and a very few such as Anthem north of Phoenix provide the school itself. Recreation areas are another amenity commonly provided by the developer; these are either privately owned and managed or occasionally dedicated to the local government for that purpose. Some master planned communities provide shopping opportunities in the form of one or more centralized commercial centers that are rarely within walking distance of the bulk of the development. Some projects include destination or resort hotel facilities. Few provide manufacturing or office park development as an integral part of the community.

It is important to note that in Arizona there are few if any jurisdictions that place any requirement on developers to include housing that is affordable to low- or moderate-income buyers or renters who are not able to pay standard market rates for housing. In some areas, developers may include a combination of housing types and sizes that may be more affordable to households of various incomes; these developments may be referred to as "mixed income" developments. Some developers may offer a limited number of lots within a development to a builder of subsidized housing, typically a non-profit organization that receives funding from the state or a local jurisdiction. In Tucson's Rio Nuevo west of Interstate 10, the Gadsden Company has voluntarily designated 35 percent of the 400 housing units in their Convento Neighborhood for affordable and workforce housing including half of those for households earning below 80 percent of median income ("affordable") and half for households up to 125 percent of median income ("workforce"). When affordable housing becomes a zoning requirement for development, this is referred to as "inclusionary zoning" (see Glossary for more information).

Lot Splitting

A second dominant housing form on the Arizona landscape, especially in unincorporated areas, is that of lot splitting. Most lot split areas are arguably the polar opposite of the master planned community in that while there may be deed restrictions, the regulatory framework and the amenities provided are minimal at best. Arizona allows property owners to split their property into five parcels without the use of a subdivision plat (see Figure 6.2). Most lot split areas are developed using whatever the existing zoning is for the property, even if the comprehensive plan may recommend a more or less intense land use. Counties, if they choose to adopt a "minor lands division ordinance," can regulate certain basic aspects of these splits such as vehicular and utility access, but they cannot deny the split. Split properties can be legally split multiple times provided that the parties involved in the splits are "not acting in concert" with each other.

Lot split properties can be large in size (up to 36 acres each), but more typically are at or just above the minimum size required by local government zoning for the area. They are developed primarily for residential uses with either site-built or manufactured homes, or some combination thereof, depending again on zoning. While there are exceptions, lot split developments typically have minimal to no amenities, and infrastructure is also very minimal.



Figure 6.2 Aerial view of lot splitting

Source: http://dashh.typepad.com/terrafirma/images

Infill Development

This type of housing development within existing urban areas may take many forms. It is often redevelopment of a vacant or abandoned property, a past or underperforming use, or a difficult property that had been skipped over for environmental reasons, its small or awkward size, or other site constraints. Infill sites tend to be smaller in size, and expensive to acquire and develop. While infrastructure usually exists for the site, it may need to be augmented in some respects. In addition, rezoning (See Glossary) may be required either to up-zone the site from a lesser intensity to a more intensive residential use, or sometimes down-zoned to a residential use from a non-residential use. Review by local government may be required.

From a housing perspective, infill development may be single-family detached but often is townhouses, modern lofts or condominiums, adaptive reuse or loft conversion projects from non-residential uses that are past their prime, or rental apartment projects either at the luxury or affordable end of the scale. More recently, infill housing may also be a combination of residential uses mixed with any number or type of non-residential uses ("mixed-use") or, with the advent of light rail in the Phoenix area, "transit-oriented development" (projects in close, often walking proximity to stops on a commuter transportation line). These types of projects are further discussed in Chapter 16.

While opposition to master-planned communities is not uncommon, infill projects for a variety of reasons are often difficult and associated with opposition from adjacent neighborhoods. Reasons cited may be increase in traffic, obstruction of views, incompatibility of architecture, increased scale or density, fear of impacts to property values, or fear of a changing demographic in the area. Ability to get an infill project approved by the jurisdiction often requires a considerable amount of negotiation, especially if the housing type and affordability differs from the surrounding area.

Figure 6.3 New infill development

Source: http://www.flickr.com

Housing in Context

Let us now look at some of the issues that have arisen from these forms of community planning as they relate to the system components listed on the first page of this chapter.

Housing Density

It has often been said that the only thing people hate worse than sprawl is density. Accustomed to post-World War II suburbs of separated land uses (and separated types of residential land uses particularly), people tend to object to differing land uses, housing types, and densities in close proximity to their choice of housing. These objections can intensify in regards to affordable housing projects, which often feature a higher density of units. The reason for this is that there is an essential truth that more housing units per acre mean lower land cost per unit. At the same time, however, it should be noted that not all high-density housing is affordable to low-income families. Such is the case in Arizona. Higher density projects may be affordable housing projects, but there are many luxury apartments, highend condominiums, and the like that are not affordable to the lower or middle income home buyer or renter.

Housing and Transportation

For years, the watchword of homebuyers in suburbanizing Arizona has been "drive 'til you qualify." The theory is that the farther away from the core of the community, the more affordable the home becomes, allowing a buyer to maximize square footage of the home and in some cases the lot size.

The Chicago-based Center for Neighborhood Technology and the Brooking Institution have developed an online tool, the *Housing + Transportation Affordability Index* (http://htaindex.cnt.org/), which accounts for the cost of housing and household

transportation as a percent of income on a neighborhood-by-neighborhood basis for 52 metro areas in the United States including Phoenix-Mesa. The key finding was that "household size and income play a lesser role in determining affordability than do neighborhood characteristics, such as good and frequent transit service, proximity to jobs, and amenities within walking distance, in determining how much a family will have to spend on transportation annually." The Index is currently being developed for Tucson and Pima County.

Urban, suburban, and rural Arizona has developed with the automobile and pick-up truck, and in the last 20 years or so, the mini-van and the SUV. The grid system of arterial and collector roads with freeways supporting a low-density suburban land use pattern of separated uses has been desirable and affordable to many. With relatively low fuel costs until recently, housing decisions have tended to be made based on factors such as house size, school district quality, proximity to family, or perception of relative safety. The work commute and other trips (school, shopping, recreation, entertainment) have not been foremost in the minds of most people. As most development is not within reasonable walking distance of a transit line, only a few alternatives to the personal vehicle exist such as car or vanpooling or use of park and ride lots.

Additionally, how we use our roads has changed over the years. The freeway, with major shopping located at nearly every interchange in urban areas, has become the modern arterial street, adding to the increased congestion of many of these facilities. Arizona Governor Janet Napolitano's reference to the "time tax," the cost of one's time sitting in traffic, potentially can be added to the housing/transportation costs. Throughout Arizona, the costs for most regional infrastructure are ultimately paid for by the taxpayer and highway user. This limits the ability to open up new areas to housing which are not in proximity to jobs or services without further burdening the regional and state transportation system.

Housing and Jobs

The decisions of where people choose to live in relation to their principle places of work determines urban form, impacts people's social lives, and, while the internal combustion engine remains dominant, has a significant effect on air quality in a region. Service-oriented businesses (also a source of employment) tend to follow housing, locating in an area once the population thresholds make business economically viable. Major employers such as manufacturing or research and development may or may not be in a position to move facilities based on population growth in any particular area.

From an economic development perspective, the relationship of where people live to where jobs are or could be located is important. The "commute-shed" for an area, typically expressed in commute time, is an economic development tool. The City of Phoenix notes in its economic development literature that 270,000 workers live within a 20-minute commute shed of the Ahwatukee Foothills, and breaks down the type of worker and average educational level of those who live within 10, 20, and 30 minute commute sheds of this particular sub-area. Another guidepost that is often used by planners is the concept of a jobs-

housing balance. Plans may contain policies and strategies to seek a jobs-housing balance at build-out for a defined area, designating a targeted amount of useable land for employment in locations within a certain proximity to residential areas.

Housing and Schools

The coordination between proposed housing development and the financing, location, and access to new and expanded public school facilities varies widely from community to community. Some communities show proposed school sites on planning documents, although such sites are not regulated by the community. Others defer completely to the independent school districts. School districts in rapidly-developing parts of the state have been working to get a rooftop contribution from developers; others work to obtain school sites from developers, and some do both.

One of the dominant issues beyond existing or potential overcrowding of school facilities is safe walking and bicycle access to schools by children. Subdivision design for housing projects sometimes limit vehicular and school bus access when such access is solely on residential streets; this could have the effect of limiting pedestrian and bicycling access as well, depending on the design.

Housing and Environment

New housing developments, as the first wave of suburbanization on otherwise undeveloped property, are often fiercely debated based on their impact on the environment. Discussion may center on water use or availability, conversion of desert or forest and its wildlife habitat, maintenance of stream flows or increase in the urban heat island. The impact on views of natural or rural landscapes from existing homes or scenic routes is often argued.

Growth, except for landlocked communities that cannot expand horizontally or the redevelopment of existing areas, requires conversion of at least some undeveloped or agricultural and ranch lands. However, community values as translated into development policy and regulation may limit the amount or location of housing. Finding the balance between providing needed housing with maintaining the landscape is an intensely local discussion. Absent any regulatory or voluntary intervention, market forces dictate that if the supply of land cannot meet demand, housing will become less affordable. Growth management techniques designed to conserve the natural environment do not necessarily create unaffordable housing; however, exclusionary zoning, such as large minimum lot sizes or excessive regulation, can.

Pima County's *Sonoran Desert Conservation Plan* seeks to marry conservation planning with land use planning as well as integrate regulatory factors into land use decisions. Increased housing densities or affordability on non-conservation lands have not necessarily been a by-product, however, and both the County and the City of Tucson have established housing trust funds for affordable housing. The City of Phoenix's Edge Development guidelines for subdivisions built adjacent to public preserve areas address the interface between new

housing areas and natural parklands. One issue that communities and counties are addressing at these important edges is good design for the prevention of wildfires, which have the potential to destroy both homes and wildlife habitat.

Smart Growth Movement

The field of planning now offers alternative approaches to traditional land use models for housing that strive to overcome the issues detailed above. The concept of "Smart Growth" is one such alternative, comprehensive approach that aims to effectively organize a community's development pattern and to accommodate growth. The Smart Growth Network defines ten core principles which are listed below. The Network also maintains an extensive on-line resource; the Housing section may be found at http://www.smartgrowth.org/about/issues/issues.asp?iss=13.

The Principles of Smart Growth

1. Create Range of Housing Opportunities and Choices

Providing quality housing for people of all income levels is an integral component in any smart growth strategy.

2. Create Walkable Neighborhoods

Walkable communities are desirable places to live, work, learn, worship and play, and therefore a key component of smart growth.

3. Encourage Community and Stakeholder Collaboration

Growth can create great places to live, work and play -- if it responds to a community's own sense of how and where it wants to grow.

4. *Foster Distinctive, Attractive Communities with a Strong Sense of Place*Smart growth encourages communities to craft a vision and set standards for development and construction which respond to community values of architectural beauty and distinctiveness, as well as expanded choices in housing and transportation.

5. Make Development Decisions Predictable, Fair and Cost Effective

For a community to be successful in implementing smart growth, it must be embraced by the private sector.

6. Mix Land Uses

Smart growth supports the integration of mixed land uses into communities as a critical component of achieving better places to live.

7. **Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas**Open space preservation supports smart growth goals by bolstering local economies, preserving critical environmental areas, improving our communities quality of life, and guiding new growth into existing communities.

8. Provide a Variety of Transportation Choices

Providing people with more choices in housing, shopping, communities, and transportation is a key aim of smart growth.

9. Strengthen and Direct Development Towards Existing Communities

Smart growth directs development towards existing communities already served by infrastructure, seeking to utilize the resources that existing neighborhoods offer, and conserve open space and irreplaceable natural resources on the urban fringe.

10. Take Advantage of Compact Building Design

Smart growth provides a means for communities to incorporate more compact building design as an alternative to conventional, land consumptive development.

Arizona communities and some counties are increasingly addressing at least some of these principles in their plans and to a lesser extent, zoning and subdivision regulations. Smart growth focuses on providing opportunities for housing choice, compact building design, and walkable neighborhoods, but the movement specifically addresses affordable housing through zoning techniques, approval process improvements, and opportunities for reinvestment in existing neighborhoods, among other tools.²

Growing Smarter

Since 1970, Arizona cities and towns with a population over 50,000 have been required to include a housing element in their general plan (it is optional for communities with a smaller population). The statute states:

A housing element consisting of standards and programs for the elimination of substandard dwelling conditions, for the improvement of housing quality, variety and affordability and for provision of adequate sites for housing. This element shall contain an identification and analysis of existing and forecasted housing needs. This element shall be designed to make equal provision for the housing needs of all segments of the community regardless of race, color, creed or economic level.

Arizona statutes for counties note that their comprehensive plans may address "housing quality, variety and affordability," but this is not a requirement. While there is no discrete housing element mandated of counties, the required land use element for counties over 125,000 people is expected to include housing and policies to "promote compact form development activity" in appropriate locations.

In Arizona, community planning was expanded and given additional teeth as a result of the *Growing Smarter Acts* of 1998 and 2000. These acts mandated that general and comprehensive plans be prepared for most communities and counties. The plans are to be updated at least every 10 years, zoning decisions must conform to them, and in the case of municipalities, most are required to put their plan to a vote of the citizenry. Arizona is the only state in the nation with this requirement.

Issues Unique to Arizona

While the state has recognized the need to "grow smarter," there are unique considerations that complicate or even inhibit new planning strategies. There are challenges on the horizon in terms of our ability to plan for the future housing needs of Arizona residents.

State Trust Land

Arizona retains more of its state trust land allocation given to it at statehood by the federal government than any other of the 48 continental United States. This land is protected from development, but can be opened up by being sold or swapped for other parcels. The state uses the land to earn significant income for the beneficiaries of the Trust, primarily the common (public) schools. While most of the land holdings are not in the path of urban growth, a sizeable and very key percentage of it is in both the Phoenix and Tucson metropolitan areas. The ability for the State Land Department to plan land for a mix of urban uses and then release land in a timely manner is critical as this helps to shape the urban form in support of the local community goals and contribute to the relative affordability of housing. Conversely, if unsold Trust land is "leapfrogged" and isolated private lands are developed first, sprawl ensues and often housing is built not in the path of growth, but isolated by distance from services and employment.

Redevelopment Challenges

Arizona has several institutional barriers to successful redevelopment not found in other states. For instance, there is no tax increment financing available due to lack of required state legislation in Arizona beyond what was approved for specific large scale projects such as Rio Nuevo in Tucson. This tool, common in other states, "uses future gains in taxes to finance the current improvements that will create those gains."

Furthermore, Arizona's *Proposition 207*, also known as the Private Property Rights Act, hinders modernizing land use regulations consistent with Smart Growth principles, especially related to new housing and creating mixed-use and infill opportunities. Passed by Arizona voters in 2006, the proposition focused on eminent domain as a key campaign issue but also included language calling for compensation if land use regulations diminished value as compared to regulations existing at the time of passage. Communities that push for change thus run the risk of inviting numerous claims alleging diminution of value. Whether or not the claims are capable of being turned into successful lawsuits may not be the discouraging factor to local government; the time necessary to process claims, however, could be significant enough to forestall critical work on fundamental changes in codes and development standards.

Rise of the Sun Corridor

Continuing urbanization in America will focus on ten very large key corridors, dubbed "megapolitan areas," of communities and cities growing together, physically and/or economically. Arizona's urbanization is likely to concentrate in the Sun Corridor, stretching

from north of Phoenix to east and south of Tucson, affecting six counties. Not withstanding the impact of Las Vegas on Mohave County, the appeal of the White Mountains, the Colorado River, and other areas of regional growth, the bulk of the demand for Arizona housing will be in the Sun Corridor. This presents both opportunities and challenges. The anticipated future housing need is vast. New and redevelopment housing and the interrelated new infrastructure need to be supported and provided economically and efficiently. Communities, counties, regions, and the state therefore need to be able to plan the use of land and resources together, such as bringing appropriate numbers of jobs in close proximity to new housing areas. Can all this be done in such a way that there is adequate housing choice for all levels of affordability?

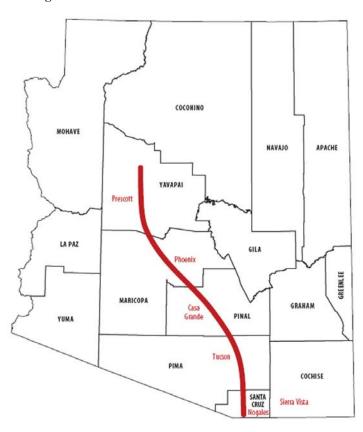


Figure 6.4: The Arizona Sun Corridor

Source: Morrison Institute for Public Policy

Endnotes

¹ Center for Neighborhood Technology, <u>www.cnt.org</u>

² Affordable Housing and Smart Growth; Making the Connection; Smart Growth Network and National Neighborhood Coalition; Washington, DC; 2001.

³ http://en.wikipedia.org/wiki/Tax increment financing.

Chapter 7

A PRIMER ON THE COST OF HOUSING AND AFFORDABILITY

Corky Poster, RA, AICP

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Key Points

- Development of an effective strategy for housing affordability requires a thorough understanding of the complex set of components to housing cost.
- The only true measure of all affordability calculations of housing is the monthly outlay of resources for all costs related to housing and shelter.
- Monthly housing costs derive from the following components (and the possible addition of some new ones). To develop an affordability strategy, each of these requires a careful analysis:
 - o Real estate costs
 - o Land development, infrastructure, and regulatory costs
 - o Construction costs of material, labor, and technology
 - o Banking and finance costs
 - o Utility and other home-related service costs
 - Operating and maintenance costs
 - o Transportation costs determined by location
- The sensitivity of the various inputs into affordability is relative and a study of alternative strategies for reducing housing cost yields some surprising results.
- Some traditional strategies may not be as effective as one imagines.

Introduction

There are two self-evident components to an understanding of the affordability of housing for the full range of incomes represented in the Arizona economy: the cost of housing and the resources available to pay that cost. All housing affordability analysis, as represented in

other chapters of this *Arizona Town Hall Background Report*, revolves around this simple dichotomy. In order to understand whether housing is affordable for any particular income segment of our population, one needs to understand how much housing costs. With this understanding, one can compare the cost of that housing with the resources available to spend for it and determine whether there is a match that allows it to be affordable, or a mismatch that makes it unaffordable.

The complexity of the actual costs and cost variables of housing is not well understood. As such, the general perception is that there are relatively simple strategies for reducing the cost of housing that focus entirely on the cost of construction and ignore the other elements of the ultimate housing cost to the resident. The goal of this chapter is to provide a deeper understanding of all costs of housing and to demonstrate how they are manifested in the total cost of shelter to the housing consumer. There is a secondary motive in clarifying these costs; with a better understanding of the full range of variable components that make up the costs of housing, one increases the opportunities to develop strategies for lowering them.

Understanding Housing Cost

Paradigm Shift

So what does housing cost? The simple answer is to view the cost of a house like the cost of a bicycle. If a bicycle costs \$200 and you have \$200, you can buy that bicycle. If you only have \$100, you look for a bicycle that costs \$100. If you cannot find one, you do without. In the same way, one can say that a house costs, for example, \$250,000. So if one has \$250,000, one can afford to buy that house. But if a family only has \$150,000, then that family needs to buy a house that costs \$150,000. The fundamental challenge in this approach would be to figure out a way to reduce the costs of housing—for example, reducing its size, quality, location, materials, production system, etc. to create a product cheap enough to arrive at a sales price that can sell, in this case for \$150,000.

But of course, this is not a reasonable way looking at it. Nobody but the very richest of Arizona's citizens has either \$250,000 or \$150,000. Housing cost is calculated in an entirely different way. It is based on monthly costs that relate to a complex set of interest rates, terms of loans, insurance, taxes, real estate costs, etc.

Yet, while we can see that this "how-much-does-a-house-cost" model does not match the complexity of actual costs, this paradigm is too often the way we tend to view the current problem of housing affordability. Most people would agree with the following statement, "Housing will be affordable by more people if we find ways to produce housing at a lower cost."

It is generally presumed that by looking at all the sub-systems that make up a house, particularly the big and expensive components of a home—the walls, the roof, the floor—and using design and technology to reduce cost, we can ultimately solve the housing cost

and housing affordability problem. The fact is that despite the best efforts of architects, engineers, and builders, the cost of housing construction has only increased, not decreased, in the last several decades.

Most incremental changes in building codes, zoning, taxation, and the regulatory structure have contributed to this increase. Houses are becoming safer, larger, and more expensive to build. Of the proposed wall systems introduced as cost-saving approaches in the last twenty years—rammed earth, straw bale, stabilized adobe, foam block/formwork systems, etc., etc.—none are less expensive than "sticks-and-stucco," although all of them were put forward as solutions to housing affordability.

Housing cost involves land development, development regulation, infrastructure, permits, impact fees, etc. The shear magnitude of the actual cost of the production of housing, compared to our lowly bicycle, requires spreading out its costs over a very long period of time and requires a different paradigm to understand it. When the price of a house is spread out over 30 years, for example, a large number of other variables enter the equation: mortgage interest rates, real estate costs, taxes, insurance, utilities, repairs, maintenance, replacement reserve, and so on. These days, new costs are fast becoming a factor in the "cost of housing": the monthly cost of information technology to the home (cable, DSL, cell phones, PDA's); rapidly increasing energy costs for electricity, heating, and cooling; and, most recently, the cost of transportation (rising cost of gasoline for automobiles) as it bears on the location of that home in relation to jobs, schools, shopping, and entertainment. Only through a different paradigm of understanding can we arrive at an effective range of strategies to achieve cost-of-housing reduction.

Monthly Costs

The interaction of each of the elements of housing cost can only be understood in terms of their respective contribution to **the only true measure of all affordability calculations of housing—the monthly outlay of resources for all costs related to housing and shelter.**Monthly housing outlay is the common denominator; the mechanism by which we can combine the wide range of costs into a single housing currency—monthly housing costs. It is the measure by which banks and government agencies calculate affordability, and most importantly of all, it is the measure by which families and individuals calculate their own housing affordability budget.

The rule of thumb used by the U.S. Department of Housing for housing affordability is that the monthly outlay of a household for its total housing costs should not exceed 30 percent of the gross monthly income of that household. There is not room here to analyze the appropriateness of this rule of thumb. Most of the best thinking on this subject (see Michael Stone, *Shelter Poverty*) suggests that this rule of thumb makes very little sense at the very lowest end of the income scale (people living in poverty cannot afford even 30 percent) or at the very highest end of the income scale (the very wealthy can afford much more than 30 percent). But that same analysis suggests that it is a good measure at, or around, the median income. Since our discussion takes place at or around the median income, it is the measure that will be used here.

The challenge is to understand all of the elements contributing to the cost of housing. This chapter explains the full set of true housing costs, demonstrates how they roll into the monthly outlay of the end user, and suggests what a comprehensive effort at reducing enduser monthly housing costs might look like.

Components of Housing Cost

Housing cost derives from the following components:

- 1. Land development, infrastructure, and regulatory costs
- 2. Construction costs of material, labor and technology
- 3. Real estate costs
- 4. Banking and finance costs
- 5. Utility and other home-related service costs
- 6. Operating and maintenance costs

The material that follows was derived from research produced by architecture, planning, and public administration students at The University of Arizona in a College of Architecture and Landscape Architecture course entitled PLN/ARC 497-597v: *Affordable Housing and Community Development*. The original research was done in 2003 from books, the internet, interviews, and other source material. This information has been updated below to reflect current (2008) costs. It is important to say that these costs are prototypical and are intended to represent the cost of no particular project, but rather a typical entry level project cost in Southern Arizona. The actual costs are less important than the relative costs. More importantly, they are used to demonstrate the interaction and relative sensitivity of costs as the basis of a cost-reduction strategy.

The model used is a home produced in the unsubsidized market but at the very bottom of that market. The product model is a very modest (1,200 square-foot, 3-bedroom, two bath, single-story with no garage), entry-level, single-family detached home on a small 5,000-6,000 square-foot lot, built in a medium-sized subdivision (50 units) in Southern Arizona. **The home, in our analysis, sells for the very low price of \$132,000.**

1. Land Development and Infrastructure Costs

This analysis assumes a 50-unit subdivision with a required rezoning. For this discussion, no impact fees are included (see Glossary for more information). It is recognized that impact fees have a profound effect on housing affordability, especially at the entry level of the market. It is also true that the cost contribution of impact fees vary widely from community to community—some have no impact fees, others have substantial impact costs to bear on the project.

Clearly, this is an important discussion, but since the goal here is to look at the sensitivity of predictable components of costs and since impact fees are not very predictable, they have been excluded from the calculation. Similarly, the rate of profit for the developer has been a volatile number over the last three years: three years ago the sky was the limit; buyers were

clamoring to buy and developers were increasing home prices and profits independent of costs. In contrast, today's market is bleak. Sales are down dramatically and developers in mid-project are scrambling to break even. For the purpose of this analysis, profit rates for developers are minimal and are included in the costs of the identified categories below:

Raw land purchase cost	\$ 13,200/lot
Rezoning cost	\$ 1,856/lot
Infrastructure/engineering	\$ 9,421/lot
Permits and review	\$ 1,400/lot
Total	\$ 25,877/lot

2. Construction Costs of Material and Labor

This analysis assumes a 1200 square foot single family house with no garage. The calculation for each of the categories includes material and labor. In general there is an assumed 60-40 split between material and labor. In many of the work categories, sub-contractors would be employed to do the work. Subcontractor prices include sub-contractor profit and overhead, but no tax. Approximately 88 percent of the sub-contractor costs are project material and labor, 12 percent are profit and overhead.

Category of Construction	Total Cost	% of Total Construction Cost
Project hard costs		
• Site work	\$ 3,522	3.3%
 Foundation/floors 	\$ 7,834	7.4%
 Exterior walls 	\$ 10,684	10.1%
 Interior framing 	\$ 8,463	8.0%
 Roof framing & roofing 	\$ 6,867	6.5%
 Cabinets and casework 	\$ 2,727	2.6%
Finishes	\$ 11,799	11.1%
 Insulation and sealants 	\$ 2,225	2.1%
 Doors/windows/hardware 	\$ 6,770	6.4%
 Specialties/equipment 	\$ 2,514	2.4%
 Mechanical 	\$ 8,344	7.9%
 Plumbing 	\$ 6,826	6.4%
 Electrical 	<u>\$ 4,876</u>	4.6%_
Subtotal Hard Costs	\$ 83,451	78.7%
Project soft costs		
 General conditions 	\$ 7,531	7.1%
Overhead @ 5%	\$ 4,549	4.3%
• Profit @ 6%	\$ 5,732	5.4%
• Tax @ 4.74% (as per AZ)	\$ 4,799	4.5%
Subtotal Soft Costs	\$ 22,611	21.3%
Subtotal Hard Costs	\$ 83,451	78.7%
Subtotal Soft Costs	\$ 22,611	21.3%
Grand Total Construction	\$106,062	100.0%
 Lot Development Cost 	\$ 25,877	
Sales price = land + construction	\$131,939	

3. Real Estate Costs

Real estate costs are calculated here excluding a real estate commission fee and including closing costs and prepaid escrow costs. These are fees paid at the time of closing:

<u>Closing Costs (with definitions from a variety of on-line sources):</u>

Loan origination fee \$ 875

An origination fee is a payment associated with the establishment of a new loan This fee is paid to the bank (or perhaps the broker)that provides the loan or services associated with taking out a loan.

Appraisal fee \$ 325

Fee charged by an expert to estimate, but not determine, the market value of property. An appraisal is an opinion of value, and is usually required when real property is sold, financed, condemned, taxed, insured, or partitioned.

Credit report \$ 65

A report carried out by a credit reporting agency and used by the lender to determine whether an applicant is eligible for credit.

• Tax service fee \$ 85

A fee charged by some lenders at closing to cover the cost of paying taxes on the borrower's property when they come due, or (if the borrower is paying the taxes), verifying that the payment has been made.

• Underwriting fee \$ 325

A fee charged by the lender to verify information on the loan application, authenticate the property's worth as collateral, and make a final determination about whether to grant a loan to the applicant.

Closing fee \$ 205

The fee charged by the closing agent who prepares the closing documents and closes the loan on behalf of the lender.

Documentation fee \$ 115

A fee often charged by an agent to cover the cost of preparing closing documents.

• Title Insurance \$ 255

An insurance policy which protects the insured (purchaser or lender) against loss arising from defects in the title.

• Recording fee \$ 25

A charge for entering the sale of a property into the public records of a city, county, or other appropriate branch of government.

Flood certification \$ 9

An independent agency report required by the lender to determine whether a property is located in a flood hazard zone, which would then require a federally-mandated flood insurance policy.

Total \$2284

Prepaid Escrow

• Interim interest \$ 190

Interest owed by the borrower to the lender on the mortgage loan from the day of the closing to the date covered by the first payment.

• Hazard insurance \$ 425

Insurance protection for the borrower and lender against property loss due to fire, wind or natural hazards.

Property tax impounds \$ 345

Money held by the lender for the payment of property taxes levied on real property based on the value of the property.

Total \$ 960

Total Closing and Escrow \$3,244

4. Banking and Finance Costs

In virtually all home sales, the large cost of a home requires a mortgage for the purchase. Interest, or the cost of borrowing the purchase price capital from a lending institution, has a major influence on the ultimate costs of housing, with the rate of interest varying as the market for money fluctuates. In the \$132,000 sales price home of the example, it is assumed that there is a 10 percent down-payment, and that the closing and escrow costs are paid for in cash at closing from savings at the time of the loan.

In the example, 10 percent of the \$132,000 sales price equals \$13,200 and the Closing and Escrow Costs are \$3,244 for a total of \$15,444. (These down-payment and real estate costs are major obstacles for home sales to low income families in and of themselves, but that is a discussion for another setting). That leaves a mortgage loan amount of \$132,000 minus \$13,200 or \$118,800. The following are the amortization schedules (monthly payments of principal and interest) for mortgages of \$118,800 for a variety of interest rates and for two distinct terms of 20 years and 30 years.

Payment calculations at various interest rates. Borrowed principal=\$118,800, 20-year term

Interest Rate	Monthly Payment	Total Paid	Factor (total/principal)
0.0%	\$ 495.	\$118,800	1.00
1.0%	\$ 546.	\$131,040	1.10
2.0%	\$ 601.	\$144,240	1.21
3.0%	\$ 658.	\$157,920	1.33
4.0%	\$ 720.	\$172,800	1.45
5.0%	\$ 784.	\$188,160	1.59
6.0%	\$ 851.	\$204,240	1.73
7.0%	\$ 921.	\$221,040	1.87
8.0%	\$ 993.	\$238,320	2.01
9.0%	\$1069.	\$256,560	2.16
10.0%	\$1146.	\$275,040	2.32

Payment calculations at various interest rates. Borrowed principal=\$118,800, 30-year term

Interest Rate	Monthly Payment	Total Paid	Factor (total/principal)
0.0%	\$ 330.	\$118,800	1.00
1.0%	\$ 382.	\$137,520	1.16
2.0%	\$ 439.	\$158,040	1.33
3.0%	\$ 501.	\$180,360	1.52
4.0%	\$ 567.	\$204,120	1.72
5.0%	\$ 637.	\$229,320	1.93
6.0%	\$ 712.	\$256,320	2.15
7.0%	\$ 790.	\$284,400	2.39
8.0%	\$ 871.	\$313,560	2.64
9.0%	\$ 956.	\$344,160	2.90
10.0%	\$1042.	\$375,120	3.16

For the sake of our analysis, we will use an interest rate of **7.25%** and a **30-year term**. For that loan, the monthly principal and interest payments would calculate to **\$812**.

5. Utility and other home-related service costs

Utility and other home-related services, of course, vary from household to household depending on patterns of use. The list below represents an average cost for a modest home. These are costs that are typically included in Department of Housing and Urban Development affordability calculations and are included as a cost in their 30 percent affordability rule.

- Gas \$ 45
- Electric \$ 85
- Telephone (land line, no cell) \$ 52
- Water \$ 44
- Insurance \$48
- Taxes \$ 98

Total Utilities/Insurance/Taxes \$372

6. Repair, maintenance and replacement reserve

In addition to the utility costs, home-owners encounter a variety of other costs associated with the upkeep of the property. Repairs and maintenance are everyday costs that average out to a monthly cost. Replacement reserve is a term more often associated with commercial residential real estate, but represents an important principal for homeowners. Replacement reserve is intended for those large, expensive costs that fall in predictable cycles—roof replacement, water heater replacement, etc.—but that typically cannot be afforded when needed from the monthly family budget. Prudent homeowners (like apartment complex owners in their *pro formas*), set aside money each month on a scheduled basis so that those funds are in place every five, ten, fifteen, etc. years when needed. (A more sophisticated analysis of life-cycle costs might explore the correlation between the quality of the housing first cost construction and the monthly repair, maintenance, and replacement reserve that will be required for upkeep in the long term.)

- Repairs and maintenance \$100
- Replacement reserve \$ 80

Total Monthly Upkeep Cost \$180

An Additional Comment about New "Costs of Housing"

In the rapidly changing world of 2008, several key costs have begun to assert themselves in any reasonable conversation f housing costs. Two costs fall into this category, Transportation and Information:

Transportation as a Housing Cost

In the first years of the 21st century, a new phrase has entered the lexicon of real estate professionals and housing cost analysts: "Drive 'til you qualify." What this has come to

mean is that entry-level home buyers are looking to the physical edges of communities for the most affordable housing. The housing boom in Pinal County has been largely attributed to homebuyers employed in the Phoenix and Tucson metro areas. For every five homes built in Pinal County in the last four years, one job was created in Pinal County. This distance commute residential model was based on the assumption of relatively affordable gasoline. As gasoline prices soar to around \$4.00 per gallon, the cost of automobile fuel effectively becomes a cost of housing. The very high foreclosure rate of homes in this "drive til-you-qualify" geographic ring (see the work of the Scott Bernstein at the Center for Neighborhood Technology, http://htaindex.cnt.org) is an alarming development in home affordability analysis.

Information as a Housing Cost

The explosion of information technology has added new components of cost to the family budget and has a direct effect on housing affordability. The cost of multiple family member cell phones, DSL internet connections, cable television, and other data sources all must ultimately come from the list of monthly checks written by homeowners. So, while these new and growing technology costs are not in and of themselves housing costs, they compete for the housing resources from the same household paycheck(s).

Monthly Housing Cost Analysis

Armed with the figures above, the next task is to construct an affordability analysis based on the income of the family and the monthly costs of our housing cost model.

Example: \$132,000 house with a \$118,000 mortgage with a 30-year term at 7.25%.

Calculation of monthly cost:

Monthly Mortgage Payment (Principal and Interest; 30 year at 7.25%) \$ 812 Utilities and Services \$ 372 Repairs, maintenance and replacement reserve \$ 180 Monthly cost to owner \$1,364

Using the 30 percent rule, the Gross Family Income must be \$1,364/.3 = \$4,547 x 12 = \$54,560 annual gross income. For a family of four in Pima County in 2008, \$54,560 is just slightly above the median income. This is an income that you might find in a fully employed, two-income family in which the primary income might be an entry level public school teacher at \$32,000 and with a secondary income that might be a secretary or a security guard employed at \$11.28/hour or \$22,560 per year.

Monthly Payment Sensitivity Analysis

To understand the costs of housing and the way they interact, let's pre-suppose an affordability problem. Suppose for the sake of the discussion, that the second income was instead a child-care worker at \$9.28 per hour instead of \$11.28. The total secondary income would be $\$9.28 \times 2,000$ hours = \$18,560. That would reduce the Family Income from \$54,560 to \$50,560, just about at the median income for Pima County. Doing the same math in reverse, $.3 \times \$50,560 = \$15,168$ available for housing per year divided by 12 = \$1,264 available per month for housing costs.

The previous monthly cost was \$1,364. The revised monthly cost to make the house affordable for this lower income is \$1,264. The difference is \$100. How can the monthly cost be reduced by \$100? The ways by which this might be accomplished are very instructive:

Strategy #1: The traditional construction cost reduction.

Reduce the construction cost by an appropriate amount so as to reduce the monthly payment by \$100. The mortgage payment would need to be reduced from \$812 to \$712. Using a different amortization table, this means at 7.25%, 30-year term, the loan would need to be reduced from \$118,800 to \$104,375 or a reduction of \$14,425. Using the construction cost analysis above, how might the construction cost be reduced by \$14,425?

Looking first at hard costs, a \$14,425 reduction in total construction cost translates into a \$11,350 reduction in hard costs (\$14,425 x .787). The absurdity of the following alternatives demonstrates that this is a nearly impossible task:

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o Eliminate the exterior walls (=$10,864)
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- \circ Eliminate the interior wall framing and the cabinets (\$8,463 + \$2,727 = \$11,190)
- \circ Eliminate the roofing and roof framing and the electrical (\$6,867 + \$4,876 = \$11,743)
- o Eliminate all finishes (= \$11,799)
- \circ Eliminate all plumbing and electrical (\$6,826 + \$4,876 = \$11,702)
- \circ Eliminate site work, foundation and floors (\$3,522 + \$7,834 = \$11,374)
- \circ Eliminate insulation, sealants, doors, windows, hardware, and equipment (\$2,225 + \$6,770 + \$2,514 = \$11,509)
- o Etc., etc.

Looking next at trying to solve the problem by addressing soft construction costs alone, a full total of \$14,425 must be eliminated.

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\circ Eliminate overhead, profit and taxes ($4,549 + $5,732 + $4,799 = $15,080)
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- \circ Eliminate general conditions, taxes, and half of profit (\$7,531 + \$4,799 + \$2,866 = \$15,196)
- o Etc., etc.

Strategy #2: The land development cost reduction.

Looking next at development costs a full total of \$14,425 must be eliminated.

- o The land has to be free (\$13,300)
- \circ The rezoning cost, permits and review and infrastructure cost need to be eliminated and the raw land cost need to be reduced by \$2000 per lot. (\$1,856 + \$9,421 + \$1,400 + \$2000 = \$14,677).

Strategy #3: Eliminate the down payment.

The down payment by the Owner from savings in the example presented was \$13,200. If the down payment by the Owner were subsidized (matched) by an equal amount (by a cash down payment subsidy program, a common practice among homeowner subsidy programs), this would reduce the loan by an additional \$13,200 and get the monthly cost reduced by almost \$100.

Strategy #4: Eliminate all of the closing costs.

The closing costs in the example presented were \$3,244. Eliminating the closing costs allows the owner to reduce the loan by an equal amount, but that falls \$11,000 short of the goal.

Strategy #5: Reduce the interest rate.

Using the amortization table for \$118,800 loan at 30-year term, the interest rate that would lower the monthly payment to \$712 is 6% or a 1.25% reduction in the interest rate.

Strategy #6: Reduce the monthly cost of utilities and services by the \$100 monthly goal

Eliminate the property taxes on this home (= \$98)

Reduce the energy cost (gas + electric = \$130) by 78%.

Eliminate the insurance payment and the telephone bill (\$48 + \$52 = \$100)

Reduce the energy and water use by (gas + electric + water = \$174) by 57%.

Strategy #7: Reduce the monthly cost of repairs and replacement reserve

Make no repairs or do no maintenance on the home (=\$100)

Save no money toward future large repairs and defer the maintenance on \$20 per month or \$240 per year. (\$80 + \$20 = \$100)

Finally, suppose that the secondary member of the family went from full time to half-time. The total family income would be further reduced from \$50,560 to (\$32,000 + \$9,280 = \$41,280) to \$41,280. This family now can afford .3 x \$41,280 or \$12,384/year divided by 12 = \$1,032 or a reduction of \$332 per month required (\$1,364 - \$1,032 = \$332) from our first example of affordability. If \$100 per month reduction required such draconian reductions in cost, what would it take to reduce the cost by \$332?

And yet, in Pima County this would put the income of this family at about 82 percent of median income, meaning they would not qualify for any federal housing assistance program (HUD programs require a family to be at 80 percent of area median income or below to qualify for any HUD sponsored housing assistance program).

Conclusions from the Quantitative Analysis

Based on the foregoing information, these are some conclusions that can be derived regarding housing cost and, in particular strategies, for lowering housing cost:

- The important cost from a consumer perspective is the monthly outlay of funds. Housing cost from a consumer perspective is a homogenized set of monthly payments. From the consumer perspective, each dollar is equal. A dollar of mortgage equals a dollar of tax equals a dollar of insurance equals a dollar of electric energy cost. These days, depending on where the house is located, it may also equal a dollar of gasoline cost.
- The cost of housing is based on many factors in addition to the cost of actual construction. This opens up a much wider area for affordable housing strategy and public policy to reduce housing cost. A careful look at each of these variables may create many more opportunities for reduction in housing cost.
- Some traditional strategies may not be as effective as one imagines.
 - Solving the problem with creative design solutions may be less effective than usually perceived by the public.
 - Solving the problem with new technologies and building systems may be more effective if they focus on monthly costs of water and energy rather than reduction in first cost.
 - Solving the problem by reducing labor costs through off-site construction may only exacerbate the problem as these lower paid workers, in turn, cannot afford housing.
 - Solving the problem by reducing housing quality in an effort to reduce housing cost may not reduce costs very effectively and may reduce the life cycle value of the home in the long run. Making first cost savings at the expense of future monthly maintenance, repair, and replacement reserve costs appears to be a very unwise strategy.
- A comprehensive strategy for housing cost reduction takes a strategic view of these costs. An analysis of the relative sensitivity of these costs may provide a very different set of approaches toward housing cost reduction. Interest rate reduction, energy conservation, and tax abatement start to join construction cost reduction and land price reduction as viable, and perhaps more effective, housing cost reduction strategies.

Chapter 8

HOUSING CHOICES

Steve Hullibarger and John Glaze

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Key Points

- There are two major types of factory-built housing: manufactured and modular.
- Factory-built housing is now strictly quality-controlled, yielding products that can have several advantages over site-built housing.
- There are barriers that often limit the installation of manufactured housing in municipalities.
- While some rental housing is dilapidated, most is in good condition, including the majority of units that house the lowest income segment of the population.
- Some people prefer to rent rather than own, regardless of their income level.
- It has been shown that rental housing in itself does not devalue a neighborhood.
- The rental market is seeing changes as a result of the current mortgage crisis.

Introduction

This chapter will look at some of the alternative housing choices available to consumers. While single-family, detached, site-built, owner-occupied housing is predominant throughout Arizona, there are other options that are desirable to some residents. These include factory-built housing and rental housing. In the following pages we will explore aspects of factory-built and rental housing as important parts of the spectrum of available options.

Factory-Built Housing

Factory-built housing—in its various forms—has been successfully providing affordable and durable shelter for millions of Americans for decades. Mostly treated in the past as peripheral to site-built home construction, new designs and construction technologies are bringing this method of construction to the forefront in many large American markets.

What is Factory-Built Housing?

Factory-built homes can be as simple as stacks of lumber pre-cut to exact dimensions, then assembled completely on site. However, the two major types of factory-built housing are manufactured and modular homes. For manufactured housing, factory construction supplies wall sections already framed and insulated, a process known as panelizing. Modular housing involves the building of three-dimensional structures which are transported to the site, then joined together on a foundation. While most site-built homes have some components that are partially assembled in factories, manufactured and modular homes are the most fully developed examples of combining manufacturing technology with site-specific aesthetic and finishing work. In fact, most factory-built homes today are true hybrids.



Figure 8.1: Two-story manufactured home consisting of three factory-built sections, completed with the on-site construction of a garage

Source: Steve Hullibarger

on-site with porch and detached garage

Figure 8.2: Modular home constructed and transported in four modules, enhanced on-site with porch and detached garage

Source: Steve Hullibarger

In the United States today, factory-built housing has universally excellent safety and quality. The modular home is constructed in the factory under building codes designed for site-built homes. These codes are normally adopted by states or local governments from established model codes, such as the International Residential Code (IRC). The manufactured home is constructed in the factory under the National Manufactured Housing Construction and Safety Standards, also known as the HUD Code, inasmuch as it falls under the auspices of the U.S. Department of Housing and Urban Development. In Arizona, the vast majority of factory-built homes are constructed under the HUD Code. This is principally due to the fact that the HUD Code was enacted, in 1974, to facilitate the large scale factory production of homes. The HUD Code is preemptive of local building codes, and it enjoys full reciprocity between the states.

Manufacturers who obtain certification and approvals to build and sell HUD-code homes may deliver them to any location in the country without having to make myriad changes that would be needed to do the same thing with a modular home. This enables the factories to standardize their construction methods, stabilize their material needs and allow their employees to become very good at what they do.

Structural quality comes from the requirement that each factory-built home, and in particular, manufactured homes, be fully engineered as a monolithic entity. Before receiving approval to build, the HUD-code manufacturer must submit a full engineering package, including energy conserving elements, for evaluation and authorization. Critically, the home must be capable of withstanding severe vibration and racking forces that are imposed upon it as it travels the highway. Site-built homes are not subject to this condition. Once the factory-built home is affixed to its foundation, it is better suited to withstand natural forces such as high winds and earthquakes.

Factory-built homes, particularly the three-dimensional modular homes, offer numerous advantages over on-site construction. By transferring the bulk of the building work to an industrial location, the opportunity to cut the cost of housing is ever-present, although not always realized. The speed of construction is greatly enhanced, and it results in savings for all time-sensitive costs, such as construction financing, taxes, and insurance. This speed also reduces nuisance activities such as noise and the generation of waste. On individual job sites, factory-built homes are less vulnerable to summer thunderstorms, material thieves, and curious children than on-site construction, which is difficult to secure.

Today's Factory-Built Housing Industry

There are differences between the make-up of the site-built housing and the factory-built housing industries, which should be understood by those who wish to utilize factory-built homes. Prior to the actual construction of residences, site development planning and execution is essentially the same, up to the conclusion of developing finished lots, ready for homes. At that point, the two construction methods diverge.

Any general contractor can typically build any home. Therefore, the characteristics of the homes are derived from market analysis and the application of design elements suitable for the location. General contractors employ a variety of subcontractors to complete specific parts of each house. Manufacturers operate their factories year-round. They offer homes that appeal to the widest possible market. There are limits to what they can offer, although most manufacturers are capable of modifications to meet a developer's needs. The manufacturers sell their goods to independent developers, builders, and retailers.

When considering factory-built homes, the existing construction features of the manufacturers need to be taken into account. No manufacturer can custom-build homes for all of their clients without suffering an efficiency impact on the production line. Therefore, the best marriage of factory and site involves some compromises on both sides in order to obtain the best home at the lowest cost.

Arizona is a manufacturing center for the Southwest. There are numerous factories located in the Phoenix area, building both modular and manufactured homes. In 2007, these factories constructed over 4,300 new homes. In addition, large numbers of homes are brought into Arizona from factories in New Mexico, Texas, Colorado, and California.¹

Building Homes in Factories

Factories are great places to build homes. Ranging from 50,000 to 200,000 square feet or more, the manufacturing center creates a favorable work environment for its people and shelter for raw material and partially-completed homes. Before entering production, the manufactured home plant must receive certification from HUD. This certification is earned when the company demonstrates that it is capable of building its approved homes with reliability of effective quality control. Management consists of a general manager and department managers for purchasing, production, sales, quality control, engineering, and

warranty service. Manufacturers invest in machinery, tools, construction tables, racks, bins, hoists, pneumatic systems, and a wide variety of other essentials to operate the factory. A plant may employ from 100 to 300 persons.

Beginning with the construction of the floors, the homes move down the assembly line from station to station, with between 15 and 25 stations being the norm. The production manager supports a staff of supervisors who lead crews typically in the mill, floor, cabinet, sidewalls, interior walls, ceiling, electric, windows, exterior siding, roofing, drywall, painting, and finish departments. Along the way, quality control staff constantly monitor and check key aspects of the home. System tests, such as electric and plumbing are performed and the results recorded. Third-party in-plant inspections are required under the HUD program. At normal production rates, it takes between four and six days for a house to be built in a typical factory. Once completed, tested, and fully inspected, the house is prepared for transporting to its destination, including wrapping open sides with the familiar plastic bearing the manufacturer's logo.

There are several not-so-obvious benefits that accrue to homeowners from having their home built in a factory. Because all material is protected against dirt and rain, the factory-built house has almost no exposure to concealed moisture or other potentially harmful elements. Walls and ceilings tend to be much more square and true than those built on an uneven surface on a job site. The home is engineered to resist dynamic transportation stresses and is capable of withstanding excessive natural forces. Many assembly practices and materials that are possible in the factory, but not possible in the field, yield superior performance results and enhance longer term durability.

Barriers to the Greater Use of Factory-Built Housing

Unfortunately, the wider use of factory-built homes has been stymied by perceptions that this type of construction is both unsafe and out of character for most neighborhoods. This image is a hold-over of the negative stereotype of the mobile home. As a result, many jurisdictions impose severe restrictions on the placement of manufactured or modular homes. This perception was justified in the past, but it now hinders the legitimate use of well-designed and durable homes from where they could enable families to invest in their own homes.

In recent decades, the evolution in design for factory-built homes has picked up speed. In 1980, seeking to open up the wider application of manufactured homes to help solve runaway housing costs, the California legislature enacted a law that requires cities and counties to allow the placement of manufactured homes in residentially-zoned areas. To qualify, the homes are required to meet tests of architectural compatibility, be placed on permanent foundations, and meet all other development standards in effect for each location. Since 1980, literally thousands of manufactured homes have been utilized in a wide range of California developments and infill properties, in suburban and urban locales. Today, it is very difficult to distinguish the manufactured home from its neighboring structures in city after city. In more recent years, other states have enacted similar legislation, including Nevada, Oregon, and Washington.

When pursuing such legislation, the most common practice within cities is to employ a professional architect to create physical modifications and enhancements to the homes in order to assure a good visual match to the neighborhood context. Popular enhancements include the on-site construction of attached garages and porches, upgraded roofing such as tile, a variety of window and door ornamentation and, where appropriate, the application of stucco exteriors. Two-story homes are now available and are increasingly used on smaller, more expensive lots. In order to achieve higher roof pitches (which have previously been limited by freeway underpass heights), factories now make use of a special hinged roof truss that allows the home to stay within height limits while in transit, yet results in roof designs that can meet any criteria. In Arizona, the manufacturers, in concert with in-field architects and contractors, are producing more and more homes with distinctive Santa Fe or territorial looks.



Figure 8.3: Manufactured home in Southwest style

Source: Steve Hullibarger

In addition to private development companies, an increasing number of public housing entities and non-profit housing corporations are using factory-built construction. Lending their support and encouragement are NeighborWorks America (www.nw.org/) and the Corporation for Enterprise Development (http://www.cfed.org/).

As has been shown in California, when regulatory barriers are removed and replaced with intelligent qualifying criteria, factory-built homes can contribute to the greater affordability of housing, especially for those of limited means.

Rental Housing

As a housing option, rentals are often thought of as a temporary and undesirable situation. Housing professionals often see it as their mission to extract people from their condition as renters. After all, the American Dream of the accumulation of wealth and the attainment of household stability are irretrievably linked with homeownership.

Who Rents?

The answer to that is "most all of us, at one time or another." Most current homeowners rented before they purchased. Students rent, people who move a lot following jobs or dreams rent. Elderly people who do not want to deal with weedy yards, leaking hot water heaters, or Home Owner Associations rent. People live in rental units for reasons of convenience and lifestyle as well as for financial reasons. Currently, there are approximately 760,000 renter households in the state of Arizona. That represents a little more than 30 percent of the total number of households.

Some people think of rental housing as a repository for our poorest households. To a large extent, that is true. Most low income people live in rental housing, and many of them are living in substandard housing. Yet almost 57,000 very low income households in Arizona live in decent, affordable rental housing whether it is government-funded public housing, Low Income Housing Tax Credit projects, or the Section 8 rental program (see Glossary for details).

Rental housing is not strictly the domain of low income households. Think of the occupants of the high-rise apartments in Manhattan. In Arizona, there are A-plus rental properties in places like Scottsdale and Paradise Valley where we can find high-end rentals abutting world class resorts. There will always be people, regardless of income, who prefer to rent their housing. Studies are mixed on the impact, if any, of rental housing on neighborhoods. (See Chapter 4, "How Housing Matters: Strengthening the Quality of Life," for further discussion of rental housing and citations.)

Rental vs. Homeownership

It is not really an issue of one versus the other. Both types of housing are needed and their fate is interrelated. Moreover, while there are some federal programs that provide subsidies for low income renters, the amount of resources applied to renters pales to insignificance when viewed alongside the monetary benefit that accrues to homeowners through federal tax deductions based on mortgage interest.

The American dream of homeownership encompasses the notion that your home is actually an investment whose value will increase. While that has generally been the case, recent events have shown the opposite. Home prices in most of Arizona have fallen over the last three years and are still in decline. Many homeowners have lost equity, savings, and their creditworthiness. Arizona has the third highest rate of foreclosures in the United States.

According to Realty Trac, more than 53,000 new foreclosure filings have occurred in Arizona so far this year. Almost all of these former homeowners have now become renters out of necessity.

Our current national financial situation has many causes, but the role of sub-prime mortgages is commonly accepted. Angelo Mozilo, the CEO of Countrywide opined that no one should be denied homeownership for lack of a down payment, but this is debatable. Remember those late night infomercials that were so ubiquitous not long ago where we were told that we could make a personal fortune by purchasing homes with little or no down payment and renting them in this explosive market? Many of those speculators wound up leaving their keys in the mailbox and walking away. Part of the problem came from a system that was overly zealous in its desire to turn renters into homeowners. Prospective homebuyers were allowed to sidestep the real challenges to qualify for that responsibility.

Providers of rental housing are being profoundly affected by the current crisis. Owners of multifamily housing in Arizona were already dealing with high vacancy rates partly because, until recently, financing for homeownership was widely available and the state's employer sanctions law forced many renters to leave Arizona. Now there is a glut of empty homes owned by speculators and available for rent. Financing for construction is hard to come by and apartment communities which were financed through the sale of bonds can be looking at steep increases in their payback rates.

Rental housing is a large and important component in our efforts to provide safe, decent, and affordable housing choices. The current financial climate is affecting rental as well as owner properties, and it is important to consider both types of housing as we move Arizona's housing policies forward.

Endnotes

¹ Manufactured Housing Institute, 2101 Wilson Blvd., Suite 610, Arlington, VA 22201; www.manufacturedhousing.org

Chapter 9

RESOURCES FOR AFFORDABLE HOUSING

Gary Bachman

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Key Points

- The role of the federal government in developing and implementing policy and funding affordable housing has decreased.
- Entitlement funding through Community Development Block Grants and HOME provides flexible resources for housing.
- As the role of the federal government declines, new resources are being sought to invest in, and preserve affordable housing.
- Established in 1988, the Arizona Housing Trust Fund serves as a successful model, providing a flexible resource to meet local needs.
- Communities in Arizona are studying ways to establish local trust funds to support affordable housing efforts.
- Employers are providing housing subsidy as a means to retain employees in difficult markets
- Community Land Trusts are a way to permanently preserve public investment in affordable housing.

Introduction

This chapter is intended to be a survey of the resources that are used to assist in the development of affordable housing in Arizona. New and innovative ideas are being tested in communities. The field grows and evolves. It will become apparent that the development and preservation of affordable housing is a complex process. Historically, the financing of housing developments, for instance public housing, may have looked very similar. Today's projects are financed with various layers of funding, both public and private, each resource containing diverse, perhaps even conflicting requirements. A dichotomy can be formed between resources that are from the public sector (federal and state programs), and those that may be considered from the private and non-profit sectors. The latter are more diverse in scope, including private capital raised from the allocation of public sector tax credits. This

paper does not discuss financing, i.e. long and short term loans. However, reducing the costs of borrowing and the mechanisms that make financing available are critical to the production of affordable housing in the United States. The range of innovative strategies that have been developed becomes even more important when we explore the decline in federal housing funds in recent years (see Figure 9.1).

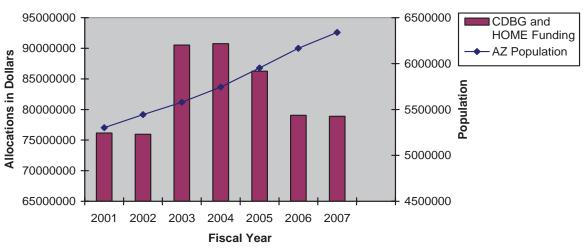


Figure 9.1: CDBG and HOME Funding vs. Arizona Population Growth, 2001-2007

Source: U.S. Census Fact Finder and U.S. Dept. of HUD

The decline is significant because it is measured in actual dollars, not adjusted to account for inflation. For instance, many communities now receive the same amount of federal funds as they did in the mid-1990s. The challenge in each community is to develop housing that is affordable to the community in an environment of declining resources, increased costs, and complex development standards and in many cases community resistance.

The mission for "housers" has expanded beyond providing "safe, decent, and affordable" housing for the working poor and farm workers to include assistance to vulnerable populations such as the elderly, homeless, and those with disabilities; and insuring access to the benefits of equity and wealth-building that is provided through homeownership. Resources are not just measured in funding amounts. As the complexity of how the resources are used becomes apparent, local capacity emerges as an issue. Persons who are knowledgeable are needed in government, non-profit, and private sectors. A critical mass of funds, skilled people, organizations, political will, and real estate are factors that make affordable housing possible.

Public Resources

U.S. Department of Housing and Urban Development (HUD) Programs

HUD distributes entitlement funds for four programs. These include the Community Development Block Grant (CDBG), HOME, the Emergency Shelter Grant (ESG), and

Housing Opportunities for People with AIDS (HOPWA).

Community Development Block Grant (CDBG)

The Community Development Block Grant program was created in 1974. Each year Congress appropriates funds which are distributed by formula to states, cities, and large counties as entitlements. Funds can be used to address locally-determined priorities based upon three national objectives:

- benefit low- and moderate-income persons
- prevent or eliminate slums or blight
- address community development needs having a particular urgency

Communities of 50,000 in population and "urban counties" with a population of over 200,000 in non-entitled and unincorporated areas can apply to receive CDBG funds. A distribution of funds through an entitlement process such as CDBG is based upon need. The continued proliferation of local resources may benefit wealthier communities who are willing to allocate surplus resources, while placing poorer and less organized communities at a disadvantage.

While not specifically a housing program, the CDBG program has made significant contributions by providing the block grant model for the distribution of funds for future community-based programs. Local governments receive the funds, determine priorities, and distribute funds based upon local capacity and effectiveness in using the funds. Most recipient jurisdictions dedicate a significant portion of CDBG funds to housing rehabilitation programs, providing necessary repairs to the increasing number of aging housing. This resource also assists with the development of housing through means such as the acquisition of land, development of on- and off-site infrastructure, down payment assistance, housing counseling, and interest subsidies.

HOME Investment Partnerships Program

The HOME program came about as a result of Title II of the Cranston–Gonzales Affordable Housing Act of 1990 and the creation of HOME Investment Partnerships. (HOME may have been an acronym at one time, but now the term refers to the program). This program is designed to expand the supply of decent affordable housing for low- and very low-income families and individuals. While HOME funding consists of a small amount of HUD's budget, it has dictated a strategy that governs affordable housing development today:

- Participation by the private sector by using federal grants to leverage investment
- Mixed income (allowing a range of incomes within one development)
- Flexibility in use funds can be in the form of grants or loans
- Formation of regional groups (consortia) to administer grants
- Participation of non-profit housing developers
- Requirement of matching funds

Today, it is hard to imagine an affordable housing project being developed without the use of HOME funds. As with CDBG, funds are allocated to jurisdictions which meet certain threshold requirements. Units of local government that do not meet the threshold

requirements can join with other geographically contiguous governments to form consortia, thereby becoming entitlements. In Arizona, there are two entitlement jurisdictions, the State of Arizona and Phoenix, as well as two HOME Consortiums, City of Tucson/Pima County and Maricopa County. In the HOME program these are called Participating Jurisdictions (PJs). The State of Arizona through the Department of Housing allocates funds to projects in areas that are not located in the urban counties (Pima and Maricopa) and cities. Funds are available for four primary purposes:

- Development of rental housing
- Subsidy for homeowners and/or homeownership development
- Rental assistance
- Rehabilitation of owner-occupied housing

It was recognized that in many regions affordable housing is not likely to be developed solely by the private sector, and it is necessary for non-profit organizations to become active producers if HOME was to achieve successes. Therefore an important feature of the HOME program is the requirement that makes funding available to qualified non-profit developers. The Certified Housing Development Organization (CHDO) set-aside, is mandated for each jurisdiction to allocate at least 15 percent of their annual allocation to fund the development of new affordable housing units, either rental or ownership.

An additional requirement is that jurisdictions match the allocation of HOME funds with local resources. The 20 percent match requirement has not been a barrier to the allocation of funds in Arizona. Indeed, since inception, \$322,733,537 in allocations have been received, and a total of 9,157 units have been developed to date. (Note: there is not a direct link between allocations and units developed, as jurisdictions have up to five years to complete projects). In addition to funding affordable homebuilding projects, a small portion of funds are allocated through the HOME program for the purpose of providing down payment assistance to first-time buyers, known as The American Dream Down-payment Initiative (ADDI).

While seemingly flexible in its purposes and uses, an array of requirements and regulations govern HOME program application, and practices differ between jurisdictions. PJs are responsible for insuring that "affordability requirements" are met. These include meeting rent and income guidelines as well as checking that the units receiving subsidy are occupied by eligible residents during a period that varies according the amount of subsidy provided to each housing unit.

Other HUD Entitlements

In addition to CDBG and HOME, funding through the Emergency Shelter Grant Program (ESG) and Housing Opportunities for People with AIDS (HOPWA) are distributed to communities. The ESG program provides funding for the operations and maintenance of emergency shelters and transitional housing, which are supportive services for the homeless and homeless prevention. Housing Opportunities for People with AIDS (HOPWA) funds are distributed to the two metropolitan areas in Arizona and are used to provide housing and supportive services for those with HIV/AIDS and their families. Table 9.1 illustrates

the distribution of funds to communities in Arizona (Note: Funding for CDBG and HOME programs has not grown with the increase in Arizona's population. Increases in funding in 2003-2004 were due in part to new entitlements).

Table 9.1: 2008 Arizona Entitlement Allocations

City	CDBG	HOME	ADDI	ESG	HOPWA
AVONDALE CITY	488,409	0	0	0	
CHANDLER	1,385,141	0	0	0	
FLAGSTAFF	610,025	0	0	0	
GILBERT	662,605	0	0	0	
GLENDALE	2,201,030	0	0	97,881	
MESA	3,383,197	0	0	151,133	
PEORIA CITY	656,918	0	0	0	
PHOENIX	16,845,609	6,338,128	51,900	749,013	1,541,000
PRESCOTT	290,372	0	0	0	
SCOTTSDALE	1,152,250	0	0	0	
SURPRISE TOWN	358,363	0	0	0	
TEMPE	1,592,703	0	0	0	
TUCSON	6,102,204	3,999,874	33,245	272,788	411,000
YUMA	923,387	0	0	0	
MARICOPA COUNTY	2,167,757	5,198,845	46,065	96,521	
PIMA COUNTY	2,560,535	0	0	113,037	
ARIZONA STATE PROGRAM	11,793,037	7,884,650	33,408	873,061	191,000
TOTALS	53,173,542	23,421,497	164,618	2,353,434	2,143,000
14 Entitlement Cities 2 Entitlement Counties			•	•	· · · · · · · · · · · · · · · · · · ·

Source: U.S. Department of Housing and Urban Development

Housing Trust Funds

Communities across the United States are tapping into Housing Trust Funds, or are engaged in campaigns and initiatives to start one. Trust funds provide resources that in many cases supplant lost federal funds, and in other situations fill gaps or meet locally identified needs not met with other grant programs. Throughout the U.S., the number of trust funds in states, counties, and cities has increased since 2000 to now number 600, generating nearly \$1.6 billion in revenues.²

Housing Trust Funds capture revenue sources that are dedicated by ordinance or law, with the purpose of providing affordable housing while meeting other local needs such as emergency

assistance. The intention is to provide a consistent and regular funding stream. While ordinances may specify purposes and uses, typically a governing body provides oversight to the trust fund, guiding policy and in many cases reviewing and approving projects. Funds may be allocated in the form of grants or loans. Some trust funds are dedicated to specific populations such as the homeless, or may be targeted to underserved population such as the very poor.

Dedicated revenue streams may emanate from two general sources: taxes and fees. Taxes are collected by local government and may be allocated to a specific use. On the other hand, fees are related to a service, and a nexus needs to be established between the source of revenue and the purpose for which it is used. Pennsylvania and Massachusetts are two states which have created opt-in provisions where a county or jurisdiction may choose to collect fees for housing trust funds, allowing counties to collect recorder fees, and a property tax surcharge respectively. Real Estate Transfer Taxes or fees and document recording fees constitute important resources for many trust funds. Additional sources include development and impact fees. Eleven states and Washington D.C. provide a form of transfer tax for housing trust funds.

The recently passed *Federal Housing and Economic Recovery Ac*t established a National Housing Trust Fund. Under this Act, a portion of profits from Fannie Mae and Freddie Mac will be allocated to the trust fund for the purpose of providing subsidy particularly targeted to lowest income populations.

Arizona Housing Trust Fund

In the six years since the establishment of the Arizona Department of Housing in 2001, a total of \$112,572,059 has been distributed from the *Arizona Housing Trust Fund* serving a total of 58,449 households.³ Arizona's Housing Trust Fund was founded by an act of the Arizona Legislature in 1988. It is funded from the State's Unclaimed Property Fund (escheats), of which 55 percent is allocated to the Trust Fund. Approximately 36 percent of the funds are reserved for rural areas. The fund grew in annual allocations from approximately \$3 million in 1988 to \$25 million in 2008.⁴ The Department combines the Trust Fund with its HOME program allocation to create a State Housing Fund, providing a single application for both resources.

Activities funded in recent years include: rental development, emergency/transitional housing development, operating subsidy for transitional and emergency housing, homeless prevention, homeownership development, owner-occupied housing rehabilitation, down payment assistance to homebuyers, funds for the Arizona Housing Finance Authority, and Planning and Administration.

Local Trust Funds in Arizona

In Arizona, only Tucson and Pima County have established Housing Trust Funds, but both continue to seek more consistent and dedicated revenue streams. Tucson has allocated general funds, condominium conversion fees, and other sources to their trust fund. Pima

County has instituted a voluntary "roof top fee" for homes sold in newly approved subdivisions in the unincorporated areas. In addition to Tucson and Pima County, Tempe, Sedona, Flagstaff, Prescott Valley, and other communities have been studying potential revenue sources and are at different stages of creating trust funds. However, at this time only counties and charter cities have the ability to establish Housing Trust Funds.⁵

Private Resources

Low Income Housing Tax Credits (LIHTC)

The Federal Home Loan Bank's Affordable Housing Program (AHP) and Low Income Housing Tax Credits (LIHTC) are major and widely used resources found in many projects. Tax credits are an investment and financing tool, and likely represent the largest source of investment/equity financing in affordable rental developments. In the years 2003-2008, the State of Arizona was awarded \$71,587,422 in tax credits, creating 7,064 units of affordable rental housing.⁶

Each state receives a per-capita allocation of credits, which has currently and temporarily increased to \$2.20. Administered by the housing finance agency of each state (in Arizona, the state Department of Housing), a Qualified Allocation Plan (QAP) specifies the priorities and funding plan for the state. Projects are selected through an annual competition and credits are invested in projects in the form of equity. In return for the capital contribution, investors receive shelter from income tax liabilities for losses resulting from the investment in rental projects. Rents are capped, and residents must meet income restrictions.

Affordable Housing Program

Each of the eight branches of the Federal Home Loan Bank is required to invest a portion of their profits into affordable housing. Arizona is served by the San Francisco Bank. The Bank has semi-annual competitions, with applications submitted by member banks. The awards are made as grants, and as a result are highly competitive. Funds can be invested in rental and homeownership projects. In 2006, a total of \$54.9 million was awarded in the two funding rounds of which \$10.7 million was awarded to 21 projects in Arizona.⁷ The Bank also offers for matching funds for low-income buyers who create savings accounts.

Employer-Assisted Housing

Housing as an employee benefit is more widespread than many people realize. Housing allowances and housing are provided with many jobs, including the President of the United States, governors, military, executives of large corporations, and clergy. Housing has historically been provided by mines to their employees, especially in isolated communities. Consider the Town of Ajo, where the Phelps Dodge Corporation constructed and maintained hundreds of homes for mine employees and their families.

Given this background, it is surprising that employers often overlook the need to provide assistance to their employees to maintain workforce stability. Many employers are coming to realize that as housing costs increase (especially in high cost communities), the ability to attract and retain employees in lower and middle salaried positions is often related to the ability of their employees to secure affordable housing. This is particularly true for large, mission-driven institutional employers such as hospitals and universities in urban areas and municipalities who now are concerned about response times for emergency personnel.

Human Resources administrators suggest three concerns:

- They are not housing administrators
- There are tax consequences of providing direct assistance to employees
- Many employers may be wary about obligating resources for an additional and potentially costly benefit.

Non-profit housing counseling agencies in partnership with local governments are prepared to provide technical assistance, HUD-certified counseling to qualified potential home buyers, and administer programs on behalf of employers. Agencies classified as 501(c)(3) can accept tax-exempt contributions on behalf of employers, which can be used to assist employees. Programs can be customized to meet specific employer requests or requirements. Legislation has been written at federal and state levels to exempt employee assistance programs from tax consequences. Costs of programs do not need to be excessive; small contributions can be used to leverage funding from local resources. Resources can be as cost-effective as providing opportunities for staff to participate in counseling sessions or other in-kind incentives or assistance.

Long Island Housing Partnership

One of the oldest EAH projects in the country operates in Suffolk and Nassau Counties in New York. Long Island has high housing costs (the median home price is \$478,800), and the inability to continually grow. Despite having several universities and good quality jobs available, many graduates leave Long Island because of the prohibitive costs of housing. Northrop Grumman is an aerospace contractor that has worked with the Long Island Housing Partnership to implement an EAH program. The program assists employees up to 130 percent of the median income, providing grants of up to \$5,000. This in turn leverages grants of up to \$15,000 from federal grants, as well as funds from a program established by the State of New York to assist employer housing benefit packages. Loans are also available to assist with housing rehabilitation. The program also provides rental assistance for employees. As of October 2007, nine employees have received down payment assistance, and more than 20 employees have participated in homebuyer education programs, making them candidates to become owners.

Land Trusts, Land Banks, and Community Land Trusts

Land Trusts, Land Banks, and Community Land Trusts have similar and sometimes overlapping purposes, are often confused, and are playing increasingly useful and important roles in affordable housing programs. Community Land Trusts, Land Banks and Employer

Assisted Housing (discussed earlier) represent places to "park" capital for eventual investment in housing; or the preservation of subsidy.

A *land trust* is a private entity that holds land for a particular purpose. A common purpose of a land trust is to set aside property in trust for conservation purposes. However land trusts can serve other public purposes. Recently, the Southern Arizona Land Trust (SALT) was formed by the Industrial Development Authority of Pima County for the purpose of purchasing and holding land and homes for affordable housing and economic development. Essentially the purpose of SALT is to act as a *land bank*. Most government resources cannot be used for this purpose, therefore this is an activity that requires the use of private capital. While the obvious benefit of land banking is the ability to reserve real estate at pre-speculative values, it is more frequently used as a method to assemble sites for a larger project.

Community Land Trusts

The primary purpose of a Community Land Trust (CLT) is the long-term preservation of affordable housing. The device that a CLT uses to preserve affordable housing is to divide the ownership between land and its improvements (the house). The land is owned by the CLT, and permanently leased (by a 99-year lease) to the occupant/owner of the home. If and when the owner/occupant decides to sell the home, the lease stipulates that the CLT has a right of first refusal to repurchase the home at a price that is predetermined by formula. Typically the CLT does not need to purchase the home as there are buyers eager to purchase an affordable housing.

In many escalating real estate markets, the CLT has been employed as a method to invest in affordable housing. The subsidy is permanently invested rather than lost after the expiration of the affordability period, lien forgiveness, or repayment. With most homeownership subsidy programs, after repayment of the subsidy the home returns to the market, and it is necessary to find increasingly scarce resources to subsidize a new unit.

While CLTs provide the most important benefits of homeownership, security and right of occupancy as well as ability to make improvements, it compromises the amount of appreciation that comes with equity. Most formulas seek a balance between the benefit that the owner receives from appreciation with affordability. By separating ownership of the land from the improvements, the land cost can be removed from the purchase price, reducing the cost of the house. The owner can benefit from improvements and may have a right to the depreciated value of improvements, and down payment made against the mortgage as well as principle payments. Typically, resale formulas account for inflation, the value of depreciated improvements, principle, and down payments, but not speculative value.

A CLT may be part of a non-profit agency with other community purposes, or may be a stand alone 501(c)(3) organization. A model for governance of CLTs has been developed. The model suggests the CLT board of directors include representatives of those who reside in the housing of the CLT; residents from the surrounding community; and representatives of local interests such as local government, lenders, and non-profit agencies. Historically, CLTs have arisen from grass roots and activist organizations. Development of affordable

housing is a difficult activity, requiring skillful and dedicated staff. Many CLTs have grown and flourished while others have languished. Recognizing that CLTs represent an important strategy for affordable housing, local governments, with the cooperation of HUD, have invested in implementation of CLTs, shepherding their development and implementation.

Flagstaff and Newtown CDC in Tempe are two examples of CLTs which have been launched using different models. A third CLT is under development in Tucson/Pima County. Flagstaff's CLT was established through the city's Community Development Office. An advisory board was formed using the tripartite model. The city provides staff to assist the land trust with final decisions such as acquisitions, policy, and budgets made by the city council. In addition, the city helped provide funding for the CLT to purchase the land for development. In contrast, Newtown CDC "collects" homes that are purchased by the homebuyers that they assist. The CDC is a "scattered site" model, with homes in Tempe as well as other jurisdictions in the metro Phoenix area. The Tucson/Pima County CLT may involve the formation of a new non-profit organization with the purpose of managing the properties and organization activities. It may act to "receive" properties developed by other non-profit organizations or purchased by the City of Tucson and Pima County through other programs.

Sweat Equity

Finally, there is the traditional, tried-and-true method for realizing affordable housing: "sweat equity." There are both public and private resources that encourage this type of work. In Arizona, Habitat for Humanity and the U.S. Department of Agriculture's Self-Help Program represent two kinds of organized sweat equity programs.

Habitat for Humanity

There are now six active Habitat for Humanity affiliates in Arizona producing approximately 75 homes each year. Habitat Chapters accept donations and volunteer contributions for construction of homes for low-income buyers. Potential buyers must participate in classes and contribute their labor as well. Purchase loans are made at 0 percent interest. The combination of donations, volunteer activities, and low-cost financing make it possible for Habitat to provide homeownership to lower income families than is possible with most other ownership programs.

Self-Help Program

The USDA provides a variety of resources to rural communities, as well as subsidies to non-profit organizations. The Self-Help Program is probably the oldest continuously operating homeownership program in the United States. Initiated in 1949, housing has been provided to rural families, often in situations where no housing market exists. The program operates as a unique and elegant hybrid between a barn raising, buyer's club, and subdivision developer. The organization purchases and subdivides housing lots, assembles qualified low-

income families, organizes the purchase of materials, qualified contractors and construction supervisors. The families spend several months providing sweat equity labor to build each other's homes. To obtain a self-help grant the grantee must demonstrate sufficient savings through sweat equity and purchasing greater than the grant subsidy.

Through this development method, high-quality housing can be built for low-income families in rural communities. An additional form of subsidy is provided through the USDA mortgage which provides a significantly lower interest rate than conventional mortgages. However, the viability of Self-Help organizations is threatened by ever increasing land and development costs. The City of Casa Grande is currently the only municipally run Self-Help developer in Arizona to provide capacity for planning and development.

Conclusion

The goal of this chapter was to describe the variety of sources that are funding the development of affordable housing in Arizona. There is a complex array of resources that have been created since the first public housing projects were built. The resource is no longer monolithic, and the outcomes of these investments have become diverse. A small but growing community of creative people wrestling with the various challenges that affordable housing places in front of us are making possible the dreams of people motivated to improve their lives, who are able to embark on a mission to build wealth for the first time in generations.

Endnotes

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Chapter 10

FORECLOSURE TRENDS AND IMPACTS IN ARIZONA

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The views expressed in this chapter are those of the author and not necessarily those of the Federal Reserve Bank of San Francisco or the Federal Reserve System.

Key Points

- The foreclosure rate in Arizona has increased dramatically, from a low of 0.16 percent in the second quarter of 2006 to 1.33 percent in the first quarter of 2008.
- This rapid rise in foreclosures has significant negative spillover effects on communities and local and state governments.
- A coordinated and multi-pronged strategy will be needed to respond to rising
 delinquencies and foreclosures, including efforts to prevent avoidable foreclosures,
 to assist families who have gone through foreclosure, to minimize the negative
 impacts of vacant properties on nearby property values and municipal budgets, and to
 redevelop foreclosed homes into affordable housing.
- While responding to the current rise in foreclosures is critical, attention must be paid to laying the foundation for sustainable homeownership in Arizona.
- There is an opportunity for state policy-makers to think about how to strategically target public subsidies to stabilize local housing markets now, as well as provide for affordable housing in the future.

Introduction

In the last 25 years, consumer credit markets have shifted dramatically, moving from a credit rationing approach to a risk-based pricing system. Today, far fewer applicants are denied credit; rather, they are offered credit at higher prices intended to reflect the greater risk posed by these loans.¹ This shift, coupled with other innovations in the financial markets, has significantly increased access to credit, with both positive and negative effects.

On the positive side, expanded access to credit greatly increased the ability of low- and moderate-income households of all races and ethnicities to become home owners.² From

1994 to 2001, the national homeownership rate grew by 3.8 percentage points, driven by strong, broad-based income growth and low interest rates, as well as innovations in underwriting and the financial markets. The homeownership rate among blacks and Hispanics increased even more substantially, up 5.9 and 6.1 points respectively.³

But, as has become apparent over the past couple of years with the rise in mortgage delinquencies and foreclosures, the risks associated with the changes in the consumer credit markets were greatly underestimated. While the full impacts are still unfolding, it is clear that the rapid rise in foreclosures is having a profound effect on families, communities, and cities. Equally clear is the need for a multi-pronged strategy to address these negative effects, including stepped up efforts to prevent foreclosures as well as programs that can mitigate the negative spillover effects of foreclosures on neighborhoods.

This chapter briefly examines the recent developments in the mortgage market, and then looks at trends in delinquencies and foreclosures in Arizona. The chapter also highlights the interventions that are being developed across the country to respond to rising foreclosures.

Recent Developments in the Mortgage Market

While some communities have been struggling with high rates of foreclosure for a much longer time,⁴ the recent national rise in delinquencies and foreclosures has been sudden and substantial. By one estimate, in 2007 more than 1.25 million homes entered foreclosure nationwide, and more than twice as many (2.6 million) were at least 30 days past due on their mortgage payments as of the fourth quarter of last year.⁵

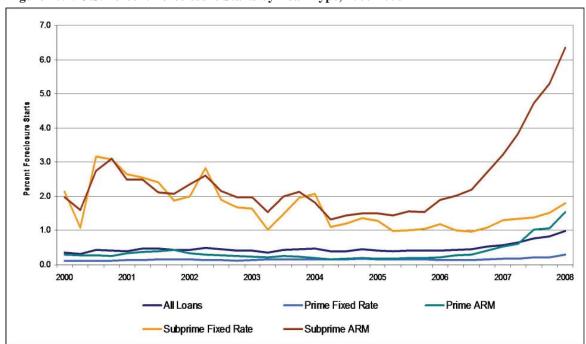


Figure 10.1: U.S. Percent Foreclosure Starts by Loan Type, 2000-2008

Source: Mortgage Bankers Association, National Delinquency Survey (1st Q 2008)

Most of the problems have been concentrated in the sub-prime market,⁶ and in particular, among sub-prime adjustable-rate mortgages, although recent data show increases in foreclosures among sub-prime fixed-rate mortgages and on prime adjustable rate mortgages as well.⁷ (See Figure 10.1).

The reasons for the current increase in foreclosures are complex and intertwined.⁸ Perhaps the most significant factor driving the current rise in delinquency and foreclosures, though, is declining house values. Economic research has shown that downward changes in house prices are strongly associated with sub-prime delinquency "hot spots." As prices have declined, borrowers who may be struggling to pay their mortgage—for example, due to a job loss or illness—may have a more difficult time refinancing or tapping into their home equity to bridge a gap in income. In addition, borrowers who were counting on house price appreciation in order to refinance into a more affordable loan in the future have found doing so difficult, particularly if their loan-to-value ratio has left them with too little equity to qualify for a new loan. The tightening of credit markets has further limited options for distressed homeowners wishing to refinance.¹⁰

This does not mean that house prices are the only factor that can influence delinquency and foreclosure rates. For example, employment conditions also help explain regional differences in foreclosures. Relaxed underwriting standards and abusive lending practices have also increased the risk of delinquency and foreclosure for sub-prime borrowers. As Federal Reserve Chairman Bernanke has noted, "far too much of the lending in recent years was neither responsible nor prudent." Research has shown that between 2001 and 2006—concomitant with the rapid growth in sub-prime lending (see Figure 10.2)—underwriting criteria eased substantially, and the quality of loans deteriorated quickly. For example, many sub-prime loans included additional risk factors, such as a lack of full documentation, high combined loan-to-values, and high debt-to-income ratios. These problems in underwriting, however, were masked by rapid house price appreciation, and it was only when housing markets began to cool that they became apparent.

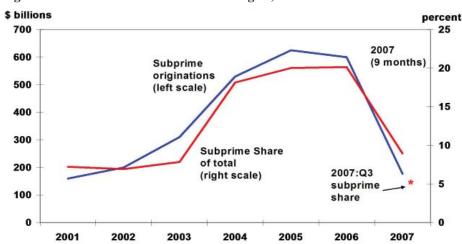


Figure 10.2: U.S. Growth in Sub-Prime Origins, 2001-2007

Source: Inside Mortgage Finance, 2007 (excerpted from the Federal Reserve Bank of San Francisco, Annual Report 2007, www.frbsf.org)

Delinquency and Foreclosure Trends in Arizona

At the local level, data constraints lead to challenges in understanding trends in delinquencies and foreclosures. Most data on loan performance is collected by private companies, can be costly to purchase, and often comes with restrictions on publicly sharing and presenting the data. In addition, different methodologies for collecting data on foreclosures, as well as different definitions of "sub-prime," can result in significant differences in the numbers being reported for the same geography. Finally, data presented in maps on foreclosure "hot spots" are usually aggregated at the zip code level, which can mask significant variation within a zip code.

Keeping these data caveats in mind, Arizona has seen a rapid increase in foreclosures. Significantly, Arizona saw rapid house price appreciation in 2004 and 2005 (Figure 10.3), along with a concomitant growth in the share of sub-prime lending. As house values began to decline in early 2007, the vulnerabilities in underwriting became apparent.

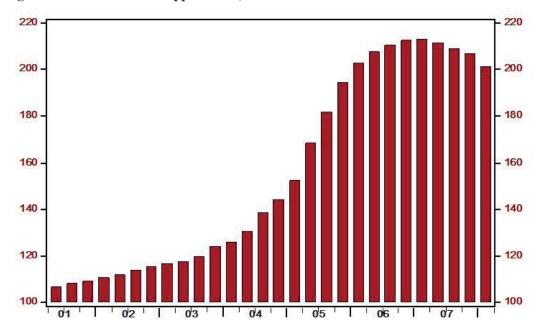


Figure 10.3: Arizona House Appreciation, 2004-2005

Source: Office of Federal Housing Enterprise Oversight, House Price Index, Haver Analytics

According to data from the Mortgage Bankers Association, the foreclosure rate in Arizona increased from a low of 0.16 percent in the 2nd quarter of 2006 to 1.33 percent in the 1st Quarter of 2008. (Figure 10.4) Serious delinquencies on all loans have risen during this time period as well. (Figure 10.5) As described above, this rapid increase in delinquencies and foreclosures in Arizona is closely linked to changing housing market conditions.

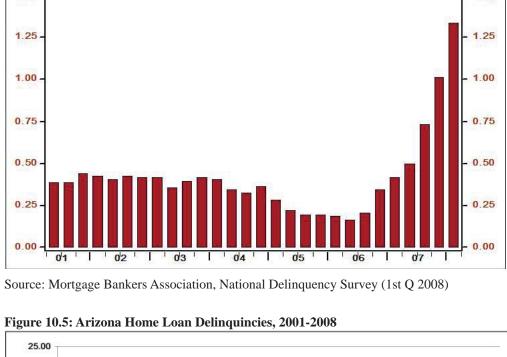
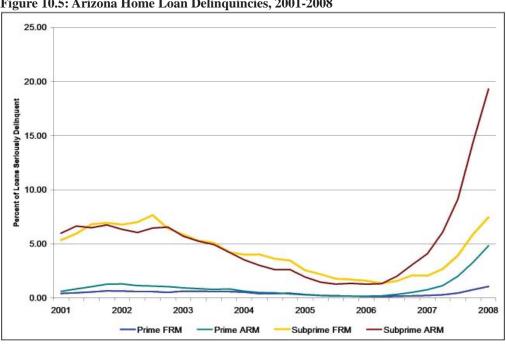


Figure 10.4: Arizona Foreclosure Rates, 2001-2008

1.50



Source: Mortgage Bankers Association, National Delinquency Survey (1st Q 2008)

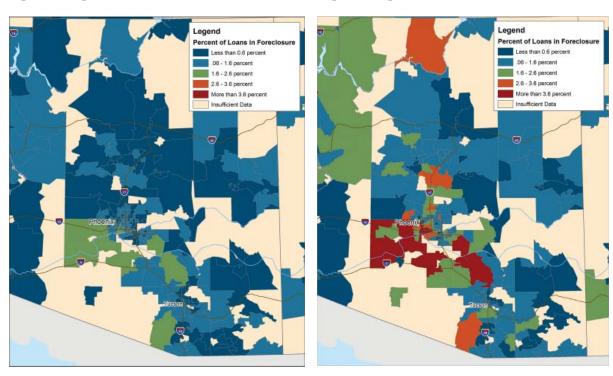
The largest concentrations of foreclosures in Arizona have been in the Phoenix metropolitan area, although areas around Tucson and Flagstaff have also been affected. Figures 10.6 and 10.7 show the change in the percent of loans in foreclosure, aggregated at the zip code level, from September of 2007 to April 2008. As the maps show, the number of

1.50

communities affected by foreclosures in Arizona has grown dramatically in a very short time. In the neighborhoods shaded in orange and red, more than 2.6 percent of all loans are in foreclosure, compared to an average of 1.6 percent of loans by zip code in Arizona. Many of these foreclosures are also ending up as REOs, or "real estate owned" properties held by lenders or servicers. (Figure 10.8)

Figure 10.6: Percent of Homes in Foreclosure by Zip Code, Sept. 2007

Figure 10.7: Percent of Homes in Foreclosure by Zip Code, April 2008



Source: McDash Analytics, LLC and FRBSF calculations

As foreclosures have become increasingly concentrated in certain neighborhoods, they threaten to have significant negative spillover effects on the wider community. Research indicates that foreclosures tend to reduce the value of nearby properties significantly, especially when vacancies drag out and the local housing market is weak. Foreclosure can therefore perpetuate a self-reinforcing cycle of decline; more homes for sale put downward pressure on the local housing market that in turn can lead to yet more defaults and foreclosures. Indeed, research has shown that concentrated foreclosures can entail significant costs for communities and municipalities. For municipalities, costs may be imposed through an increased need for policing and fire protection, demolition contracts, and building inspections. In addition, revenue may be lost due to diminished property taxes. Researchers studying FHA foreclosures in Minneapolis estimated that the average foreclosure costs the city \$27,000 and costs the neighborhood \$10,000. In a study of foreclosures in Chicago in 1997 and 1998, researchers estimated that the cumulative effect of 3,750 foreclosures in those years was that nearby property values were reduced by a total of more than \$598 million. In a study of more than \$598 million.

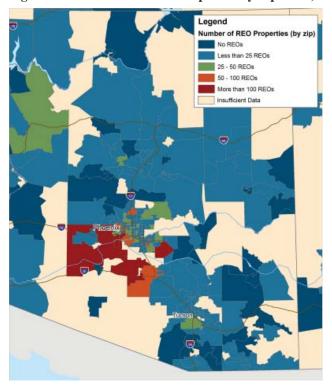


Figure 10.8: Number of REO Properties by Zip Code, 2008

Source: McDash Analytics, LLC and FRBSF calculations

The current rise in foreclosed properties may have even more serious implications for low-and moderate-income communities. In 2006, more than 45 percent of loans on one- to four-unit properties originated in minority, low-income census tracts were high cost, compared to 23 percent of originations in middle-income white areas and 15 percent in high-income white areas. While linking data on borrower income and race with data on loan performance is difficult, studies of cities like Baltimore, Chicago, and Cleveland have found that low-income and minority communities have been the hardest hit by concentrations of foreclosures. As such, foreclosures could undermine much of the success that has been achieved in increasing the number of low-income and minority households that are now homeowners, and limit their ability to build wealth over the long-term. Furthermore, as declining property taxes and transfer fees shrink local government revenues, vital services to low- and moderate-income families may also suffer (the State of Arizona has no property transfer fee).

Addressing the Negative Impacts of Foreclosure

Given the significant negative spillover effects of foreclosures, a wide range of stakeholders— including local and state governments, nonprofits, and the private sector—are developing policies and/or programs that can help prevent foreclosures as well as mitigate the negative impact of foreclosures on borrowers and communities.

Preventing Foreclosure

A key priority has been to avoid preventable foreclosures. Many initiatives are already underway, including efforts to improve borrower outreach through public service announcements and community events, to develop a systematic and streamlined approach to restructuring adjustable rate loans, and to create new refinance options to help borrowers shift into more sustainable loan products.

At the national level, efforts have focused on improving borrower outreach and increasing the capacity of nonprofits and servicers to respond effectively to borrowers in distress. NeighborWorks, a national nonprofit organization created by Congress to provide financial support, technical assistance, and training for community-based revitalization efforts, maintains a National Foreclosure Mitigation Counseling Program, and in December 2007 helped to increase the availability of foreclosure counseling services by distributing \$180 million in grants to HUD-approved housing counseling intermediaries and to qualifying state housing finance agencies. Arizona received nearly \$1.5 million to promote housing counseling in the state. The Homeownership Preservation Foundation has also established a national foreclosure hotline, 1-888-995-HOPE, which helps borrowers assess their situation, set up a mortgage repayment plan, and get back on track financially, and has been working to raise awareness of foreclosure prevention resources through public service announcements and media campaigns.

As the scale of foreclosures has grown, the private sector has also taken steps to build its capacity to respond to the scale of borrowers seeking help. The HOPE NOW Alliance, a national partnership that includes more than 25 lenders, loans servicers, and counseling organizations dedicated to preserving homeownership and minimizing foreclosures, worked together to establish a uniform set of procedures and guidelines for servicers, and increase their ability to do loan modifications.

To help support these national efforts, as well as develop its own local initiatives, Arizona has established a Foreclosure Prevention Task Force, which brings together 200 organizations, lenders, community leaders, and government representatives to coordinate outreach and education efforts to assist homeowners facing foreclosure, including bilingual assistance. Collectively, these efforts have led to a significant increase in loan modifications (see Glossary) and loan forbearance (see Glossary) plans in Arizona. Data from servicers reporting to the HOPE NOW Alliance show that while in the first quarter of 2007, only 182 loans were modified, in the second quarter of 2008, 4,416 loan modifications were successfully completed in Arizona. Servicers also increased the number of repayment plans established in Arizona, from 2,265 in the first quarter of 2007 to 6,123 in the second quarter of 2008.²⁰

Yet significant barriers to large-scale loan modification efforts remain, and still pale in comparison to the number of foreclosure sales in Arizona (10,171 in the 2nd quarter of 2008). There are several reasons for this: difficulties in connecting borrowers with lenders/servicers, lack of servicer capacity to respond to the number of calls, as well as silos within

servicers that prevent effective communication between the collections department and the loss mitigation department. The legal structure for securitizations and mortgage-servicing agreements also limit servicers' ability to modify loans, particularly in terms of principal reductions. Changing the nature of pooling and servicing agreements to allow servicers more flexibility in making loan modifications may be necessary.²¹

Mitigating the Negative Impact of Foreclosures on Neighborhoods

While much attention has rightfully focused on reaching distressed borrowers and preventing foreclosure, attention is increasingly being paid to the challenges associated with concentrated neighborhood foreclosures. The Housing and Economic Recovery Act of 2008 signed by President Bush at the end of July includes legislation that will allocate \$3.92 billion to communities hardest hit by foreclosures and delinquencies. These supplemental Community Development Block Grant (CDBG) funds will be used to purchase foreclosed homes, at a discount, and rehabilitate or redevelop the homes to stabilize neighborhoods and stem the significant losses in values of neighboring homes.

While this funding will provide much needed financial support to cities grappling with foreclosures, responding to the problem of foreclosed and vacant properties is far from easy. One particularly important question for Arizona is how to respond to REOs in Phoenix's suburban neighborhoods, which saw rapid construction and growth during the housing boom. How will interventions in these areas need to differ from those in older, low-income neighborhoods within the city's urban core?

In addition, experience with REO property acquisition and disposition in the past suggests that there are a number of barriers to the large-scale redevelopment of REOs into affordable housing. Key among these are the challenges cities and nonprofits face in working with servicers and lenders to negotiate on REO properties. Due to the complicated nature of pooling and servicing agreements, it is often difficult to identify who has authority to negotiate the price on any one property. Property valuation adds another wrinkle, particularly when housing markets are still declining, and when significant rehabilitation of the property is needed. Nevertheless, many nonprofits and cities are setting out the ambitious goal of redeveloping REOs into affordable housing, and some cities and states such as Chicago, Cleveland, and Massachusetts have successfully developed broad partnerships among stakeholders in both the public and private sector to tackle the remaining challenges. It will be important to share lessons from these efforts, as well as develop best practices that can be replicated across communities affected by foreclosures.

Moving Forward: Promoting Sustainable Homeownership

While responding to the current rise in foreclosures is critical, moving forward, attention must also be paid to laying the foundation for sustainable homeownership in Arizona. As a first step, there is a need to develop new strategies that help low-income borrowers – particularly those that may not have extensive financial knowledge – make better and

more informed credit choices. The Federal Reserve Board's revised Home Ownership and Equity Protection Act, or HOEPA regulations, are designed to strengthen protections for borrowers and to prohibit unfair and deceptive practices in the mortgage market. Importantly, the updated regulations establish a new category of "higher-priced mortgages, and prohibit a lender from making a loan without regard to borrowers' ability to repay the loan from income and assets other than the home's value. Moreover, to show that a lender violated this prohibition, a borrower does not need to demonstrate that it is part of a "pattern or practice." In addition, the rules place tighter restrictions on prepayment penalties.²²

Yet additional investments in financial education and homeownership counseling should also be considered a critical part of this strategy. Financial education has been shown to help households manage their finances more prudently, especially in decisions concerning credit, saving, and investment, and it has been shown to reduce the likelihood of default.²³ Calling for more financial education is not a new idea, but challenges remain in funding educational programs and developing appropriate curricula and delivery channels for diverse audiences.

Another question is how to promote more affordable homeownership opportunities within the state. Although declining house prices will alleviate some affordability concerns, homeownership remains out of reach for many low- and moderate-income families in Arizona. Expanding access to affordable homeownership programs—particularly those that involve pre- and post-purchase counseling and support as well as a savings component such as an Individual Development Account—can help to promote sustainable homeownership moving forward. Helping families save for a down payment, and ensuring that they have a savings buffer to help them weather adverse economic times or life events, may lead to better outcomes overall than mortgages that make homeownership affordable only through risky loan terms.²⁵

The current rise in foreclosures should not be seen as justification to abandon the goal of expanding access to credit among low-income households, since access to credit, and the subsequent ability to buy a home, remains one of the most important mechanisms to help low-income families build wealth over the long term.²⁶ In addition, increasing the supply of affordable housing, for example, through *housing trust funds* and *community land trusts*, can also help to create long-term housing affordability. Finally, the likelihood of a return to tighter credit and underwriting standards also suggests the need to develop new products and programs that can help low-income families access responsible loans.

To conclude, while Arizona has been hard hit by the current rise in delinquencies and foreclosures, there is also an opportunity for state policy-makers to think about the future direction of state housing policy, and how to strategically target public subsidies to stabilize local housing markets now, as well as provide for affordable housing in the future.

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² Between 1993 and 2000, home purchase lending to low- and moderate-income people living in low- and moderate-income neighborhoods grew by 94 percent—more than in any of the other income categories. See: *The 25th Anniversary of the Community Reinvestment Act: Access to Capital in an Evolving Financial Services System* (Joint Center for Housing Studies, Harvard University, Cambridge, MA, March 2002), p.4.

³ The State of the Nation's Housing 2008. (Joint Center for Housing Studies, Harvard University, Cambridge, MA, 2008).

⁴ For example, cities such as Chicago and Minneapolis were experiencing high levels of foreclosure well before the current national increase in foreclosure rates.

⁵ Mortgage Bankers Association (MBA), National Delinquency Survey, 4th Quarter 2007. Figures U.S. Total, seasonally adjusted. RealtyTrac reported that in 2007, more than 2.2 million foreclosure filings were logged against 1.3 million properties nationwide. MBA data also likely underestimate the absolute number of delinquencies.

⁶ The classification "subprime" generally is a lender-given designation for loans extended to borrowers that have some sort of credit impairment, say, due to missing installment payments on debt or lack of credit history.

⁷ Janet L. Yellen, "Prospects for the U.S. Economy in 2008," speech by President and Chief Executive Officer of the Federal Reserve Bank of San Francisco to the San Francisco Planning and Urban Research Group, San Francisco, February 12, 2008. (Note: Research suggests that risk of fixed rate subprime loans compared to ARMs in part reflects selection bias, with riskier borrowers opting for ARMs. Some research also shows that adjusted for the vintages of loans, the performances of subprime fixed-rate and adjustable-rate loans are more similar. See Yuliya Demyanyk and Otto van Hemert, "Understanding the Subprime Mortgage Crisis" (Federal Reserve Bank of St. Louis, February 4, 2008).

⁸ For a good overview of the subprime foreclosure crisis, see "The Subprime Mortgage Market *National and Twelfth District Developments*," Federal Reserve Bank of San Francisco, Annual Report 2007, available online at http://www.frbsf.org/publications/federalreserve/annual/2007/2007annualreport.pdf.

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- ¹⁴ See, for example, Dan Immergluck and Geoff Smith, "The Impact of Single-family Mortgage Foreclosures on Neighborhood Crime," *Housing Studies* 21, no. 6 (2006): 851-866. Dan Immergluck and Geoff Smith, "The External Costs of Foreclosure: The Impact of Single-Family Mortgage Foreclosures on Property Values," *Housing Policy Debate* 17, no. 1 (2006): 57-79. Vicki Been, Solomon Greene and Jenny Schuetz, "Spillover Effects of Foreclosures on Property Values in New York," paper presented at the New York City Subprime Lending and Foreclosure Summit, December 12, 2007.
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- ¹⁶ Immergluck, Daniel and Geoff Smith (2005). "There Goes the Neighborhood: The Effect of Single-Family Mortgage Foreclosures on Property Values." Chicago: Woodstock Institute. Available at: http://www.woodstockinst.org/publications/research_reports
- ¹⁷ The State of the Nation's Housing 2008. (Joint Center for Housing Studies, Harvard University, Cambridge, MA, 2008).
- ¹⁸ See, for example, William C. Apgar, and Mark Duda, *Collateral Damage: The Municipal Impact of Today's Mortgage Foreclosure Boom* (Homeownership Preservation Foundation, Minneapolis, MN, 2005) and Ira Goldstein and Richard Voith, "One Industry's Risk is Another Community's Loss: The Impact of Clustered Mortgage Foreclosures on Neighborhood Property Values in Philadelphia," paper presented at the Federal Reserve Bank of Philadelphia, *Reinventing Older Communities*, April 2006.
- ¹⁹ Edward M. Gramlich, *Subprime Mortgages: America's Latest Boom and Bust* (Washington, D.C., The Urban Institute, 2007), p. 79.
- ²⁰ HOPE NOW Alliance, *June State Data Tables*, accessed online on August 14 at http://www.hopenow.com/upload/data/files/June%20State%20Data%20Tables.pdf.

- ²¹ Eric Rosengren, "Current Challenges in Housing and Home Loans: Complicating Factors and the Implications for Policymakers," remarks given at the *The New England Economic Partnership's Spring Economic Outlook Conference on Credit, Housing, and the Consequences for New England*, Boston, Massachusetts, May 30, 2008.
- ²² For the details on the new HOEPA regulations, see http://www.federalreserve.gov/newsevents/press/bcreg/20080714a.htm
- ²³ Marianne A.Hilgert, Jeanne M. Hogarth, and Sondra G. Beverly, "Household Financial Management: The Connection between Knowledge and Behavior," *Federal Reserve Bulletin* (July 2003): 309-322. Lei Ding, Roberto Quercia, and Janneke Ratcliffe, "Postpurchase Counseling and Default Resolutions among Low- and Moderate- income Borrowers" (Center for Community Capitalism Working Paper, University of North Carolina, 2007).
- ²⁴ The State of the Nation's Housing 2007 (Joint Center for Housing Studies, Harvard University, Cambridge, MA, 2007).
- ²⁵ Michael A. Stegman, "An Affordable Homeownership Strategy that Promotes Savings rather than Risks," in *Ending Poverty in America: How to Restore the American Dream*, ed. John Edwards, Marion Crain, and Arne L. Kalleberg, 165-178 (New York: New Press, 2007).
- ²⁶ This assumes responsible lending and that homeownership is sustainable. Research has shown that low-income homeowners build more wealth than low-income renters, both through accumulated equity in the home as well as a greater propensity to save. See Edward M. Gramlich, *Subprime Mortgages: America's Latest Boom and Bust* (Washington, D.C., The Urban Institute, 2007), pp. 70–77 for an analysis of the 2004 data from the Survey of Consumer Finances on this topic.

Chapter 11

RURAL HOUSING ISSUES

Martina Kuehl

Martina Kuehl has been providing training and technical assistance to the affordable housing and community revitalization industry since 1991. She began her career counseling buyers of Resolution Trust Corporation properties using Mortgage Revenue Bonds. She later managed the State of Arizona HOME and Housing Trust Fund Programs and directed all HUD programs for the Arizona Office of Housing Development, now the Arizona Department of Housing. Since 2004, she has been consulting with government and nonprofit organizations—assessing community needs and markets, designing programs and policies, evaluating and underwriting housing projects, designing and delivering training programs, and building both strategies and capacity to plan and implement housing, human service and community development programs.

Key Points

- *Rural Economies* in general tend to be less economically diverse than metropolitan economies and are therefore more vulnerable to boom-bust cycles; seasonal, retirement-, and tourist-driven, they rely heavily on lower-wage employment, producing housing demand at the top and bottom of the cost scale.
- *Housing Affordability* is a special issue due to the preponderance of single-family housing, often on large lots or acreage, combined with lower-wage employment, limited private land, and high cost of infrastructure.
- *Housing Quality* in rural areas is impacted by the fact that one of five housing units was built prior to 1970; most affordable housing units are older units.
- *Rural Infrastructure* is limited by limited economies; many rural areas rely on individual wells and septic systems, which may have unforeseen environmental impacts as population grows, with limited capacity, aging conditions, and private ownership adding to the complexity.
- Capacity in rural communities to address affordable housing needs is limited
 by access to funding for planning and implementation, availability of qualified
 organizations and human resources, and lack of economies of scale for project
 development.
- *Prescriptive and Competitive Funding* for affordable housing results in great challenges to a rural community's ability to formulate and carry-out effective programs.

Introduction

Beautiful scenery, outdoor recreation, panoramic views, restaurants serving homemade pie, and generations of families living on the same piece of land are all part of the small town charm that attracts people to many rural communities. Some people stay in hotels and eat in restaurants, providing employment opportunities for local residents. Retirees move in. Families purchase second homes so they can visit again and again. Young workers relocate

to fill the jobs that are created. Entrepreneurs move in and build businesses to serve the tourists, the seasonal residents, the families who have lived in the community for generations, and the families and individuals who moved in search of employment.

Rural Economies

For many rural Arizona communities, this scenario means greater economic diversity and an array of goods and services for residents. Seasonal residents often have higher incomes, and retirees bring personal wealth and equity to purchase housing (Figure 11.1). Yet neither seasonal residents nor retirees are dependent upon employment opportunities. The service economy that prevails does not necessarily rely on high-wage industries; low-wage jobs with no fringe benefits dominate the economy. This scenario also means housing shortages and declining affordability as demand for housing drives prices up (see Appendi B for a reflection of wages to housing cost by county).

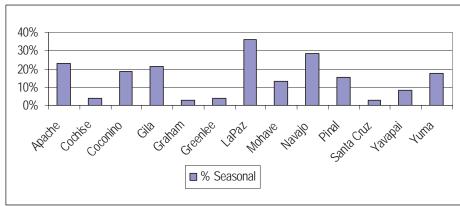


Figure 11.1: Seasonal Units as Percentage of Total Housing Units, 2000

Source: U.S. Census, 2000

While this scenario is not true of all rural areas, the difference between metro and non-metro economies is noteworthy. Rural economies tend to be less economically diverse and therefore have a more boom-or-bust nature. They are also typically slower to recover from economic downturns than metro economies, where employment choices are greater. Also of note is that tribal land is prevalent throughout Arizona, representing more than one-third of land ownership in Apache, Coconino, Gila, Graham, and Navajo counties, and is home to more than one-quarter of the population in Apache, Coconino, and Navajo counties. In these counties, socio-economic conditions may be statistically impacted by tribal economics. Many Native Nations have developed casinos, which have expanded the employment base and increased the overall income for all county residents. Other tribal lands are geographically vast or isolated, with few income-generating industries.

Housing Affordability

In addition to socio-economic conditions, limited private land, housing variety and quality, infrastructure cost and availability, and competition for scarce human and financial resources all contribute to housing affordability conditions in rural Arizona.

The wide open spaces that attract so many to rural Arizona are often the result of a large proportion of government land ownership. Private land ownership in rural Arizona ranges from a low of 4 percent in Gila County to a high of 40 percent in Cochise County (Figure 11.2). As the population of rural areas grows, the demand for this limited private land often results in higher prices. Those higher prices are passed along to the renter or owner, resulting in decreased affordability.

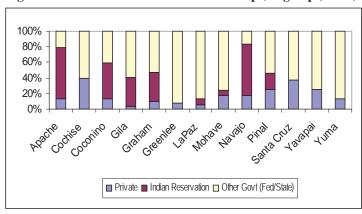


Figure 11.2: Rural Arizona Land Ownership (Aug-Sept, 2008)

Source: Arizona Department of Commerce

Housing type is driven largely by demand and most residents of rural areas demand single-family homes on large lots. Consequently, single-family units are the predominant (59 percent) housing type in rural Arizona. In many rural areas, the proportion of manufactured housing (30 percent) has declined as demand has shifted along with economies and demographics. In more rapidly urbanizing rural areas, multi-family housing has been developed, yet for the most part this represents only a small portion (11 percent) of the housing stock.¹

Single-family housing is typically the least affordable housing type, primarily due to larger lot sizes and the costs of infrastructure and construction. So, while it may be the most desirable housing type, it is frequently the least affordable. Families may qualify to purchase the available housing, yet the economics of the purchase may make maintenance challenging.

Housing Quality

Housing affordability and housing quality go hand-in-hand. Lower-income households may

rent or purchase units that are initially more affordable. The most affordable units are often those that are older or in poor condition, and utility and maintenance costs are often higher than in a newer unit. Other households may purchase housing at the top of their affordability range. Either way, saving for major repairs can be a major challenge.

Owner-occupied housing units tend to have fewer negative conditions than renter occupied units. In 2000, throughout rural Arizona, 32 percent of owner-occupied units and 44 percent of renter-occupied units had one or more negative conditions, including lack of affordability and the lack of complete plumbing or kitchen facilities.

Another measure of housing quality is the age of the housing stock. While many older units are lovingly maintained, the aging of major systems often means higher costs and deferred maintenance. Housing that is almost 40 years old or older is more likely to experience the failure of a major housing system or be in need of major repairs. Approximately one-fifth of housing units in Arizona's rural counties are older than 39 years, with higher proportions in Southern and Eastern counties and lower proportions along Arizona's western border (Table 11.1). Aging housing stock is further discussed in Chapter 14.

Table 11.1: Percentage of Housing Units in Rural Counties Built Before 1970

County	Units Built Before		
	1970		
Apache	25%		
Cochise	29%		
Coconino	20%		
Gila	26%		
Graham	30%		
Greenlee	44%		
LaPaz	18%		
Mohave	9%		
Navajo	21%		
Pinal	12%		
Santa Cruz	23%		
Yavapai	14%		
Yuma	19%		

Source: U.S. Census, 2000

Rural Infrastructure

Infrastructure refers to the various systems and facilities that support a viable community: sewer and water systems, electric systems, communication lines, roads, parks, and schools. Each of these must be balanced to support housing development and the residents. Like rural economies, rural infrastructure and conditions vary by community.

In some locations, limited economies mean limited infrastructure. Private land ownership patterns make the extension of existing systems costly. In other locations, geographic conditions such as a limited water supply and difficult terrain add to the cost. Individual wells and septic systems may have unforeseen environmental impacts as population grows. Some systems are incapable of serving additional users because they lack capacity or are in poor condition. Private ownership of infrastructure may complicate the coordination for improvements or additions in some areas. Small rural water and wastewater systems may require disproportionately high monthly user fees.

Like housing, infrastructure has two primary costs: development/expansion and maintenance. Like housing, the cost to develop/expand and maintain infrastructure is borne by the users. Development and expansion of infrastructure is often funded by impact fees on new housing or commercial development. These fees are typically passed on to the occupants, negatively impacting affordability unless there are special exemptions.

Building Capacity

The private sector carries out most market-related housing activities in rural areas. Contractors, local lenders, and other real estate professionals respond to the demand created by those households capable of paying for both newly-constructed and existing housing units. But the capacity of the private sector to address housing affordability and quality conditions is often limited by the size of the market and restricted profit.

Consequently, responsibility for addressing rural housing quality and affordability conditions often falls to government, and capacity to address conditions is often limited both within and outside of government. Regionally-specific conditions affect capacity. These conditions include the nature of local planning and decision making, the limited number of experienced nonprofit housing-related organizations, the lack of economies of scale in project development, geographic isolation and dispersion, and funding sources that are both competitive and prescriptive.

The array of community needs often exceeds the financing and human capacity to address them. Planning focused on both immediate market conditions and future anticipated changes is necessary. Communities are often faced with difficult decisions regarding what need to tackle first. These decisions are made more difficult when only one or two staff people have responsibility for implementing them. The capacity to support or develop new multi-family housing is not the same as the capacity that is needed to support an owner-occupied housing rehabilitation program. A broad range of knowledge/tools/capacity is required to adequately address the broad range of housing needs that may exist in a single jurisdiction.

Few opportunities for community collaboration with experienced housing organizations exist in most rural areas. To effectively address housing conditions, an organization, whether government, nonprofit, or for-profit, needs to assemble a combination of financing, expertise, leadership, and commitment. Nearly every rural organization struggles to achieve a resource

base that is continually available at a scale necessary to maintain the capacity that has been developed. Funding sources for core operations that sustain an organization are typically limited. Most housing funding is focused on specific development activities and projects that have a specific time frame in which they are operated or developed. The fee that is earned is also specific to that time frame. Funding for creative planning and new conceptual design strategies is seldom available for the development of affordable housing.

The fee-based structure of affordable housing development makes the development of smaller-scale rural projects (and the corresponding capacity) a challenge. A twenty-unit project does not require much less time or capacity to develop than a forty-unit project. Yet, the larger project is more likely to earn a fee that supports core organization activities, purchases specialized capacity to develop the project, and has sufficient profit to invest in the pre-development costs of the next project.

Quite often, affordable housing providers in rural areas grow from existing organizations that provide social services. These organizations have capacity that focuses on people, their day-to-day needs, and crisis management. Still, the capacity to serve the needs of people is very different than the capacity to develop housing. On the plus side, a social service organization will see housing as more than just a decent, safe place to live. They will see housing as the creation of a stable environment. The stable environment provided by housing can bring people together to access services and connect housing to the larger socio-economic environment. (See Chapter 4, "How Housing Matters: Strengthening Quality of Life"). On the negative side, a social service organization will not necessarily have the skills to manage a complex housing development, arrange financing, and oversee construction.

Sometimes, rural communities and markets are geographically isolated. The geographic isolation and dispersion of rural organizations and communities often results in a housing system that is insular, with many organizations attempting to build the capacity to perform every step in the process of delivering housing, regardless of the individual and organizational experience and strength.

In some parts of the state, rural communities are beginning to come together with nonprofit and for-profit organizations to build a range of capacity. For example, in Pinal County, discussions regarding the sharing of experience and knowledge across jurisdictions and organizations have begun, and some communities already provide contractual services to others through inter-governmental agreements. In Yavapai County, two separate efforts are taking place—both exploring how an organization might be formed to build capacity shared among jurisdictions. Individually, the relatively small size of many rural markets prevents access to the long-term resources that are needed. The goal of collaborative efforts such as these is to support the building of capacity in order to serve varied housing needs.

Funding for Rural Housing

As noted in Chapter 9, funding resources for housing are often very prescriptive about what can be done, limiting who can be helped, and the amount of funding that may be used to

assist any one household or housing unit. This may not fit with the needs of an individual rural economy or regional collaborative, or the needs of the individuals living and working a community. There may be great opportunity to provide affordable housing and address a real need, while funding to take advantage of that opportunity may not exist.

For example, most subsidized rental housing programs restrict occupancy to households that earn less than 60 percent of the area median income. Still, in many rural communities the difference between what a household earning 60 percent of the median income can afford and the amount of rent that must be charged to develop and maintain the units makes project development infeasible. Households earning 80 percent of the median income are in need of rental housing and could pay enough rent to make the project feasible, yet funding sources cannot fund the project.

The cost of homeownership in many rural areas is unaffordable to many of those in need of housing. Most homeownership assistance programs restrict purchase to households that earn less than 80 percent of the median income. Financing programs often restrict household income to not more than 130 percent of the median income. The affordability gap for households earning 80 percent of the median income is so great that funding sources cannot provide enough to make homeownership possible. A household with two working adults may earn 150-200 percent of the median income and still require assistance with the down payment and closing costs.

Much of the housing funding in Arizona is directly available to individuals who purchase homes using special loan products and loan guarantees from local, state, and federal sources. Housing funding to units of government and non-profit organizations may be either in the form of an annual allocation or entitlement, or distributed competitively based on individual program or project merits. While urban jurisdictions/organizations receive annual allocations of certain funding (entitlement), rural jurisdictions or organizations must compete for that same funding on the merits of individual programs and projects (Figure 11.3).

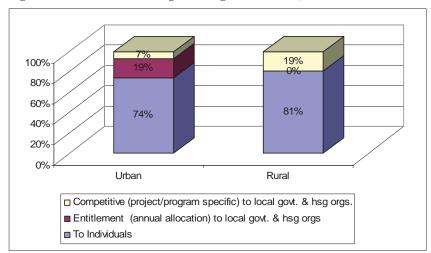


Figure 11.3: Arizona Housing Funding Distribution, 2006

Source: U.S. Department of HUD, ADOH, USDA Rural Development

The competitive nature of rural housing funding is directly linked with the nature of rural housing capacity. Urban areas that receive annual allocations of housing funding also receive administrative funding. This administrative funding supports staff that plan and implement housing activities and administer various funding sources. Rural areas must, however, compete. Competitive selection factors often include planning, resource leveraging, project feasibility, and organization capacity. These competitive selection factors are the very challenges that rural areas face.

Conclusion

Housing is related to economies and community infrastructure in a complex and intricate way. Rural Arizona is diverse, and conditions prevalent in one part of the state are very different than those in other parts of the state. In many ways, basic housing needs in rural areas are no different than in metro areas. These needs, however, are generally shaped by local conditions, which include economic diversity, housing quality and variety, infrastructure, and human and financial capacity.

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¹ U.S. Census, 2000.

Chapter 12

NATIVE NATIONS HOUSING

Eric Descheenie

Eric F. Descheenie is Legislative Staff Assistant to the Honorable Lawrence T. Morgan, Speaker of the 21st Navajo Nation Council. As such, Eric is responsible for overseeing State of Arizona affairs as they relate to the Navajo Nation Office of the Speaker and legislative branch. In addition, he delivers guidance in the areas of capital improvement projects, personnel policy development, local enterprise investment, and state legislative matters for the Navajo Nation Legislative Branch. Eric previously served as Tribal Liaison for the Arizona Department of Housing, working with tribes around the state. He is a proud husband to his wife, Miranda, and father to two sons, Sequoyah and Denali.

Key Points

- It is critical to learn from the people what their housing needs are, rather than assume.
- As tribes pursue economic development, housing development becomes more critical than ever.
- As in other rural areas of the state, Native Nations face difficult issues regarding infrastructure and capacity.
- By and large, the tribal land in Arizona is held in trust by the U.S. Department of Interior. As a result, much of the land carries complex legal implications and costly approval processes in achieving housing development, in particular homeownership development.
- Recent advocacy at the national, state, and local level has contributed greatly to tribal housing efforts.

Introduction

There are 22 tribes located in Arizona, all of which maintain sovereign governments. As such, each tribe exercises self-determination that allows for genuine decision-making and control over tribal affairs and resources. Further, these tribes maintain unique languages, religious traditions, and customs, contributing to the diversity of the U.S. Southwest with some tribes extending into New Mexico, Utah, Nevada, and California. In terms of Arizona geography and population, tribes comprise approximately 28 percent of the state land base and represent approximately 5 percent of the state total population (Figure 12.1). The challenges and complexities associated with Native Nations Housing are just as great and extensive as the tribes of Arizona are vast and diverse. This chapter delves into the broad challenges and successes that tribes and tribal housing developers confront.

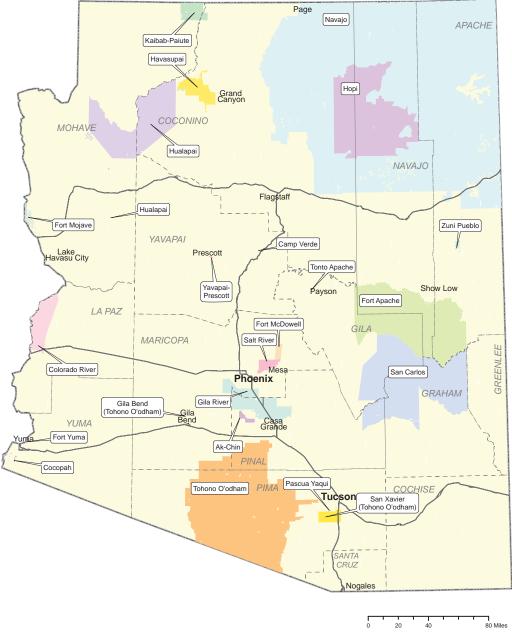


Figure 12.1: Map of Arizona Tribal Land

Source: Arizona Department of Transportation

The 2000 State of Housing Report by the Arizona Housing Commission notes that:

U.S. Census data show that substandard housing is...prevalent on Arizona's 21 Native American reservations. At least 15.9 percent of reservation units lack complete plumbing and some tribes face even more severe situations. For example, on both the Navajo and Hopi reservations, the number of units lacking complete plumbing exceeds 45 percent. Overcrowding is also quite common on Arizona reservations.

Approximately 36 percent of reservation units are overcrowded. On both the Havasupai and Navajo reservations the number of overcrowded units exceeds 50 percent. According to the U.S. Census in 1990, Arizona reservations had the worst overcrowding among all reservations nationally.

This excerpt provides a picture of Native Nations Housing and establishes a conceptual basis for understanding the housing conditions of Native American people on tribal lands. Below is an opportunity to engage a viewpoint from members of the Tohono O'odham living in southern Arizona. By accepting such insight, those who create laws and policy, implement programs, and make funding decisions in the affordable housing arena might be able to view the information that follows in a new light of common appreciation.

Listening to the People

Worldview

We can not justly speak about Native American people with out having considered their worldview and religious traditions, as the identity of indigenous people is inextricably tied to the ways in which they interpret reality and their surroundings. Naturally, this begs the question, "How do those of us who do not know about Native people's worldview begin to make such a connection?" Let us take a step back to consider a larger context that can offer answers to this legitimate question. Though the belief system of each tribe is unique, many recognize objects to be embodied beings, or "other-than-human persons." These can include thunder, tree, stone, sun, and animals, as well as cultural artifacts such as masks. If material objects such as rocks, stones, or trees are understood to be actual persons—or have the potential to be through this idea of "other-than-human-persons" who can directly impact the well being of a people—then conceivably a house could generate the same value, meaning, and consideration that we attribute to our friends and family, or in some cases our adversaries.

Housing Insights

In 1976, informal interviews conducted by Father Richard Purcell of the Covered Wells Catholic Church located on the Tohono O'odham Indian Reservation revealed the following explanation for preferences for a people's own housing:

... I think it's a good idea to ask us Papagos how we want our house and not just build something the white people like. Maybe we like something different than they do. For my house I always want to have it like the way we are supposed to have it in our way. I want my kitchen to be in another place away from our sleeping place, yes, like two different buildings, but close together and with the watto (shade) in-between to kind of hold them together...

We need to have a cooking place in one house and a sleeping place in another house. It's not good to sleep and eat in the same place. And you shouldn't put your toilet too close to your house like they always do in town...

The only kind of house I want is one made out of shampt (adobe). That's the best kind. And I like it to have cement on the outside...

I don't like that new house we got now. It's too big, and it's all cement walls and floors. It makes us sick to stay in a house of cement. It gives us colds in the wintertime. And that gas for the heat is bad for us Papagos, too. It makes us get a headache. I guess wood is the best thing to use in the stove. The beans just won't cook on that gas.²



Figure 12.2: "Older Big Fields" - A Traditional Home on the Tohono O'odham Nation

Source: Darrell Juan, Tohono O'odham Ki:Ki Association

Challenges Facing Native Nations Housing

For tribes, working under conditions including impoverished communities, high unemployment, struggling tribal economies, restrictions on public funding, and bureaucracy at the tribal, state, and federal level, housing development has not always met the people's desires.

As tribes pursue economic development, housing development becomes more critical than ever. Tribes are facing a growing need to house key professionals including doctors, nurses, educators, and law enforcement personnel. As a result, tribal leaders find themselves speaking to similar housing dilemmas as their counterparts off tribal land, rural and urban. How do we acquire the organizational capacity and expertise to deliver safe, decent, and affordable housing? How do we finance the development of infrastructure with rising construction costs, especially in remote areas? In the remote areas, we receive little to no interest from sub-contractors; what can be done? Homeownership on tribal trust land is

minimal; what can be done to change this? These are just a few of the many questions that are asked.

Federal and State Programs

Tribes from across the state of Arizona, alongside agencies from the federal, state, and local government and community stakeholders, have developed an array of policies, programs, and funding opportunities to help answer these questions.

Such progress includes the passage of the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA) administered by the U.S. Department of Housing and Urban Development–Office of Native American Programs (US HUD-ONAP). NAHASDA reorganized the system of housing assistance provided to Native Americans by eliminating several separate programs of assistance and replacing them with a block grant program. The two programs authorized for Indian tribes under NAHASDA are the Indian Housing Block Grant (IHBG), which is a formula-based grant program and primary source of housing capital for most tribes, and Title VI Loan Guarantee which provides financing guarantees to tribes for private market loans to develop affordable housing.³

Tribes of Arizona, like their counterparts nationwide, rely heavily on NAHASDA funding for their housing needs, including operating assistance, development, housing services, housing management services, and model housing activities approved by HUD. Since authorized, NAHASDA programs have provided approximately \$650 million annually to 365 Tribally Designated Housing Entities (TDHEs), nationwide. Despite overall tribal success in implementing NAHASDA, according to an audit released by the HUD Inspector General (2001-SE-107-0002), studies show that such appropriations do very little in Indian Country. This, considering "HUD estimates that current NAHASDA funding levels will only meet five percent of the need for housing."

In Arizona, tribes have made considerable progress in working with state officials. On September 2, 2003, Arizona Governor Janet Napolitano hosted a Summit on Tribal Housing where leaders of Native Nations joined in discourse on tribal housing issues and identified opportunities where the State of Arizona could assist. The resulting *Governor's Tribal Housing Initiative* launched the first ever set-aside of \$2.5 million of State Housing Trust Funds exclusively for tribal housing activities. This resource, paired with the services of the Tribal Liaison, has generated unprecedented opportunity for Arizona tribes.

A second component of the *Governor's Tribal Housing Initiative* was the formation of the Tribal Housing Task Force which was comprised of representatives from the tribal, state, federal, private, and community stakeholder sectors. The group compiled preferred methods in navigating obstacles to achieve success, developed tools to assist at various stages of the development process, elevated awareness of key issues that deserve greater attention, and collected and distributed resources to tribal developers all in an effort to address four priority key issues:

- 1. Increasing financial literacy among tribal communities
- 2. Adopting codes and ordinances that allow for private finance on tribal land
- 3. Increasing opportunity for infrastructure development
- 4. Increasing access to needs assessment tools and finance

Native Nations are certainly no strangers to the Low-Income Housing Tax Credit program (LIHTC). The LIHTC program promotes the development of affordable rental housing for low-income individuals and families. To date, it has been the most successful rental housing production program in Arizona, creating thousands of residences with very affordable rents. The LIHTC, rather than a direct subsidy, encourages investment of private capital in the development of rental housing by providing a credit to offset an investor's federal income tax liability.

Arizona is one of a limited number of states that provides a set-aside of LIHTC for development on tribal land. The Arizona Department of Housing increased the LIHTC Tribal Set-aside from \$1 million to \$1.5 million for the 2007 Tax Credit Allocation; it currently remains at \$1.5 million. Since 1996, nine tribes have capitalized on this program, particularly the White Mountain Apache Tribe, which has garnered eight tax credit awards to date. In total, 22 awards have made their way to tribal lands amounting to more than \$9.5 million in Low Income Housing Tax Credits.⁵

Figure 12.3: Apache Ridge II, LIHTC Award \$97,017, White Mountain Apache Tribe, 2003

Source: Arizona Department of Housing

Lending Challenges and Opportunities

Generally speaking, the tribes of Arizona maintain three primary types of land, including:

- Land held in trust. Approximately three quarters of all tribal land is held in trust on the tribes' behalf by the U.S. Government via the U.S. Department of the Interior (DOI). Trust land cannot be taken out of trust or encumbered with out the approval of DOI. Tribes may lease or otherwise assign portions of trust land for use by specific individuals, but ownership remains with the tribe. Generally tribal courts together with DOI have jurisdiction over key real estate transactions.
- *Allotted land*. These lands are held in trust by the federal government for individuals. Tribes generally have no property interest in allotted trust lands. Like tribal trust land, allotted lands cannot be alienated or encumbered without DOI approval.
- *Fee simple land.* These lands are bought and sold by individuals without restriction or approval of DOI.

By and large, the tribal land in Arizona is held in trust by the U.S. Department of Interior. As a result, much of the land carries complex legal implications and costly approval processes in achieving housing development, in particular homeownership development.

As identified through the Arizona *Governor's Tribal Housing Initiative*, adoption of the proper codes and ordinances that will allow for public and private finance on tribal land is critical to the future of tribal economies and housing affairs. According to the U.S. Senate on Indian Affairs, some of the main obstacles to "building business friendly environments" that would yield confidence from investors is the ability of tribes to deliver adequate legal and governance infrastructure. Such "activities include well-established and operating tribal justice and dispute resolution mechanisms, legal code, code development, and legal and regulatory regimes that foster economic growth and risk-taking."

One of the few organizations that has responded to this issue has been Fannie Mae. The company's website explains their process:

To make conventional mortgage financing available on tribal trust lands or land that is otherwise restricted, Fannie Mae conducts a legal review of the tribe's constituent documents and law to ensure the tribe has laws and legal structures in place that appropriately support mortgage lending. Depending on the particular transaction, e.g., fee simple land is exempt, or the relationship among the parties, a Fannie Maeapproved lender may lead the review of the tribe's legal structure. Once the review is completed, Fannie Mae and tribes enter into a Memorandum of Understanding (MOU) that makes conventional mortgage financing available on trust land.⁷

Even if a tribe can provide the proper legal and governance infrastructure that would allow for private finance on tribal land, there are additional hurdles to clear such as impending delays associated with timely land lease recording by the U.S. Bureau of Indian Affairs (BIA). A timely land lease recording is critical to securing housing financing.

According to testimony by Yavapai-Apache Nation Chairman Jamie Fullmer to the U.S. Committee on Financial Services, Subcommittee on Housing and Community Opportunity, Removing Barriers to Homeownership for Native Americans, 2006:

Land and land lease issues are a major barrier to Native American homeownership. Currently, the U.S. Bureau of Indian Affairs (BIA), reviews, approves, and records all land leases and other land-related documents. In the case of the Yavapai-Apache Nation, one BIA agency regional office handles these tasks for the entire north half of the state of Arizona. While counties in the northern half of the state of Arizona can record land documents, i.e., deeds and rights-of-way, for non-reservation land in approximately 30 days, it can take the BIA upwards of one year to complete the same type of transaction.

Furthermore, Aneva J. Yazzie, former Deputy Director of the Arizona Department of Housing and current Chief Executive Officer for the Navajo Housing Authority, "encourages the BIA to contract with local tribes to produce the Title Status Reports (TSR) for Native American lands" in order to process land titles on tribal trust land in a more timely manner. This recommendation, if offered, as she is aware of "a tribe in another state that successfully contracted this function … allows for local control and a more expedient process in securing land title reports."

In an effort to expand financing options for tribes statewide, Native Home Capital Arizona, a local non-profit and certified Community Development Financial Institution (CDFI) was created. A Community Development Financial Institution is a specialized financial institution certified by the U.S. Department of the Treasury that works in market niches that are underserved by traditional financial institutions. Created through the work of community stakeholders with seed capital from the Arizona Department of Housing and Arizona Housing Finance Authority, Native Home Capital Arizona offers engaged technical assistance statewide with the end result in mind of placing Native American people in safe, descent, and affordable housing. In Arizona, there are a number of other CDFIs, typically operated by tribes exclusively for their respective communities that provide mortgage services, business development lending, and other important lending functions that serve the needs of Native Americans.

Going Forward

Thus far, as outlined in this chapter, tribes have been successful in creating and maintaining partnerships with a variety of entities, public and private, national and local, that has resulted in quality housing for their communities. However, the housing challenges that exist in the rest of the state hold for Native Nations housing as well. The efforts to provide infrastructure, build capacity, and construct culturally-appropriate affordable housing can gain further complexity from tribal land ownership. Going forward, it will become increasingly important for tribes to develop new partnerships. As we endeavor to meet the needs of Native American people, it behooves us to reach out beyond our own comfort areas and ideologies and meet the people on their terms.

Endnotes

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⁷ Fannie Mae website, "Native American Lending Legal Documents". https://www.efanniemae.com/sf/ip/na/legal.jsp

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Chapter 13

HOUSING HOMELESS AND SPECIAL NEEDS POPULATIONS

Fred Karnas, PhD

In October 2007, Fred Karnas was named director of the Arizona Department of Housing and Executive Director of the Arizona Housing Finance Authority by Governor Janet Napolitano. In that role he serves as a member of the Governor's cabinet and oversees the Department's work that ranges from addressing homelessness to creating home ownership opportunities and building livable communities. He began his work life in Arizona in the early 1970s and has worked in a variety of community and faith-based housing and human service non-profits in the state, as well as serving as a policy adviser to Governor Napolitano. He has also spent a portion of his career in Washington, DC, serving as Deputy Assistant Secretary at the U.S. Department of Housing and Urban Development, executive director of the federal Interagency Council on the Homeless (a working group of the White House Domestic Policy Council), and as executive director of the National Coalition for the Homeless. He holds a Bachelor of City Planning degree from the University of Virginia, School of Architecture, a master's degree in social work from Virginia Commonwealth University, and a PhD from the College of Architecture and Urban Studies at Virginia Tech.

Key Points

- While each person and situation is unique, persons with special needs share several commonalities, including: extremely high rates of poverty; the desire to live in normal housing rather than segregated and restrictive settings; the need for long-term supports and service in order to live as independently as possible; the desire for personal control, autonomy, and choice in one's living situation.
- Affordability and appropriateness are the key housing issues of persons with disabilities.
- The housing part of special needs housing does not look different from any other housing, although optimally it is more accessible than most existing housing. All members of the tenant household should have easy, facilitated access to a flexible and comprehensive array of supportive services.
- Supportive housing is an important model that reflects the basic principles of housing for persons with disabilities.

Introduction

At its broadest, the definition of "special needs" often includes those persons with disabilities as well as the elderly and homeless persons. However, this chapter will narrow the focus on special needs housing to those persons with significant disabilities, including homeless persons with disabilities and frail elderly persons: three subgroups of the special needs population who share common housing needs.

According to the U.S. Census, a disability is defined as a long-lasting (at least six months) physical (e.g., blindness, paralysis, etc.), mental (e.g., mental retardation, autism, etc.), or

emotional (depression, anxiety, etc.) condition that can make it difficult for the person to undertake the basic activities of daily living, such as walking, climbing stairs, dressing, bathing, learning, or remembering. The condition can also impede a person from being able to go outside the home.

Long-time disability advocate Eunice Kennedy Shriver suggests that, "Housing is the key for individuals and families with disabilities. It is the necessary foundation piece that leads to education, employment, and active participation in communities." If that is in fact the case, the news is not good. In 2006, for the first time ever, national average rents for one-bedroom and efficiency apartments exceeded the entire monthly SSI payment for individuals relying on SSI for income. Simply stated, persons with disabilities are disproportionately poor compared to people without disabilities. In Arizona, in 2006, an individual living on SSI made 18.8 percent of the state's median income. As a result, it took 103.7 percent of an individual's SSI check to cover the cost of the Fair Market Rent of a one bedroom housing unit, and nearly 90 percent of the monthly SSI check to rent an efficiency apartment.* The lack of housing affordability consigns many persons with significant disabilities to less than appropriate alternative housing arrangements in nursing homes, institutions, and substandard board and care homes. Others remain hidden from the general public in the care of parents or other family members. As a result, many Americans are unaware of the magnitude of the housing needs of persons with disabilities.

Homelessness

While having to remain in the care of family or friends or being placed in institutional settings is far from optimal for many persons with disabilities, others face an even more devastating alternative, homelessness. While homelessness is really a catch-all term for the victims of an array of personal and systemic break downs, it is clear that a significant number of homeless persons are living with disabilities. It should be recognized, however, that it is not the disability that makes a person homeless, since most persons with disabilities do not find themselves on the street. For many, homelessness reflects the collision of deep poverty with disability. According to the National Coalition for the Homeless, about one in four adult homeless persons have a psychiatric disability. Still others living on the street are living with HIV/AIDS or other chronic health conditions, physical disabilities, developmental disabilities, or substance use disorders. And the sad reality is that many homeless persons are suffering from dual or multiple disabilities.

In 2007, the best estimate of the number of homeless persons in Arizona on any given day was 14,514 men, women, and children. Of this population, it was estimated that nearly 3,000 homeless individuals were chronically homeless. (Although the term chronic homelessness has become the federal government's term of art to describe this population, the author prefers "long-term" homeless persons as "chronic" suggests

^{*} Supplemental Security Income (SSI) is the federal program that provides financial support for people with significant long-term disabilities who have virtually no assets.

permanence to homelessness which is an inaccurate). A person is chronically homeless under the federal definition if they are a single individual with a disability who has been continuously homeless for a period of 12 months or homeless at least four times over the past three years.⁴ A subset of the "chronically" homeless population are those who are seriously mentally ill (SMI), a population which, in Arizona, is estimated to be 1,777 persons. Another 312 homeless persons are dually diagnosed with mental health and substance use disorders. Experts suggest that these numbers are probably low due to the difficulty of ascertaining the health status of those homeless persons counted outside the shelter system.

The importance of housing for improving the health status of those living on the streets has been the focus of a significant amount of recent research. In 2007, a special edition of "AIDS and Behavior" journals reported that:

- Homeless or unstably housed persons were two to six times more likely to "have recently used hard drugs, shared needles or exchanged sex" than similar low income persons who were stably housed.
- Receipt of housing assistance enabled homeless persons with substance use and mental health problems to achieve stability over time and to cease or reduce both drug related and sexual risk behavior.
- Over a 12-year period, housing status and receipt of housing assistance consistently
 predicted entry and retention in HIV medical care, regardless of demographics, drug
 use, health, mental health status, or receipt of other services.⁵

As a result of this and similar research, the federal government has focused a great deal of attention on "chronic" homelessness over the past six years with reports from some locations that the number of "chronic" homeless persons on the streets is being reduced.

Frail Elderly

Another subset of the larger disability community is the frail elderly. On January 1, 2006, the first Baby Boomer celebrated his or her 60th birthday, marking the beginning of a significant demographic change for the United States. Over the next several decades, as the Boomer cohort ages, a growing percentage of the American population will be over 60 years of age. By 2020, in Arizona, one of four residents will be over 60 years of age (compared to 1 in 6 in 2000). Perhaps an even more stunning statistic is that the number of Arizonans over age 85 will increase by 102 percent between 2000 and 2020.

While age alone is not an inevitable predictor of health status, statistics point to the fact that Arizonans over 75 are more likely to have difficulties performing activities of daily living, including walking, and, less frequently, eating and toileting. About 25 percent of the state's over 65 population has significant mental or behavioral health problems including memory disorders, depression, sleep disorders or substance abuse disorders.⁷ Among older Arizonans,

according to the 2000 U.S. Census, physical disabilities had the highest incidence rate (28 percent) compared to mobility disabilities (16 percent), sensory disabilities (15 percent), mental disabilities (9 percent), and self-care disabilities (7 percent). For those elderly persons struggling with chronic and disabling health conditions, housing is a key to stability and health maintenance.

Research regularly underscores the fact that most older persons want to stay in place, but the twin challenges of economic pressures and housing inaccessibility (outside steps, inside stairs, unsafe bathrooms, etc.) either isolate frail elderly persons or push them to more expensive and inappropriate residential settings.

Commonalities

According to O'Hara and Day, frail elderly persons, persons with significant disabilities, and the "chronic" homeless population share at least four characteristics:⁸

- Extremely high rates of poverty
- The desire to live in normal housing rather than segregated and restrictive settings
- The need for long-term supports and service in order to live as independently as possible
- The desire for personal control, autonomy, and choice in one's living situation

The Housing Imperative

While consumers and their advocates have argued for more and better housing options for people with disabilities for decades, it was not until the 1999 Supreme Court decision in Olmstead v. L.C. that communities were forced to recognize that institutionalization was not an appropriate housing model for the vast majority of persons with disabilities. The court's decision argued that unjustified isolation in an institutional setting was a form of discrimination:

First, institutional placement of persons who can handle and benefit from community settings perpetuates unwarranted assumptions that persons so isolated are incapable or unworthy of participating in community life.... Second, confinement in an institution severely diminishes the everyday life activities of individuals, including family relations, social contacts, work options, economic independence, educational advancement and cultural enrichment.⁹

As a result of the Olmstead decision, communities are required to offer persons with disabilities currently living in public institutions, nursing homes, and other restrictive settings more appropriate housing and services to support independent living.

Barriers to Housing for Persons with Disabilities

"Housing for People with Mental Illness: Update of a Report to the President's New Freedom Commission" suggests that there are a number of barriers to meeting the housing needs of persons experiencing mental illness and other disabilities:¹⁰

- Federal "elderly only" housing policies prevent persons with mental illness and other disabilities under the age of 62 from accessing many federally subsidized rental properties.
- Programs that can help SMI consumers access affordable housing, such as the Section 8 Housing Choice Voucher program and Section 811 Supportive Housing for Persons with Disabilities, have experienced a decline in federal support in recent years.
- With the exception of funding for people who are chronically homeless, recent federal housing policy has shifted to home ownership opportunities for households above 30 percent of median income rather than on affordable rental housing.
- The federal government has passed on decision making for most housing programs to the state and local level where support is uneven and officials do not always "understand or prioritize the needs of people with mental illnesses." There have been reductions in federal housing subsidies, leaving more responsibility to states and municipalities for new housing production.

Housing Models for Persons with Special Needs

According to O'Hara and Day:

The goal of the independent living movement is for people with disabilities to control their own lives and become self-empowered, to become socially and economically productive, to achieve self-direction and to have the opportunity to live in permanent, independent, affordable, and accessible housing.¹¹

Toward that end, O'Hara and Day suggest that there are some important principles in supportive housing for persons with disabilities:

- All groups have a similar need for government-funded housing assistance because of extreme poverty.
- Control over one's environment and housing choice is important.
- Housing must be permanent, as defined in the landlord/tenant law.
- Housing must be "unbundled" from supportive services...but supportive service must be available and accessible if needed and desired.
- Supportive services must be flexible and individualized rather than defined by a "program." ¹²

There are a variety of ways to address the need for more special needs housing in Arizona. The first is through the development or renovation of supportive housing. It should be noted that the development of special needs housing is not unlike the development of any housing. There may be some design elements that respond to accessibility and visitability (see Glossary), but, for the most part, the key difference between supportive housing and "normal" housing is not in the physical design, but in the availability of supportive services. Thus, it is important to recognize that there is no such thing as "homeless housing" or "AIDS housing" or "elderly housing." Housing is housing. The only thing that may differentiate the housing for the various population groups is the constellation of services available.

The Corporation for Supportive Housing (CSH) focuses primarily on housing for homeless persons, but the basic tenants of their supportive housing definition apply universally to housing for persons with disabilities. The elements of this definition are as follows:

- The unit is available to, and intended for, a person or family whose head of household is homeless, or at risk of homelessness, and faces multiple barriers to employment and housing stability, which might include mental illness, chemical dependency, and/ or disabling or chronic health conditions.
- The tenant ideally pays no more than 30 percent of his/her household income towards rent and utilities and never pays more than 50 percent of income toward such housing expenses.
- The tenant household has a lease (or similar form of occupancy agreement) with no limits on length of tenancy, as long as the terms and conditions of the lease or agreement are met.
- The unit's operations are managed through an effective partnership among representatives of the project owner and/or sponsor, the property management agent, the supportive service providers, the relevant public agencies and the tenants.
- All members of the tenant household have easy, facilitated access to a flexible and comprehensive array of supportive services designed to assist the tenants to achieve and sustain housing stability.
- Service providers proactively seek to engage tenants in on-site and community-based supportive services, but participation in such supportive services is not a condition of ongoing tenancy.
- Service and property management strategies include effective, coordinated approaches for addressing issues resulting from substance abuse, relapse, and mental health crises, with a focus on fostering housing stability.¹³

There are several approaches to the provision of supportive housing. The first is a single site multi-unit complex (i.e., apartments) targeted to a specific population group (e.g. homeless persons experiencing mental illness or elderly persons). While this model works well for seniors and some subsets of the homeless population, many people with disabilities prefer living in scattered site units which are part of a larger housing complex with a more diverse population. These units may be set aside in Low Income Housing Tax Credit projects as is being done in North Carolina and other states. Or the units may be private market units such as single family homes or units in apartment buildings.

There are also a variety of supportive housing service delivery models including the "housing first" model that has been much discussed across the country in recent years. This approach to supportive housing focuses on getting persons with disabilities quickly off the street and into permanent housing (as opposed to shelter or transitional housing) and surrounding that person with voluntary services. "Pathways to Housing" in New York City, a pioneer in the "housing first" approach, has had considerable success with persons experiencing mental illness. The key to a successful "housing first" approach is the availability of affordable housing (often subsidized) and the appropriate constellation of voluntary services for each client.

Another approach to providing housing for persons with disabilities is through the modification of existing residences. Modifications of entryways with ramps for accessibility, the addition of stairway lifts to move persons from floor to floor in multi-story homes, and the renovation of bathrooms and kitchens to make them accessible to persons in wheelchairs or with other mobility disabilities can allow frail elderly and persons with disabilities to remain in the homes and communities with which they are familiar and comfortable. In addition to home modifications, there are a number of assistive technologies which can support persons living independently, including communication devices (telephone and computer adaptations), durable medical equipment (mobility supports), and emergency systems (fall detectors, unlit gas detectors, vibrating fire alarms). The key issue in both home modifications and assistive technologies is cost. Because there are limited number of sources of funding for persons with economic constraints, using this approach to independent living can be challenging.

Another method for ensuring accessibility for persons with disabilities and ultimately eliminating the challenges of having to retro-fit homes with accessibility modifications is the implementation of "universal design" principles. Universal design encourages the design and construction of housing units so that they can be easily adapted for any resident by focusing on such housing elements as stepless entrances, wider interior and exterior doorways, wider hallways, open interior layout, placement of electrical outlets and light switches so they are reachable both by those with disabilities and those who are abled, curbless showers, and knee space under kitchen counters. A more macro approach to supporting independent living for persons with special needs is the development of "livable communities." This planning approach involves ensuring communities include mixed use and mixed income intergenerational housing, second units, co-location of programs and services, and transportation options that support the mobility, health, and service needs of a diverse population.

Finally, in order to move the special needs housing agenda, resources are needed. Currently there is a fragmented array of federal and state programs. For example HUD's 202, 811, and Continuum of Care programs all make some units available to the frail elderly, homeless persons, and persons with disabilities but they are all inadequately funded to meet the extensive housing needs of this nation's disabled population. A few states have taken matters into their own hands. In North Carolina, the state requires that all Low Income Housing Tax Credit projects make 10 percent of their units available for low income persons with disabilities. New Jersey is using proceeds from traffic fines to create a Special Needs Housing Trust Fund. And, Hawaii has created a Supported Housing Bridge Fund to assist disabled persons access quality housing while awaiting longer term subsidies like Section 8 vouchers.

Conclusion

In the end, innovation in affordable housing practices benefiting people with disabilities will also depend on intangibles, including a culture of innovation and change, and the leadership it takes to sustain the process of systems change. However, these dynamics can be fostered and enhanced by: 1) developing working partnerships between the affordable housing system and the disability community; 2) creatively utilizing all available resources—both housing and service resources; and 3) prioritizing the housing needs of people with disabilities in all state- and community-based affordable housing activities.¹⁵

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Chapter 14

AGING HOUSING STOCK

Allison Kennedy

Allison Kennedy has had a life-long interest in the intersection of people, land use, and culture. She received a B.A. in English from Wesleyan University in Connecticut and subsequently went on to study Landscape Architecture at The University of Arizona. She has worked on several community planning projects including housing for the UA Agricultural Research Station at Red Rock, which is currently under construction. Her work with the Drachman Institute began as a research assistantship on several year-long housing assessments in townships around Arizona. She received her Master's of Landscape Architecture in May 2008; her thesis regarding urban infill practices was given an award of excellence. Allison continues to work for the Drachman Institute on housing research and community outreach design projects.

Key Points

- Arizona experienced a housing boom following WWII. These homes are still an
 important part of the state's housing stock, but are approaching an age where major
 repairs are needed. There is division over whether older homes should be updated or
 torn down and replaced.
- Older mobile homes cannot effectively be upgraded, yet their residents often cannot afford a different housing option.
- Housing materials and construction make significant differences in the lifespan of a house. Post-war houses are more durable than most of those being built today.
- Historic preservation of aging housing stock can be difficult given rigid guidelines of
 what is valuable. Rehabilitation funding can be competitive and is often targeted at
 the lowest income families.
- It is important to consider how new housing will age, and how it will be maintained.

Introduction

Aging housing stock is a growing concern in Arizona. Throughout the state, populations boomed in the post-WWII years. The number of homes needed to accommodate these new residents likewise surged between 1945 and the early 1970s. The older housing units in this range are fifty years or older, a benchmark age for buildings. For some, fifty years is the full lifespan of a building; for others, a time when major repairs may be needed. It is also the age at which a building may be considered historic. In Tucson alone, it is estimated that by the end of the decade between 50,000 and 80,000 units (as much as 18 percent of the city total) will be fifty or more years old.¹

Post-War Housing History

To understand the problems arising from aging housing stock, we need to know about homebuilding practices during the post-war era. During the 1940s, Arizona was the

fastest growing state except for California. War-time industry such as aviation brought new workers and their families to the area. When the war ended and the manufacturing plants that supported it closed, many people chose to stay for the good climate, low cost of living, and relatively cheap available land. The primary market was working class families on a single income looking for affordable homes, and housing developers responded accordingly. A popular way of reducing the cost of housing was to build outside city limits on unincorporated county land. Here, not only were land prices cheaper, but builders could avoid the land use and building regulations imposed by municipal governments.² Even after counties enacted county-wide zoning, or cities annexed new areas and expanded their borders, ordinances were difficult to enforce. This means that a significant number of postwar homes in Arizona were built in an unregulated, somewhat haphazard way. To bring them up to today's code standards is a large and expensive proposition.

Housing development then, as now, occurred mainly in the form of subdivisions. However, unlike today when national development companies own the land, in the 1940s and 1950s it was not uncommon for individuals to hold the land rather than businesses. The land was divided and then sold to builders or the families themselves. These subdivisions typically contained around 100 homes, and the houses averaged less than 1,000 square feet (Figure 14.1).³ Though there was a mixture of building styles, most homes were constructed from local materials such as burnt adobe brick which were readily available and inexpensive. This "distinctive palette" gives these older subdivisions a certain character that is valued today.



Figure 14.1: Older home characteristic of early post-war subdivisions

Source: Drachman Institute

Over time, subdividing the land and constructing the houses on it became an integrated operation organized within one company. Developers began to consider economies of scale, where mass-producing homes is more cost effective than designing and building each home separately. Starting in the late 1950s, subdivisions began to offer model homes. A family could choose one of several set designs which could be finished or sited on the lots

in different ways in order to individualize the homes. This type of production allowed subdivisions to become larger and still be economical. The number of new homes built per year increased, as did the size of the units. An average 1,200-1,500 square-foot home might have three or four bedrooms, two bathrooms, a rear patio, double wide carport, and upgraded fixtures and appliances (Figure 14.2).⁴

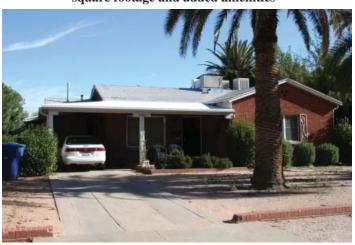


Figure 14.2: Typical later post-war model ranch home that demonstrates larger square footage and added amenities

Source: Drachman Institute

Throughout Arizona, the majority of post-war houses are constructed of some kind of masonry, as lumber was scarce and expensive after the war. In Tucson, these materials were typically burnt adobe, concrete, brick, or slump block. In the Phoenix area, Superlite block was the most common.⁵ These materials hold up well and have a long life, even in the desert's harsh conditions. They can also, as mentioned previously, impart a visual character or sense of place to a neighborhood. The 1960s and 1970s saw lumber become a prevalent building material in the form of wood-frame housing construction and in wood siding. These materials are not as durable or easy to maintain (see Figure 14.3). Ranch houses remained the dominant style regardless of building material. Their rectilinear forms were simple and cost-effective to build: one level, constructed on a concrete slab, topped with a low-pitched roof.

Mobile Homes

Another popular form of affordable post-war housing was the mobile home. Travel trailers, which prior to the war had been used for vacationing, were transformed into year-round residences that let their owners live near the war-time production plants. Following the war, the trailer industry changed to meet consumer demand. Pull-along trailers were largely replaced by self-propelled recreational vehicles for travelers. For the population who desired a residence rather than a holiday vehicle, mobile homes were developed. The early homes were limited by laws regarding maximum towing size: 8 feet wide, 12.5 feet high, and 35

feet long.⁶ Particularly for families, these cramped conditions resulted in overcrowding and lack of privacy. Multi-sectionals, or "double-wides," began to be produced in the late 1960s. Though size of the living space was increasing, quality of the unit remained an issue. This led the U.S. Department of Housing and Urban Development (HUD) to pass the Mobile Home Construction and Safety Standards Act in 1974, creating a national building code for mobile units. This code supersedes state and local building codes meaning that as long as the unit is in HUD compliance, it can be sold anywhere in the country.⁷

Figure 14.3: Properties of common Arizona building materials

Materials





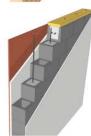
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Source: Drachman Institute

Rural Areas

Older rural housing shares some commonalities with housing built in expanding urban areas during the same era. Many homes were constructed prior to the adoption of building or land use planning codes, particularly mobile units. Mobile and manufactured homes are especially prevalent in rural areas, comprising as much as half of the existing housing stock in some locations (Camp Verde, for example). Much of aging housing in rural areas is clustered in definable neighborhoods, a fact which has both positive and negative aspects. On the one hand, it means rental and substandard housing is often concentrated in one place, but on the other hand suggests an opportunity for focused revitalization efforts.

Post-War Housing Now

Current Conditions

Today, post-war homes are still an essential part of Arizona's housing stock. In many cases, they represent some of the most affordable housing within cities. Trends show that older housing makes up a large part of the single-family rental unit market. Because they are built of masonry, most are structurally quite sound. The exception is mobile homes, which in their early years were often of poor quality, an unfortunate circumstance that has perpetuated negative stereotypes about them despite the fact that newer models are comparable to standard construction (see Chapter 8). Older homes are typically occupied by middle- to lower-income families who may not have the resources to keep up with the maintenance required on an aging home (Figure 14.4). The lower the household income, the more issues there usually are to be addressed. This also holds true for rental housing, which is more likely to fall into disrepair than owner-occupied units.

A recent study of post-war homes in Tucson revealed that roughly half have problems with plumbing or the roof. ¹⁰ These costly items would require an estimated \$10,000 per home to repair. The inefficiency of older homes may also be costing their owners. Post-war homes were built in a time when a leaky structure was acceptable. Airflow was needed in order to make evaporative cooling more effective. Now, many households have switched to air conditioning and central heating. With their single-paned windows and lack of insulation, the homes do not hold cooled or heated air well.

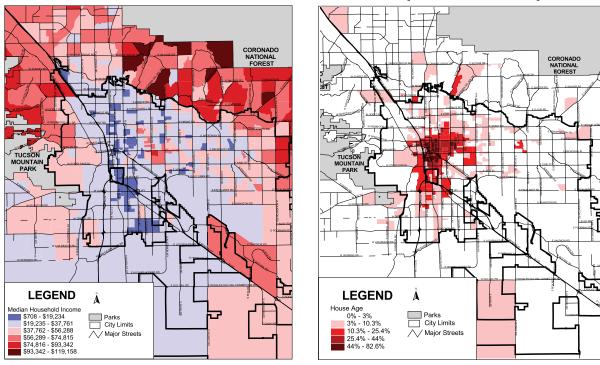
A further issue is that these post-war houses were constructed before the need for universal accessibility was widely acknowledged. Additional evidence of this is that the Americans with Disabilities Act (ADA) was not passed until 1990 (and even this legislation does not apply to private homes). Yet older homes are popular with an elderly population, some of whom have owned the house for decades and want to "age in place," and others who have moved in for the convenient location and affordability. Post-war units need to be made accessible for their residents, which may mean installing wheel chair ramps, adapting bathrooms, widening doorways, etc. Above all, in order to keep housing conditions favorable and safe, these homes should ideally be brought up to code, particularly by updating the plumbing and electrical systems.

Figure 14.4: A comparison of these two maps (census data for Tucson, 2000) reveals that households with the lowest median income tend to reside in areas where the oldest housing is concentrated. Deviations in this pattern usually indicate larger, historically valuable homes.

Median Household Income by Block Group

House Age by Block Group





Source: City of Tucson Department of Urban Planning and Design

Improve or Replace?

Homeowners seem to be of two minds regarding aging housing stock: upgrade or tear down. The decision to keep or demolish a house depends mainly on its condition and the financial situation and interests of the residents or owners. Though the amount of work needed on a home varies, the Tucson study of post-war housing found that fixing the problems would be about ten times less expensive than replacing the home. With improvements, the masonry houses can last another fifty years.

Alternatively, building a new home can greatly increase energy efficiency and accessibility, and may bring more property value to an aging neighborhood. This practice is becoming more common in Arizona as the value of the land begins to surpass the value of the old housing unit. Some homes have historical value, and should be preserved as a part of our cultural heritage. Yet others, particularly cheaply-built early mobile homes, are difficult to upgrade and continue to deteriorate. Realizing this, the construction industry will typically not work on mobile homes, leaving repair work to handymen and "do-it-yourself" owners. However, the household income for many owners of these units often prohibits them from doing adequate repairs or purchasing a new unit, which can now cost nearly as much as a site-built home.

The following items are typically the most needed improvements in post-war homes:

- *Insulative shell* may require replacing windows and roof and inserting wall insulation
- *Mechanical and plumbing systems* may require replacing water heater, putting in low-flow toilets, installing grounded outlets, replacing copper wire, and replacing old pipes
- *Accessibility* may require widening doorways and halls, installing wheelchair ramp, chair-lift, grab-bars, and lower counters.

Preservation or Rehabilitation

Then there is the question of historic preservation versus housing upgrade. As has been described, some neighborhoods and individual homes are considered to be historically significant due to the design and character, because of a famous resident who lived there, or because of an important event that occurred there. Such buildings can be candidates for any of several historic preservation strategies that will help to protect the character of the home.

There are both federal and state preservation programs. Houses or whole neighborhoods can be nominated for the National Register of Historic Places. Inclusion on the register does not exert any restrictions on the homeowner, who can make changes to or even demolish the structure. However, being on the register is often a prerequisite for homes to apply for state programs, which is the case in Arizona. The National Trust for Historic Preservation has a rehabilitation tax credit available for restoring old buildings, but it only applies to buildings whose use generates income, and is therefore not available for home owners. The State Historic Preservation Office (SHPO) of Arizona, administered by the State Parks, offers a property tax deduction of 35-45 percent for qualifying homes on the national register. This State Historic Property Tax Reclassification is binding, and the property owner must agree to maintain and preserve the historic value of the home. While tax deductions provide some assistance, funding for historic preservation of housing comes primarily from the owner through bank or family lending, or out of pocket.

Historic preservation is further limited by the fact that agencies are only interested in homes and districts that have retained their integrity. This is a qualitative measure of how well a property still conveys its original significance. Homes that have been altered over time to meet the needs of their occupants, say with an addition, are usually ineligible. However, other resources exist to help homeowners with non-historic yet aging properties achieve important renovations. Every year, HUD allocates money to Community Building Block Grants (CDBG) and the Arizona Department of Housing (ADOH). In 2006, these monies totaled about \$12 million. The majority of these funds must be put toward the benefit of low- to moderate-income households, and the rehabilitation of owner-occupied and rental housing are considered eligible activities.

The U.S. Department of Agriculture Rural Development branch provides assistance to very low-income families (less than 50 percent of area median income) in need of housing repair in non-urban areas. The assistance is in the form of a 1 percent interest government loan of

up to \$20,000 that is available to owner-occupiers.¹³ The Rural Housing Programs extended by Rural Development also make funding available to individuals and developers for the acquisition and rehabilitation of single- and multi-family rural housing for low- to moderate-income residents.

Municipalities can contribute to housing rehabilitation through their own programs, often in partnership with local non-profits (see Chapter 9). An example of this is Neighborhood Housing Services (NHS) of Phoenix which receives funding from the city to provide education, home rehabilitation services, and mortgage products. To date, NHS has renovated several dozen homes in Phoenix's Garfield neighborhood. The organization purchases a rundown older home—often a foreclosed property available through a bank. Using primarily federal loans, NHS may update the appliances and the electrical, replace floors, windows, walls and roofing as needed and remove un-permitted additions. The home is then sold to an income-qualified family or individual, with subsidy from the city providing down payment assistance.¹⁴

Looking Ahead

Finally, it is important to remember that today's new housing stock becomes tomorrow's aging housing stock. Arizona still has many usable post war homes because these homes are constructed of durable masonry materials. In contrast, most houses being built today are wood frame and stucco. While masonry houses may last fifty or sixty years without needing extensive improvements, wood-frame homes probably have a life expectancy around thirty years. With the recent housing boom that occurred throughout the state, there are thousands of these new homes that will likely need major repair in a few decades. Some groups are calling for bond measures or increased public and private investment to aid in rehabilitating older housing now and in the future.

Endnotes

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² "Tucson Post WWII Residential Subdivision Development 1945-1973." Akros, Inc., Wilson Preservation, Coffman Studios, LLC, HDR, and the Preservation Studies Program of the College of Architecture and Landscape Architecture at The University of Arizona. October, 2007.

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¹¹ Arizona State Historic Preservation Office. www.pr.state.az.us/partnerships/shpo/spt.htm

¹² Arizona Department of Housing. <u>www.housingaz.com</u>

¹³ USDA Rural Development. <u>www.rurdev.usda.gov/rhs/sfh/brief_repairloan.htm</u>

¹⁴ Personal communication with Doug Parker, Real Estate Manager for Neighborhood Housing Services on September 10, 2008.

Chapter 15

SUSTAINABILITY AND GREEN TECHNOLOGY

Shane Smith, RA, LEED AP

Shane Smith is an Architect and LEED Accredited Professional with a research focus in energy, water, and material conservation. She served as the Drachman Institute Research Coordinator for the past year and coordinated the research for a set of guidelines titled *Conservation Technologies for Affordable Housing: Energy Efficiency and Water Conservation Design Guidelines*.

Key Points

- There are a number of cost-effective sustainable design measures that can be implemented in housing construction to offset operating costs and alleviate depletion of limited energy, water, and material resources.
- Aspects critical to a housing development's long-term sustainability include:
 - Site selection (because of location in proximity to workplace and amenities)
 - Site development (because of impacts on the urban and natural environments)
 - Minimization of building footprint (because of reduced site disturbance and energy and material conservation)
- There are unique regional material resources in Arizona that have been utilized on a limited number of housing projects; however, the predominant form of residential construction in Arizona is stucco and wood frame.
- Regulations for energy efficiency are adopted by local jurisdictions in Arizona and do not currently account for solar orientation, a factor that greatly impacts the energy performance of a building in the southwest.
- Current green building programs in Arizona are limited to Phoenix, Scottsdale, Tucson, and Flagstaff.

Introduction

As housing-related costs continue to rise, housing affordability levels will continue to decline. Some primary costs affecting affordability levels are the rising energy, water, and material resource prices. Energy consumption is both directly and indirectly related to fossil-fuel based technologies, and fossil fuels are increasing in cost very rapidly while global resources for such fuels are continuously depleting. Water is a most precious resource in the state of Arizona. Depletion of groundwater supply, limited access to river water, and ongoing droughts severely limit the amount of water available in the state for agriculture, industry, and municipal use. Sustainable, or "green," design measures can offset the depletion and rising costs of these resources. In addition, sustainable housing provides the added benefit of healthy living conditions, often a concern in affordable housing development.

Sustainability and Green Building Considerations

Sustainability encompasses economic viability, fairness, and environmental conservation. It is the latter aspect, environmental conservation, which is addressed in this chapter as it pertains to housing in Arizona.

Green building addresses five core issues:

- 1. Smart land use
- 2. Energy efficiency
- 3. Water efficiency and management
- 4. Resource-efficient materials
- 5. Healthy indoor environmental quality¹

The U.S. Green Building Council has devised a set of standards and accompanying rating system to help guide sustainable construction. The program, called Leadership in Energy and Environmental Design (LEED), can certify buildings that meet their set criteria. Some of the specific strategies for green housing development include the following:

- Building in communities with existing services and infrastructure (infill)
- Reusing centrally-located land and rehabilitating historic buildings or older building stock
- Locating projects close to public transit and community amenities to reduce car dependency
- Producing the most compact and efficient housing units possible to reduce material use and the amount of space needing heating and cooling
- Reducing construction waste through materials reuse or recycling
- Reducing energy consumption through well-designed buildings and efficient appliances and fixtures
- Reducing water consumption both indoors and in landscaping
- Improving the quality and reducing the volume of storm water
- Using materials that do minimal harm to people and the environment during manufacture, use, and disposal
- Increasing durability by minimizing moisture penetration
- Improving indoor air quality through good ventilation and use of nontoxic materials and finishes
- Reducing the heat island effect (see Glossary) through reflective roof and paving materials and planting trees
- Establishing maintenance practices that reduce use of pesticides, fertilizers, and harmful cleaning chemicals²

Site Selection and Development

The selection of a site for any housing development is critical to the project's long-term sustainability. An appropriate project location can reduce the dependency on private automobile use when there is proximity to public transportation or pedestrian links to

shopping, parks, schools, and workplace. An infill project can utilize existing infrastructure. Each of these site selection aspects lend to both long-term affordability and environmental benefits.

Sustainable site development considerations include the reduction of site disturbance through minimized building footprints, storm water management, reduction of urban heat island effects, and reduction of light pollution (see Glossary). Smaller building footprints have the added benefit of reduced energy consumption loads. Appropriate storm water management design will result in more water retained on site and cleaner water runoff from the site into storm drain systems. Urban heat island effects can be reduced through incorporating more trees, pervious site surface materials, and light color building materials. Light pollution reduction strategies include selecting appropriate fixtures that minimize the spread of lighting.

Energy Use

The primary considerations for energy-efficient housing include the following:

- A thorough analysis of the interrelated performance of the building enclosure in conjunction with the passive or active mechanical systems (often termed "wholehouse" or "whole-systems" performance analysis)
- Consideration for site orientation
- Proper oversight of the construction process in order to ensure adequate standards are met with regards to duct-taping and sealing of other potential air leaks

Often the building enclosure system is addressed as one of the primary energy efficiency targets; thus, high resistance-value (R-value) insulation in both walls and roofs may be installed to improve the thermal barriers against extreme hot and cold weather conditions. Some additional building enclosure elements that assist with energy performance that are not always considered include wall and roof reflectance values (especially for hot climates), and the strategic placement of windows, doors, and skylights. Additionally, other sometimes neglected strategies include minimizing wall-to-floor area and window-to-wall ratios. However, the most common component targeted for energy performance tends to be the mechanical systems. If the building or house is designed properly in its other aspects, especially with integrated passive design (solar access with thermal mass for passive heating, overhangs on roof and other shading elements for passive cooling, etc.), then each of these strategies can alleviate sole dependency on mechanical systems.

Single-family residences have various energy efficiencies, dependent upon construction type, climate region, age, occupant use, and construction quality. A typical range of adequate energy consumption (for heating and cooling source consumption only) for a single-family house is 50-60 KBtu/square foot per year. However, a more sustainable energy consumption range is around 25-40 KBtu/square foot per year.

Multi-family residences also have various energy efficiencies with similar causal factors as noted above. However, multi-family housing tends to be, by nature, more energy efficient per square foot than typical single-family housing construction. This is primarily due to the limited exposure to exterior conditions with shared walls and shared roof for buildings with multiple floors.

Residential energy consumption is also affected by the efficiency of appliances, light fixtures, and occupant behaviors. Appropriate education for occupants is critical to ensuring more efficient energy use in affordable housing. Use of ENERGY STAR rated appliances and compact fluorescent light fixtures will also reduce energy consumption.

Figure 15.1: Ironwood Trails affordable housing development in Apache Junction with Photovoltaic panels donated by Arizona Public Service Company



Source: Habitat for Humanity

Specification of active solar technologies, such as solar hot-water heating or photovoltaic (PV) systems, can also offset utility costs. Studies indicate that solar hot-water heating systems are cost-effective with a typical pay-back period of less than seven years. However, PV systems are far more expensive and generally not feasible for affordable housing development. There are some emerging relationships between utilities and non-profit developers in which PV systems are donated by the utility company to a housing development project. One example is the Ironwood Trails development by Habitat for Humanity in Apache Junction in which Arizona Public Service Company donated a 3kW PV system for each house (Figure 15.1); this size system helps to offset energy costs for each residence. However, a 5kW PV system is typically required for a residence to become independent from grid-tied (or utility-provided) electricity. Installation of PV systems also benefit the utility company through reduced peak demand loads that alleviate potential black-outs due to over-demand on the utility's available power supply.

Water Use

Water in Arizona comes from five primary resources:

- 41 percent from groundwater
- 21 percent from in-state rivers
- 20 percent from the Colorado River
- 15 percent from the Central Arizona Project (CAP)
- 3 percent from reclaimed water (see Glossary)³

Reclaimed water access exists through underground water storage recharge programs within Active Management Areas (AMAs) that exist in Phoenix, Prescott, Tucson, and Pinal and Santa Cruz Counties (Figure 15.2). Water use is split among agriculture (68 percent), municipal use (25 percent), and industry (7 percent).⁴ Lack of precipitation (meteorological drought) combined with the decreasing river flows and groundwater levels (hydrological drought) have affected the entire state with exception of Phoenix, which has access to reservoirs of the Colorado River and Lakes Mead and Powell.⁵

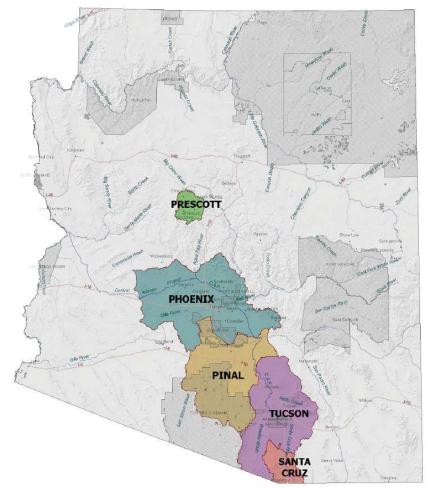


Figure 15.2: Arizona Water Active Management Areas

Source: Arizona Department of Water Resources, 2008

Water efficiency measures in housing development can include water-efficient landscaping, innovative wastewater technologies, and a general reduction of water use. Gray-water systems utilize waste water from approved plumbing fixtures (lavatory, shower, washing machine) and recycle the water to temporary storage or direct the water to exterior landscaping. The City of Tucson recently passed a requirement for all new homes built within the city limits beginning June 1, 2010, to include the waste system needed to connect to a gray-water irrigation system that could be installed at a later date. It is estimated that the system will cost about \$500 for the average home.

Rainwater harvesting is a method of capturing and storing rainwater on-site that can later be used in exterior landscaping. Both the gray-water and rainwater harvesting systems alleviate the need for potable water for landscaping irrigation. In addition, installing low water-use plant materials can reduce water consumption for landscaping. Installation of low-flow plumbing fixtures and dual-flush toilets can further reduce the amount of potable water use.

Material Use

Materials that are used in building construction for residential projects vary widely. Different building materials may be required by building code for single-family vs. multi-family housing, for new construction vs. renovation or rehabilitation, and for different regions. Sustainable material selection includes materials that are extracted, processed, or made within a regional proximity to a project site (LEED recommends a 500-mile radius around a project location for regional identification of building materials). Utilization of regional materials reduces the embodied energy of the material because of the reduced transport distance. Building materials that have a portion of recycled content, that are made from rapidly renewable resources (defined as materials that grow back within five years), or that are harvested with sustainable practices (such as Forest Stewardship Council wood), can also minimize the environmental impact of building construction.

In 2004, the construction of five houses by The University of Arizona School of Architecture Design-Build Studio, in partnership with various non-profit developers and City of Tucson Community Services Department, were initiated. The wall construction types for each of the five houses vary and include Integra Block, Insulated Concrete Form (ICF) System, Heydon System, Straw Bale, and Rammed Earth (Figure 15.3). The intention of the project was to model construction that provides substantial long-term energy savings targeted for low-income households. The building materials implemented in these affordable housing projects represent a sample of current construction systems, some of which are made from renewable resources (straw bale, rammed earth), that improve energy performance. However, the most predominant exterior wall system in affordable housing development in Arizona is wood stud framing with batt or blown-in insulation and exterior stucco finish. This building system typically offers the cheapest initial construction cost, but is not as effective for long-term energy cost savings when compared with highly insulative or thermal mass exterior wall systems.



Figure 15.3: Rammed earth wall of an affordable housing unit

Source: Drachman Institute/DDBC

Reuse of existing buildings is a highly effective strategy for reducing material use. Adaptive reuse projects not only make use of existing structures, but also lessen the environmental impact of transporting additional materials to the project site. Adaptive reuse projects can sometimes be costly due to additional remediation efforts and unknown existing conditions that might be revealed during construction. The Curley School in Ajo, Arizona, is a school building that was converted to a mixed-use facility with affordable housing units for artists

Although infrastructure is often one of the first major obstacles for decent affordable housing development in rural areas, another is transporting building materials to remote sites. Some sustainable building material considerations for rural affordable housing in Arizona include adobe, rammed earth, and straw bale in the southern regions, and modular Structural Insulated Panels (SIPs) in northern regions. FlexCrete units, a form of concrete masonry units made with the fly-ash byproduct from the coal-fired power plant in the Navajo Nation, are also a sustainable building material option for northern regions. There are very few existing rural housing projects in Arizona that utilize sustainable building techniques. In addition, the U.S. Department of Agriculture and Rural Development currently have no incentives in place for green design.

Indoor Environmental Quality

Health-related costs for low-income populations can often be burdensome and can often constitute a large portion of these families' annual household incomes. The indoor environment of residences directly impacts the health and well-being of the occupants. Poor indoor environmental quality (IEQ) can cause asthma, lead poisoning, headache, allergies,

depression, and other disease. IEQ can be improved through design strategies such as carbon dioxide monitoring, tobacco smoke control systems, ventilation effectiveness, low-emitting materials (no off-gas and no-VOC materials), mold-resistant materials, as well as through an increase of natural daylight and general control of the indoor environment by its occupants.

Cost Considerations

Both initial and long-term costs must be considered when evaluating the environmental conservation and cost-saving benefits of green strategies. Long-term costs encompass operational, maintenance, and life-cycle costs. Major aspects of housing costs are addressed in Chapter 7, "A Primer on the Cost of Housing and Affordability." The initial costs of some green strategies may be cost-prohibitive for affordable housing development; however, the long-term cost-saving benefit, especially for low-income households, can offset the initial costs. Funding incentives are often needed to encourage implementing certain green strategies into low-income or affordable housing development, although there are many passive green strategies that do not add any cost to a project. The initial costs for green strategies applied to renovation projects may be generally higher than when integrated in new construction. There may also be regional differences for the most cost-effective green strategies.

Current Policy for Sustainable Affordable Housing in Arizona

The 48th Legislature, 2nd Regular Session (2008) saw the introduction of several bills relating to green building. HB2766, Omnibus Energy Act of 2008, was sponsored by Rep. Lucy Mason (R-Prescott). The bill underwent several changes from its initial iteration after lengthy stakeholder meetings. The bill passed the House of Representatives and its Senate Committee, but was not brought to the full Senate for consideration. Among numerous other provisions, the bill established energy goals for residential construction. Relevant provisions included:

- Establishes statewide goals for new buildings phased in over the next 12 years
- Increases the percentage of new buildings that must be more efficient, on average, than 2006 standards: 15 percent by 2012, 30 percent by 2016 and 50 percent by 2020
- Requires the Department of Commerce Energy Office, cities, towns, and counties to track energy-efficient construction and report annually
- Defines energy-efficient building as new residential and commercial buildings that meet or exceed specific national energy-efficiency standards
- Establishes construction of energy-efficient buildings as a state policy.

Initially, the bill also required the Director of the Department of Housing to establish guidelines that require all new, state-funded, multifamily housing construction to meet specific energy efficient standards. However, this provision was to be removed if the bill went to the Senate floor due to industry opposition. A concern with mandating stringent

energy-efficiency standards for affordable housing development is that the cost impact will be burdensome to the extent of making a project infeasible.

A strike-everything amendment to HB2221 (Rep. Jonathan Paton, R-Tucson) would have required any municipality that establishes a mandatory green building program for any new residential or commercial development to prepare a green building impact analysis study. The municipality or any other political subdivision would be prohibited from requiring, as a condition of any land use or approval, that a land owner participate in any green building program or denying any land use approval for not participating or installing any green building measure that has not been adopted in statute. Many local governments opposed the legislation and the bill stalled shortly after the amendment was adopted.

Regional and Local Code Enforcement

Arizona is a home rule state, thus codes are continually adopted and enforced on a local level. Today, thirty local municipal governments in Arizona have adopted energy codes or codes which incorporate energy provisions. However, there are still some jurisdictions that do not require any specific energy standards to be met for residential construction. The energy code most widely adopted in various jurisdictions is the International Energy Conservation Code (IECC); only a few municipalities have amended this code for regional differences. Exclusion of energy efficiency standards from local codes impacts homeowners' and renters' abilities to afford the annual utility costs. The IECC indicates that energy analysis calculations be provided for code compliance verification; the analysis programs most often accepted in jurisdictions within Arizona are ResCheck or ComCheck. Neither of these software programs accounts for solar orientation in the energy performance analyses. Solar orientation has a significant impact on the energy performance of a structure, especially for passive-solar designs and for construction throughout the southwest.

For a list of programs that currently incentivize, qualify, or verify sustainable housing design in Arizona, see Appendix D.

Endnotes

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Chapter 16

BEST PRACTICES IN EMERGING MARKETS

Allison Kennedy Richard Eribes, PhD, AIA

Allison Kennedy has had a life-long interest in the intersection of people, land use, and culture. She received a B.A. in English from Wesleyan University in Connecticut and subsequently went on to study Landscape Architecture at The University of Arizona. She has worked on several community planning projects including housing for the UA Agricultural Research Station at Red Rock, which is currently under construction. Her work with the Drachman Institute began as a research assistant on several year-long housing assessments in towns around Arizona. She received her Master's of Landscape Architecture in May 2008; her thesis regarding urban infill practices was given an award of excellence. Allison continues to work for the Drachman Institute on housing research and community outreach design projects.

Richard A. Eribes is the Assistant Vice President for Campus and Facilities Planning and former Dean of the College of Architecture and Landscape Architecture at The University of Arizona. He holds the title of Professor in the School of Architecture. Over the last ten years, he served as a member of U of A's Planning and Design Review Advisory Committee, and was chair of the 2003 Comprehensive Campus Plan Steering Committee. He came to The University of Arizona from the University of New Mexico where he was Dean of the School of Architecture and Planning. He also served as Assistant Dean for Research at ASU's College of Architecture and Environmental Design, as well as the Director of Research and Publications for ASU's School of Public Affairs, and was the first Director of the Center for Urban Studies. He has published extensively, most recently editing with M. Hardin and C. Poster, *From the Studio to the Streets: Service-Learning in Planning and Architecture*, by the American Association of Higher Education, and as a contributing author in the award winning book *Casa y Communidad (House and Community)* by Henry Cisneros. Eribes has done extensive research on urban design and environmental perception, affordable housing, and public policy. His design work has been recognized by both the Albuquerque Chapter and the Southern Arizona Chapter of the American Institute of Architects.

Key Points

- With the diversity of family types in Arizona today, the single-family detached home
 is not always the best living arrangement. While alternatives have been proposed,
 some, like accessory dwelling units, are prohibited under some current zoning laws or
 building regulations.
- Multigenerational families living together are becoming increasingly common, as are families headed by grandparents or single parents. These family structures have bearing not only on the way we design housing, but on how we design communities.
- Hispanics and military personnel are groups with significant power in Arizona's housing market, representing a growing need for safe and attractive entry-level homes.
- Smaller homes, partially-communal living, and immediate access to alternative transportation are becoming attractive housing features. Increasing housing density can help achieve these goals.
- New, successful housing planning strategies focus on conservation by reusing land and buildings and incorporating mass transportation.

Introduction

Family structures are becoming increasingly diverse. Millions of American households do not correspond to a model of the "typical" nuclear family, yet are often expected to fit into the same housing configurations. This chapter will look at Arizona markets that are expanding both population-wise and in purchasing power. Due to "non-traditional" family arrangements and/or cultural considerations, these groups may be better served by new and creative forms of housing. First, we will look at markets that are driven by demographics, and then turn to those created by innovations in design, planning, and development. Each market is briefly explained and accompanied by case study exemplifying the best practices in addressing the challenges raised.

Multigenerational Families

According to comparisons of the 1990 and 2000 U.S. Census, multigenerational families show the largest increase of any family structure, with an overall growth of about 60 percent during the course of the decade. By 2000, 4 percent, or approximately 3.9 million households nationally were made up of three or more generations living together. There are several reasons for this trend. For many, the primary motivation is economic. Another reason for the increase in multigenerational families is the aging population of baby boomers. Multiples surveys have revealed that the majority of those fifty years or older would rather live among people of all ages than in an age-segregated setting.

Grandfamilies

Multigenerational households vary greatly in size and composition. One of the fastest growing types of multigenerational household is the "grandfamily," a situation in which grandparents are the primary caregivers in raising grandchildren. As of the 2000 U.S. Census, 4.5 million children across America were living in grandparent-headed households. This family structure seems to occur frequently as a result of issues including: parent's drug or alcohol use/addiction, teenage pregnancy, neglect, and abandonment. Due to these cited reasons why the biological parents were not raising their children, it is common in the grandfamily for the grandparents to have custody of the grandchildren. Studies indicate that less than half of these caregivers receive financial child support from the government or parents,³ increasing their need for affordable housing.

Housing Considerations for Multigenerational Families

Housing appropriate for multigenerational families can be a complex issue. The larger family group requires more space, yet members still desire privacy. In order to achieve this, some families elect to buy a duplex or multi-story home, while others build an additional master bedroom or convert garage space into living space. Another alternative is constructing a secondary unit on the same property as the main house. These structures, known as accessory dwelling units (ADUs) or "granny flats," can be separate or attached to

the primary house. Housing for multigenerational families must also take into consideration the needs of each age group present, especially the very young child and the elderly.



Source: Stardust Center, ASU

Best Practices: Guadalupe House

A design/build project of the Stardust Center of Arizona State University, the Guadalupe House is a multigenerational home located near Tempe.

- The housing complex is made up of a single family detached home with an accessory dwelling unit.

 Together these total 1,450 square feet of living space.
- To accommodate possible future family growth, a second floor terrace on the main house can be turned into a separate apartment.
- A courtyard provides an enclosed play or family gathering area.
- The house was designed to be adaptable to varying lot sizes.

Single-Parent Households

Between 1970 and 1990, the number of single-parent households in the U.S. doubled, and was estimated to be at 12.9 million in 2006. Of these, 10.4 million were single mothers and 2.5 million were single fathers.⁴ Single parenthood has increasingly been considered a conscious choice; trends show that successful working women are electing to raise children on their own. Greater incomes and social support mean that these women are able to afford market rate housing as well as quality child care and education. Yet the number of poor single-parent families headed by women is also growing, and may comprise as much as 40 percent of the country's homeless population.⁵

Housing Considerations for Grandfamilies and Single-Parent Families

Single-parent families and grandfamilies share several housing needs. As one author has pointed out, both can be characterized by limited mobility. Single parents with younger children are less able to move about freely due to the sole responsibility of childcare. Seniors in grandfamilies may likewise be more homebound as a result of frailty. Having immediate access to schools, stores, employment opportunities, and public services is therefore very important for both family types. Also crucial is the availability of childcare. Partially-communal living that combines private dwelling units with common facilities can be a desirable arrangement.



Source: David Flores, Casa Familiar

Best Practices: Abuelitos Housing

The Abuelitos Housing project (also referred to as Senior Gardens) in San Ysidro, California, consists of fourteen units of affordable rental housing targeted to grandfamilies.

- Each unit has one larger bedroom for grandparents and a smaller, second-floor loft bedroom for grandchildren.
- The design includes private spaces as well as communal areas and services.
- Private spaces include a backyard for all units, while shared areas consist of a common garden and an onsite childcare facility.
- The site is within walking distance of two different forms of public transportation.
- Security is maintained by controlled access, making it safer for children.

Hispanics

In 1970, Hispanics made up 3.2 percent of the U.S. population. That figure is now approximately 13 percent, or 40 million.⁷ Hispanics are the fastest-growing segment of the overall population and the middle class. Moreover, this is a young demographic with a median age of 26. This data shows that Hispanics are poised to become a significant factor in the housing market: the population currently wields \$1 trillion in annual purchasing power, and they comprise 18 percent of the total U.S. young adult population that will soon be of home buying age.⁸ It is estimated that by 2010, six million new Hispanic households will be looking to purchase all six million units added to the national housing stock during the decade. The composition and preferences of Hispanic families are thus important to consider. Hispanics are a diverse group with differences stemming from country of origin and immigrant generation. However, there are some discernable trends and commonalities. Hispanics tend to have larger families than the average American household. They also have a higher rate of multigenerational and single-parent families. The Hispanic population is concentrated in urban areas, preferring compact neighborhoods with nearby shopping and schools.⁹

Housing Considerations for Hispanics

Cultural inheritance and large, multigenerational families are two driving factors of housing design for Hispanics. While more space is needed for extended families in order to prevent overcrowding, dense, walkable communities are desirable. Larger houses on smaller lots may be acceptable, though backyards are an important social space and should be retained. A mix of housing sizes and both ownership and rental properties should be offered to accommodate different family needs. Home businesses are common among the Hispanic population, making flexible, multiuse areas an attractive feature.



Source: Poster Frost Associates

Best Practices: Casitas de las Florecitas

Casitas de las Florecitas is a small development in San Ysidro, California, made up of four duplexes for a total of eight housing units.

- This housing is intended for low to moderate income, first time home owners.
- Each unit is 1,288 square feet and includes three bedrooms and two bathrooms.
- Houses also feature a garage, laundry areas, ample storage, and high ceilings in kitchen and dining areas.
- 4,600 square foot lots ensure large private outdoor spaces for gatherings, with both side and backyards.
- Bright colors, wrought iron, and linear design are reminiscent of Mexican architecture.

Military Housing

The military has a significant presence in Arizona with more than 40,000 personnel (not including civilian employees). While this is not a large portion of the state population overall, military housing can have a considerable impact on the surrounding community. Historically, the U.S. military relied on two different strategies to meet housing demand for their personnel. The first method was government-owned military housing located on-base or nearby. The second method of housing military personnel has been through the use of non-taxable basic housing allowances (BAH). The BAH is provided to offset the cost of renting or purchasing civilian housing in neighborhoods near bases, and is meant to cover 80 percent of housing expenses.

In 1995, the Department of Defense (DoD) declared that much of military housing stock was in poor repair and had reached the end of its projected life with an average age of thirty-three years. Military housing was not cost-effective, and therefore the DoD decided to allow privatization of limited new military housing construction while simultaneously promoting a shift to civilian housing. There are several major military installations in Arizona: Fort Huachuca, Yuma Proving Grounds, Barstow Air Station (MCAS Yuma), Davis-Monthan AFB, and Luke AFB. To date, all have had contracts awarded to private developers to build new housing on military property, and much of the work has already been completed. This housing is now owned, maintained, and operated by developers through a fifty-year lease with the government in what is referred to as a Public/Private Venture (PPV). Each redevelopment has resulted in higher-quality housing, but an overall reduction in the number of on-base units. In accordance with the DoD's decision, more military members are seeking housing in civilian neighborhoods.

Housing Considerations for Military Families

The Deputy Assistant Secretary of the Army has noted that, "Individuals who join the military today are pursuing a career...they are better educated, have higher standards of living, and do not consider their situation to be temporary." Nevertheless, military families are much less likely than civilians to own a home. Mobility of this population is very high, with the average family moving every three years. Shorter durations of residence are also common due to special training sessions and temporary duty assignments. Units for both individuals and families are needed, with a growing percentage of families and single parents. Almost all junior personnel living off-base rent their housing. Among those who buy, single-family detached units are preferred to condominiums or townhomes. Among the higher pay grades, families may buy a home at one location for continuous ownership while they rent housing where they are stationed. High turn-over rates can be disruptive to civilian communities, both socially and in terms of the market.



Source: Clark Realty Capital, www.clarkrealty.com/

Best Practices: Gateway Village

Clark Realty Capital has replaced 545 military housing units built in 1941 with 460 new townhomes in a PPV with the Navy in San Diego.

- Utilizes Smart Growth planning ideas, such as creating walkable neighborhoods
- Includes attached multifamily town homes, maximizing open space and energy efficiency
- Recycles and reuses materials from the old housing units in new construction
- Includes a variety of communal recreation facilities
- Promotes neighborhood awareness and pride through high quality design, minimizing crime and property damage that can occur in high-turn over areas
- Provides affordable housing to single-income military families.

Smaller is Better

The phrase "Small(er) is Better" refers to an architectural movement that is gaining recognition. In America, the average household size is shrinking while at the same time the footprint of a standard home is growing. In 1970, the average home size was 1,500 square feet with 3.14 people. Today the average new home is 2,349 square feet with a family of 2.57.¹² Yet many are finding big homes burdensome and real estate brokers report smaller new homes (+/- 1,500 square feet) sell quickly. "Smaller is Better" recognizes several reasons for downsizing. Larger homes typically use more energy, require more maintenance, consume more land (property tax), and require larger mortgages, all of which increase monthly costs (see Chapter 7). There is also an environmental impact from increased consumption of energy and materials needed for these structures (see Chapter 15). Demographic changes contribute to shifting preferences as well. Numbers of single

parents, couples without children, and empty nesters have been growing, and these groups often prefer to spend less time and money on housing upkeep and more on leisure and culture pursuits.



Source: Drachman Institute/DDBC

Best Practices: Flow-Thru House

The Flow-Thru House, located in Tucson, is a demonstration project of the Drachman Design-Build Coalition of The University of Arizona.

- This singe family detached house of 974 square feet includes three bedrooms and two bathrooms.
 Movable panels make it possible to combine the two smaller bedrooms into a larger one.
- Large overhangs shade the house and extend the living space outside. Outdoor areas feature a covered patio and laundry facilities.
- The house is designed to use minimal energy and to maximize natural ventilation.
- High ceilings throughout much of the house help to make it feel larger.

Cohousing

Started in Denmark in the 1970s, cohousing is a grassroots response to the feelings of isolation that can result from the preference for privacy in Western cultures. The primary aim of this movement is to create strong community spirit and increased social interaction among neighbors. This is achieved by combining private residences with shared common amenities. A cohousing community is like a small neighborhood (typically six to forty homes) with its own community center. The center may include workshops, laundry facilities, a kitchen, dining room or large multi-purpose room, and outdoor gathering spaces including a pool or playground. Houses are often of modest size and may be grouped together in order to maximize shared open space. Families can choose to what degree they wish to participate in community life, which is extensive. Community members maintain the property, plan events, cook group meals, and so forth. In some instances, the entire parcel of land is communally owned while families hold an individual title for their home. This can significantly decrease home cost, though due to demand the price of a cohousing unit is often above market rate. There are currently four cohousing developments in Arizona (three in Tucson) totaling 148 units with a fifth community in the planning stages.



Source: Author

Best Practices: Sonora Cohousing

The Sonora Cohousing community in Tucson is made up of 36 attached townhome units, with three to four units clustered together.

- Units are grouped around and face onto communal walkways.
- Central common house where community meals are prepared and served; other shared facilities include a laundry area, a workshop, community garden, etc.
- Homes range from 2 to 5 bedroom, with units for sale and for rent.
- Services such as child or elder care are available from neighbors.

Urban Infill and Adaptive Reuse

City centers have once again become popular places to live, but it can be challenging to create new housing in areas where there is little available land. Urban infill and adaptive reuse are prototypes that produce housing opportunities. Urban infill is development that occurs on vacant or underused land within an existing city context, thus conserving resources by reusing property and existing infrastructure. Adaptive reuse can be considered a form of urban infill. This practice transforms buildings and spaces from their original use to a new use while retaining historic features. Vacant industrial buildings are particularly popular for adaptive reuse. While their large size expands possibilities for developers, there can be difficulties in changing zoning restrictions on these structures. Municipalities may want to consider streamlining the process of rezoning for adaptive reuse, as these projects have had great success.



Source: Jeff Simon, Rob Paulus Architect

Best Practices: Barrio Metalico and Icehouse Lofts

These two projects in Tucson were both designed by Rob Paulus Architect. Barrio Metalico features 9 infill units while Icehouse Lofts transformed a former ice manufacturing plant into 48 modern units.

- Creating housing on the previously vacated sites has intensified land use and created a more vibrant neighborhood.
- Though the original land use has been modified from industrial to residential, aspects of the historical character have been preserved.

Transit-Oriented Development

Transit-Oriented Development (TOD) can be defined as intensive mixed-use development centered around a mass-transit station.¹⁴ The concept of uniting public transportation with communities is not new, but has gained momentum in the past decade as frustration with aspects of life in sprawling urban and suburban areas increases. Rising costs of living (housing plus transportation expenses) also factors in to dissatisfaction and household stress. Ridership on mass-transit systems continues to increase, and a recent study has projected that within the next 25 years at least 14.6 million American households will be looking for housing within a half-mile of a transit stop.¹⁵

Successful TOD must function as both a transportation node and a place; in other words, both a transportation link and a destination in and of itself. True TOD reduces reliance on private vehicle transportation, enabling residents to walk or bike from their homes to a transit stop and to obtain important amenities like groceries, banking services, entertainment, and childcare without the need of a car. While a certain amount of density is necessary to create viable TOD, residents should have a choice between different housing sizes from larger single-family units to studio apartments. For-purchase and rental properties should both be offered, thus allowing for families with different incomes and living situations to be accommodated.

Though the potential benefits and demand for TOD are great, the complexity and scale of these projects creates several challenges. Public agencies such as transit authorities will need to be involved, as well as local and federal governments. Partnerships between these agencies and private developers responsible for the residential and commercial aspects are very important. Because there is not yet a standard set of procedures or outcomes for TOD, developers and investors may be hesitant to commit, fearing higher costs and risks. As of 2003, mass transit projects throughout the United States were seeking approximately \$60 billion in public and private funding. The wait time for federal monies can be considerable given this competition, and the Federal Transportation Administration may eliminate projects if local land-use policies and zoning are not supportive of TOD. In Arizona, Phoenix is encouraging future TOD growth by creating transit-oriented zoning overlay districts along the new Valley Metro light rail alignment.



Source: http://www.lightrailnow.org

Best Practices: City of Carrollton, Texas

This suburb of Dallas has implemented extensive planning to prepare for the future extension of the Dallas Area Rapid Transit (DART) system.

- Planning efforts have included: new zoning and streetscape standards for transit centers, a taxincrement reinvestment zone, land acquisition strategies, a city-wide transportation and parking plan, etc.
- A new walk and bike trail network connects future station areas to all parts of the community.
- The city has enacted economic incentives for transit centers.

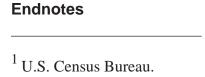
Gentrification

One potentiality to be aware of with the types of new housing development described here is gentrification, a complex and politically charged issue. This phenomenon occurs when a lower-income area of a city becomes transformed by the middle classes, displacing the original population and altering neighborhood character. Gentrification follows disinvestment or devalorization, which is in essence the removal of resources from an area. In America, disinvestment in urban areas occurred widely following WWII, when growth was instead focused on suburban areas. Beginning in the late 1960s there have been successive waves of gentrification paralleling economic and real estate booms and recessions. An increase in gentrification is marked by renewed interest in city centers by municipalities and potential residents alike. These parties see that disinvested areas are run-down, yet have character and historical value. In its existing condition, housing in these neighborhoods would bring low rents, but there is potential for significant increase under "higher and better" land use. This is referred to as a "rent gap," a situation that draws investors and developers who then upgrade the property.

Often, individual families begin this cycle. It has been found that disinvested neighborhoods often appeal to middle-class, well-educated, and politically liberal families who are seeking urban housing over the suburbs. As they make improvements to the housing stock, more people of a similar class situation are drawn to the neighborhood. Rents and home values begin to rise, eventually making the area unaffordable to the previous working class residents. Ironically, their departure can detract from the authentic character that was part of the attraction to gentrifiers. Whether gentrification is a positive or negative circumstance largely depends on the financial standpoint of the interpreter. To some, areas of the city are revitalized and tax bases increase. To others it means the loss of a home and perhaps a community.

Conclusion

The 21st century is bringing demographic changes and new development trends to Arizona. Non-traditional families of all types and sizes are looking for attractive housing that meets their needs. Close proximity to services and public transportation have been shown to be important to many homebuyers. While innovative housing solutions are being pursued, they can face significant barriers in the form of financing, restrictive zoning, etc. Public interest in and support of the best practices described in this chapter will assist in creating a variety of housing choices to suit the many lifestyles of Arizonans.



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- ⁵ Sprague, Joan Forrester. *More Than Housing: Lifeboats for Women and Children*. Boston: Butterworth Architecture, 1991.
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- ¹⁴ Dittmar, Hank and Gloria Ohland. *The New Transit Town*. Washington: Island Press, 2004.
- ¹⁵ Reconnecting America's Center for Transit-Oriented Development. "Hidden in Plain Sight: Capturing the Demand for Housing Near Transit." September, 2004. www.reconnectingamerica.org/public/practices, accessed July 24, 2008.
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APPENDIX A

Employment Growth and Housing Affordability by Industry - Urban Arizona*

Industry	Urban Employment 2001	Urban Employment 2007	Urban Employment Change 2001-2007 Numbers	Urban Employment Change 2001-2007 Percent	Hourly Wages- Maricopa County (for Urban Arizona)	Can Afford to Buy Median Priced House	Can Afford to Rent 2-BDRM Apartment
Mining	4,200	4,700	500	11.9%	\$17.50	No	Yes
Construction	151,000	215,800	64,800	42.9%	\$16.26	No	No
Manufacturing	186,200	167,600	(18,600)	-10.0%	\$17.99	No	Yes
Wholesale Trade	87,000	98,900	11,900	13.7%	\$17.11	No	Yes
Retail Trade (Retail store workers)	224,900	279,100	54,200	24.1%	\$11.42	No	No
Transportation, Warehousing and Utilities	67,800	73,400	5,600	8.3%	\$18.23	No	Yes
Information (Publishing, motion pictures and videos, radio and TV stations and telecommunications)	49,300	37,700	(11,600)	-23.5%	\$18.99	No	Yes
Finance and Insurance	107,900	130,200	22,300	20.7%	\$17.45	No	Yes
Real Estate Rental and Leasing	36,200	45,500	9,300	25.7%	\$14.33	No	No
Professional and Business Services (Legal services, management services, computers services, accounting services, engineering services, payroll services)	300,700	383,000	82,300	27.4%	\$21.41	No	Yes
Educational Services (Businesses that provide educational services to schools, colleges, and universities, plus specialized schools such as computer training, language schools, flight training, cosmetology)	26,188	43,000	16,812	64.2%	\$16.08	No	No
Health Care and Social Assistance	159,312	211,100	51,788	32.5%	\$15.09	No	No
Leisure and Hospitality	190,700	232,200	41,500	21.8%	\$10.79	No	No
Other Services (Auto repair shops, barber shops, other repair shops)	73,600	93,300	19,700	26.8%	\$12.37	No	No
Government - Federal, State and Local (All government employees including teachers, police)	277,200	318,200	41,000	14.8%	\$19.72	No	Yes
Total Employment	1,942,200	2,333,700	391,500	20.2%	\$14.56	No	No

Employment Growth and Housing Affordability by Industry - Rural Arizona

Industry	Rural Employment 2001	Rural Employment 2007	Rural Employment Change 2001-2007 Numbers	Rural Employment Change 2001-2007 Percent	Hourly Wages- Mohave County (for Rural Arizona)	Can Afford Buying a Median- Priced House	Can Afford Renting a 2-BDRM Apartment
Mining	5,400	6,000	600	11.1%	\$18.09	No	Yes
Construction	22,600	32,200	9,600	42.5%	\$14.65	No	Yes
Manufacturing	15,500	19,000	3,500	22.6%	\$14.02	No	Yes
Wholesale Trade	8,900	10,400	1,500	16.9%	\$14.45	No	Yes
Retail Trade (Retail store workers)	43,200	50,900	7,700	17.8%	\$10.66	No	No
Transportation, Warehousing and Utilities	8,800	9,700	900	10.2%	\$16.13	No	Yes
Information (Publishing, motion pictures and videos, radio and TV stations and telecommunications)	4,600	6,100	1,500	32.6%	\$13.77	No	No
Finance and Insurance	1,400	3,700	2,300	164.3%	\$15.02	No	Yes
Real Estate Rental and Leasing	7,900	8,200	300	3.8%	\$12.50	No	No
Professional and Business Services (Legal services, management services, computers services, accounting services, engineering services, payroll services)	19,200	26,100	6,900	35.9%	\$14.29	No	Yes
Educational Services (Businesses that provide educational services to schools, colleges and universities plus specialized schools such as computer training, language schools, flight training, cosmetology)	2,112	2,400	288	13.6%	\$14.20	No	Yes
Health Care and Social Assistance	32,288	41,100	8,812	27.3%	\$14.20	No	Yes
Leisure and Hospitality	39,300	44,000	4,700	12.0%	\$9.72	No	No
Other Services (Auto repair shops, barber shops, other repair shops)	11,100	11,700	600	5.4%	\$10.97	No	No
Government - Federal, State and Local (All government employees including teachers, police)	100,600	103,100	2,500	2.5%	\$17.02	No	Yes
Total Employment	322,900	374,600	51,700	16.0%	\$12.73	No	No

^{*} Urban Arizona is comprised of Maricopa and Pima Counties.

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APPENDIX B

Housing Affordability for Home Buyers and Renters in Common Occupations ("workforce housing") for Selected Arizona Communities

				Can	not aff	ord to	buy or	rent				
			9	Can	afford	to onl	y rent					
				Can	afford	to buy	or ren	t .				
				Curr	unora	to buy	, or rem					
2008							_		Hourly M	Median Wage		
			Hourly	2 BDRM	Hourly			'	lourly iv	nedian wage		
City/Town	County	Median Home	Wage Needed	Aptmnt Monthly	Wage Needed	Police Officer	Teacher	Retail Worker	Nurse	Firefighter	Waitperson	Total of All
		Price*	to Buy	Rent**	to Rent	Omcer		worker				Occupation
Bullhead City	Mohave	\$241,000	\$34.97	\$723	\$13.90	24.42	16.74	11.75	19.38	18.38	7.37	12.
Casa Grande	Pinal	\$146,000	\$21.19	\$862	\$16.58	17.08	21.93	8.89	20.81	18.52	7.25	13.
Clifton	Greenlee	\$104,983	\$15.24	\$674	\$12.96	16.11	16.59	7.17	17.77	15.39	7.18	19.
Coolidge	Pinal	\$119,950	\$17.41	\$862	\$16.58	17.08	21.93	8.89	20.81	18.52	7.25	13.
Douglas	Cochise	\$109,000	\$15.82	\$678	\$13.04	21.17	16.10	8.28	17.77	16.00	7.08	14.
Eloy	Pinal	\$95,930	\$13.92	\$862	\$16.58	17.08	21.93	8.89	20.81	18.52	7.25	13.2
Flagstaff	Coconino	\$315,000	\$45.71	\$1,012	\$19.46	23.47	18.24	8.55	18.07	16.86	7.22	12.
Florence	Pinal	\$141,660	\$20.56	\$862	\$16.58	17.08	21.93	8.89	20.81	18.52	7.25	13.
Globe	Gila	\$127,500	\$18.50	\$782	\$15.04	21.68	16.24	8.73	19.28	15.39	7.12	14.3
Holbrook	Navajo	\$115,000	\$16.69	\$668	\$12.85	14.35	18.12	8.61	19.22	14.35	7.29	13.7
Kingman	Mohave	\$151,000	\$21.91	\$723	\$13.90	24.42	16.74	11.75	19.38	18.38	7.37	12.7
Lake Havasu City	Mohave	\$247,500	\$35.92	\$723	\$13.90	24.42	16.74	11.75	19.38	18.38	7.37	12.7
Nogales	Santa Cruz	\$166,251	\$24.13	\$707	\$13.60	24.84	18.51	8.60	13.34	16.23	7.34	11.
Parker	La Paz	\$270,000	\$39.18	\$652	\$12.54	23.80	17.41	8.98	16.69	15.39	7.18	11.4
Payson	Gila	\$259,900	\$37.72	\$782	\$15.04	21.69	16.24	8.73	19.28	15.39	7.12	14.3
Phoenix Metro - Resale	Maricopa	\$211,305	\$30.66	\$8.62	\$16.58	24.84	16.28	9.66	20.54	22.19	7.30	14.
Phoenix Metro - New	Maricopa	\$253,505	\$36.79	\$862	\$16.58	24.84	16.28	9.66	20.54	22.19	7.30	14.
Pinetop-Lakeside	Navajo	\$258,000	\$37.44	\$668	\$12.85	14.35	18.12	8.61	19.22	14.35	7.29	13.3
Prescott	Yavapai	\$311,054	\$45.14	\$818	\$15.73	22.01	18.41	9.53	20.71	16.03	7.36	13.0
Safford	Graham	\$174,000	\$25.25	\$637	\$12.25	23.41	16.84	8.72	17.77	15.39	7.18	12.
San Luis	Yuma	\$125,000	\$18.14	\$743	\$14.29	18.45	17.37	9.32	18.40	15.58	7.20	11.4
Sedona	Yavapai/Coconino	\$462,500	\$67.12	\$818	\$15.73	22.01	18.41	9.53	20.71	16.03	7.36	13.0
Show Low	Navajo	\$234,500	\$34.03	\$668	\$12.85	14.35	18.12	8.61	19.22	14.35	7.29	13.7
Sierra Vista	Cochise	\$189,899	\$27.56	\$678	\$13.04	21.17	16.10	8.28	17.77	16.00	7.08	14.0
Springerville	Apache	\$143,692	\$20.85	\$574	\$11.04	19.54	18.71	7.32	18.45	13.57	7.10	13.
Tucson*	Pima	\$199,900	\$29.01	\$762	\$14.65	25.87	17.86	9.30	20.06	18.76	7.17	14.
Williams	Coconino	\$220,000	\$31.93	\$1,012	\$19.46	23.47	18.24	8.55	18.07	16.86	7.22	12.
Winslow	Navajo	\$86,750	\$12.59	\$668	\$12.85	14.35	18.12	8.61	19.22	14.35	7.29	13.3
				1111								
Yuma	Yuma	\$197,750	\$28.70	\$743	\$14.29	18.45	17.37	9.32	18.40	15.58	7.20	11.4

Affordability Calculation Assumptions: 30% of income is allocated to housing. For buying a house additional assumptions included 5% down payment, 6.5% intere rate at 30-years fixed, plus allocation of 21% of the monthly payments to property taxes, insurance and other costs such as PMI.

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^{*} Most home prices are median, but a few are average prices. Most prices are for April 2008 and some are for May, June, or for first quarter, 2008.

^{**} Apartment Rents - HUD 2008 Fair Market Rents. Rents shown are for 2-bedroom units.

APPENDIX C

Development-Related Employment (Construction + Suppliers), Arizona, 2007

Industry	Jobs
NAICS 2361 Residential building construction	26,109
NAICS 2362 Nonresidential building construction	16,544
NAICS 237 Heavy and civil engineering construction	27,970
NAICS 238 Specialty trade contractors	153,729
NAICS 321 Wood product manufacturing	7,660
NAICS 32412 Asphalt paving and roofing materials mfg.	166
NAICS 3255 Paint, coating, and adhesive manufacturing	227
NAICS 326191 Plastics plumbing fixture manufacturing	467
NAICS 32712 Clay building material and refractories mfg.	607
NAICS 3272 Glass and glass product manufacturing	702
NAICS 3273 Cement and concrete product manufacturing	7,451
NAICS 327991 Cut stone and stone product manufacturing	464
NAICS 3323 Architectural and structural metals mfg.	8,236
NAICS 33312 Construction machinery manufacturing	267
NAICS 3334 HVAC and commercial refrigeration equipment	1,410
NAICS 3351 Electric lighting equipment manufacturing	396
NAICS 3352 Household appliance manufacturing	390
NAICS 337 Furniture and related product manufacturing	8,887
NAICS 4233 Lumber and const. supply merchant wholesalers	7,061
NAICS 4236 Electric goods merchant wholesalers	13,238
NAICS 4237 Hardware and plumbing merchant wholesalers	6,113
NAICS 42381 Construction equipment merchant wholesalers	1,630
NAICS 442 Furniture and home furnishings stores	14,670
NAICS 443 Electronics and appliance stores	12,358
NAICS 444 Building material and garden supply stores	27,587
NAICS 2211 Power generation and supply	9,148
NAICS 22131 Water supply and irrigation systems	2,151
NAICS 522292 Real estate credit	12,494
NAICS 52231 Mortgage and nonmortgage loan brokers	4,824
NAICS 524126 Direct property and casualty insurers	8,354
NAICS 524127 Direct title insurance carriers	3,113
NAICS 5311 Lessors of real estate	9,493
NAICS 5312 Offices of real estate agents and brokers	11,079
NAICS 53131 Real estate property managers	11,856
NAICS 53132 Offices of real estate appraisers	1,252
NAICS 53139 Other activities related to real estate	1,230
NAICS 541191 Title abstract and settlement offices	835
NAICS 5413 Architectural and engineering services	32,585
NAICS 54141 Interior design services	1,043
NAICS 54142 Industrial design services	119
Total, Development Related	453,915
Total, all industries	2,247,684
Development Related as a % of Total	20.2%

Quarterly Census of Employment and Wages

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APPENDIX D

Existing Green Building Programs in Arizona

Statewide

LEED for Homes rating system can be implemented anywhere in the state. Currently, however, the current LEED for Homes certifying parties are limited to the Pima County Development Services in the Tucson metropolitan area and Sonoran LEED for Homes, LLC in the Phoenix metropolitan area. The state of Arizona currently has 15 certified LEED for Homes projects (out of 329 nationwide), most of which are higher-end homes. The most prominent credit category included in the LEED for Homes rating system as compared to other LEED rating systems is the "Awareness and Education" element. Occupant education is a major consideration for achieving the most effective resource and operating cost efficiencies since every household has varying home-use habits.

Flagstaff

Coconino County has an initiative that encourages energy efficient building practices throughout northern Arizona known as the Coconino County Sustainable Building Program (CCSBP).

Phoenix

The City of Phoenix offers bond funds for green building projects, offers loans and loan funds for green building development, and offers general green building technical support for energy efficiency retrofits and for AC and lighting change-outs.

Scottsdale

The **Scottsdale Green Building Program** includes a Green Home Rating Checklist specifically geared for residential new construction and major remodels. This rating system has 28 total mandatory green design measures, provides incentives for keeping a small house footprint (less than 3,000sf), and provides a plethora of additional green strategy rating options. Scottsdale also carries a priority permitting process for green projects. There is a multifamily residential project (SkyVista) on the boards in Scottsdale with a 30% mix of affordable units; there is currently no public information regarding the project's aspirations for integration of green strategies.

Tucson

The **Tucson Electric Power (TEP) Home Guarantee** program consists of inspections during construction of the home to ensure that specific standards are met for maximizing energy efficiency (such as duct sealant, proper installation, properly sized equipment, etc.). TEP will guarantee quoted maximum electric heating and cooling operating costs for a home for up to five years, and will credit the homeowner the difference if the annual electric bill exceeds the predetermined amount. Both the water heater and the heat pumps (split system heating and cooling systems) in TEP Guaranteed homes are required to be electric, any other appliances may be gas.

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GLOSSARY

Adapted from www.HousingPolicy.org

Α

Accessible Design

Generally means that the dwelling meets prescribed requirements for accessible housing. Mandatory requirements for accessible housing vary widely and are found in state and local building codes, in agency regulations such as in the Department of Housing and Urban Development's program 202 and 811, section 504, and the Fair Housing Amendments Act requirements. They are also found in standards such as the American National Standards Institute's A117.1 (ANSI A117.1-1986, 1998) and the Uniform Federal Accessibility Standards (UFAS). Accessible features in dwellings include items such as wide doors, sufficient clear floor space for wheelchairs, lower countertop segments, lever and loop type handles on hardware, seats at bathing fixtures, grab bars in bathrooms, knee spaces under sinks and counters, audible and visual signals, switches and controls in easily reached locations, entrances free of steps and stairs, and an accessible route through the house. *See Also: Universal Design*

Accessory Dwelling Unit (ADU or granny flat)

A small, self-contained residential unit built on the same lot as an existing single-family home. (Because they are often used by extended family members, ADUs are also referred to as "in-law apartments" or "granny flats.") ADUs may be built within a primary residence (such as in an attic or basement), attached to the primary residence (like a small duplex unit with a separate entrance), or detached from the primary residence (such as conversion of a detached garage). An ADU will be subordinate in size, location, and function to the primary residential unit (which is why ADUs are sometimes referred to as "secondary units" or "second units").

Adaptive Reuse

A new use for a structure or landscape other than the historic use, normally entailing some modification of the structure or landscape.

Adjustable Rate Mortgage (ARM)

A mortgage loan subject to changes in interest rates during the course of the loan term. When rates change, adjustable-rate mortgage (ARM) monthly payments increase or decrease at intervals determined by the lender. The change in monthly-payment amount, however, is usually subject to a cap. In hybrid ARMs, the interest rate is fixed for a period of time – often, 3, 5, 7, or 10 years – and then coverts to an adjustable rate thereafter.

Affordable Housing

There is no single definition of affordable housing. What is considered "affordable" by a family earning \$100,000 a year will likely be out of reach for another family that earns only

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\$25,000 a year. Incomes and housing costs also vary by location. A typical home in one community might cost \$300,000, while that same house would cost half as much in another part of the country.

Rules of thumb often are used to determine affordability. For example, the federal government considers housing to be affordable if a family spends no more than 30 percent of its income on its housing costs, including utilities. Using this benchmark, a family earning \$30,000 a year could afford to pay up to \$9,000 a year (or \$750 a month) on housing. In the private sector, lenders underwriting home purchases typically require that families spend no more than some set percentage of income (such as 28 percent) for mortgage payments, taxes and insurance.

Yet, these "rules" don't tell the whole story. A family making \$200,000 per year can afford to spend 30 percent of its income on housing and have enough left over to meet other necessities, but a family making \$20,000 might not be able to make ends meet on the income left over after spending 30 percent for housing. A family's capacity to meet other expenses depends on other factors such as family size and age of children.

Ultimately, families of all incomes need affordable homes – homes that are decent and accessible to jobs, shopping and other services, and available at a cost that allows them to provide for life's other necessities, such as food, clothing or medical care.

Area Median Income (AMI)

A statistic generated by the U.S. Department of Housing and Urban Development (HUD) for purposes of determining the eligibility of applicants for certain federal housing programs. HUD determines AMI on an annual basis for each metropolitan area and non-metropolitan county, making adjustments for household size and other factors. Different housing programs use different percentages of AMI – such as 30 percent of AMI or 80 percent of AMI – as maximum income limits for admission. Many state and localities have adopted HUD's income limits for their own programs, or use a variation on the HUD limits.

Arizona Department of Housing (ADOH)

ADOH was established by the State Legislature in 2001 in an effort to allow for greater coordination and innovation of housing related services at the state level, with a particular focus on homes for working families.

R

Below-Market

A general term that, in the housing context, refers to housing that rents or sells for less than prevailing market levels. In some cases, below-market housing is used synonymously with affordable housing. In other cases, below-market housing is targeted at moderate-income families with somewhat higher incomes than those served by federal affordable housing programs. Generally, housing can be offered at below-market levels only with a public subsidy or with a public concession such as density bonuses or reduced-cost publicly-owned land.

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Bond

A bond is a type of loan or debt security that is issued by a public authority or credit authority for long-term investments. Bonds are repaid when they "mature," typically 10 years or more after being issued.

Brownfield

Abandoned, idle, or underused industrial and commercial properties where expansion or redevelopment is complicated by actual or perceived environmental contamination.

Building Code

Regulations established by a recognized government agency describing design, building procedures and construction details for new homes or homes undergoing rehabilitation. Local building codes are often based on a national model code known as the International Building Code, or one of its predecessors. The International Code Commission has established a number of special building codes that apply to particular situations, such as the International Existing Building Code, which facilitates the renovation of older structures by streamlining the applicable code requirements.

Building Enclosure

The comprehensive exterior wall and roof system of a building including, but not limited to, exterior finish materials, waterproofing, sheathing, glazing, insulation, and framing.

Building Permit

A permit issued by a local government agency that allows the construction or renovation of a home.

C

Capacity

Capacity is the ability of individuals, institutions, and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner.

Community Development Block Grant (CDBG)

A Federal program created under the Housing and Community Development Act of 1974. This program (often known as CDBG) provides annual grants on a formula basis to states and larger cities and urban counties to be used for a wide range of community development activities directed toward neighborhood revitalization, economic development, affordable housing and improved community facilities and services.

Community Land Trust (CLT)

A form of shared equity homeownership designed to ensure that homes made affordable through public or philanthropic subsidies remain affordable over the long-term. Under the traditional community land trust model, a nonprofit community land trust is established to own the land on which homes are situated. The trust then sells the physical structures to

home purchasers for an affordable price, along with a long-term lease on the land. When the home is sold, it must be sold at an affordable price to a qualifying homebuyer.

See Also: Shared Equity

Comprehensive Plan

A comprehensive plan is a land use document that provides the framework and policy direction for land use decisions, identifying where and how growth needs will be met. Adjacent jurisdictions are required to have plans that are consistent. These plans then provide the basis for many of the policies, regulation, and budget decisions that cities and counties will make.

See Also: General Plan

Continuum of Care

An approach that helps communities plan for and provide a full range of emergency, transitional, and permanent housing and service resources to address the various needs of homeless persons at the point in time that they need them. The approach is based on the understanding that homelessness is not caused merely by a lack of shelter, but involves a variety of underlying, unmet needs—physical, economic, and social. Designed to encourage localities to develop a coordinated and comprehensive long-term approach to homelessness, the Continuum of Care consolidates the planning, application, and reporting documents for various U.S. Department of HUD programs.

See Also: Transitional Housing

Cost Burden

According to the HUD definition:

Moderate Cost Burden (Cost Burden > 30 percent) = Housing costs (including utilities) are between 31 and 50 percent of reported income.

Severe Cost Burden (Cost Burden >50 percent) = Housing costs (including utilities) are exceeding 50 percent of reported income

D

Debt to Equity Ratio

A financial ratio used to determine whether a government agency, business, household, or other entity can safely borrow over long periods of time. The ratio is calculated by dividing an entity's outstanding debt by the amount of equity it holds. A high debt to equity ratio may indicate that an entity is financing its growth with debt. For government agencies, debt to equity ratio is important because it will determine whether it has a strong or weak bond rating.

Deed Restriction

Restrictions or limitations on the use of property, as noted in a deed. Deed restrictions are one mechanism for maintaining the long-term affordability of a home with a significant public subsidy.

See Also: Shared Equity

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Demand-Side

Demand-side housing policies address housing affordability challenges by increasing individuals' purchasing power. For example, the federal government provides Section 8 housing choice vouchers to individual households to enable them to afford the costs of private-market rental homes. Supply-side policies, by contrast, seek to directly expand the supply of affordable homes – usually through subsidies to enable developers to build or rehabilitate affordable homes.

See Also: Supply-Side

Density Bonus

Permission granted by a municipality to build more or larger units than otherwise allowed by the existing zoning codes. Density bonuses are sometimes included as an "offset" to compensate developers for revenue that may be lost due to a requirement in an inclusionary zoning ordinance that a share of newly developed units be affordable to working families. In other cases, density bonuses are granted as an incentive to encourage owners to voluntarily include affordable units within new developments.

See Also: Inclusionary Zoning

Ε

Economy of Scale

The economic principle that as the scale of production increases, the cost of producing each additional unit decreases, leading to a lower average cost per unit. This principle helps explain, for instance, some of the costs advantages of manufactured homes and larger builders.

Eminent Domain

Right of a government agency to take private property for a public purpose. Fair compensation must be paid to the owner whose property is taken.

Employer-Assisted Housing (EAH)

Housing assistance provided by employers for their workers or the broader community. A growing number of employers are extending employer assisted housing benefits to their workers by providing grants or loans to assist with downpayments (for homebuyers) or security deposits (for renters), offering homeownership education and counseling, and investing in the development of affordable homes in the community.

ENERGY STAR

A government-backed program for rating the efficiency levels of appliances and fixtures.

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Forbearance

A forbearance or repayment plan is the temporary cessation or reduction of loan payments and the principle, but it does not permanently alter the terms of the loan.

Foreclosure Prevention

Assistance provided to help struggling homeowners avoid a foreclosure and possibly retain their home. Foreclosure prevention programs often include counseling and financial assistance. Click here to learn more.

Forgivable Loan

A loan that is forgiven if program requirements are met for a specified period of time. The loan may be forgiven incrementally over time – for example, 20 percent per year for five years – or all at once at the end of the specified time period.

G

General Plan

Tthe overall planning made about an area, land, city, county, etc. wherein areas are generally established for different purposes, zones, and activities.

See Also: Comprehensive Plan

Gentrification

A process in which a low-cost – and possibly deteriorating – neighborhood undergoes revitalization through reinvestment in its physical assets. Gentrification is often associated with an influx of higher-income residents, an increase in property values, and the displacement of at least some of the original lower-income residents, which can make it controversial.

Green Building

Refers to a set of building design and construction practices that seek to reduce a building's environmental impacts by improving energy efficiency and indoor air quality, reducing water use and consumption, choosing sustainable building materials, and situating the home in a manner that takes advantage of sunlight and other natural amenities.

Greenfield Sites

A piece of previously undeveloped land in a city or rural area currently used for agriculture, landscape design, or left to nature.

Growing Smarter/Plus

The State of Arizona's Growing Smarter Act of 1998 and the Growing Smarter Plus Act of 2000 provide comprehensive land use planning and zoning reforms, including the acquisition

of open space, and give residents of Arizona cities, towns, and counties a number of tools to shape growth in their own communities, such as the right to vote on general plans and restrictions on how general and comprehensive plans can be amended.

Н

Hogan

A traditional, sacred house of the Navajo people.

HOME

Established by Congress in 1990, this federal program is designed to expand the supply of decent affordable housing for low- and very low-income families and individuals. HOME funds are provided each year by HUD to states and localities, which determine how the funds are spent. HOME funds may be used for: tenant-based rental assistance; assistance to homebuyers; property acquisition; new construction; rehabilitation; site improvements; demolition; relocation; and administrative costs.

HOPE VI

A federal program designed to revitalize distressed public housing through demolition and reconstruction. HOPE VI grants are made to public housing authorities based on a competition administered by HUD. Many HOPE VI developments include households with a mix of incomes and provide supportive services.

Housing Affordability Gap

The difference between the cost of housing and what the residents can afford to pay.

Housing Authority

An organization established under state law to provide housing for low- and moderate-income persons (in this case, the Arizona Department of Housing). Commissioners are appointed by the local governing body of the jurisdiction in which they operate. Many housing authorities own their own housing or operate public housing funded by HUD. See Also: Arizona Department of Housing

Housing Trust Fund

A dedicated fund established to provide a stable source of revenue reserved solely for affordable homes. Local housing trust fund revenue is is not encumbered by the restrictions associated with federal resources and thus may be used more flexibly to fulfill locally-determined housing goals. Congress recently passed legislation creating a National Housing Trust Fund.

HUD

The U.S. Department of Housing and Urban Development. Formed in 1965, HUD is charged with ensuring smooth policy for housing and city development. Since the mid-1970s,

its focus has shifted primarily to housing, leaving urban planning more in the hands of individual cities. One of the main functions of HUD is its role as a lending facilitator, helping people of low- and mid-level incomes to acquire loans to purchase housing. (HUD itself is not a lending institution). Other major areas of purview include counseling services for potential homeowners, safety issues, housing discrimination, senior housing, home repair and homeowner's insurance.

I

Impact Fee

Charges assessed by local government to cover the infrastructure costs associated with new development. These one-time expenses are typically levied upon issuance of building permits (usually on a flat, per-unit basis) to help ensure that public facilities and services—including water and sewer systems, parks, and even schools—have adequate capacity and infrastructure to meet the demands of a growing population. While impact fees are initially charged to the developers of new homes, the cost of the fees may be passed on to the occupants in the form of higher home prices or rents, which can make new housing less affordable.

In regards to impact fees, Arizona Revised Statue 9-463.05 states: "A municipality may assess development fees to offset costs to the municipality associated with providing necessary public services to a development, including the costs of infrastructure, improvements, real property, engineering and architectural services, financing, other capital costs and associated appurtenances, equipment vehicles, furnishings and other personalty."

Inclusionary Zoning

A requirement or incentive for developers to reserve a specific percentage of units in new residential developments for low- to moderate-income households. Inclusionary zoning is a flexible tool that uses the momentum of the real estate market to create new affordable rental and ownership opportunities (i.e. if the market is high more development will be occurring, increasing the opportunity to creating new affordable housing). Many ordinances require below-market units to be built at the same time, in the same location and with an appearance similar or identical to the adjacent market-rate units, helping to create diverse, mixed income neighborhoods and disperse affordable homes throughout the community.

Infill

Development that occurs on vacant or abandoned lots, in spaces between buildings, or through the redevelopment of existing lots in an urban area, rather than on previously undeveloped land outside of developed area boundaries.

Infrastructure Costs

The cost of providing the various systems and facilities needed to support the operation of a community (e.g., sewer and water systems, electric systems, communication lines, roads). Some municipalities charge impact fees to developers or purchasers of new homes to help pay for the costs associated with the initial servicing of these homes.

See Also: Impact Fee

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Land Bank

Governmental or quasi-governmental entities dedicated to assembling properties – particularly vacant, abandoned, and tax-delinquent properties – and putting them to productive use. Land bank authorities acquire or facilitate the acquisition of properties, hold and manage properties as needed, and dispose of properties in coordination with city planners and in accordance with local priorities for land use.

Click here for information on how land banks help convert vacant and abandoned property to productive use.

See Also: Community Land Trust

LEED

Leadership in Energy and Environmental Design (LEED) is sustainable building certification program run under the auspices of the U.S. Green Building Council (USGBC). The program is designed to inform and guide professionals who work with structures. LEED concentrates its efforts on improving performance across five key areas of environmental and human health: energy efficiency, indoor environmental quality, materials selection, sustainable site development, and water savings. Rating systems are available for existing buildings, new construction, and major renovations.

See Also: Green Building

Loan Modification

A permanent change to the loan agreement with the current lender that alters one or more terms of the loan such as lowering the interest rate or increasing the length of the loan term. In some cases, the modification may include a reduction in principal (for example, forgiving delinquent payments).

Low Income Housing Tax Credit (LIHTC)

The federal program that is the principal source of federal support for the construction and rehabilitation of affordable rental homes. The tax credits are a dollar-for-dollar credit against federal tax liability. States allocate the tax credits to developers according to the criteria set out in the states' qualified allocation plans. Developers then work with syndicators to sell the credits to investors – generally for-profit corporations and investment funds – generating the equity necessary to complete their projects. Some states also have similar tax credit programs.

See Also: Qualified Allocation Plan

M

Manufactured Home

A housing type that is wholly or substantially built in a factory and then delivered to the building site for final assembly and installation.

See Also: Modular Homes

Mixed-Income

A type of development that includes families at various income levels. Mixed-income developments are intended to promote deconcentration of poverty and give lower-income households access to improved amenities.

Mixed-Use

A type of development that combines various uses, such as office, commercial, institutional, and residential, in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design.

Mobile Home

Technically, this is the term used for manufactured homes produced prior to June 15, 1976, when the HUD Code went into effect; by 1970, these homes were built to voluntary industry standards. However, it is still often used (incorrectly) to generally refer to housing that is not site-built (i.e., factory-built housing).

Modular Homes

Houses that are built in sections that have been manufactured in a factory setting. These sections, or modules, are delivered and assembled at the intended site of use. Unlike manufactured homes, modular homes are subject to the same building codes as stick-built homes, and may be financed using the same mortgage products. Modular homes are often indistinguishable from neighboring homes that have been built entirely on-site; however producers are able to reduce their costs through use of a standardized production technique and other economies of scale in the production process.

See Also: Manufactured Home

Mortgage Interest Deduction

A tax break for homeowners. Homeowners with deductions that are large enough to warrant itemizing can deduct the amount of interest on their mortgage when they file their taxes. The mortgage interest deduction is the largest subsidy for housing in the United States.

Multifamily

A type of property that is designed for more than one family, such as a condominium or apartment building.

Ν

NIMBY

NIMBY is an acronym for Not in My Back Yard, which refers to opposition by nearby residents to development that they perceive to be undesirable. NIMBY sentiment sometimes leads to the derailment of plans to build affordable homes.

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Ordinance

A law adopted by a local government pertaining to an issue within its legal power. *See Also: Zoning Code*

Overlay District

An overlay district is a specific geographic area upon which additional land use requirements are applied, on top of the underlying zoning code, in order to promote a specified goal. Overlay districts may be used to allow greater flexibility in development types without undergoing a large-scale rezoning.

Ρ

Payback Period

Amount of time it takes for a conservation strategy's cost savings to cover its purchase, installation, and operating costs. The most feasible and financially-effective strategies will typically have a payback period of less than seven or eight years.

Preservation

The term preservation has several meanings in the housing context. It can refer to historic preservation, in which efforts are made to preserve and retain historic structures in a community, or to the preservation of rental housing, in which efforts are made to stem the loss of affordable rental homes. Rental housing preservation can focus on physical maintenance and repairs, the maintenance of a development's affordability, or both.

Public Housing

The federal public housing program was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single family houses to high-rise apartments. There are approximately 1.2 million households living in public housing units, managed by some 3,300 housing agencies (HAs).

0

Qualified Allocation Plan (QAP)

A document issued by a state housing finance agency explaining the standards and priorities by which applicants will receive federal low-income housing tax credits. *See Also: Low Income Housing Tax Credit*

Real Estate Transfer Tax/Property Transfer Fee

State and/or local taxes that are assessed on real property when ownership of the property is transferred between parties. Real estate transfer tax revenue is sometimes used to fund state or local housing trust funds. According to a 2006 study from the Federation of Tax Administrators, thirty-five states plus D.C. impose a real estate transfer fee. Fees or tax rates range from a low of 0.01 percent in Colorado to a high of 2.2 percent in D.C. In about two-thirds of the states imposing the tax, the rate is below 0.5 percent of the value of the transfer. Nationwide, this raised approximately \$7 billion for state and local governments in fiscal year 2004.

Rehabilitate

The process of renovating and restoring older or deteriorating properties.

Rezoning

The process and action of reclassifying a parcel, parcels or geographic area from one zone classification to a new zone classification. Some localities have expanded the supply of housing by rezoning land from industrial use to residential use. Rezoning includes "upzoning," or a selective rezoning of residential land to allow higher density development of single- and/or multi-family housing, and "downzoning," which is used to restrict the amount of development a property, usually by reducing the allowable density of the property. *See Also: Zoning*

R-Value

The "R" in R-value stands for "resistance" to heat flow. R-Value is a measure of thermal insulative property. The higher the number, the better the building insulation's effectiveness.

S

Section 202

A HUD program that finances supportive housing for the elderly through interest-free capital advances to private, nonprofit organizations. The advance does not have to be repaid as long as the housing continues to serve very low-income elderly residents for 40 years.

Section 8

A two-pronged federal program that helps low-income households afford privately-owned rental units. Subsidies granted through the Section 8 Housing Choice Voucher program are tenant-based, meaning that they may be used to rent any unit that meets program requirements. Subsidies granted through Section 8 project-based assistance are project-based, meaning the same units remain affordable, even as tenants change. In both cases, families pay about 30 percent of their income for housing, including utilities, and the government covers the balance of costs through a subsidy.

See Also: Section 8 housing choice voucher, Section 8 project-based assistance

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Section 8 Housing Choice Voucher

The largest federal rental housing assistance program, the Section 8 Housing Choice Voucher program helps eligible low-income families afford the costs of rental homes they locate on the private market. Under the program, an income-qualified household typically contributes about 30 percent of its income for housing, including utilities, and the government covers the balance of costs through a subsidy. Although it is commonly referred to as "Section 8," it is now officially called the Housing Choice Voucher Program.

Section 8 Project-Based Assistance

Section 8 project based assistance is a federal rent subsidy program in which rent assistance is attached to specific privately-owned units. Families that live in units with Section 8 project-based assistance typically contribute about 30 percent of household income towards the monthly rent, and the administering public housing agency pays the remainder of the contracted rent directly to the landlord. When the family moves, the subsidy remains with the unit, keeping it affordable for the next family.

Shared Equity

An approach to homeownership that balances ongoing housing affordability and individual asset accumulation. Under shared equity, a public or philanthropic entity provides funding to help a family purchase a home. In return, the entity shares in any home price appreciation that occurs while the family lives there, preserving the buying power of the subsidy in the face of rising home prices, and allowing an initial investment in homeownership to help one generation of homeowners after another. In some forms of shared equity, such as community land trusts, the public's share of appreciation stays in the home, enabling it to be sold for an affordable price. In other forms, such as shared appreciation mortgages, the public's share of appreciation is used to give a larger loan to the next homebuyer to make a home of their choice affordable.

See Also: Community Land Trust, Silent Second Mortgage

Silent Second Mortgage

An important technique for making homeownership affordable while recycling public dollars, a silent second mortgage is a secondary home loan issued by a home-buying program to supplement a family's primary mortgage that does not need to be repaid until the home is resold (or in some cases, refinanced). Because no payments are due on the loan until the home is resold or refinanced, it has the same effect as a grant on housing affordability for a purchaser. But because the loan is repaid upon resale, the funds can be recycled to help the next homebuyer. When used as part of a shared equity strategy, silent second mortgages are known as shared appreciation loans.

See Also: Shared Equity

Smart Growth

Broadly speaking, smart growth refers to a set of development principles that link environmental, social, and economic objectives together to create vibrant, safe, and healthy places to live. Smart growth development generally seeks to takes advantage of existing infrastructure to preserve farmland and open space; encourages multi-modal transportation

options by concentrating development around public transit corridors; integrates housing and other land uses together; and provides a range of choices in the development of the built environment to promote affordability.

Soft Cost

A cost to the developer of a property that is indirect (i.e. not related to land or materials). Examples include architect and legal fees, insurance payments, and property taxes. Lengthy review and permitting processes can significantly increase development time, leading to substantial increases in a project's soft costs that reduce housing affordability.

Sprawl

The process in which the spread of development across the landscape far outpaces population growth. The landscape sprawl creates has four dimensions: 1) a population that is widely dispersed in low-density development; 2) rigidly separated homes, shops, and workplaces; 3) a network of roads marked by huge blocks and poor access; and 4) a lack of well-defined, thriving activity centers, such as downtowns and town centers. Most of the other features usually associated with sprawl – the lack of transportation choices, relative uniformity of housing options, or the difficulty of walking – are a result of these conditions. Families' search for affordable housing is one factor contributing to sprawl.

Subprime

Subprime mortgages are made to borrowers with poor credit histories who do not qualify for prime interest rates. To compensate for the increased credit risk, subprime lenders charge a higher rate of interest.

Subsidized Housing

Subsidized housing is housing that is made available at below-market rates through the use of government subsidies. Unlike other government support programs, such as food stamps or Medicaid, housing subsidies are not an entitlement and are generally in short supply. To live in a home funded by a federal housing subsidy, an applicant must qualify by income. For the largest federal rental assistance programs – specifically, Housing Choice Vouchers, public housing, and project-based Section 8 – federal law limits eligibility to households with incomes at or below 80 percent of area median income (AMI). Other federal rental assistance programs are limited to families with incomes at or below 60 percent of AMI (Low-Income Housing Tax Credit) or 50 percent of AMI (supportive housing for the elderly and disabled). Direct federal subsidies for homeownership are generally limited to families with incomes at or below 80 percent of the area median income, though reduced-cost mortgage programs reach families with somewhat higher incomes.

Supply-Side

Supply-side housing policies seek to increase the supply of affordable homes. Government agencies may either add to the housing stock directly, such as by building public housing, or may provide incentives for private developers to produce more homes – for example, through the low-income housing tax credit. Efforts to reduce regulatory barriers to the development or rehabilitation of housing also operate on the supply-side of the equation; such efforts promote

housing affordability by freeing the market to better respond to increases in housing demand. *See Also: Demand-Side*

Τ

Tax Abatement

The reduction or elimination of property taxes, granted to owners of specific properties for a designated period of time in order to stimulate a specified public benefit. Click here to learn how tax abatements can be used to increase the availability of affordable homes.

Tax Increment Financing (TIF)

A potential financing source for housing and other public improvements in designated underdeveloped areas. Communities can borrow against the incremental tax revenue expected to be received after completion of the improvements to provide initial funding of the investments. Typically refers to a property tax; not available in Arizona due to lack of authorizing legislation. Arizona did pass a sales tax TIF that supports Tucson's Rio Nuevo project.

Tax-Exempt Private Activity Bonds

Private activity bonds are bonds issued by state or local governments to fund private activities that have a public benefit. The federal government provides each state with a certain amount of authority – known as bond cap – to issue tax-exempt private activity bonds for specified purposes, including homeownership, rental housing, health care, education, and manufacturing. States decide how much of their bond cap to allocate to each qualifying use. Private activity bonds are important sources of financing for affordable homes. When used to finance homeownership, they are known as mortgage revenue bonds. When used to finance qualifying rental developments, they automatically qualify a development for 4 percent lowincome housing tax credits.

See Also: Low Income Housing Tax Credit

Transitional Housing

A project that is designed to provide housing and appropriate support services to homeless persons to facilitate movement to independent living, ideally within 24 months.

Transit-Oriented Development

Mixed-use development centered around a public transit hub to maximize the number of people who can utilize public transportation services to meet their daily travel needs.

IJ

Universal Design

Items that are usable by most people regardless of their level of ability or disability can be considered universally usable. Many accessible and adaptable features are universally usable.

For example, round door knobs are not usable by people with limited use of their hands, but lever handles are usable by almost everyone.

See Also: Accessible Design

Urban Heat Island

The increased temperatures within a metropolitan area due to various factors such as air pollution, lack of vegetation, radiant heat reflection from multiple surfaces, blockage of wind by tall buildings, etc.

V

Vacant Property

A property that has no occupants. Often these properties are also in severe disrepair.

Variance

Exceptions to zoning laws granted by municipalities in accordance with the provisions of state zoning enabling laws.

See Also: Zoning Code

Vehicle Miles Traveled

The number of miles that residential vehicles are driven each day. When housing is located far from employment centers and public transit, vehicle miles traveled generally increase, along with environmental pollutants.

VOC

Volatile Organic Compounds: often found in paints, carpets, and other interior finish materials.

W

Workforce Housing

Housing for the occupations needed in every community, including teachers, nurses, police officers, fire fighters and many other critical workers. In many communities, there is a mismatch between where these jobs are located and where affordable homes are located – a difficult situation for both working households and employers. Many working families must choose between paying exorbitant housing costs to live close to their jobs or enduring lengthy commutes from areas with more affordable housing. In areas with particularly high housing costs, employers may have difficulty retaining employees because the workers do not make enough to afford nearby homes and tire of long commutes.

See Also: Affordable Housing

Zoning Code

Local codes regulating the use and development of property. Zoning ordinances typically divide a community into land use districts or "zones," represented on zoning maps, and specify the allowable uses within each of those zones. For example, some communities divide land into industrial zones, commercial zones, and one or more residential zones. Some zones also may permit a mix of uses. Zoning codes establish development standards for each zone, such as minimum lot sizes, maximum heights of structures, building setbacks, and yard sizes. Overly rigid zoning codes that don't allow for multifamily homes or higher density development may present obstacles to affordable homes.

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