Resource Book:
ASU Faculty Research Workshop

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Foreword

This Resource Book provides a preliminary overview of the issues and research that serve as a backdrop to the collaborative efforts facilitated by the October 2003 ASU Faculty Research Workshop on Affordable Homes and the Family. The preliminary questions and concerns suggested by participants prior to the workshop (see pages 4–5) signal the beginning of an emerging collective committed to creating transdisciplinary, problem-oriented research that engages the myriad dimensions of affordable housing for low-income working families.

The overview is organized into three sections. The first section provides a prelude to transdisciplinarity by highlighting published research and reports. The second part provides an introduction to representative research methodologies and theories that have provided the framework for much work to date, as well as recommendations for future work. The third section offers a preliminary inventory of data sets and sources, including Arizona State University research and local, state, and national data sources.

The Resource Book is intended as a work in progress that will be augmented and transformed by the endeavors of the ASU Stardust Center for Affordable Homes and the Family.
A rizona suffers from a shortage of permanent affordable homes for working families that condemns more than one in ten households to substandard living conditions; nearly 197,400 Arizona families lack an affordable home. We are experiencing an explosive population growth with an increasing proportion of low-income working families, and we lack the understanding, commitment, and infrastructure to ensure affordable homeownership or permanent housing and the wide range of benefits it provides. Safe, permanent affordable homes for working families can break the cycle of poverty by establishing the stability willing families need to improve their access to critical family services (i.e., health care, education assistance, and core life skills training).

In an effort to improve access to permanent affordable homes for the working poor, the Stardust Foundation and Arizona State University have come together to form the Stardust Center for Affordable Homes and the Family. Stardust has provided a $250,000 planning grant and a $2.25 million start-up grant to establish the Center. The Center will take on significant research activities; establish a database of available and relevant research; provide program design, planning services, and technical assistance; embark on education and training; and evaluate programs. With these activities, we are aiming to address social issues directly and take on the responsibility of facilitating family stability and neighborhood development for the future.

The Center will focus on establishing a social and economic foundation for affordable homes for working families; studying the impacts of family services on family and neighborhood stability and success; and meeting the technological and architectural challenges of sustainable homes. Technology might address the natural energies available at the building boundary due to climate and site; passive and low-energy architectural systems for heating, cooling, and lighting; and appropriate integration with mechanical systems. We also will focus on institutionalizing innovative social and economic research programs in the economics of building affordable homes; studying the effect on family and community stability and success of permanent affordable homes; and determining best practices for supportive family services.

Research will be transdisciplinary and will coordinate, significantly enhance, and encourage new research in this area throughout the University. With this transdisciplinary approach, the Center will include people and resources university wide—within policy, construction, technology, design, sustainability, family studies, education, community involvement—in order to generate innovative and applicable solutions. We understand that community stability does not rely only on providing affordable housing, and thus focus on the need for social and family services as a complement for creating stability. The interaction and joint effort between the Stardust Foundation and ASU will provide the Center with unique qualities: the capabilities of a foundation for quality investments and community involvement and the capabilities of a learning institution for intellectual involvement, research, and application.
Workshop Objectives and Approach

The most pressing task in this early phase of the ASU Stardust Center for Affordable Homes and the Family—one that is critical to its long-term success—is planning. The Center has been charged with coordinating research activities, establishing a database of extant research, and developing critical research in all areas of relevance to home and family stability and success. Given the varied areas of research that relate to these topics, it is essential for us to begin thinking about how we will approach them with respect to our individual disciplines and, more importantly, whether new insight can be gained from planning a research agenda across disciplines.

Even a cursory reading of the literature from our respective disciplines demonstrates three important findings:

- we do not know enough about the relationships between housing and households;
- we do not fully understand the performance and capacity of existing housing and social service programs; and
- we have barely begun to think about how methods, findings, and even basic research questions can be enhanced by discussions across disciplines and subsequently applied in policy and programs.

Why Do We Come Together?

The faculty members that have been asked to participate in this workshop span a variety of disciplines and research areas related to homes and families. Our group is neither final nor exclusive. Rather, with the knowledge of our respective disciplines’ work in housing and households, we all come here looking beyond our individual training and expertise to create a new forum for multidisciplinary discussions. Ultimately, these discussions will determine the content of the Center’s work.

How Do We Work Together?

Basic principles will guide our discussions during this workshop and will be held as core values for the Center’s development. These include:

- emphasis on problem-oriented inquiry that is use-inspired and focused on applied outcomes.
- respect for all disciplines and methods of inquiry. The team will embrace reciprocity and integration across ideas, theories, data, solutions, and problems;
- written and oral communication should be accessible to all other disciplines; and
- the development of a common language and agenda around housing and family issues—particularly, specific problems—should run as an underlying goal in all presentations and brainstorming.

What Will Come out of Our Work?

Discussions across disciplines are rarely easy, nor is applying those discussions to a program as specific as homes and families. Our workshop will be the first brush strokes in the bigger picture for the Center. Through this, we will:
• identify problem areas in the production of homes and the formation of households, mechanisms for approaching them, and possible solutions;
• generate a list of researchable issues affecting housing and families and neighborhoods that can be studied both in and across disciplines; and
• discuss which problems the Center might and should address.
Preliminary Questions from Workshop Participants

Overall Picture

• How do we define the parameters of affordable housing, that is, “housing cost” and “family income”?
• How do we identify “family success”?
• Which segments of Arizona’s population are unable to locate appropriate and affordable housing?
• What are the financial, physical, and psychological barriers to access and use of affordable housing?
• How do stereotyping, bias, and prejudice affect those who provide, fund, and potentially use affordable housing?
• What are the moving patterns of those in the local metropolitan area and the effects of residential mobility and associated stressors and outcomes?
• Which design and technological innovations have generated greater affordable housing elsewhere?
• What are the supply and demand sides of “affordable” housing? On the supply side, what are the impacts of zoning, regulation, production techniques, and markets? On the demand side, what are the impacts of family budgetary factors on affordability? What do families earn, what do they want?
• Which technologies, public policies, or private philanthropic initiatives could reduce the price of housing by, say, 20 percent per month, without reducing quality or satisfaction?
• What is the impact of affordable housing on neighborhoods and how can affordable housing be most appropriately situated within the Phoenix metropolitan area?
• How do affordable housing issues in Arizona mirror and differ from national trends?
• How do sprawl and regional growth impact Arizona affordable housing?
• How did Arizona’s current housing patterns develop?
• What is the relationship between housing status and community growth/decline?

Impact on and Perspectives of Families

• How can the transition to affordable housing be facilitated and how does it affect family members?
• Which life opportunities are most enhanced by homeownership?
• Which life opportunities are most enhanced by long-term home occupancy (regardless of ownership status)?
• From the perspective of families seeking housing, what makes housing appropriate and affordable?
• Which types of “affordable housing” lead to good versus bad outcomes for families? For example, there is currently significant belief that clustering low-income families in public housing may not be
the best policy. How do we find the attributes that lead to healthy, affordable housing—by which I mean affordable housing that is good for the residents in a multifaceted way?

- If every family of $45,000 or less who is moving into “low cost” housing or who has a “special loan” from the Stardust Foundation were provided a case assessment and if the services recommended were actually provided, then (a) how much would this cost to do, and (b) how much difference would it make in family “success” as defined above?

Housing Design and Construction

- How can we use process, management, and other technologies to change the way houses are built to produce higher value homes at lower cost?
- What are the social relations (social, economic, political, cultural) within the housing industry in the United States and Arizona that organize housing for families and make it affordable?
- What are the economic consequences of affordable housing for those who provide and use it?
- What role does physical quality of housing units and community infrastructure have in economic and social benefits?

Paths to Change

- What technological innovations or public/private initiatives can reduce the cost of housing for low-income working families and increase family success:
  - fewer defaults on loans?
  - fewer moves by the family to other housing?
  - fewer periods of unemployment?
  - fewer incidences of domestic violence or child abuse?
  - better school performance by children?
  - fewer incidents of arrest for children, youth, and adults?
  - heightened self-esteem of children and parents?
  - increased embeddedness within the neighborhood?
  - increased civic/political participation?

- How can we encourage and finance upgrading of the housing stock in affordable older neighborhoods?
- Is single-family homeownership truly the most realistic, promising path to affordable housing for low-income working families? What about the alternatives: rentals, manufactured “mobile” homes, condos, multifamily housing?
- Why are there so few nonprofit housing providers in Arizona?
- What is the current policy context and, if needs be, can it be challenged and improved?
Research

• Which methods and data sources have been used previously?
• What theories underpin the research?
• Which research/information would be most persuasive to citizens, leaders, media, and political leaders about the importance of providing affordable housing to every family that needs it? What “facts,” what “symbols,” what changes in social constructions of people who live in low-cost housing and in low-cost housing areas are needed?
Part I.

Prelude to Transdisciplinary Research

Profile of the Problem and the People

Families and Children

Neighborhoods

Policy and Finance Issues

Design, Construction, and Technology

Best Practices
Profile of the Problem and the People

The Growing Gap between Wages and Housing Costs

One-third of all U.S. households (homeowners and renters) have housing affordability problems, that is, they spend more than 30 percent of their incomes on housing.

Almost 19 percent of all households (or 17.3 million households) spend 30 to 50 percent of their incomes on housing.

Over 15 percent of all households (or 14.3 million households) spend more than 50 percent of their incomes on housing.

Ten percent of all homeowners spend more than 50 percent of their incomes on housing. This is a 67 percent increase in homeowners from 1997 to 2001.

The housing industry sustains the overall economy, but the situation has worsened at the individual level for low-income families trying to afford a house.

For lower-income households:


Figure 1. Millions of Working Households Nationwide Face Affordability Problems

Increasing Needs and Inadequate Earnings

- The **housing wage** is the amount a person working full-time has to earn per hour to afford a two-bedroom rental unit at fair market rent while paying no more than 30 percent of income in rent.

- The national housing wage is $13.87. It has increased 37 percent since 1999, when a person had to earn $11.08 an hour to afford a fair market two-bedroom rental unit.

- The Arizona housing wage is $15.00 per hour. A full-time worker must earn $15 an hour to afford (at 30 percent income) a two-bedroom unit at fair market rent.

- The current Arizona housing wage (the wage Arizonans must make to afford rental housing) is the 17th highest in the United States.

- In the last year, 2002–2003, Arizona had the 8th largest increase in the housing wage in the nation.

- In the last year, the nonmetropolitan areas in Arizona had the highest increase in housing wage in the United States.

  Arizona housing wage in nonmetropolitan areas increased 2.83% compared with 2.80% in California; 2.79% in Nevada; and 2.11% in Oregon.

- The **federal minimum wage** has been $5.15 per hour since 1997.

- To Afford Housing:
  - Renter households in Arizona and 39 other states have to earn more than twice the prevailing minimum wage. Arizonans have to earn 2.9 times the minimum wage.
  - Renter households in eleven other states must earn more than three times the minimum wage to afford housing.

  An Arizona worker earning the minimum wage of $5.15 per hour must work 117 hours per week in order to afford a two-bedroom unit at fair market rent.

- For 2003, **housing costs** continue to rise faster than wages and the cost of other goods. The national housing wage increased by 3.7 percent between 2002 and 2003, while inflation was 2.1 percent. According to the Economic Policy Institute, real median earnings have fallen throughout much of 2002 and 2003.

  Housing costs are especially acute for families earning wages in the services sector, which continues to represent a fast-growing portion of the national economy. The average income earned by families with extremely low incomes (those at 30 percent or below of their area’s median income) is $8.34 an hour, yet there is no state in which an extremely low income household can afford the fair market rent on a two-bedroom home.

Five Critical Service Jobs: Worker Wages and Housing Affordability Problems

The Washington, D.C., Center for Housing Policy’s annual report, *Paycheck to Paycheck*, highlights the gap between wages and housing costs by examining the lack of affordable housing for individuals in five critical service jobs: elementary school teacher, police officer, licensed practical nurse, retail salesperson, and janitor.

Figure 2. Wages and Housing Costs: Homeownership and Rental Markets

<table>
<thead>
<tr>
<th>2001 Home Affordability and Selected Median Annual Incomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Median-priced Home = $156,000</strong></td>
</tr>
<tr>
<td>Annual Income Needed to Qualify for Home Mortgage: $49,703</td>
</tr>
<tr>
<td>Elementary School Teacher: $41,080</td>
</tr>
<tr>
<td>Police Officer: $40,970</td>
</tr>
<tr>
<td>Licensed Practical Nurse: $30,670</td>
</tr>
<tr>
<td>Retail Salesperson: $17,150</td>
</tr>
<tr>
<td>Janitor: $17,900</td>
</tr>
</tbody>
</table>

**Phoenix-Mesa Median-priced Home = $150,000**

Annual Income Needed to Qualify for Home Mortgage: $47,791

Elementary School Teacher: $33,670

Police Officer: $47,000

Licensed Practical Nurse: $32,130

Retail Salesperson: $18,010

Janitor: $16,350

Annual income needed is calculated using the prevailing 2001 interest rate, assumes a 10 percent downpayment and includes taxes and insurance.

<table>
<thead>
<tr>
<th>2001 Rent Affordability and Selected Median Hourly Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Fair Market Rent, 2BR = $721</strong></td>
</tr>
<tr>
<td>Hourly Wage Needed to Afford 2BR Rental: $13.87</td>
</tr>
<tr>
<td>Elementary School Teacher: $19.75</td>
</tr>
<tr>
<td>Police Officer: $19.70</td>
</tr>
<tr>
<td>Licensed Practical Nurse: $14.75</td>
</tr>
<tr>
<td>Retail Salesperson: $8.24</td>
</tr>
<tr>
<td>Janitor: $8.61</td>
</tr>
</tbody>
</table>

**Phoenix-Mesa Fair Market Rent, 2BR = $760**

Hourly Wage Needed to Afford 2BR Rental: $14.62

Elementary School Teacher: $16.19

Police Officer: $22.60

Licensed Practical Nurse: $15.45

Retail Salesperson: $8.66

Janitor: $7.86

*This Market Rent and Hourly Wage Needed to Afford a 2BR Apartment are from the National Low Income Housing Coalition, Out of March 2001, accessed at http://www.nlchq.org. The Housing Wage is the hourly wage that needs to be earned for housing to be considered affordable, i.e., to not more than 30 percent of income. Annual Income and Hourly Wage data for selected occupations are from the Bureau of Labor Statistics, Occupational Employment Statistics Survey, 2004, accessed at http://www.bls.gov.*

### Table 1. Lack of Affordable Housing in America and Arizona

This study compares wages for five vital occupations—janitor, retail salesperson, elementary school teacher, police officer, and licensed practical nurse—with homeownership and rental housing costs in 60 of the nation’s largest housing markets.

#### Homeownership: Cannot qualify for a mortgage for the median-priced home
- **Janitors**—all 60 metropolitan markets*
- **Retail Salespersons**—all 60 metropolitan markets*
- **Elementary School Teachers**—32 metropolitan markets*
- **Police Officers**—28 metropolitan markets*
- **Licensed Practical Nurses**—57 metropolitan markets*

#### Rent on a two-bedroom apartment: Paying excessive income
- **Janitors**—all 60 metropolitan markets*
- **Retail Salespersons**—all 60 metropolitan markets*
- **Elementary School Teachers**—one metropolitan market
- **Police Officers**—one metropolitan market
- **Licensed Practical Nurses**—17 metropolitan markets

#### Rent on a one-bedroom apartment: Paying excessive income (more than 30% income)
- **Janitors**—58 metropolitan markets*
- **Retail Salespersons**—59 metropolitan markets*
- **Elementary School Teachers**—two metropolitan markets
- **Police Officers**—three metropolitan markets
- **Licensed Practical Nurses**—four metropolitan markets

#### Percent of income needed for a mortgage (1999–2001)
- **Janitors**—up an average of 6.7% in 36 metropolitan markets and down an average of 4.7% in 24 markets (up 6.2% in Phoenix-Mesa area)
- **Retail Salespersons**—up an average of 8.2% in 40 metropolitan markets and down an average of 3.9% in 20 markets (up 7.5% in Phoenix-Mesa area)
- **Elementary School Teachers**—up an average of 4.0% in 32 metropolitan markets and down an average of 2.8% in 25 markets (1999 data unavailable for three markets) (up 4.7% in Phoenix-Mesa area)
- **Police Officers**—up an average of 3.4% in 30 metropolitan markets and down an average of 2.9% in 25 markets (1999 data unavailable for five markets) (up 2.0% in Phoenix-Mesa area)
- **Licensed Practical Nurses**—up an average of 4.7% in 31 metropolitan markets and down an average of 2.6% in 28 markets (1999 data unavailable for one market) (down 1.0% in Phoenix-Mesa area)

#### Percent of income needed for a two-bedroom apartment (1999–2001)
- **Janitors**—up an average of 5.8% in 45 metropolitan markets and down an average of 3.0% in 15 markets (up 6.6% in Phoenix-Mesa area)
- **Retail Salespersons**—up an average of 5.6% in 54 metropolitan markets and down an average of 1.5% in 6 markets (up 7.1% in Phoenix-Mesa area)

#### Percent of income needed for a one-bedroom apartment (1999–2001)
- **Janitors**—up an average of 4.7% in 45 metropolitan markets and down an average of 2.4% in 15 markets, (up 5.2% in Phoenix-Mesa area)
- **Retail Salespersons**—up an average of 4.5% in 54 metropolitan markets and down an average of 1.2% in 6 markets (up 5.7% in Phoenix-Mesa area)

*Includes Phoenix-Mesa area

Profile of the People

Countless Americans, regardless of social station, confront affordable housing problems, but for specific groups the crisis is overwhelming. In addition to low-income workers, the struggle to obtain affordable housing is exacerbated for racial and ethnic minorities, single-parent women, and marginalized populations such as the elderly, Native Americans living on reservations, immigrants, people with disabilities, former prisoners, and the homeless. See Appendix A, Profile of the Problem and the People, for extended references on the nature and scope of the affordable housing problem, including historical analyses and Arizona dimensions.

Low-income Working Families

- As the disjunction between income and housing costs increases, the need for workforce housing—affordable housing for low-income workers and their families—has become paramount. Working families with single heads of household are especially disenfranchised but, in many markets, decent housing is beyond the reach of families with two low-wage earners (Bell, 2002).

- 39 percent of a randomly selected national sample of 300 adult members of working families viewed affordable housing as problematic and as big a problem as affordable health care. Those living in the West perceived it as the greatest problem (Hart & Teeter, 2002).

- Low-income families face major constraints to homeownership, including lack of information, income, wealth, and supply gaps facing potential buyers of affordable homes (Collins & Dylla, 2001).

- Supply-side constraints are acute for households with incomes below 80 percent of the median income. National American Housing Surveys estimate that the proportion of owner-occupied units available to these households has decreased to 44 percent. Overall, there were about a half-million fewer affordable owner-occupied homes in 1999 than in 1997 (Collins et al., 2001).

- Access to affordable housing is compounded for those who live in cities, like Phoenix, where government expenditures for affordable housing are reduced (see Figure 3).

Race and Ethnicity

The latest national Housing Discrimination Study, conducted by the Urban Institute in 2000, found that housing discrimination had declined since the 1989 national study, but it still exists at unacceptable levels. The results were based on a sample of 4,600 pair tests in 23 metropolitan areas. In the paired tests, two individuals, one minority and the other white, posed as otherwise identical homeseekers, and visited real estate or rental agents to inquire about the availability of advertised housing units. Findings included:

- Hispanics and African Americans most often encountered discrimination when they were told that a rental unit was unavailable, while a non-Hispanic white tester would be able to examine or rent the property.

Figure 3. City Expenditures on Affordable Housing

• Although discrimination in home buying had declined:
  • African Americans were most often discriminated against through “steering.”
  • Real estate agents gave Hispanics little or no help in finding mortgage financing, compared to non-Hispanic whites.

Arizona Findings
This first phase of the research examined discrimination against two groups: Hispanics in Tucson and American Indians in Phoenix.

In Tucson:
• Compared to non-Hispanic white renters, Hispanic renters received consistent adverse treatment (29.3%, one of the highest in the nation).
  • More often quoted a higher rent for the advertised unit than similarly qualified non-Hispanic whites.
  • Less likely to have arrangements made for future contact than non-Hispanic whites.
  • None of the measures found statistically significance adverse treatment of non-Hispanic white renters, compared to Hispanics.
• Hispanic homebuyers are less likely to receive adverse treatment on many treatment measures than their national counterparts (12% compared to 19.7% nationally).
  • Hispanics were less likely to have arrangements made for future contact than non-Hispanic white homebuyers.
  • Non-Hispanic whites were less likely to inspect as many units as Hispanic homebuyers.

In Phoenix:
• Estimates of adverse treatment against American Indian renters in Phoenix were generally comparable to national estimates of adverse treatment against both African American and Hispanics.
  • Overall incidence of adverse treatment against American Indians was 51.3 percent, compared to a national estimate of 49.0 percent for African Americans and 52.7 percent for Hispanics.
• American Indians faced consistent adverse treatment in 22.5 percent of tests, compared to 21.6 percent for African Americans and 25.7 percent for Hispanics, nationwide.


Gender
• Housing is one of the critical barriers facing Arizona’s working poor in the quest for economic independence, especially with regard to women’s experiences in transitioning from economic crisis to self-sufficiency as primary breadwinners. The state’s explosive rate of population growth, unprecedented increases in housing costs, and an extreme shortage of developable land combine to cause a severe shortage of housing options for low-income families, many of which are headed by women in minimum wage jobs attempting to exit federal cash assistance and locate affordable housing and utilities (Williams & Bortner for Arizona Women’s Education and Employment, 2003).
Housing involves a complex, interlocked set of economic, social, and physical design components. Many women spend their lives trying to reconnect the private and public; more original approaches should reach out to jobs, housing, transportation, child care, and care of the elderly as parts of a better solution. A richer set of spaces and activities is required to support the transition between private life and public life. Women do most of this informal work and must be involved as users and designers. The city sought by many women is a city of women’s equality, with architecture combining professional craft and political activism and social life blending nurturing and services (Hayden, 2002).

Women with “younger” families or children living away from the family or histories as victims of domestic violence are highly vulnerable to repeated stays in homeless shelters. Availability of affordable housing and family structure and dynamics are two important factors in lowering the incidence of homelessness among women (Metraux & Culhane, 1999).

Marginalized People

The Elderly

With the aging of World War II “baby boomers,” the U.S. will face critical shortages in housing and supportive health services for seniors within the next decade. In order to address the “quiet crisis,” the commission offers Congress more than 40 specific policy recommendations that call for intensified government, private sector, nonprofit, and faith-based efforts to improve, streamline, extend, and unify services for seniors (Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century, 2002).

Florida investigators describe geographic inequality and unfairness in the availability of affordable senior housing. Most of the state’s low-income elderly population live in counties that are underserved by these accommodations (Golant, 2002).

Immigrants

The gap in homeownership rates between immigrants and native households has widened in recent years. However, historically immigrants have been well assimilated into the housing market, as the homeownership gap between natives and immigrants narrows markedly as the immigrant’s tenure in the country lengthens. Two primary factors in explaining homeownership rates among immigrant households are national origin and the presence of fellow countrymen and women in the areas in which immigrants choose to locate (Borjas, 2002).

Based on the 2001 American Housing Survey, Drew (2002) analyzes the differences between the demographic, geographic, housing, and financial characteristics of native and foreign-born first-time homebuyers since 1997.

- Foreign-born homeowners have over 1.2 trillion in housing wealth—one-tenth of the total national housing wealth—despite representing only 8 percent of all homeowners.
- One in five foreign-born homeowners is a recent first-time homebuyer.
- The median house value of foreign-born first-time homebuyers is $150,000—50 percent higher than that of native-born first-time buyers largely as a result of the concentration of immigrant households in metropolitan areas with high cost housing.
• To afford these more expensive homes, foreign-born recent first-time homebuyers are making larger down payments and shouldering heavier cost burdens than comparable native-born homebuyers.
• A larger share of foreign-born than native-born first-time homebuyers live in metropolitan areas; however within metro areas, foreign and native-born first-time homebuyers are equally distributed among central city and suburban areas.
• As more immigrants continue to arrive in the United States, housing markets in the future will be shaped in part by the patterns and behaviors exhibited by new foreign-born homebuyers.

• U.S. Census microdata from 1980 and 1990 for the Los Angeles metropolitan area suggest that differences in income, education, and immigrant status largely explain the homeownership gap between Latinos and whites. Asians are as likely to choose homeownership as are whites, and status as an immigrant did not portend lower homeownership rates among Asians (Myers et al., 2000).

People with Physical Disabilities

• The affordability of efficiency and one-bedroom apartments is the most critical aspect of the housing crisis faced by individuals with disabilities. Edgar and others examine the affordability of modest rental housing for people with disabilities in all 50 states and within each of the 2,646 district housing market areas of the country, as defined by the federal government (Edgar et al., 1999).

• A National Public Radio report paints a picture of the financial and bureaucratic barriers Americans with physical disabilities face in finding accessible, affordable housing. 90 percent of Public Housing Authorities fail to apply for Section 8 vouchers for people with disabilities and much of the affordable housing stock is inaccessible to people with physical disabilities (Karaim, 2002). http://www.npr.org/news/specials/housingfirst/whoneeds/physdisabled.html

Native Americans Living on Reservations

• Making conventional home purchase loans on Native American trust lands involves overcoming long-standing barriers. The most significant barriers are that lenders (1) are uncertain about whether they can foreclose on Native American trust lands to recover their loan funds, (2) have difficulty understanding the implications of the different types of land ownership because of the complex status of Native American trust lands, (3) are unfamiliar with the tribal courts in which litigation is conducted in the event of a foreclosure, and (4) are concerned about the absence of housing ordinances governing foreclosures in tribal communities (U.S. GAO, 1998).

• On Navajo trust lands, affordable housing is limited for all income levels, but middle-income Navajo are unable to qualify for government-subsidized housing and, denied mortgages on the reservation, are forced to leave the reservation or opt for temporary housing (Listokin, 2001).

• Through 1994, no conventional home mortgages had been granted on the Navajo reservation and, through mid-1998, there were fewer than 15 (Listokin, 2001).

Homeless Individuals

• Lack of affordable housing, deinstitutionalization, and poverty are cited as the three primary causes of homelessness in the older US population (Tully & Jacobson, 1994).
• For individuals who are mentally ill, elderly, chronically homeless, drug addicted, and former prison inmates, supportive housing connects permanent housing with comprehensive health, support, and employment services (Baron, 2003; Corporation for Supportive Housing, 2002, 2003).

• Homeless veterans encounter obstacles in obtaining health and human services and suggest a need for greater emphasis on affordable housing, advocacy-based case management services, employment opportunities, increased sensitivity in service delivery systems, and empowerment-centered practice (Applewhite, 1997).
Families and Children

Extensive research, policy, and commentary focus on the consequences the lack of affordable housing eventuates for families and their children (see Appendix A, Families and Children, for full references). These concerns are the heart of ASU’s Stardust Center for Affordable Homes and the Family. Primary issues range from the diminishment of children’s intellectual capacities and academic accomplishment, to the creation of physical and psychological ill health, to unemployment repercussions. This section briefly highlights central issues and provides a preliminary look at research on the individual and social impacts of homeownership. Considerations extend not only to macrostructural realities but to the very sense of well-being of each individual.

Housing—shelter—is one of the most basic needs of an individual. Housing, however, is more than just shelter—it provides a sense of control and self-esteem and is instrumental to individual self-sufficiency. It is also one of the most basic community needs—part of the essential services and facilities that provide a foundation for healthy community. Housing has such far-reaching impacts because it affects individuals and families in several important ways (Quercia & Bates 2002).

Thwarted Life Chances

• Approximately one out of seven families has critical housing needs, meaning that they spend more than half of their incomes on housing or live in physically dilapidated units (Lipman, 2002).

• When housing is not affordable, families may have to move frequently to reduce their housing costs. The effect of the stability of housing on the educational attainment of children and adolescents can be significant (Quercia & Bates, 2002).

• Students may change schools as they move among temporary housing options, leading to lower academic achievement and emotional and social distress (Julianelle & Foscarinis, 2003).

• Average reading scores for students who moved three or more times were half those of students who did not move (Family Housing Fund, 1998).

• Homelessness is associated with a range of acute and chronic stressors and often represents the extreme end of a continuum of hardship and poverty. Yet it is but one of many events to which children living in poverty are increasingly being subjected. As a society we should be concerned not only for the well-being of homeless children but for similarly poor housed children as well, all of whom are growing up in this country under increasingly harsh and unfavorable circumstances (Buckner et al., 1999).

Access to Employment/Earnings

• Jobs have become more and more decentralized, with over half of all employment opportunities nationwide located in the suburbs. An even higher proportion of manufacturing and retail jobs are now outside the central cities (Holzer, 1991).
• As jobs have become decentralized from the city core, urban residents have experienced increasing commute distances and times, which further discourages work. African-American men face longer commute times than white men, which are often due to their reliance on slow mass transit (Taylor & Ong, 1995).

• Women of color, who are often the sole wage earner of the family unit, also have a longer commute time than white women and have difficulty accessing suburban jobs (McLafferty & Preston, 1997).

**Significant Health Problems**

• Consequences to children’s health due to poor housing include asthma and respiratory disease, chronic illness, injuries, lead poisoning, and malnutrition (Sandel et al., 1999).

• Almost 59 percent of Arizona’s housing stock is at risk of having lead-based paint (Center for Community Change, 2001).

• While poor quality housing and neighborhoods negatively impact physical and mental health for the housed, the homeless individual or family faces far more severe health problems (Quercia & Bates, 2002).

**Threat of Homelessness**

• Mayors from a 25-city survey cite the following causes of homelessness: lack of affordable housing, mental illness and substance abuse and the lack of needed services, low-paying jobs, domestic violence, unemployment, poverty, prison release, downturn in the economy, limited life skills, and changes and cuts in public assistance programs (Lowe, 2002).

• People who cannot find shelter often must stay on the streets, in cars, or in other places not meant for human habitation (Lowe, 2002).

• To suggest that a child sleeping on the streets or in a dangerous, crowded shelter, with no place to store toys or books, and no sense of hope or security, has an opportunity equal to that of anyone in our society is simply a mockery (Waldron, 1991).

• African Americans, women of early child-bearing age, and young children are homeless in disproportionate numbers (Quercia & Bates, 2002).

• Homeless families are more susceptible to violence as they are vulnerable on the streets (Schmitz et al., 1995).

Derived primarily from Rohe et al.’s 2001 analysis of the social benefits and costs of homeownership, the following table identifies numerous research studies on the individual and social impacts of homeownership.
<table>
<thead>
<tr>
<th>Issue</th>
<th>Source</th>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Control Variable</th>
<th>Findings</th>
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<tbody>
<tr>
<td><strong>Individual Impacts</strong></td>
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<tr>
<td><strong>Life Satisfaction:</strong> Level of contentment with all aspects of one’s life</td>
<td>Rossi &amp; Weber, 1996</td>
<td>National Survey of Families &amp; Households; General Social Survey</td>
<td>Area probability sample; Sample survey</td>
<td>13,000 households 1,500 households</td>
<td>Age, socioeconomic status (SES)</td>
<td>1) Positive relationship in National Survey 2) No significant relationship in General Social Survey</td>
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<td></td>
<td>Rohe &amp; Stegman, 1994b</td>
<td></td>
<td>Longitudinal design with a control group; follow-up survey</td>
<td>171 Low-income participants in a low-income homeownership program; 202 Section 8 recipients</td>
<td>Age, sex marital status, education, income, housing type, condition, satisfaction</td>
<td>Homebuyers experienced positive increase after 1½ years Still higher ratings from homeowners after 3 years</td>
</tr>
<tr>
<td><strong>Residential Satisfaction:</strong> Level of contentment with housing unit &amp; neighborhood</td>
<td>Lam, 1985</td>
<td>Housing satisfaction survey</td>
<td>National</td>
<td></td>
<td>Demographic, housing, neighborhood characteristics</td>
<td>Homeowners substantially more satisfied than renters</td>
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<td></td>
<td>Galster, 1987</td>
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<td>Homeowners in Wooster, Ohio and Minneapolis, MN</td>
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<td></td>
<td>In later life cycle, more satisfied regardless of unit and neighborhood characteristics; satisfaction also higher among those owning newer units</td>
</tr>
<tr>
<td><strong>Psychological Health:</strong> Level of self-esteem and perceived control over life</td>
<td>Balfour &amp; Smith, 1996</td>
<td>Case study of lease purchase program sponsored by the Cleveland Housing Network</td>
<td>Participants selected from each neighborhood association</td>
<td></td>
<td></td>
<td>Securing low-cost housing, working toward homeownership contributes to self-esteem and personal security</td>
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<td></td>
<td>Rakoff, 1977</td>
<td></td>
<td>In-depth interviews, nonrandom</td>
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<td>People viewed their success or failure in life in terms of homeownership i.e., quality, ability to “move up”, owning property…</td>
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<td></td>
<td>Clark, 1997</td>
<td>National Survey of Black Americans</td>
<td>National</td>
<td>1,618 black respondents</td>
<td></td>
<td>Significant but weak positive relationship between homeownership and self-esteem</td>
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<tr>
<td></td>
<td>Rohe &amp; Stegman, 1994b</td>
<td></td>
<td>Panel study: four sites in central city Baltimore, 3 interviews</td>
<td>143 new home buyers; Section 8 renters</td>
<td></td>
<td>Second and third interviews, no statistically significant difference between self-esteem of home buyers and renters</td>
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<tr>
<td>Issue</td>
<td>Source</td>
<td>Study</td>
<td>Design</td>
<td>Sample</td>
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<tr>
<td>Physical Health</td>
<td>Macintyre et al., 1998</td>
<td>Survey</td>
<td>1,500 individuals</td>
<td>Age, sex, income, self-esteem</td>
<td>Homeowners scored higher on general and specific health indicators</td>
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<tr>
<td></td>
<td>Rossi &amp; Weber, 1996</td>
<td>National Survey of Families &amp; Households; General Social Survey</td>
<td>Area probability sample Sample survey</td>
<td>13,000 households 1,500 households</td>
<td>Positive relationship No significant relationship</td>
<td></td>
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<td></td>
<td>Page-Adams &amp; Vosler, 1997</td>
<td>Survey of laid off factory workers</td>
<td>193 respondents</td>
<td>Income, education</td>
<td>Less stress, depression, problem- atic alcohol use among homeowners than renters</td>
<td></td>
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<tr>
<td></td>
<td>Robert &amp; House, 1996</td>
<td>American Changing Lives</td>
<td>Survey</td>
<td>3,617 respondents 25 years or older</td>
<td>Income, education Homeownership positively associated with functional health but not to number of chronic conditions or self-rated health</td>
<td></td>
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</tbody>
</table>

Social Impacts

<table>
<thead>
<tr>
<th>Neighborhood Stability: Average length of tenure among neighborhood residents (less turnover equals greater stability)</th>
<th>Rohe &amp; Stewart, 1996</th>
<th>Census data 1980, 1990</th>
<th>Increase in neighborhood home ownership levels over time leads to increase in property values of single-family, owner-occupied units; homeowners tend to stay longer than renters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold effects of neighborhood change on quality of life indicators</td>
<td>Galster, Quercia &amp; Cortes, 2000</td>
<td>Census tracts drawn from 100 largest metropolitan areas (1980,1990)</td>
<td>34,706 tracts</td>
</tr>
<tr>
<td>Issue</td>
<td>Source</td>
<td>Study</td>
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<tr>
<td>Neighborhood Stability, continued</td>
<td>South &amp; Deane, 1993</td>
<td>American Housing Survey</td>
<td>Longitudinal sample of housing units with sample of selected metropolitan areas</td>
</tr>
<tr>
<td></td>
<td>South &amp; Crowder, 1997, 1998a, 1998b</td>
<td>Panel Study of Income Dynamics, local census data</td>
<td>U.S. residents and their families Unmarried, noncohabiting mothers: 2,580 Black 2,913 White 902 Black 397 Non-Black</td>
</tr>
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<td></td>
<td>Burkhauser, et al., 1995</td>
<td>Panel Study of Income Dynamics local census data</td>
<td>U.S. residents and their families</td>
</tr>
<tr>
<td>Social Involvement: Participation in voluntary or political organizations</td>
<td>Rossi &amp; Weber, 1996</td>
<td>National Survey of Families &amp; Households, General Social Survey</td>
<td>Area probability sample; sample survey of U.S. households</td>
</tr>
<tr>
<td></td>
<td>DiPasquale &amp; Glaeser, 1999</td>
<td>General Social Survey</td>
<td>Sample survey of U.S. households</td>
</tr>
<tr>
<td></td>
<td>Cox, 1982</td>
<td>Survey of homeowners and renters in Columbus, Ohio metropolitan area</td>
<td>400 adults</td>
</tr>
<tr>
<td>Issue</td>
<td>Source</td>
<td>Study</td>
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</tr>
<tr>
<td>Social Involvement, continued</td>
<td>Rohe &amp; Stegman, 1994a</td>
<td>Longitudinal, low-income homebuyers and renters in Baltimore</td>
<td>Home buyers more likely to participate in neighborhood and block associations but not other types of organizations; economic incentives of homeownership and perception of neighborhood problems no effect on level of participation</td>
</tr>
<tr>
<td>Kingston &amp; Fries, 1994</td>
<td>General Social Survey</td>
<td>Sample survey of U.S. households</td>
<td>Both male and female homeowners more likely to vote in local elections; female homeowners more likely involved in community issues; no positive relationship between homeownership and participation in voluntary organizations</td>
</tr>
<tr>
<td>Socially Desirable Youth Behaviors: Better school performance, lower drop-out rates, lower rates of teen parenthood</td>
<td>Essen, et al., 1978</td>
<td>National Child Development Study (Britain)</td>
<td>Housing conditions, region, family size, gender, social class, parental education, parental school visits</td>
</tr>
<tr>
<td>Green &amp; White, 1997</td>
<td>Panel Study of Income Dynamics, 1980 PUMS, 1980 High School and Beyond</td>
<td>Children of PSID households, 17–18 year olds All households with a 17 year old Cohort of high school sophomores, all 18 year olds</td>
<td>Race, family income, parent education, family composition, size, work status</td>
</tr>
<tr>
<td>Boehm &amp; Schlottman, 1999</td>
<td>Panel Study of Income Dynamics</td>
<td>Personal characteristics, average home value, parental education/income/family size</td>
<td>Homeownership a significant predictor of educational attainment; children raised in owned homes translate greater educational attainment into increased earnings and homeownership</td>
</tr>
<tr>
<td>Haurin, Parcel &amp; Haurin, 2000</td>
<td>Panel study from National Longitudinal Survey of Youth</td>
<td></td>
<td>Homeownership significantly raised reading and math ability and reduced behavioral problems of children</td>
</tr>
</tbody>
</table>
Neighborhoods

Neighborhoods and communities have the potential to ameliorate the impact of societal deprivation and inequities. Most research focuses on their potential to concentrate and extend the damaging impact of inadequate and uncertain housing, as well as magnify the daily survival struggles in deteriorating, dilapidated housing. This section provides resources that explore the processes through which individual problems are magnified and confounded by neighborhoods, including social isolation and the rejection of affordable housing by more privileged neighborhoods. See Appendix A, Neighborhoods, for extensive references on these topics.

Monumental Consequences

• Concentrations of poverty and disadvantage caused by the segregation of low-cost housing create social problems. A neighborhoods’s social and cultural milieu can substantially affect its residents’ views on school, work, and illegal activities (Quercia & Bates, 2002).

• The reality of our democratic ideal of equality of opportunity inevitably turns on our recognition of the central role that segregation plays in maintaining inequality and denying communities of color key resources and opportunities (Powell, Kearney & Vina, 2001).

• Social networks are of great importance in terms of job referrals and resources. Social isolation in predominantly minority or low-income neighborhoods tends to truncate networks, leaving residents with limited sources of information about employment opportunities (Briggs, 1998).

• For over 60 years, the United States has been committed to providing a “decent home in a suitable living environment” for all Americans (Rosen, 1998), but funding inadequacies, cumbersome regulatory processes, and neighborhood opposition continue (Field, 1997).

• The “Not In My Back Yard” (NIMBY) syndrome has become an active force in thwarting many low-income housing projects. A more coordinated local approach to building support for low-income housing is required. Analysts argue that the NIMBY perspective will be successfully eradicated when those in the low-income housing industry can convince the public of the real benefits of affordable housing developments (Tener, 1996).

Need for Comprehensive Community Services

Generations of neglect—too little public investment in housing and infrastructure, almost no private investment in housing and businesses—have had consequences. One has been to make it harder for families and children in those neighborhoods to succeed. Most do succeed, going on to live productive lives, but too many are at risk. And finding effective ways to assist and strengthen these at-risk families and children is not easy. But when a wide variety of services are combined, when outreach to at-risk, isolated families is emphasized, when the explicit goals are to strengthen families and communities, when the focus is on long-term prevention, when low-income people themselves are involved in designing, monitoring, and even running some of the programs, dramatic improvement can be made (Center for Community Change, 1999).
• Supportive housing connects permanent housing with comprehensive health, support, and employment services. Residents receive jobs, housing, social services, and improved recreational facilities (Baron, 2003, Borenstein, 2000).

• Service-enriched housing is a way to confront the long-term needs of families and individuals caught in the cycle of chronic poverty. Service-enriched housing offers voluntary assistance programs to resident low-income families facing social and economic problems or personal crises (Tull, 1996).

• Community building programs are designed to restore engagement in the life and government of the community, set community standards, and increase access to opportunities. The community building approach becomes a critical strategy for maintaining social stability and reducing crime, joblessness, and other problems in public housing developments. Community building appears to be the key to helping residents achieve sustainable independence (Naparstek, Dooley, & Smith, 1997).

Tables 3 and 4 that follow provide an overview of studies that have been conducted to examine the relationships between neighborhood and myriad dimensions of individual, family, and community life.
<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Neighborhood data</th>
<th>Findings from published studies</th>
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<tbody>
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<td><strong>Children</strong></td>
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<tr>
<td>Children of National Longitudinal Survey</td>
<td>Children born to women in</td>
<td>673 children aged 3–4 &amp; 5–6 (approx. 40%</td>
<td>1980 Census tract data; 70% only study child in tract</td>
<td><em>Chase-Lansdale &amp; Gordon (1996):</em> SES positive association with 5–6-year-olds’ PPVT-R &amp; reading achievement; racial similarity positive association with 5–6-year-olds’ PPVT-R.</td>
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<tr>
<td></td>
<td>nationally representative</td>
<td>African American)</td>
<td></td>
<td><em>Chase-Lansdale, Gordon, Brooks-Gunn, &amp; Klebanov (1997):</em> High SES positive association with 5–6-year-olds’ PPVT-R (boys only) &amp; reading achievement (European Americans only); low SES negative association with girls’ math achievement; male joblessness negative association with boys’ reading achievement &amp; positive association with girls’ reading &amp; math achievement; ethnic diversity negative association with European Americans’ PPVT-R.</td>
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<tr>
<td></td>
<td>study</td>
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<td><em>Chase-Lansdale, Gordon, Brooks-Gunn, &amp; Klebanov (1997):</em> High SES positive association with 5–6-year-olds’ PPVT-R (boys only) &amp; reading achievement (European Americans only); low SES negative association with girls’ math achievement; male joblessness negative association with boys’ reading achievement &amp; positive association with girls’ reading &amp; math achievement; ethnic diversity negative association with European Americans’ PPVT-R.</td>
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<tr>
<td>Infant Health &amp; Development Program</td>
<td>Early intervention for low</td>
<td>Approx. 1,000 children from diverse SES &amp;</td>
<td>1980 Census tract data; average 1.1 cases per tract</td>
<td><em>Brooks-Gunn, Duncan, Klebanov, &amp; Sealand (1993):</em> Affluence positive association with 3-year-olds’ IQ.</td>
</tr>
<tr>
<td></td>
<td>birth weight, premature</td>
<td>racial/ethnic backgrounds</td>
<td></td>
<td><em>Chase-Lansdale, Gordon, Brooks-Gunn, &amp; Klebanov (1997):</em> High SES positive association with 3-year-old European Americans’ IQ (boys only) &amp; boys’ PPVT-R &amp; 5-year-olds’ PPVT-R (boys only) &amp; verbal IQ; ethnic diversity negative association with 5-year-old European Americans’ verbal IQ &amp; PPVT-R.</td>
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<td></td>
<td>infants at 8 sites across</td>
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<td><em>Duncan, Brooks-Gunn, &amp; Klebanov (1994):</em> Affluence positive association with 5-year-olds’ IQ.</td>
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<td></td>
<td>country</td>
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<td><em>Klebanov, Brooks-Gunn, McCartney, &amp; McCormick (1998):</em> Affluence &amp; low income no association with 1- &amp; 2-year-olds’ IQ.</td>
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<tr>
<td><strong>Adolescents</strong></td>
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<tr>
<td>Adolescent Pathways Project</td>
<td>Longitudinal study of</td>
<td>669 10–16 year-olds (54% African American)</td>
<td>1980 Census tract data</td>
<td><em>Halpern-Feldsher et al. (1997):</em> Low SES negative association with European American females’ combined reading/math scores.</td>
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<td></td>
<td>students from low-income</td>
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<td>schools in New York City,</td>
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<td>Baltimore, &amp; Washington, DC.</td>
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<td>Beginning School Study in Baltimore</td>
<td>Longitudinal study of</td>
<td>Approx. 450 8th graders (approx. 50% African</td>
<td>1980 Census data; 26 regional planning districts</td>
<td><em>Entwisle, Alexander, &amp; Olson (1994):</em> Income positive association with boys’ math achievement.</td>
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<td>youth from 20 randomly</td>
<td>American)</td>
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<td>selected schools</td>
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<tr>
<td>California Study</td>
<td>Students drawn from 5</td>
<td>Approx. 7,000 predominantly European</td>
<td>1980 Census tract data</td>
<td><em>Dornbusch, Ritter, &amp; Steinberg (1991):</em> SES positive association with reported grades.</td>
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<td></td>
<td>San Francisco Bay Area</td>
<td>American high school students</td>
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<tr>
<td>Gautreaux Study</td>
<td>Quasi-experimental design</td>
<td>342 African American &amp; Latino families from</td>
<td>Not available</td>
<td><em>Rosenbaum, Kalieke, &amp; Rubenowitz (1988):</em> Youth who moved to more affluent suburbs more likely to graduate high school, take college prep classes, &amp; go to college than youth who remained in city.</td>
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<td>public housing</td>
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<tr>
<td>Study</td>
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<td>Neighborhood data</td>
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</tbody>
</table>
Brooks-Gunn, Duncan, Klebanov, & Sealand (1993): Affluence positive association with European Americans’ HSG; female headship negative association with HSG.  
Duncan (1994): Affluence positive association with European Americans’ & advantaged African American females’ completed schooling & European American males’ college attendance; low income positive association with European American males’ & African American females’ completed schooling & European American males’ college attendance; female headship negative association with African American females’ & European American males’ completed schooling & African Americans’ HSG; female employment rate negative association with females’ completed schooling (advantaged African Americans only) & college attendance & positive association with European American males’ completed schooling & HSG; percent African American negative association with African Americans’ completed schooling (advantaged males only) & college attendance.  
Foer & McLanahan (1996): Dropout rate negative association with females’ HSG.  
Halpern-Felsher et al. (1997): High SES positive association with completed schooling (excluding African American males); ethnic diversity positive association with African American males’ completed schooling. |
| Promoting Academic Competence      | Longitudinal school-based study in Atlanta  | 346 11–16-year-old African Americans                                  | 1980 Census tract data  | Halpern-Felsher et al. (1997): High SES positive association with African American females’ Iowa Basic Skills scores; male joblessness negative association with African American males’ basic skills. |

Note: All findings reported are for analyses in which individual and family characteristics were taken into account. Definitions of neighborhood measures are available upon request. SES = socioeconomic status; PPVT-R = Peabody Picture Vocabulary Test–Revised; HSG = high school graduation.  
<table>
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<td>Do Individual and Neighborhood Context Explain Ethnic Differences in Juvenile Delinquency?</td>
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<td>Frequency and seriousness of delinquent youth behavior</td>
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<td>Census and Cuyahoga County Department of Health and Human Services</td>
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<td>School Leaving: A Longitudinal Perspective Including Neighborhood Effects</td>
<td>Ensminger, Lamkin, and Jacobson (1996)</td>
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<tr>
<td>Why is There More Crime in Cities?</td>
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<td>Crime patterns</td>
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<td>Data drawn from the Neighborhood Project</td>
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<td>Poverty, not public housing participation has negative effect on children's outcomes</td>
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Policy and Finance Issues

As the numerous references in the Policy and Finance section in Appendix A attest, many scholars have grappled with the fundamental policy question, What shall we do? Their analyses consider growth control, regulatory guidelines, and economic development, as well as issues such as the relationships between affordable housing and multifamily public housing and welfare policy.

Attention has also been directed toward the major policy implementation area of finance, including scrutiny of affordable lending practices, tax credits, mortgage underwriting, and bond financing. The following are frequently asked questions and prominent replies.

What Policies Are Intended to Promote Affordable Housing?

Inclusionary Zoning

• Residential developers provide a percentage of total units at below market rents or sales prices in conjunction with the market-rate units in the project. Two most common approaches are:
  (1) voluntary inclusionary programs (“builder’s remedy” and “voluntary set-aside program”) and (2) mandatory set-asides with density bonus, i.e., in exchange for development rights or zoning variances (Dietderich, 1996; Brown, 2001).

Criticism: The “Irony of Inclusionary Zoning” argues that inclusionary zoning stalls the housing market, raises prices, decreases supply, and ultimately hurts the lower-income individuals it purports to help (Ellickson, 1981). See related theory discussion on pages 51–52.

Housing Trust Funds

• Public sector tools used to direct financial resources to the development of affordable housing for low-income households. Nearly 150 affordable housing trust funds are in operation around the nation, including 37 state-administered funds (Hall et al., 2001).

Redevelopment

• A process by which government action promotes new development on urban land that has been developed in a poorly planned manner and contains deteriorated or obsolete structures.
  Data from the Redevelopment Housing Activities Annual Reports 1986–1997 indicate that redevelopment sponsored housing has greatly reduced the shortfall in affordable housing in ten cities (Grigsby, 2000).

Reengineering of Failed Inner City Public Housing Projects

• Early evidence suggests that the newer developments, which in many cases are replacing high rise projects for the extremely poor with mixed income developments, are not only better for the residents but are opening up larger redevelopment opportunities that were formerly unthinkable (Grogan & Proscio, 2000).
Historical Preservation

- Historic preservation and affordable housing are frequently viewed as competing goals that must be balanced in order to benefit the community. One solution may be to combine the Low-Income Housing Tax Credit with the Historic Rehabilitation Tax Credit to increase the numbers of houses applicable for rehabilitation. This approach provides affordable housing and benefits nonprofit housing developers who are inexperienced with historic preservation as well communities where higher homeownership rates would ensue (Ceraso, 1999).

Voucher Programs

- Need to maximize the utilization of vouchers allocated to local programs, but funding level is inadequate. Tens of thousands of low-income families—primarily elderly and disabled people and working families—will be deprived of needed housing assistance (Sard & Fischer, 2003; Finkel et. al, 2003).

Are Affordable Housing Objectives Compatible with Smart Growth, Economic Development, and Environmentalism?

No

- Growth control (“smart growth”) increases the cost of available land and housing.
- Case study of conflicts in Massachusetts highlights “statutes that promote competition” between the advocates of open space and advocates of affordable housing (Bobrowski, 2003).

Yes

- Affordable housing IS compatible with other initiatives. The perceived conflict stems from the negative impact of single-issue initiatives that address some aspect of smart growth but do not represent a comprehensive smart growth approach. See 19 case studies from towns, cities, and states across the United States (Arigoni, 2001).
- The conflict is overstated. Smart growth has the potential to deal with the inequitable consequences of uneven growth by encouraging new development in communities that have suffered as a result of sprawl—the low-density residential and strip mall development that characterizes so many places in the United States (Kalinosky, 2002).
- Affordable housing is a viable community economic development strategy. The dual objectives should be pursued in tandem (Scanlon, 1998).
- Abolishing exclusionary zoning provides a natural policy alliance for environmentalists and affordable housing advocates. They both challenge the origins and practice of class segregation by residential zoning (Liberty, 2003).
How Do Welfare Policy and Affordable Housing Interact?

• Affordable housing is a key to the self-sufficiency being required of welfare recipients (Sard & Springer, 2002).

• The affordable housing gap has adverse consequences for low-income families trying to work. A growing body of research suggests that providing housing assistance to low-income families and enabling families to live closer to employment opportunities may help welfare recipients get and keep jobs. The reauthorization of welfare this year and the consideration of major housing bills provide opportunities to implement change that would support these welfare policy goals. Advocates propose a policy agenda to reduce the affordable housing gap, encourage location decisions that are more accessible to jobs, and support replication of housing strategies that appear to increase the likelihood of a successful transition from welfare to work (Waller & Sard, 2002).

• Welfare leavers without housing assistance pay 64 percent of their household income for rent and utilities, compared to 23 percent of recent leavers with assistance (Quane et al., 2002).

• Neighborhood characteristics affect household reliance on welfare receipt. Families who moved into communities with more-educated neighbors were much more likely to leave public assistance after the move than their counterparts in areas with less-educated residents (Rosenbaum & DeLuca, 2000).

Is Public Housing a Failed Policy?

Yes

• As the land on which public housing is built is designated for a single, unchanging purpose, it produces a “frozen city,” a poor area that impedes the regeneration of cities. It has become apparent that public housing combines a concentration of social problems with a huge maintenance backlog, and misguided federal attempts have been made to reform the projects. The failure of this social experiment has been evident for a long time, however, and it is long overdue for termination (Husock, 2003).

No

• But significant changes are needed.
  • replace high-density projects with scattered-site public housing
  • debunk the myth of property value decline
  • emphasize importance of good management, tenant screening, public relations, good design, and amenities
  • establish one seamless, integrated funding stream
  • institute comprehensive community services
  • involve low-income people in designing, monitoring, and operation (Hogan, 1996; Varady et al., 1998; Center for Community Change, 1999; and National Low Income Housing Coalition, 2001).
What Are the Primary Potential Financial Avenues to Increased Affordable Housing?

Tax Credits

- Targeted low-income homeownership tax credit. Current tax provisions provide insufficient incentives for lower-income families to buy homes and provide limited targeting of homeownership incentives (Collins et al., 1998).

- Rehabilitation and historic preservation tax credits are two of the most significant tax benefits available to rural and urban community development projects (Curran, 1998).

- No-interest second mortgage tax credit. One of the largest problems confronting low-income homebuyers is not lack of income but, often, a lack of wealth or savings. A federal tax-credit could induce the private market to provide no-interest second mortgages to low-income families who otherwise could not purchase a home (Eakes & Stein, 2000).

- Low-Income Housing Tax Credit Program (LIHTC): The leading financial tool for creating multifamily housing in America (Hobart & Schwarz, 1997). Aspects include:
  - adding new or rehabilitated rental housing units to the affordable housing stock
  - states establish preferences and set-asides
  - credits target specific places (Gustafson & Walker, 2002).

- Income tax credits attracting new investors into the market for developing multifamily housing that is affordable. Profitable as well as “socially responsible” (McQuiston, 1996).

  Criticism: Program requires additional layers of subsidy to leverage investment and provides benefits to developers in excess of the amount necessary to induce them to invest (McClure, 2000).

Tax-exempt Bond Financing

Tax credits can be earned on projects that receive tax-exempt financing. Vehicle for multifamily rental housing for smaller size developments with rents that are affordable to low-income households.

- Barriers to success:
  - obtaining an allocation of tax-exempt private activity bond cap authority
  - meeting the 50 percent test for qualifying for the full tax credit amount from tax-exempt financing
  - obtaining other subsidies needed to make the project feasible
  - overcoming the high fixed costs of issuing bonds for tax-exempt financing (Guggenheim, 1999).
How Can We Increase Lending to Underserved Populations?

Decrease or Eliminate Credit Barriers

• There is room for further relaxation of borrowing constraints to expand access to homeownership. Attention should be given to mortgage products that alleviate borrowing constraints in the early years of the mortgage and if mortgage product innovation is coupled with policies designed to enhance the social and financial stability of families (Rosenthal, 2001).

Institute More Flexible Underwriting Guidelines

• Efforts that address the lack of adequate savings to make a downpayment are the most promising.

• The supply of appropriately priced housing needs to increase for the full benefits of affordable lending to be realized (McCarthy et al., 1998).

Extend the Underwriting Practices and Opportunities Found in White Suburban Areas Uniformly across the Nation

• An estimated 600,000 more U.S. renter households (2.1 percent) would become home owners. If they were limited to the purchase of a median-cost home, this figure drops slightly to 522,000 (1.85) percent).

• Extended analyses suggest that up to 2.7 million low-to-moderate income renter households (7.6 percent of all renter households) should prove more attractive to mortgage lenders than the average first-time home buyer and possess a relatively high probability of moving into home ownership (Galster et al, 1999).

Increase Use of Automated Underwriting in Mortgage Lending

• Data from Mac’s Loan Prospector Automated Underwriting strongly indicate that automated underwriting (AU) provides substantial benefits to consumers, particularly those at the margin of the underwriting decision. AU systems more accurately predict default than do manual underwriters and the increased accuracy results in higher borrower approval rates, especially for underserved applicants (Zorn et al., 2002).

Challenge Assumption That Affordable Housing Decreases Community Property Values

• Review of 14 published research studies that subsidized, special-purpose, or manufactured housing had either a positive effect or no negative effect on the market value of neighboring properties (Werwath, 1996).

• Some subprime lenders, who generally operate outside the federal regulatory structure, engage in abusive lending practices that strip borrowers’ home equity and place them at increased risk of foreclosure. Need to examine patterns in subprime lending to understand where the risk and impact of predatory practices may be highest (U.S. Department of Housing and Urban Development, 2000).
Scrutinize and Improve the Federal Home Loan Bank (FHLB) System

• How have program funds been used to support affordable housing initiatives?
• How has the program been administered?
• What opportunities exist for improvement? (England-Joseph, 1995)
Design, Construction, and Technology

The central affordable housing question for design, construction, and technology is how to produce quality, higher-value homes at lower cost. Addressing this question involves challenging widespread housing assumptions as well as envisioning viable alternatives. This section provides selected resources on design and technology. In addition to resources generated by endeavors such as the Partnership for Advancing Technology in Housing, information is available from state and national agencies. For example, the U.S. Department of Housing and Urban Development (HUD) offers several publications to highlight affordable housing design and facilitate developers’ design decisions in affordable housing projects. Additional resources address utility costs, including energy efficiency and water and sewer finances; alternatives to traditional home ownership, including manufactured housing, mutual housing, and redundant office space; and student involvement in alternative housing designs. See Appendix A, Design, Construction, and Technology, for additional resources on these topics, including energy efficient and sustainable housing.

Design and Construction

• One HUD workbook provides resources to assist developers with design decisions in affordable housing development projects. This workbook is intended to be used with HUD’s Affordable Housing Design Advisor, which contains complementary resources, links, illustrations, and case studies (Evans, 2001).

• Another HUD manual provides builders with techniques for building and marketing durable affordable housing. Particular attention focuses on the gap between first-time buyers’ expectations and what they can actually afford (Garner et al., 1999).

• HUD’s Building Innovation for Homeownership (BIH) program identifies housing projects across America that employ innovative homebuilding technology, design, and development. HUD has profiled 63 housing projects in the U.S. that meet BIH criteria, including pictures and descriptions of housing type, technology used, design, project size, housing price, and financing for each project profiled (U.S. Department of Housing and Urban Development, 1998).

Utility Costs

• Colton (1995) has examined utility-sponsored energy efficiency programs and their use in developing and implementing affordable housing. Energy efficiency improvements in low- and moderate-income housing are shown to significantly reduce the cost of housing, improve overall affordability, and enhance the creditworthiness of the homeowner. The author concludes that affordable housing programs would benefit from partnering with utility-based energy efficiency initiatives.

• An online HUD publication highlights the heavy burden of utility costs in affordable housing development, reviews the important energy mandates for HUD programs, and discusses the resources available to reduce these costs for American families and communities (HUD USER, 2000).
The Department of Energy’s (DOE) Office of Energy Efficiency and Renewable Energy has initiated its Partnership for Affordable Housing program as a major incentive to spread the benefits of improved energy efficiency nationwide. The DOE office will work with the National Association of Housing and Redevelopment Officials (NAHRO) to help create the community partnerships crucial to implementing the program (Myers, 1997).

Water supply system operating costs also impact the viability of affordable housing development in the United States (Netzer et al., 2001).

Alternatives to Traditional Home Ownership

Manufactured Homes (Mobile Homes)

Since the early 1980s, the manufactured housing market has undergone a transformation that could benefit the affordable housing market. Pilot projects have proven that manufactured and modular homes are an attractive, affordable alternative that can blend with homes in existing neighborhoods (Watson, 2002).

One comprehensive guide addresses legal issues related to planning and building factory-constructed home communities and small modular home subdivisions (Albern, 1997). Among other topics, the guide examines legal issues, including zones, codes, and rules and regulations; examines lot lay-outs; and considers water supply and sewage disposal systems.

Another paper explores advantages and disadvantages of manufactured housing for those concerned with community development and asset building (Apgar et al., 2002). The authors discuss several challenges, including homebuyer education and financing, manufacturer accountability, and installation standards, land-use controls, and development of innovative yet affordable designs. The authors also discuss the need to create cost-effective methods to upgrade or rehabilitate older, often deteriorating, mobile homes.

One resource illuminates the history and culture of the mobile home in the U.S., including federal standards enacted during the 1970s that led to innovation in design and the production of much more attractive and durable models (Hart et al., 2002). Today, one of every five new single-family housing units purchased in the United States is a mobile home. Despite extensive changes in manufacture and design, even the most immobile mobile homes are still sold, financed, regulated, and taxed as vehicles.

Redundant Office Space

An unprecedented oversupply of office space and the severe lack of affordable housing in London, England has led to suggestions that these empty office buildings be converted for housing (Barlow & Gann, 1995). The authors suggest that current planning policies and owner fears of financial loss may prevent these conversions and argue for a more flexible attitude to building design and construction ensure that buildings can be converted effortlessly when demands arise for new uses.
**Mutual Housing**

- Mutual housing provides as an affordable alternative to homeownership and can serve as a means of transition from public housing and other multifamily housing to homeownership (Taylor, 1997).

**Student Involvement**

- In a hands-on program at the University of Kansas, student architects designed and built a house that became part of the local affordable housing pool (O’Brien, 2000).

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**Recommended Source**


  This extensively researched book is a testament to the ability of communities to build excellent affordable housing for families, using creative vision, perseverance, and scarce resources. The book provides an understandable and visually rich survey of outstanding affordable family housing developments in locations ranging from small towns to inner cities throughout the United States. The history of affordable housing in the United States is traced, and how such housing is developed with a mix of government and private financing is described. A major theme of the book is achieving compatibility with existing neighborhood conditions while providing contemporary housing at higher densities. The book also examines the provision of usable public and private open space, the creation of appropriate vehicular and pedestrian access and circulation, and the incorporation of special amenities for all residents.
Best Practices

Best Practices embody the professional judgments of experts and national organizations regarding exemplary programs and strategies, including financing, constructing, and managing home ownership and rental housing opportunities for low-income residents. Many awards focus on individual programs, several discuss particular state and local strategies for affordable housing development, and others focus on programs cited as award winners in national reviews and competitions. See Appendix A, Best Practices, for thirty literature references.

Individual Community Programs

• Oak Park Village, a mixture of rental and owner-occupied units in Boise, Idaho (Beck, 1996).

• El Paseo Affordable Homes, giving low-income families the opportunity to buy quality homes in Oxnard, California (Journal of Housing & Community Development, July/Aug 2001).

• Brownstones Family Housing Development, a neighborhood rehabilitation project improving the quality of life for low-income residents in St. Cloud, Minnesota (Journal of Housing & Community Development, July/Aug 2001).
  • Seattle’s voter-approved special tax levy to fund affordable housing in that city (Rice, 1996).

• Planning processes used to identify critical housing needs and the innovative use of federal HOME funds in Tucson (Thoreson & Larson, 1995).

• Public/private partnerships to create a housing delivery system in Santa Fe (Werwath, 1996).

• Marin City, U.S.A. a housing and retail redevelopment project that provides quality housing, employment, and social services to low-income residents in Marin City, California (Borenstein, 2000).

• Tres Placitas, an affordable housing neighborhood developed solely with private financing mechanisms in Albuquerque, New Mexico (Warfel, 2000).

Local Affordable Housing Development Strategies

• Analysis of Fannie Mae Foundation Maxwell Award Winners for nonprofit housing development, including recommendations for developers of homeownership, rental, and special-needs programs (Biswas, et al, 1998).

• Description of a process for identifying affordable housing as the “best practices” top priority issue to be studied by the Maricopa Association of Governments (MAG) Planners Stakeholders Group (Corey Cox Planning & Research, 2002).

• Discussion of innovative strategies toward housing affordability and improving the financial standing of lower-income households (Kloby, 2002).

• Description of the policies and practices of the Health, Housing and Integrated Services Network, initiated by the California office of the Corporation for Supportive Housing (Lenoir, 2000).
• Description of a variety of affordable housing programs that employ what the author defines as eight keys to successful affordable housing projects (Lipow, 1996).

• Discussion of tools states can use to increase to housing for low-income families, including tax incentives, housing trust funds, rental subsidies, homeownership promotion, and individual development accounts (National Governors Association, 2002).

• Discussion of innovative steps to stimulate the private sector to build more workforce and pensioner housing (Nelson, 2002).

• Identification of “ten best practices” in promoting affordable homeowners, with real world examples (U.S. DHUD, 1996).

National and State Recognition for Best or Exemplary Practices


• Documentation of efforts of several U.S. cities to create new homeownership developments in inner-city or inner-ring suburban neighborhoods, utilizing a range of financing mechanisms (U.S. DHUD, 1996).

• Profiles of winners of annual National Association of Housing and Redevelopment Officials (NAHRO) Awards of Excellence in the category of affordable housing, including rental and special needs programs and frequently featuring varieties of personal assistance, financial counseling, parenting programs, job training, assistance for special needs, and other supportive services for low- and very low-income residents (Journal of Housing & Community Development, 1997, 1998, 2000, 2002).

• Examples of “good work” done by housing and community development agencies throughout the country (Rajah-Gibbs, 1996, 1998, 1999, 2000).

• A report profiling 50 programs with notable success in increasing homeownership rates (Schubert & Thresher, 1997).

• Illustrations of over 100 exceptional state and local programs providing an array of affordable housing policies and programs (Stegman, 1999).

Researching Best Practice Awards

While professional judgments are foremost in determining best practices, Biswas et al (1998) have provided a research model for assessing the efficacy of programs honored as best practices. They examined the long-term performance of 36 housing developments that were chosen for Maxwell Awards between 1989 and 1994. Winners were chosen based on design quality, innovative financing, affordability, and creativity in addressing housing needs. The study was initiated to determine whether the developments continue to provide affordable housing to low-income households. Telephone interviews and site visits were conducted, and performance indicators were applied to the developments. The authors found that most of the homeownership developments were performing well, and homeowner satisfaction with the units was generally high. Additionally, none of the rental or special-needs developments had been
foreclosed upon, and all continued to provide affordable housing to their intended target populations. The report then describes factors affecting performance of the developments including organizational, project-specific, and contextual factors.
Part II.

Representative Research, Theory and Critique

Research Methods and Representative Studies

Theoretic Exemplars

Possible Areas of Future Research
Affordable housing research includes wide-ranging subjects and methodologies. Single method-studies dominate, but multidisciplinarity advocates the crafting of multiple-method research to provide encompassing inquiries into the many dimensions of affordable housing. The following provides a cursory review of representative research methods and studies.

**Surveys**

- Random, nationally representative telephone survey
  
  Sample of 1,004 adults over age 22 & 300 adults in working families; assessments of living situations & preferences regarding housing and community. Affordable housing as problematic as affordable health care for working families; 60 percent of both samples perceived affordability as growing problem; widespread support for government action.
  
  Hart & Teeter, 2002

- Purposive sample of 25 largest U.S. population areas
  
  Planning directors, city managers, and planning board chairpersons. Responses from 1,510 of 10,000 jurisdictions. Control of residential development controls & affordable housing policies. Identifies two main kinds of growth-controlled communities: one uses low-density zoning in a politically fragmented metropolitan framework with little mitigating effort at affordable housing policies; other uses environmentalist controls in conjunction with affordable housing programs to manage growth & blunt the effects of high housing prices on lower-income residents.
  
  Pendall, 1995, Berkeley Institute of Urban and Regional Development.

**Evaluation**

- 4-year analysis of trends and characteristics of HOME Investment Partnerships program
  
  Data from the American Housing Survey and HUD program information systems demonstrate deep & persistent housing problems for worst case housing needs among families with incomes below 50 percent of the area median income.
  

- Case study of empowerment evaluation used by university and community development corporation partnership
  
  Describes phases of empowerment evaluation adapted in a partnership. Goals were to build capacity among staff in evaluation methods & strategies, to examine a specific tenant program & identify/assess indicators of safety & security, & to facilitate changes to enhance the safety & security of tenants. Phases followed by the partnership: (1) gathering information about the program; (2) setting goals & objectives; (3) identifying impact indicators; (4) data collection; (5) problem-solving & planning; & (6) monitoring & feedback. Analyzes benefits & challenges of partnership.
  
### Historical Analysis

- **Decade-by-decade summary of the history of affordable cooperatives.**

  Affordable cooperative movement evolved from ethnic & union groups that developed self-help cooperatives in 1920s, through the federal funding of low-income cooperatives in the 1960s & 70s, to local nonprofit organizations using ad hoc packages of funds to organize cooperatives during 1980s & 90s.


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<th>Inferential Statistics</th>
<th>Case Studies</th>
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<tr>
<td><em>Logit model developed to predict likelihood that renter household will move into home ownership during 18-month period.</em> Estimates size of potential home owner market, examines relative default risks associated with expanded home ownership among lower-income, ‘underserved’ households. Baseline analyses indicate that just over 600,000 (2.1 percent) more renter households would become home owners during the period if they could buy low-cost homes &amp; the underwriting practices &amp; opportunities found in white suburban areas were applied uniformly across the nation. If limited to purchase of a median-cost home, this figure drops slightly to 522,000 (1.85 percent). Extended analyses suggest that up to 2.71 million low-to-moderate income renter households (7.6 percent of all renter households) should prove more attractive to mortgage lenders than the average first-time home buyer &amp; possess a relatively high probability of moving into home ownership.</td>
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<tr>
<td><em>Regression analysis of factors that influence city policy choices on spending for economic development versus affordable housing.</em> Investigate factors that influence city decision to pursue a limited strategy as predicted by public choice theory, as opposed to a balanced approach that favors affordable housing programs in preference to economic development programs. Inter-city competition increases likelihood that cities will pursue a limited strategy of economic development. Political variables also influence local policy decisions and are, in fact, more important than inter-city competition. Galster et al., 1999, <em>U.S. Housing Studies</em>, 14(6), 777–801.</td>
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<tr>
<td><strong>Inclusionary housing in California, 75 programs</strong> As avenue to residential integration and affordable housing, 75 program have produced over 24,000 units. Provide flexibility to the developers in meeting program requirements, establish affordability terms that are usually met at 30 years or longer, and favor moderate-income home buyers. Often response to an actual or perceived threat of litigation due to noncompliance with state “housing element” law. Calavita &amp; Grimes, 1998. <em>Journal of the American Planning Association</em>, 64(2), 156–169.</td>
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Spatial Analysis (GIS)

- Demographic mapping of social, racial, fiscal, land use, political trends in the nation’s top 25 metropolitan areas.

- Costs of sprawl. Analysis of political swing districts. New typology of suburbs. Concludes that all metropolitan residents would benefit from reduced fiscal inequities, regional land use planning, metropolitan governance.


- Demographic mapping in metropolitan Phoenix area of age, type, and size of the housing, primary usage of the housing, and measurement of affordability are provided.

  The age of housing reflects outward of spread of development. Large differences exist across the area in other housing measures which related to geographic variation in household income and in the type of housing.

  Rex, 2000, Morrison Institute for Public Policy

Assessment Methods

- Improved, “accurate” descriptive statistic of affordability that satisfies three axioms of monotonicity, transfer, and transfer sensitivity. Uses Foster, Greer, Thorbecke statistic.


- Florida statewide affordable housing needs assessment methodology to update comprehensive plans & focus more on affordable housing. Development of uniform methodology & data sources, applicable to other states.


- Proposed method for identifying housing affordability problems. Compares income to average rent the market charges for housing deemed appropriate for a household & compares current housing consumption with appropriate consumption.

  Thalmann, 1999, Urban Studies, 36(11), 1,933–1,947.

Experimental Design

- Year-long, quasi-experimental examination of newspaper coverage impact on perceived & actual public opinions.

  Newspaper attempt to decrease opposition to affordable housing. Traces effects of purposefully chosen news agenda. Conclude strategy extremely limited in ability to change opinions or salience of issue for individuals. May have important effects on citizens’ perceptions of salience the community as a whole attaches to an issue and on perceptions of dominant opinion climate. Outcomes not identical to the goals of news organization, but ability to alter perceptual environment in which policy changes transpire implies ability to facilitate change indirectly.


Multiple Methods

- Analysis of voucher utilization. Statistical analysis of existing computerized HUD files, other secondary data sources, on-site staff interviews with a national sample of 48 PHAs, and telephone interviews with local HUD staff, landlords, participants, and community representatives.


- Impact of affordable & special needs housing on neighborhoods. Home sales and crime data, focus groups with residents of neighborhoods, windsheild surveys to assess the physical appearance housing developments relative to neighborhoods.

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<td>• Social and cultural forces that influence the home-purchase decisions of minority and immigrant households.</td>
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<td>Minorities and immigrants are likely to face little-understood barriers to homeownership, new research sponsored by HUD and Fannie Mae has found.</td>
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<th>Content Analysis</th>
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<td>• Newspaper coverage of immigrants</td>
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<th>Panel Studies</th>
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<td>• Employs the Panel Study of Income Dynamics and a dynamic estimating technique to examine the effect of parents’ housing choices on the likelihood of homeownership and wealth accumulation by their children.</td>
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<td>The analysis shows that children of homeowners are more likely to own sooner than are children of renters. In addition, also, they are more likely to achieve higher levels of education and income. These results lead to substantially higher levels both of housing and nonhousing wealth accumulation for the children of owners. Also, for lower income households, housing wealth proves to be a particularly important component of total wealth accumulation.</td>
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<td>Kids Mobility Project, cited by Family Housing Fund, 1998</td>
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<th>Optimization Methods</th>
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<td>• Genetic algorithm analysis for multiobjective urban planning.</td>
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<tr>
<td>Optimal future land-use &amp; transportation plans for a high-growth city. Constraints imposed to ensure affordable housing for future residents, including minimization of traffic congestion, costs, and the minimization of change from the status quo. Millions of plans considered to generate set of optimal plans (Pareto set).</td>
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Comprehensive Reviews of Multiple Studies: Topics & Brief Summaries

**Social benefits & costs of home ownership**

Strong, consistent evidence that homeowners are more likely to be satisfied with their homes and neighborhoods; participate in voluntary & political activities; stay in homes longer, contributing to neighborhood stability. (Some positive impacts may be limited to specific populations or housing conditions.) Sparse, inconclusive evidence on several other purported positive impacts. Some evidence that under certain conditions, home ownership may have negative impacts, including damage to psychological or physical health & decreased ability to escape distressed neighborhoods (suggests caution be taken when promoting home ownership, particularly among those less likely to be successful).


**Neighborhood influences on low-income children’s development: theories & methodologies in prevention science research**

Proposes a model that focuses attention on mediating & moderating processes; is appropriate for studies of individual differences in outcomes; acknowledges transactions between residents & neighborhoods; & is sensitive to how neighborhood influences may differ for children at different development stages.


**Effects of neighborhood residence on child & adolescent well-being**

Reviews key methodological issues, examines links between neighborhood characteristics & child outcomes. Suggests link between high socioeconomic status (SES) & achievement, low SES & residential instability & behavioral/emotional outcomes; identifies 3 pathways, institutional resources, relationships, and norms/collective efficacy, through which neighborhoods might influence development.


**Link between affordable housing & children’s health & outcomes**

Research from Centers for Disease Control, leading medical and public health journals, firsthand observations by pediatricians nationwide, most recent data from HUD America Housing Survey, National Housing Trust, U.S. Conference of Mayors, city & county consolidated plans. Poor housing consequences for children: asthma & respiratory disease, chronic illness, injuries, lead poisoning, homelessness, malnutrition & diminished educational achievement.

A comprehensive review of theoretic approaches relevant to the study of affordable housing far exceeds the scope of this preliminary resource book, but it is important to illustrate the diverse theories that have been brought to bear as well as acknowledge the significant challenge that confronts emergent collaborative efforts.

The lack of rigorous theorizing is a major critique of both affordable housing policy and related scholarship.

*Housing policy and housing research are woefully short of theoretical models. Housing policy in the United States is a pastiche of programs with no clear political philosophy or social theory. Similarly, housing research by noneconomists is often a descriptive pastiche of local implementation of these programs. In many ways, economists have dominated housing research, and the microeconomics model has prevailed. This is unfortunate because the evolving system for affordable housing is a complex hybrid of market, quasi-market, and nonmarket forces. Conceptual models are needed to help organize, enhance, and advance our understanding; to clarify the normative purposes of housing policy; and to facilitate agreement on the goals for housing policy.*

Koebel, 1997, 497

Other analysts observe that housing research evidences a major bifurcation of theory and application/policy that many accept as inherent in the constraints of the field. That is, a tension between theorizing and governmental and/or market exigencies permeates endeavors and eventuates policy advocacy rather than broadly applicable theory. Researchers are limited to testing the effects of housing and social service policies and programs more than controlling variables and testing theories.

If the theoretic underpinnings are obscure or underdeveloped in many discussions, there are clearly other scholars whose research is founded in and dedicated to testing robust theoretic models. Many are directed at analyzing three primary issues: the generation of sufficient affordable housing, analyses of power relations surrounding the distribution of resources within society, and the impact of inadequate and unaffordable housing on individuals, families, neighborhoods, and the larger society. The following is a preliminary look at diverse representative analyses and the theoretic perspectives they employ.

**Increasing Affordable Housing**

**Filtering Mechanism in Housing Market**

Allow the “trickle down” filtering mechanism in the housing market to proceed unimpeded by regulation. Most moderate-income housing is produced through this filtering process in the housing market. That is:

> low- and moderate-income families benefit from the construction of housing at all levels of quality, including the highest quality units they could not conceivable afford to buy. The infusion of new housing units into a regional market sets off a chain of moves that eventually tends to increase vacancy rates (or reduce prices) in the housing stock within the means of low-and moderate-income families. Consequently, an excellent way—perhaps even the best way—to improve the housing conditions of low- and moderate-income families is to increase the production of housing prices beyond...
their reach. Although this trickle-down process does not occur instantaneously or without some friction, most housing economists agree that it does work in due time, and that it has produced in the United States a housing stock that is the envy of the world.  
Ellickson, 1981, 1185

**Government Regulation of Housing such as Inclusionary Zoning**

There is no “Free Market” in housing; the market has always operated within zoning guidelines that have been primarily exclusionary. Efficient regulation enhances the low-income housing stock, compensates developers for their losses through density variances, and advances social values.

*When inclusionary programs are voluntary, developers choose whether to build according to existing zoning rules or seek a density variance on the condition that they set aside part of the development for low-income housing. The outcome will always be to increase the stock of affordable housing—measured either in market value or in number of units created… When inclusionary programs are mandatory, developers are required to dedicate to low-income use part of any new development above a certain size, but they receive a density bonus to compensate for possible losses. When compared to exclusionary zoning, this will always increase the stock of affordable housing. If used more aggressively, the higher costs of development may decrease total development activity, but higher density per development will increase number of units built for any given amount of investment. Further increase in stock of affordable housing is likely, for a variety of reasons, including the inelasticity of key inputs (land) and the ability of the developer to pass on the costs of the program to wealthiest consumers… [Inclusionary programs] change the nature of the housing stock, increase the Filter Rate, distribute the regional tax base more evenly, lessen prior pressures in existing urban communities, and increase the mobility, opportunities, and wealth of the American poor.*

Dietderich, 1996, 49

**Public Choice Theory**

*Public-choice theorists predict that cities will not support local affordable housing programs, reasoning that city policy makers seek to provide the best cost-to-benefit ratio for public goods and services to attract residents and maintain fiscal health. The economic self-interest by cities results in interjurisdictional competition and the avoidance of redistributive policies such as affordable housing programs. Furthermore, some scholars argue that intergovernmental funding and mandates are necessary to motivate cities to support affordable housing programs… [Using] survey data from the 1990 U.S. census, the findings show that intercity competition reduces the likelihood that cities will spend local dollars on housing programs. Intergovernmental factors, such as federal funding and state-mandated housing planning, on the other hand, positively influence cities to spend local funds on affordable housing program.*

Basolo, 1999, 659

**Theories of the Nonprofit Sector**

The nonprofit sector is theorized as a third and increasingly important influence in the creation and management of low-income housing, especially in light of the inadequacies of efforts by government and the for-profit sector.
The nonprofit sector has become a vital partner in the welfare state’s provision of social services … the sector [is] a positive counterbalance to the coercive and impersonal powers of the state, thus making the sector’s mediating role a desirable goal to maximize. Similarly, the nonprofit sector was seen as a mechanism of reasserting grass-roots democracy and local autonomy in response to the centralization of power at the national level, leading to calls for “devolution” of power and responsibility back to groups closest to the problem being addressed.


Political Economy Critique of Third Sector Housing Approach

As members of the “third sector,” community-based housing organizations have been portrayed as merging housing development and preservation with community empowerment for successful community revitalization. Recent housing research says that community-based housing organizations have been successful by involving and building communities while developing and managing long-term affordable housing. In the research, these organizations are said to be able to maintain a double bottom line. In contrast, the political economy approach identifies the contradiction between relying on outside capital and trying to serve the community. The rationales and policies of the conservative and liberal administrations of the 1980s and 1990s have shaped the conditions under which community-based housing organizations work, and they have become vulnerable to market pressures due to some policies.

Koschinsky, 1998. Also see Capek & Gilderbloom, 1992; Salamon, 1993; Davis, 1994.

Power Relations and the Distribution of Housing Resources

Policy Design Theory

National policy—such as the fair housing and community reinvestment policies—shapes politics, advocacy, citizenship, and discrimination in housing at the local level. Political power resources and social constructions of populations shape political discourse and policy designs. These policy designs then impact citizenship, advocacy, and the problems at which policy is directed. A major explanatory factor is the social construction as “undeserving” of those without adequate housing. That devalued status influences the political arguments and discourse, including the availability of affordable housing and discrimination in housing. Because of the ways in which divisive images of target populations impact the specific characteristics of policy designs, neither fair housing nor community reinvestment policies achieved as much as they might have otherwise (Sidney, 2003).

Political Opportunity Structure Perspective

Devolving affordable housing policies in the United States has altered urban community collective action … The case study examines three phases of federalism and finds that devolution results in dispersed housing and community development decision making, and shifts responsibilities to the nonprofit sector. The resulting structures encourage community group competition, shrinkage or elimination of smaller community-based organizations, and growth of professionalized community development corporations. Rather than enhancing political access as theorized by [the political
opportunity structure perspective], American devolution produces contest federalism; competitive nonprofit housing development produces winners and losers, and inhibits collective action.

Bockmeyer, 2003, 175

Human Rights Framework
There are inviolable principles that elaborate upon and substantiate human dignity and well-being. Adequate housing is specified as a component of the right to an adequate standard of living. Accordingly, all human beings have the right to a secure place to live, which is fundamental to living in dignity, to physical and mental health, and to the overall quality of life. This right is explicitly set forth in the Universal Declaration of Human Rights (http://www.unhchr.ch/udhr/lang/eng.htm), the International Covenant on Economic, Social and Cultural Rights (http://www.unhchr.ch/html/menu3/b/a_cescr.htm), and many other widely accepted international human rights treaties and Declarations (Article 14, Convention on the Elimination of All Forms of Discrimination Against Women; Article 5, Convention on the Elimination of All Forms of Racial Discrimination; Article 2, Convention on the Rights of the Child; Article 21, Convention Relating to the Status of Refugees; and Article 43, International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families). A fundamental problematic for the human rights framework is how, despite widespread recognition of the human right to adequate housing, the lack of affordable and adequate housing remains one of the most pressing problems facing humanity (Goldewijk, et al., 2002).

Impact of Inadequate, Unaffordable Housing
As demonstrated by the many references in Tables 2 through 4, much research excavates the far-reaching impacts of inadequate housing and the overall conditions that produce and perpetuate it. The family and the neighborhood are the primary units of analysis, but the consequences for individuals, especially children and adolescents, as well as the consequences for the larger community, are ultimate concerns.

For example, ecological theoretic models examine the institutional and social context in which human behavior is enmeshed. Urie Bronfenbrenner’s (1998, 2000) bioecological theory presents a systems-based approach that examines human development in the multifacted social context. It discloses the broad influences on human development—the conditions and processes that shape it, including neighborhoods, legal and economic systems, as well as families and schools.

Based on four decades of data, Bronfenbrenner and Evans (2000) characterize the current social order as one of increasing chaos that has generated disarray in social development. The environmental state is characterized by “frenetic activity, lack of structure, unpredictability in everyday activities, and high levels of ambient simulation. Background stimulation is high, and there is a general lack of routinization and structure in daily life. The environment is also a major source of interruption of proximal processes in the form of residential noise, crowding, and classroom design” (121) The corresponding impact on youth development is equally dire:

progressive decline over time in concern for the well-being of others—expressed primarily not in words but in actions…. In light of these data we conclude that the principle developmental challenge confronting contemporary societies … is the growing threat of a major breakdown specifically in the domain of social development. We have therefore undertaken what we saw as the necessary next scientific step: that of developing both a theoretical model and corresponding research designs
for the further scientific investigation of the effects of the increasing chaos and its mode of operation, as well as identifying potential counterforces for its reduction and possible reversal (121, emphases in the original).

It is crucial to the analysis of affordable housing and the prospects for change that, although contextual theories focus on the centrality of environment, they do not envision individuals or families as passive recipients of environmental mandates. Of utmost importance are the reciprocal dynamics that occur in interchanges between individuals and their environments (see Sameroff et al., 1997).
Possible Areas of Future Research

The following reflect the nature and scope of recommendations for future research. They range from sweeping admonitions relevant to the entire field of scholarship to specific topics proposed for subfields.

**Overall Recommendations for Field of Inquiry**

- Emphasize the reciprocal relationship between theory and housing research.
- Integrate design and technology concerns with contextual research exploring individual and social outcomes.
- Develop research designs informed by a thorough understanding of market dynamics and their critique.
- Better establish the conditions under which homeownership is an advisable investment.
- Ask if homeownership has been oversold in comparison to alternatives.
- Explicate power relationships, especially power exercised by the disenfranchised, e.g., the power and influence low-income tenants have and how they use it.
- Produce models and empirical evidence elaborating more deeply the relationships between discriminatory acts and structural inequality.
- Link the above with banking industry transformation and outcomes in the housing and credit markets.
- Better identify the mechanisms through which homeownership influences economic variables of interest.
- Identify best means of supplying affordable housing under myriad differing local conditions.
- Examine housing supply conditions in “hotspot” metropolitan markets such as Phoenix.
- Devise better methods to measure the macroeconomic importance and impact of the housing sector.
- Develop methods for tracking families with housing affordability problems who move.
- Study interactions among local, state, and federal policy levels and collaborative opportunities to ameliorate affordable housing problems.
- Scrutinize design and technology capacities to produce higher value homes at lower cost.
- Look for ironic and unintended outcomes and retain the ability to be surprised.
Specific Topics for Future Research

- Alternative methods for preserving homeownership rather than just expanding it.
- Family household budgets adjustments to deal with severe housing cost burdens. How the adjustments impact children’s long-term educational achievement and social development outcomes.
- Extent to which parents are forced to take on second and third jobs to pay for housing, and potential repercussions on children.
- Differences in the benefits and costs of homeownership between low- and moderate-income homeowners and middle- and upper-income homeowners.
- Economic impacts of mortgage delinquency and default for low-income families.
- Impact of immigrant community interactions on housing and mortgage finance decisions.
- Landlord-tenant relations and broader topics of property management.
- Welfare policy and housing assistance close to employment.


Integrated Theory, Research, and Application Agenda

Focusing on the nonprofit housing arena, Koebel (1998) provides a robust example of a comprehensive research agenda, articulated within a sound theoretic framework and committed to change. His explicit objective is to present:

*a starting point in developing a theory of nonprofit housing and in placing nonprofit housing squarely in the realm of nonprofit sector research. It also a call for the nonprofit housing sector to broaden its attention and to engage the debates surrounding the nonprofit sector as a whole, in the U.S. and abroad … The theory presented identifies several areas of distinction for nonprofit housing that point to the broad elements of a nonprofit research agenda: mission and trust; boards and policy; philanthropy and voluntarism; primacy; partnership and political economy. Nonprofit housing research need to move beyond counting units and resources to developing a richer understanding of this sector. Comparative studies between [nonprofit housing organizations] and for-profit housing providers are needed (1998, 267–268).*

A series of specific research questions probing each “area of distinction” follows Koebel’s preamble, thus integrating the overriding theoretic concerns and specific research questions.

Particularly in light of the commitment to multidisciplinarity, affordable housing research must transcend individual questions or clusters of questions to create coherent, multifaceted, theory-informed research agendas. These more encompassing visions will sustain collaborative work and enhance the possibilities for widely applicable research that contributes to the transformation of housing within American society.
Part III.

PRELIMINARY INVENTORY OF DATA SETS/SOURCES

Arizona State University

State and Local

National
Arizona State University

Faculty Datasets

- School Mobility and Educational Achievement
- Mobility and Its Effects, K–8 Children
- Neighborhoods for Justice: Land Use and Zoning Time Series Analysis
- Neighborhoods for Justice: Past and Present, Final Project for PUP 362 Urban Planning IV Studio
- Phoenix Area Social Survey (PASS)
- Affordability Index and Metro Phoenix Multifamily Rent Index
- Housing Affordability Index
- Housing Condition Evaluation

School Mobility and Educational Achievement

Contact
Kathy Nakagawa, Psychology in Education, ASU, nakagawa@asu.edu

Geographic Area or Population Covered
All Phoenix feeder districts (30); all Tempe, Chandler, Scottsdale, Mesa school districts

Sample Characteristics
Cross-sectional, 180 returned surveys out of 360

Number and Description of Variables
Rate of mobility by school, achievement of the school (based on 97/98, and also new data), kinds of programs and practices for new kids, innovative programs or practices, level of parent involvement, outreach to parents, percent of teachers who create homework intended to involve parents, GIS data from City of Phoenix (demographics including income), neighborhood resources (Head Start facilities, parks)

Unit of Analysis
Primary data set—elementary (K–8) school; second analysis—child/family

Time Frame
1997/1998 school year
Mobility and Its Effects, K–8 Children

Contact
Mary Stafford, Psychology in Education, ASU,
Mary.Stafford@asu.edu

Geographic Area or Population Covered
Inner-city elementary district (K–8), observations from multiple schools, 50 families, 87 children

Sample Characteristics
Cross-sectional. Families (parents) were surveyed, teachers were surveyed, children were observed in classroom settings, and children were tested for intelligence, adjustment, etc. All instruments except teacher instruments were translated into Spanish and whichever language was most comfortable was used.

Number and Description of Variables
Mobility, number of moves, family income, parents’ education levels, where parents educated, parents’ occupations, language used at home, language parents use with their parents, parent’s perceptions of affect of mobility on achievement and adjustment, children’s home behaviors, schools, questions regarding family structure and organization (e.g., traditionalism), Phinney scale for ethnic identity and what it means to be American, Genograms (family tree)s and Ecomaps (people who provide supports and demands to the family), child’s intelligence (collected through tests given by researchers), age, gender, ethnicity, grade, whether child spent multiple years in the same grade (“grade retention”), schools attended, K–present, number and percent of absences, regular/Special Ed, achievement, adjustment, including attribution of success and failure (collected through tests), teacher’s perceptions of behavior, including a teacher rating of child’s perception of self based on particular behaviors, classroom observations of behavior including # of contributions to the class, # of individual interactions with the teacher, # of individual interactions with peers, quality of interaction (positive or negative)

Unit of Analysis
Children, families

Time Frame
Research done over period from 1995–1998

Comments
Available in computer file labeled MKENILDT. Dr. Stafford is willing to share her data.
Neighborhoods for Justice: Land Use and Zoning Time Series Analysis

Contact
Ruth Yabes, Ruth.Yabes@asu.edu
Juan Brenes-Garcia, Juan.Brenes.Garcia@asu.edu

Geographic Area or Population Covered
Three sets of neighborhood groupings: Barrios Unidos, Grant Park, and Downtown Southwest Neighborhood Assoc.

Unit of Analysis
Individual parcel level data for land use and zoning

Time Frame

Sample Characteristics
Current land use (MetroScan categories): residential (single-family detached, duplex, multi-family, mobile homes, residential misc.), commercial (misc.), industrial (light, heavy, misc.), institutional (govt.), parks, open space, schools, churches, railroad, parking, multiple uses, offices, services, retail, vacant. Maps that show parcel data as either vacant, residential or industrial

Number and Description of Variables
Residential, commercial, industrial, agricultural, other/vacant. In more recent years, those variables are broken down further, for example, into light/heavy commercial, light/heavy industrial, single-family/multi-family housing. Number of cases: By decade for the entire area: 5 time series maps by decade from 1970-2000 plus 2002—1 set for and use, 1 set for zoning categories

Comments
Maps are on ArcView GIS; data base and raw data in Excel spread sheets. We have all of the original parcel data and categories available from the Maricopa County Assessor’s Office in spreadsheets. Still working on formulas to create data that shows how different categories and land use have changed (increased or decreased) over time, as well as the proportion of residential properties adjacent to industrial land uses and how that proportion/ratio has changed over time.
Neighborhoods for Justice: Past and Present, Final Project for PUP 362 Urban Planning IV Studio

Contact
Ruth Yabes, Ruth.Yabes@asu.edu
Cris Howard, 965-7188

Geographic Area or Population Covered
Three sets of neighborhood groupings: Barrios Unidos, Grant Park, and Downtown Southwest Neighborhood Assoc.

Sample Characteristics
Current land use (MetroScan categories): (residential (single-family detached, duplex, multi-family, mobile homes, residential misc)), commercial (misc.), industrial (light, heavy, misc.), institutional (govt.), parks, open space, schools, churches, railroad, parking, multiple uses, offices, services, retail, vacant

Number and Description of Variables
General statistics: Violent crimes, soil samples, number and location of landfills and hazardous waste disposal sites, infra-structure (electricity, water mains and tops, wells, sewers, trash collection, sidewalks condition, street lighting); circulation data (public transit, no car ownership, private transportation systems); public institutions (fire and police stations, courts, jails, libraries, schools, community centers and human services, hospitals and clinics, parks, open space); zoning categories. Number of cases: Estimate is over 3000 parcels (data is not available on-line at the moment), and in terms of sections, 3 broad groups of neighborhoods

Comments
Maps are on ArcView GIS; data base and raw data in Excel spread sheets. We have all of the original parcel data and categories available from the Maricopa County Assessor’s Office in spreadsheets.

Phenix Area Social Survey (PASS)

Contact
Survey Research Laboratory
Department of Sociology, ASU
Sharon Harlan, Sociology, Project Director
Sharon.Harlan@asu.edu
Project report on 6 neighborhoods
http://www.asu.edu/clas/sociology/pass/pass.pdf

Geographic Area or Population Covered
Residential areas, City of Phenix

Sample Characteristics
“Area probability sample of households within selected census block groups” (Phoenix Area Social Survey, March 2003, p. iii). To coordinate data with ecological measures of the Central Arizona-Phoenix Long-Term Ecological Research Project (CAP LTER), “CAP LTER Survey 200 ecological monitoring sites were used as the sampling frame...” (Ibid.).

Number and Description of Variables
Survey responses to mobility, sense of community, community sentiment, attitude about availability of public transportation and other amenities, attitudes about land preservation and housing density, landscape preferences, other environmental concerns (e.g., water, pollution), social capital, neighborhood resilience, neighborhood problems, home satisfaction and factors that contribute to or take away from it, lot size, fences and walls, types of landscaping, security gates, Homeowners Associations, attitudes toward Phoenix city government, demographics, including age, ethnicity, income
Affordability Index and Metro Phoenix Multifamily Rent Index

Contact
Arizona Real Estate Center (AREC)
L. William Seidman Research Institute
WP Carey School of Business, ASU
Contact: Jay Butler, Director, AREC,
Jay.Butler@asu.edu

Geographic Area or Population Covered
Maricopa County

Unit of Analysis
Maricopa County, cities, PMHS districts, Census Tracts, multifamily housing units

Time Frame
Affordability Index, 1985–present; Multifamily Rent Index, 2001–present; actual rents paid, only most recent year; residential permits, 1960–present; vacancy rates, 1970–present; home sales, square footage, median sales price, average sales price, 1984–present; household gross income, 1985; population data, 1997–present; interest rates, 1985–present

Sample Characteristics
Residential permits collected from all, geocoded to census tract, tabulated. Vacancy rates from stratified, cluster sample of at least 10,800 detached housing units and 10,800 attached (condo/townhome) units.

Number and Description of Variables
Affordability index (new and resale), multifamily index of rent change, actual rents paid within multifamily units of 100 or more (one year only), residential permits (detached, attached, and multifamily), vacancy rates (detached, attached, and multifamily), home sales (new and resale), square footage of homes sold, median sales prices, average sales prices, household gross income, population data including migration data by area, effective interest rates

Comments
AREC can perform data manipulations, including creation of revised or different indices. Data available in machine-readable formats.

Housing Affordability Index

Contact
Arizona Real Estate Center (AREC)
L. William Seidman Research Institute
WP Carey School of Business, ASU
Contact: Jay Butler, Director, AREC,
Jay.Butler@asu.edu
http://wpcarey.asu.edu/seid/arec/data.cfm?table=afford

Geographic Area or Population Covered
Maricopa County, other counties within the Phoenix Metropolitan Area, single-family houses

Unit of Analysis
Census tract, counties, cities

Time Frame

Comments
Electronic versions of working spreadsheets are available from AREC. AREC can perform data manipulations for a fee depending on the operation requested.

Sample Characteristics
Data collected based on all transactions recorded (not a sample). Exceptions: duplicates; sales of houses less than $25,000; houses where prices are too high for the area and reflect land value, not housing value; cases where prices are missing; if book-map-parcel number places the house somewhere that does not match the address, etc. Houses are matched to tract using book-map-parcel numbers.

Number and Description of Variables
Affordability index (new and resale), effective interest rates, median gross monthly income, median sales price, monthly housing payment
Housing Condition Evaluation

Contact
Downtown Center, Urban Data Center, and
School of Public Affairs, ASU
Contact: John Hall
“Windshield survey method,” where observers are
trained to observe factors of dwelling quality from
the curb

Geographic Area or Population Covered
City of Phoenix

Sample Characteristics
Cross-sectional, stratified sample of nearly 37,000 dwellings from areas considered likely to have concentrations of substandard housing. Quality Assurance: Randomly sampled 10 percent of those completed in first 10 percent of tracts (397 dwellings).

Number and Description of Variables
Census tract, structure number, address, housing condition (combined from variables measuring structural appearance, electrical, plumbing, natural light and ventilation), yard condition, type of structure, crime by type and police quarter sections (related to tract), Census Data (including age groupings, duration of vacancy, educational attainment (25 years and over), employment status (16 years and over), income (median), ages of housing units, housing and person density, language spoken in home, median value of housing units in tract, mortgage relative to income, persons and rooms per unit, population by race, poverty, public assistance and social security, tenure (time in residence), size and type of HH, units by value and rent

Comments
Dataset currently exists on 1.44 MB diskettes formatted for IBM PS/2 models and compatibles (double-sided, high-density). A copy of the diskettes will be made available. A copy of the report cited above is held by the Center for Urban Inquiry. John Hall is fully willing to share the data as long as complete citations are given. Previous Phoenix Housing Condition studies were done in 1972 and 1980.
State and Local

Data Sources

- Affordable Housing Assessment, Municipality Population and Housing Unit Update (2002), and Census 2000 Housing Maps
- Tempe Neighborhoods Tomorrow Task Force Survey of Tempe Residents Neighborhood Issues
- Housing Units Permit Data
- Demographic Profile Tables, Summary File 3 data (U.S. Census Long-form data), Summary File 1 Data (U.S. Census Short-form data)
- Kids Count Data Book 2003
- United States Historical Census Data Browser
- City and County Data Books
- Housing Opportunity Index and State and Metro Building Permits
- FFIEC Geocoding System
- Magic on CD-ROM

Affordable Housing Assessment, Municipality Population and Housing Unit Update 2002, and Census 2000 Housing Maps

Contact
Maricopa Association of Governments
302 North 1st Avenue, Suite 300
Phoenix, Arizona 85003
Phone: (602) 254-6300
FAX: (602) 254-6490
http://www.mag.maricopa.gov/display.cms and U.S. Census Bureau

Unit of Analysis
Housing units, cities and regions in the Greater Phoenix region

Time Frame
Affordable Housing Assessment, housing inventory in 1995 only, affordability index, 1984–2000, estimated affordable housing need, 2000

Geographic Area or Population Covered
Greater Phoenix cities, Maricopa County, regions within Maricopa County (i.e., east valley, west valley, reservations, …), Census tracts

Sample Characteristics
Total population. Affordable Housing Assessment—housing inventory, 7 cases, affordability index, 17 cases, estimated affordable housing need, 10 cases; Municipality Population and Housing Unit Update, 32 cases, U.S. Census Housing maps, various

Number and Description of Variables
Housing inventory type, median home sale prices, monthly housing payments, affordability index, number of owner/renter households, estimate of housing need, total and occupied housing units, occupancy rates
Tempe Neighborhoods Tomorrow Task Force Survey of Tempe Residents Neighborhood Issues

Contact  
Maryanne Corder, Maryanne_Corder@tempe.gov

Geographic Area or Population Covered  
Residents who live within the City of Tempe boundaries

Sample Characteristics  
Questions were asked about adequacy of the number and service of parks, what are the top problems facing neighborhoods (crime, traffic were at top of list)

Number and Description of Variables  
Preferences, impressions, attitudes, about neighborhood issues in Tempe (about crime, traffic, parks, code violations, party houses, noise, vandalism, graffiti, homeless persons, drug problems) demographic data (age, race, income, place of residence, level of education)

Comments  
A good data set on Tempe residents’ insights and preferences on neighborhood issues. Three inch binder full of charts, tables, histograms, that describe each question, the resulting numbers, and analysis of the 435 interviews

Housing Units Permit Data

Contact  
Pima Association of Governments  
177 N Church Ave, Suite #405  
Tucson, Arizona 85701  
Phone: (520) 792-1093  
Fax: (520) 620-6981  
http://www.pagnet.org/default.htm  
Submit comments: http://www.pagnet.org/contact/webcomment.htm.  

Unit of Analysis  
Cities, counties

Time Frame  
Annually, 1990–2000

Geographic Area or Population Covered  
Pima County

Number and Description of Variables  
Housing units permitted (divided into single family, multi-family, and mobile homes). 5 cities (Tucson, South Tucson, Marana, Oro Valley, and Sahuarita), 1 county (Pima)

Sample Characteristics  
All housing units
Demographic Profile Tables, Summary File 3 data (U.S. Census Long-form data), Summary File 1 Data (U.S. Census Short-form data)

Contact
Arizona Department of Economic Security
Site Code 045Z
P.O. Box 6123
Phoenix, AZ 85005
Phone: 602-542-5924
FAX: 602-542-7425
Email: PopStats@mail.de.state.az.us
http://www.de.state.az.us/links/economic/webpage/page2.html

Geographic Area or Population Covered
Arizona, Counties, Places, Metropolitan Statistical Areas (MSAs), American Indian Reservation Areas, Congressional Districts, Census Tracts, Zip Codes

Unit of Analysis
Housing units at multiple geographic levels: Arizona, Counties, Places, Metropolitan Statistical Areas (MSAs), American Indian Reservation Areas, Congressional Districts, Census Tracts, Zip Codes

Time Frame
Data acquired only from 2000 Decennial Census

Comments
Useful repackaging of 2000 Census data. Multiple geographies compiled into single tables

Number and Description of Variables
Units in structure, Value of home, Housing by units in structure, housing unit data (i.e. vacancy rates and measures of household size)

Sample Characteristics
Demographic Profile Table data and Summary File 3 data are compiled from a 1 in 6 sample of total households. Summary File 1 data are compiled from all people and housing units. Arizona, 15 counties, 250 Census Defined Places, 5 MSAs, 21 American Indian Reservation Areas, 6 Congressional Districts (106th Congress)

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Kids Count Data Book 2003

Contact
Annie E. Casey Foundation
701 St. Paul Street
Baltimore, MD 21202
Phone: 410-547-6600
http://www.aecf.org/kidscount/databook/

Geographic Area or Population Covered
U.S. States and the District of Columbia

Unit of Analysis
N/A

Time Frame
Data acquired only from 2001 Supplementary Survey

Comments
Can be viewed in multiple forms (map, graph, table…) and raw data can be directly downloaded.

Number and Description of Variables
Low-Income Households With Children Where Housing Costs Exceed 30 percent of Income

Sample Characteristics
Nationwide monthly survey of 700,000 households. This data reflects an annual average of the monthly data. 51 (all U.S. States plus the District of Columbia)
## United States Historical Census Data Browser

**Contact**
- University of Virginia Geospatial and Statistical Data Center. United States Historical Census Data Browser. ONLINE. 1998. University of Virginia
- Email: geostat@virginia.edu
- [http://fisher.lib.virginia.edu/census/](http://fisher.lib.virginia.edu/census/)

**Geographic Area or Population Covered**
- Entire U.S.

**Unit of Analysis**
- State, County

**Time Frame**
- Ten-year census data 1790 to 1960

**Comments**
- Can normalize or graph raw data on the fly. Only digital source of Census data before 1970.

### Sample Characteristics
- 1 in 6 sample. 1 state (Arizona), 15 counties

### Number and Description of Variables
- Basic counts of population, race, gender, and some measure of household size and composition. The data differ from decade to decade, according to what was collected in the census and the items chosen for transcription to electronic form. Beginning with 1840, some economic characteristics such as education and occupation are included. Later decades have more variables, including ancestry, literacy, and income variables. Housing is variously described as farm/acreage ownership, dwellings, or households. 1940 has the most complete and detailed housing data. No information is included on western territories before statehood, or for the District of Columbia.

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## City and County Data Books

**Contact**
- The Rector and Visitors of the University of Virginia, Charlottesville, Virginia, 22903
- Email: geostat@virginia.edu (webmaster email, no other contacts listed)
- [http://fisher.lib.virginia.edu/ccdb/](http://fisher.lib.virginia.edu/ccdb/)

**Geographic Area or Population Covered**
- entire U.S.

**Unit of Analysis**
- Counties, States, Cities, Places

**Time Frame**
- 1988 and 1994 only

**Comments**
- Completely customizable Census data in HTML, table format, or via FTP.

### Sample Characteristics
- 1 in 6 sample of total households. 1988 data: Arizona—1 state, 15 counties, 9 cities, 56 places
- 1994 data: Arizona—1 state, 15 counties, 13 cities, 95 places.

### Number and Description of Variables
- Total units, occupied/vacant housing, percent owner/renter occupied, housing values, and other characteristics including source of water/sewage disposal, structure type and size.
Housing Opportunity Index and State and Metro Building Permits

Contact
National Association of Home Builders
1201 15th Street, NW
Washington, DC 20005
Toll Free Phone: 800-368-5242
Local Phone: 202-266-8200
Fax: 202-266-8559
http://www.nahb.org/category.aspx?sectionID=113

Geographic Area or Population Covered
HOI, Phoenix-Mesa, AZ MSA, Tucson, AZ MSA, Yuma, AZ MSA; Building Permit data, Phoenix-Mesa, AZ MSA, Tucson, AZ MSA, Arizona

Sample Characteristics
Regional sales transactions records from First American Real Estate Solutions (formerly, TRW); estimated property taxes and property insurance based on metropolitan estimates of median tax and insurance rates from the 1990 Decennial Census, as estimated by NAHB from the Census Bureau’s Public Use Microdata Sample (PUMS). HOI, 191 MSAs measured and ranked; Building Permit data, Arizona and 2 Arizona MSAs (Phoenix-Mesa and Tucson)

Number and Description of Variables
Single and multi-family building permit activity (building permit data), Share of homes affordable for median income family (HOI), Median incomes (HOI), Median home prices (HOI), Affordability rank (HOI)

FFIEC Geocoding System

Contact
Federal Financial Institutions Examination Council
http://www.ffiec.gov/geocode/default.htm
http://www.ffiec.gov/default.htm
ffiec-suggest@frb.gov (webmaster email, no other contacts listed)

Geographic Area or Population Covered
Entire U.S.

Sample Characteristics
Compiled from a 1 in 6 sample of total households

Number and Description of Variables
Number of Census tracts in Arizona, 1105 cases. Total housing units, number of 1–4 family units, median year structure built, inside central city (Boolean), owner-occupied units, renter-occupied units, vacant units, owner-occupied 1–4 family units

Part III. Preliminary Inventory of Data Sets/Sources
Magic on CD-ROM

Contact
RL Brown Housing Reports
Greg Burger, greg@rlbrownreports.com or (480) 614-0211
http://www.buildersresearch.com/
about_rl_brown_housing_reports.asp

Geographic Area or Population Covered
Maricopa County, North Pinal County, Casa Grande and “surrounding areas”

Sample Characteristics
No information

Number and Description of Variables
Permit and escrow closings by month for over 2,500 active subdivisions, updated monthly; product data and characteristics for 5,300 active floor plans, updated monthly; starts by plan data for leading subdivisions, updated monthly; master planned community rankings and performance statistics, updated monthly; Builder rankings, updated monthly Subdivision rankings, updated monthly; market share by price range by geographic submarket calculations; 2,700+ last 12 month land sale transactions, updated monthly; 1,400+ future subdivision announcements, updated monthly

Unit of Analysis
Builders, subdivisions, others (?)

Time Frame
Last 12 months (?)

Comments
Costly industry data source ($1,500/six-month subscription), which may or may not be beneficial to research. No data samples were available on their website.
National

Data Resources

- American Housing Survey (US Census)
- Partnership for Advancing Technology in Housing (PATH) Technology Inventory
- Survey of Consumer Finances
- Survey of Small Business Finances
- A Picture of Subsidized Households
- Housing Cost Indexes & Administrative Tabulations
- Low-Income Housing Tax Credits (LIHTC) Database
- Property Owners and Managers Survey (POMS)
- Panel Study of Income Dynamics
- The Health and Retirement Study
- Bureau of Labor Statistics (various)
- Bureau of Economic Analysis (various)
- Bureau of Justice Statistics (various)
- Home Mortgage Disclosure Act Data
- Fannie Mae Corporation National Housing Survey
- Residential Energy Consumption Survey (RECS)
- Health Statistics (various)
- Education Statistics
- Affordable Housing Design Advisor (Gallery)
- Design Matters (Gallery)

American Housing Survey (US Census)

Contact
U.S. Census Bureau and HUD
Contact person: Ron Sepanik, HUD
http://www.buduser.org/datasets/ahs.html
also www.census.gov/hhes/www/ahs.html

Unit of Analysis
Household (with respective house)

Time Frame
Biannually nationally, with MSA-specific data between years.

Number and Description of Variables
53,600. A variety of demographic data are provided for households and their respective physical houses such as: Geography; Unit Size; Unit Quality; Housing Cost; Household Composition; Income; Neighborhood; Utilities; Recent Move; Commuting; Mobile Home; Lead Based Paint; Upgrade and Remodeling

Comments
The American Housing Survey (AHS, formerly Annual Housing Survey) is the largest and most widely-used source for information about U.S. people and homes. It gives data on apartments, single-family homes, mobile homes, vacant homes, family composition, income, housing and neighborhood quality, housing costs, equipment, fuels, size of housing unit, and recent movers. National data are collected every other year, from a fixed sample of about 50,000 homes, plus new construction each year. The survey started in 1973, and has had the same sample since 1985, noting homes and households changing over the years. In some metropolitan areas there are additional samples every 4-6 years, to measure local conditions (done every 2 years). The surveys are conducted in person and on telephone by the Bureau of the Census for the U.S. Department of Housing and Urban Development.
Partnership for Advancing Technology in Housing (PATH)
Technology Inventory

Contact
NAHB Research Center
Mike Blanford, HUD
http://www.toolbase.org

Unit of Analysis
NA (Specific technologies)

Time Frame
Updated monthly

Geographic Area or Population Covered
NA

Number and Description of Variables
NA (Currently 160+ technologies listed). Information on new and changing technologies listed in a database.

Comments
The PATH Inventory is not a database, but an inventory of new technologies that can assist in the goals of affordability, energy efficiency, quality, and improved overall performance. The technologies are listed in the following categories: Appliances; Design Tools; Doors and Windows; Electrical/Electronics; Evaluation Tools and Equipment; Exterior Walls; Fences, Decks, and Patios; Foundations; Heating, Ventilating, and Air Conditioning; Interior Partitions, Ceilings, and Floors; Plumbing; Roofs; Sitework; Whole-house Systems.

Survey of Consumer Finances

Contact
Federal Reserve Board
National Organization for Social Science and Survey Research (University of Chicago)
http://www.norc.uchicago.edu

Unit of Analysis
Family

Time Frame
Triennial beginning 1962 (1989-on available electronically)

Geographic Area or Population Covered
National sample

Number and Description of Variables
4,500 families. Income demographics and consumer choices, along with relationships to financial institutions, are covered.

Comments
The Survey of Consumer Finances (SCF) is a triennial survey of the balance sheet, pension, income, and other demographic characteristics of U.S. families. The survey also gathers information on the use of financial institutions. The links to the surveys provide summary results of the surveys, codebooks and related documentation, and the publicly available data. Also included are the data and related information from the 1962 Survey of Financial Characteristics of Consumers and the 1963 Survey of Changes in Family Finances. These surveys are the most direct precursors of the SCF. Sample recent publications from the SCF include:

A Rolling Tide: Changes in the Distribution of Wealth in the U.S., 1989-2001,

Interviewers and Data Quality: Evidence from the 2001 Survey of Consumer Finances,

Demographic Shifts in the Distribution of Wealth, 1992 to 1998: Evidence from the
Survey of Small Business Finances

Contact
Federal Reserve Board
National Organization for Social Science and Survey Research (University of Chicago)
http://www.norc.uchicago.edu

Unit of Analysis
Small Businesses (less than 500 employees)

Time Frame
Every 5 years beginning 1987

Geographic Area or Population Covered
National sample

Number and Description of Variables
40,000 small businesses. Small business financial behavior and the use of financial services and financial service providers by these firms, such as credit availability; the location of the sources of financial services; the types of financial services used, including checking accounts, savings accounts, various types of credit, credit cards, trade credit, and equity injections; as well as the firm’s recent credit acquisition experiences.

Comments
A Picture of Subsidized Households

Contact
HUD
ICF Consulting
http://www.huduser.org/datasets/asthsrg/statedata98/index.html

Unit of Analysis
Household

Time Frame
1998

Geographic Area or Population Covered
National sample

Number and Description of Variables
Varies per subsidy program. Includes reported information from PHAs and HUD administrators for the major subsidy programs, including: Indian Housing; Public Housing; Section 8 Certificates and Vouchers; Section 8 Moderate Rehabilitation; Section 8 New and Substantial Rehabilitation; Section 236; Other HUD subsidies; and Low Income Housing Tax Credits (LIHTC).

Comments
The report and data file cover about four and a half million HUD-subsidized housing units, and a third of a million housing units assisted by Low Income Housing Tax Credits, for a total of nearly five million subsidized housing units. About a quarter are in Public Housing projects. Another quarter are Section 8 Certificates or Vouchers, which let participants choose their own rental units in the private market. About a fifth of the subsidized units are in the Section 8 New Construction and Substantial Rehabilitation programs. The other units are divided among various other programs, primarily Section 236 and the Low Income Housing Tax Credit. Some projects have a mix of subsidized and unsubsidized units; just the subsidized units are counted here. Data on households were sent by agencies and landlords to HUD, and were summarized by HUD. Data on the number of units available and units occupied are from HUD’s own administrative records. For Public, Indian, Certificates+Vouchers, Moderate Rehabilitation, all data are the most recent as of 5/98. For private projects, data on households are more recent, 7/98, but units in 7/98 are estimated from a 9/95 file. Tax credit households are from 1996; units & bedrooms are 12/94.

Housing Cost Indexes & Administrative Tabulations

Contact
HUD, various internal researchers
www.huduser.org

Unit of Analysis
Household

Time Frame
Annual

Geographic Area or Population Covered
Nationally generated.

Number and Description of Variables
NA (economic costs are generated by calculation, not survey). Varies

Comments
Calculations include Section 8 existing housing program: contract rent annual adjustment factors and fair market rent indexation; Section 8 income limits; Section 8 administrative fees; fair market rents: fair market rents (FMRs) determine the eligibility of rental housing units for the Section 8 housing assistance payments program. Section 8 Rental Certificate program participants cannot rent units whose rents exceed the FMRs. FMRs also serve as the payment standard used to calculate subsidies under the rental voucher program. HUD annually estimates FMRs for 354 metropolitan areas and 2,350 nonmetropolitan county FMR areas. 50th percentile rent estimates: rent estimates at the 50th percentile (or median) are calculated for all fair market rent areas. Government sponsored enterprise data: Because Fannie Mae and Freddie Mac receive significant benefits from their government-sponsored status, Congress wanted to assure that the public was getting enough in return. Beginning with 1993, the GSEs have provided HUD annually with loan-level data on each mortgage they acquire. Qualified census tracts and difficult development areas. HUD subprime and manufactured home lender list.
Low-Income Housing Tax Credits (LIHTC) Database

Contact
HUD
http://www.huduser.org/datasets/lihtc.html

Geographic Area or Population Covered
National

Unit of Analysis
Unit

Time Frame
Annually (incremental)

Number and Description of Variables
NA (100 percent of units utilizing LIHTC). All relevant information on the units, including: project address, number of units and low-income units, number of bedrooms, year the credit was allocated, year the project was placed in service, whether the project was new construction or rehab, type of credit provided, and other sources of project financing.

Comments
The database includes project address, number of units and low-income units, number of bedrooms, year the credit was allocated, year the project was placed in service, whether the project was new construction or rehab, type of credit provided, and other sources of project financing. The database has been geocoded, enabling researchers to look at the geographical distribution and neighborhood characteristics of tax credit projects. It may also help show how incentives to locate projects in low-income areas and other underserved markets are working. LIHTC is currently the primary source for new production of affordable (read, subsidized) units in the United States.

Property Owners and Managers Survey (POMS)

Contact
HUD
http://www.huduser.org/datasets/poms.html

Geographic Area or Population Covered
National sample

Unit of Analysis
Owner

Time Frame
November 1995 and June 1996

Number and Description of Variables
Owners of 16,300 rental units. Rental management concerns including: maintenance, management practices, tenant policy, financial aspects of rental property ownership, owner characteristics, and related topics.

Comments
POMS was designed to learn more about rental housing and the providers of rental housing. The purpose was to gain a better understanding of the property owners and managers on whom the nation depends to provide affordable rental housing and what motivates their rental and maintenance policies.
Panel Study of Income Dynamics

Contact
Survey Research Center, Institute for Social Research, University of Michigan
http://psidonline.isr.umich.edu/

Geographic Area or Population Covered
National sample

Number and Description of Variables
65,000 individuals (over as much as 36 years). Emphasizes the dynamic aspects of economic and demographic behavior, but its content is broad, including sociological and psychological measures.

Comments
The PSID is a longitudinal survey of a representative sample of US individuals and the families in which they reside. It has been ongoing since 1968. The data were collected annually through 1997, and biennially starting in 1999. The data files contain the full span of information collected over the course of the study. PSID data can be used for cross-sectional, longitudinal, and intergenerational analysis and for studying both individuals and families.

The Health and Retirement Study

Contact
National Institute on Aging
University of Michigan Health and Retirement Study
http://hrsonline.isr.umich.edu

Geographic Area or Population Covered
National sample

Number and Description of Variables
22,000 individuals. Physical and mental health, insurance coverage, financial status, family support systems, labor market status, and retirement planning

Comments
The Health and Retirement Study (HRS) and Asset and Health Dynamics Among the Oldest Old (AHEAD) studies were created as separate but related surveys. The original HRS study was supported by a cooperative agreement between the National Institutes on Aging (NIA) and the University of Michigan, with additional funding from the Social Security Administration, the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S. Department of Health and Human Services (DHHS), and the Pension and Welfare Benefit Office (see Juster and Suzman 1995). It was joined in 1993 by a companion study, Assets and Health Dynamics of the Oldest Old (AHEAD), consisting of persons born before 1924 who were aged 70 and over in 1993. It was funded as a supplement to the HRS (see Soldo, et. al. 1997).
Bureau of Labor Statistics (various)

Contact
Bureau of Labor Statistics
http://www.bls.gov/

Geographic Area or Population Covered
National sample

Unit of Analysis
Industry, Occupation, and Individual

Time Frame
Varies

Number and Description of Variables

Comments

Bureau of Economic Analysis (various)

Contact
Bureau of Economic Analysis (DOC)
http://www.bea.doc.gov

Geographic Area or Population Covered
Both National and State samples

Unit of Analysis
Individual

Time Frame
Annual

Number and Description of Variables
Varies per survey. Personal Income and Income Outlays.

Comments
The BEA also runs predictions on how individual incomes shape regional economic growth.
Bureau of Justice Statistics (various)

Contact
Bureau of Justice Statistics (DOJ)
http://www.ojp.usdoj.gov/bjs/

Geographic Area or Population Covered
Both National and Local samples

Number and Description of Variables
Varies per survey. Variety of criminal, victimization, and enforcement data, including: Criminal victimization; Crime characteristics; Victim characteristics; Incident-based statistics; Criminal offenders; Federal, state, and local enforcement and prosecution; Federal sentencing, processing, and prisons; Enforcement expenditures.

Comments
The BJS collects, analyzes, publishes, and disseminates information on crime, criminal offenders, victims of crime, and the operation of justice systems at all levels of government. Much of the collection comes both from self-reporting by enforcement districts and from national surveys by Federal investigations.

Home Mortgage Disclosure Act Data

Contact
Federal Financial Institutions Examination Council
http://www.ffiec.gov/hmda

Geographic Area or Population Covered
National

Number and Description of Variables
In 2003, there were approximately 31 million loan records for calendar year (CY) 2002 reported by 7,771 financial institutions. Loan data

Comments
The Home Mortgage Disclosure Act (HMDA) was enacted by Congress in 1975 and is implemented by the Federal Reserve Board’s Regulation C. This regulation provides the public loan data that can be used to assist: in determining whether financial institutions are serving the housing needs of their communities; public officials in distributing public-sector investments so as to attract private investment to areas where it is needed; and in identifying possible discriminatory lending patterns. This regulation applies to certain financial institutions, including banks, savings associations, credit unions, and other mortgage lending institutions.

Fannie Mae Corporation National Housing Survey

Contact
Fannie Mae Corporation
http://www.fanniemae.com/media/survey/index.jhtml

Geographic Area or Population Covered
National sample

Number and Description of Variables
1,864 adults. Attitudes towards housing, housing’s importance, and knowledge of housing purchase process.

Comments
The National Survey provides a broad overview regarding citizens’ perceptions of housing, including cost outlays, knowledge of buying, and services.
Residential Energy Consumption Survey (RECS)

Contact
Department of Energy
Robert Latta, DOE
http://www.eia.doe.gov/emeu/recs/contents.html

Geographic Area or Population Covered
National sample

Unit of Analysis
Occupied housing units

Time Frame
Annually (generally)

Number and Description of Variables
4,822 units. Level and quality of energy consumption

Comments
The Residential Energy Consumption Survey (RECS) provides information on the use of energy in residential housing units in the United States. This information includes: the physical characteristics of the housing units, the appliances utilized including space heating and cooling equipment, demographic characteristics of the household, the types of fuels used, and other information that relates to energy use. The RECS also provides energy consumption and expenditures data for: natural gas, electricity, fuel oil, liquefied petroleum gas (LPG), and kerosene.

Health Statistics (various)

Contact
National Center for Health Statistics
http://www.cdc.gov/nchs/

Geographic Area or Population Covered
National samples

Unit of Analysis
Individuals

Time Frame
Varies

Number and Description of Variables
NA. Variety of health surveys by individual and household.

Comments
NCHS data documents the health status of the population and of important subgroups; identify disparities in health status and use of health care by race, ethnicity, SES, region, and other population gradients; describe experiences with the health care system; monitor trends in health status and health care delivery; identify health problems. Major surveys include: the National Health Interview Survey (http://www.cdc.gov/nchs/nhis.htm); National Health Interview Survey on Disability (http://www.cdc.gov/nchs/about/major/nhis_dis/nhis_dis.htm); National Health and Nutrition Examination Survey (http://www.cdc.gov/nchs/nhanes.htm); National Health Care Survey (http://www.cdc.gov/nchs/nhcs.htm); National Vital Statistics System (http://www.cdc.gov/nis); and National Immunization Survey (http://www.cdc.gov/nis).
## Education Statistics

**Contact**  
National Center for Education Statistics  

**Geographic Area or Population Covered**  
National samples

**Unit of Analysis**  
Students, Schools, and School Districts

**Time Frame**  
Varies

**Number and Description of Variables**  
NA. Variety of education surveys

**Comments**  
The NCES collects and summarizes data on all levels of education (pre-primary through graduate) including enrollment, achievement, and outcomes, and contexts.

## Affordable Housing Design Advisor (Gallery)

**Contact**  
LISC  
Deane Evans, NJIT  
[http://www.designadvisor.org](http://www.designadvisor.org)

**Geographic Area or Population Covered**  
National sample

**Unit of Analysis**  
NA (Project listings)

**Time Frame**  
1995–on

**Number and Description of Variables**  
NA (Currently 76 built projects). Project specifications, funders, developers, and architects

**Comments**  
The Gallery of High Quality Affordable Housing provides an introduction to some of the most exciting, well designed affordable housing projects in the United States. The Gallery is organized as a series of case studies - over 80 in all - each briefly telling the story of an affordable housing development from its conception through the design and development process to its culmination as a thriving community. The focus is primarily on new construction and on family housing, although several rehab/renovation projects are included, as well as a few developments for the elderly and for populations with special needs. It is anticipated that additional examples from all these areas will be added as the Gallery expands over time.

## Design Matters (Gallery)

**Contact**  
UIC Chicago City Design Center  
Roberta Feldman  
[http://www.uic.edu/aa/cdc/AHDC/website](http://www.uic.edu/aa/cdc/AHDC/website)

**Geographic Area or Population Covered**  
National sample

**Unit of Analysis**  
NA (Project listings)

**Time Frame**  
1980–2000

**Number and Description of Variables**  
NA (currently 50+ built projects). Project specifications, funders, developers, and architects

**Comments**  
A catalog of exemplary affordable housing located throughout the U. S. The City Design Center at the University of Illinois at Chicago compiled this Internet catalog to recognize and learn from the dedicated work of outstanding practitioners. A broad spectrum of projects, built between 1980–2000, is presented: housing that is functional, innovative, satisfying—and above all, affordable to households with limited incomes.
Appendix A.

REFERENCES

Part I

Profile of the Problem and the People

Arizona


**Historical Analyses**


**General**


Appendix A. References


**Gender**


**Race**


Marginalized Populations

Seniors/Elderly


**Immigrants**


**People with Physical Disabilities**


**Native American Reservations**


**Homeless**


Appendix A. REFERENCES


Comprehensive Services


Health


Neighborhood


### Policy and Finance


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*Appendix A. References*


Design, Construction, and Technology


Transportation


### Best Practices


Nelson, A. C. (2002). Top ten state and local strategies to increase affordable housing supply. *Fannie Mae Foundation Newsletter, 5*(1).


**Part II.**

**Representative Research, Theory and Critique**

REFERENCES


Appendix A.

References


Appendix B.

**Rural Populations**

- Belden, J. N., & Wiener, R. J. (1999). *Housing in rural America: Building affordable and inclusive communities*. Thousand Oaks, CA: Sage Publications. This book addresses the issue of creating affordable housing in rural communities by examining the conditions and context of the problem, the people and places most affected, the sources of funding for development, and creative solutions to the overall problem. Each chapter provides several examples and outlines conclusions or solutions to the problem presented. Chapter titles include the following: “The context of affordable housing in rural America,” “Conditions and trends in rural housing,” “Affordable housing in the rural south,” “The hidden homeless,” “The role of the federal rural housing programs,” “Credit and capital needs for affordable rural housing,” “Mutual self-help housing,” and “Community land trusts and rural housing.”


organizations and government agencies to provide a full range of services to homeless individuals and families. Each of the four case studies in the report covers a different type of continuum. Rural Arizona’s plan illustrates a statewide approach with a specific focus on rural areas.

- **Housing Assistance Council. (2002).** *Rural Voices, 7*(3), 1–29. This issue explores ideas for funding new production of decent, affordable housing for low-income rural households, focusing on some suggestions currently under consideration in Congress. The magazine begins with a presentation of recent data that shows why production of new rural housing is needed. Excerpts are included from the bipartisan Millennial Housing Commission’s report to Congress describing the widening gap between the demand and the supply of affordable housing, particularly for people with extremely low incomes. Four articles in the magazine explore housing trust funds and current proposals to create a national trust fund or to add Federal dollars to existing state and local trust funds.

- **Housing Assistance Council. (2002).** *Tak ing Stock: Rural People, Poverty, and Housing at the Turn of the 21st Century.* Washington, DC. Retrieved September 8, 2003, from http://www.ruralhome.org/pubs/hsganalysis/ts2000/executivesummary.htm. This report provides an overview of rural America’s residents, their economic condition, and their homes. It is third in a series of decennial reports by the Housing Assistance Council (HAC) that use data from the Census and other sources along with case studies describing some of the poorest parts of the rural United States. The regional analyses and case studies in this report depict five persistently poor areas and populations in rural America and provide examples of counties with some of the worst housing conditions in the U.S.

- **Housing Assistance Council. (2001).** *No Refuge From the Fields.* Washington, DC. Retrieved September 8, 2003, from http://www.ruralhome.org/pubs/pressreleases/2001/norefuge.htm. According to HAC, this is the first nationwide survey of farmworker housing in twenty years and confirms what smaller studies and anecdotal descriptions have been saying. Structural problems, broken appliances, and overcrowded living conditions are common among farmworkers’ homes. Families with children suffer the worst conditions. This major research project was conducted over three years from 1997 through 2000. Data on 4,625 housing units in 22 states and Puerto Rico were collected in a nonrandom survey by more than 100 outreach workers from 16 organizations that work with farmworkers around the country.

- **Housing Assistance Council. (2000).** *Combining Funding Sources for Rural Housing Development.* Washington, DC. Retrieved September 8, 2003, from http://www.huduser.org/periodicals/rrr/rrr_3_2000/0300_3.html. This report provides seven case studies to illustrate factors that lead to rural nonprofit funding success. It describes how some developers use common funding sources by blending programs such as HOME and Low Income Housing Tax Credits. Many funding sources in the case studies are Federal programs available nationwide to nonprofit rural housing developers. Other funding sources are only available locally but can serve as models for nonprofit groups to use when building their case with local lending agencies to support affordable rural housing.

assistance and project development financing programs. The study concludes with a section of general and specific policy recommendations that were provided by HAC’s roundtable participants. Overall, the data and panel discussions strongly indicate that an increased level of funding must be dedicated to increasing, improving, and maintaining the stock of rural rental units in the U.S.

- Housing Assistance Council. (1998). Linking Rural Housing and Social Services: Case Studies. Washington, DC. Retrieved September 8, 2003, from http://www.ruralhome.org/pubs/development/linking/toclinkingruralhousing.htm. This study examines some of the ways in which rural housing development and social service organizations are attempting to combine permanent housing with such social services as job training and placement, welfare and other income maintenance programs, and health care, among others, for the benefit of both low-income tenants and low-income homeowners.

- Reeder, R. (1999) New Impetus for Several General Assistance Programs. Rural Conditions and Trends, 10(1), 6-12. Describes 1999 federal funding to large general-assistance programs affecting small towns and rural areas (including Housing and Urban Development, federal disaster relief, rural extension activities, and Bureau of Indian Affairs assistance programs); increased funding for Empowerment Zones/Enterprise Communities; re-authorization of the Economic Development Administration and Appalachian Regional Commission; and a new Office of Rural Housing and Economic Development.

- Schachter, J., Jense, L., and Cornwell, G. (1998). Migration, residential mobility, and poverty in rural Pennsylvania. Rural Development Perspectives, 13(2), 40-45. In Pennsylvania, high-poverty nonmetro counties are attracting additional poor immigrants, especially the least educated, at the same time that college graduates are showing a net out-migration from rural areas. This pattern increases the strain on rural educational and social services. Survey results suggest that the poor move primarily for quality-of-life and housing reasons.

- Ziebarth, A. (1997). Growth and locational impacts for housing in small communities. Rural Sociology, 62, 111-125. A study was conducted to examine housing availability and affordability in 589 Midwestern communities. Results reveal that, based on the growth and location of a community, significant quantitative housing affordability and availability differences exist among small communities. However, focus group communities contradicted these differences. The results have potential effects for public housing enactment in small communities.
Appendix C.

INTERNATIONAL ANALYSES

Comparative


Africa

Ghana


Zimbabwe


South Africa


Asia

China


Hong Kong

India

Singapore

South and East Asia

Caribbean

Europe


Great Britain


Hungary


Spain


Eastern Europe


Western Europe


North America

Canada


