Residential Financing in the Colonias

Report
To the U.S. Department of Housing and Urban Development
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I. EXECUTIVE SUMMARY

Colonias are communities located along the U.S.-Mexico border that lack basic infrastructure – including paved roads, water and wastewater systems, generally contain substandard housing that frequently includes older mobile homes or RVs, and are home to individuals and families who have very low incomes. Colonias typically lack any type of sustained or organized economic development activity and rarely – if ever – reflect a development plan or policy. These communities, house approximately 500,000 residents who are generally U.S. citizens of Mexican descent. These communities also retain much of their Mexican heritage, frequently retaining Spanish as their primary language.

This study begins with an overview of the population and housing characteristics of selected CDPs and Census tracts containing Colonias. The study then takes a closer look at the key residential finance issues in the Colonias as identified in the focus groups held on-site and through the experiences of other countries where this type of development is more common. The study then looks at the current level of lending activity reported in the Census tracts selected for analysis. Finally, alternative finance mechanisms and potential pilot programs are proposed and additional and more formal research studies are recommended.

There seems to be a wide spectrum of colonias – ranging from the very poor and very undeveloped communities in Texas to the incorporated, urban cities of New Mexico with running water and electricity. Texas colonias, housing the majority of colonias residents (approximately 370,000) are generally peri-urban settlements located at the outskirts of cities such as El Paso and McAllen. They lack basic services and their residents overwhelmingly – 80 percent – report incomes below the poverty level. Arizona, with fewer colonias, report that about one-third of their colonias are incorporated cities and towns. These colonias are generally smaller in size and density, are not clustered along the border, and have a mixture of rural and urban employment. On the other hand, only one-tenth of New Mexico's colonias are incorporated. These communities can organized into two distinctive types: (1) the MSA colonia which are generally located by Dona Ana County and have high population growth with both urban and rural employment along the El Paso-Las Cruces corridor; and (2) the non-MSA colonia mostly rural communities that are home to older populations. These colonias are also experiencing little to no growth. Lastly, California colonias are for the most part located in Imperial County (San Diego). California colonias are unique as most of their residents are Native American rather than Hispanic or Latino.

Colonias housing in the four states is, for the most part, comprised of mobile or self-built homes that are improved or expanded over time as additional income becomes available. A common and strong motivating factor of colonia residents is the commitment to homeownership and the strong work ethic dedicated towards building and improving their homes and living conditions. With the current immigration and natural growth pressures, these communities will grow at a much faster pace, compounding their current poor housing and socioeconomic status.

Residential finance in the colonias is limited since residents generally have low incomes, lack a credit history, and have informal and inconsistent employment. Residents usually either purchase undeveloped land in a separate transaction from their home, or build homes on rented land or rent dwellings on land they are purchasing. Sales contracts that do not convey rights in equity or legal title predominate. It is common that more than one family lives on either the same lot or in the same home. In most cases these homes are not eligible for finance because either their development lacks clean title or necessary infrastructure.

Based on interviews and focus groups with colonias residents, contract for deeds is a common way in which individuals and families own their property. It was, however, described as a high priority to convert them into warranty deeds since they are vulnerable to loosing their lots if they miss three payments. In many cases, these conversions are impossible, because developers frequently do not have clean title.

Small housing development corporations have successfully built homes in the colonias with prices ranging in the low $40,000s. These organizations have had the most success where buyers can obtain home mortgages through sources with flexible underwriting criteria not keyed to conventional guidelines.

This study attempts to corroborate, through an analysis of Home Mortgage Disclosure Act (HMDA) data – which provides information about loans made by large banks and savings and loans, the information collected through interviews and focus groups about the low level of formal lending currently occurring in the colonias. Because the Census tracts used by HMDA do not conform exactly to colonias boundaries, this analysis attempts to identify a selection of Census tracts whose boundaries closely mirror those of colonias or whose residential characteristics are generally in line with the characteristics of colonias on the whole. Generally, while the data used likely includes loans made within communities that are not identified colonias (but are nearby identified colonias), this analysis shows that lending activity within these tracts is less than the lending activity throughout the respective state. Analysis also shows that application denial rates are frequently higher in these communities and incomes of applicants are generally lower.

Internationaly, colonias are similar to those in the U.S.: they lack basic services, their residents are poor, and housing represents that essential problem in many of these communities. Colonias are, however, more prevalent in other countries, sometimes accounting for up to 75 percent of all urban development due to squatting, informal subdivisions, or organized land invasions.

Latin American governments have recognized the unlikely possibility of stopping colonia formation. Moreover, they have also acknowledged that there is a severe lack of funds preventing them from quickly upgrading housing conditions and providing the needed infrastructure to these communities. Their approach has been to gradually upgrade these settlements by first legalizing the land ownership, followed by the phased upgrade of infrastructure, and ending with the provision of finance to upgrade or expand self-build homes.

In the U.S. local and state governments have been slow to address the serious issues facing colonias residents. Primarily due to a lack of political will and an implicit recognition of the low return on investment in these communities, local and state governments have only recently begun to invest in these border communities and enact laws making it illegal to sell land on a contract for deed basis. Furthermore, in some cases, investment in the colonias has been viewed as a way of promoting further colonia development. Others have noted staggering construction costs to rehabilitate homes in the colonias and extend infrastructure where it would be less costly to build new homes elsewhere.

The conclusion of this paper explores and recommends alternative ways to provide new entry level housing, as well as for infill development and home improvement and expansion, through mechanisms that include flexible mortgage and or insurance pools. A phased approach, similar to that used by Latin American governments, is also recommended.

II. INTRODUCTION

Four states, Texas, New Mexico, Arizona, and California, are home to over 2,000 colonias with approximately 500,000 residents living within 150 miles of the US-Mexico border. Most of these colonias are located on the fringes of rapidly urbanizing areas in counties that are located directly on the US-Mexico border. Although colonias have existed along the border since the turn of the 20th century, they have grown most rapidly over the past twenty years. Most recently, in the wake of September 11, 2001 and its aftermath, increased immigration regulation on border crossings have added to the Colonias growth pressures as illegal immigrants have chosen to stay longer and seek permanent residences in the US. in order to avoid crossing the border on a daily or weekly basis to or from work in the US and their residence in Mexico. Colonia's, residents, state and local governments, nonprofit assistance groups and federal agencies, such as the US Department of Housing and Urban Development, have a common interest in better understanding Colonias housing conditions and related issues.

This report draws on interviews and focus groups with colonia residents, recent studies addressing housing issues in these areas, interviews with other stakeholders, and an analysis of available relevant data to explore the ways in which colonia residents are financing their lots and homes, their characteristics and housing preferences, and the obstacles they face. This information is used to develop general strategies and potential methods for residential financing that appear to be feasible and cost-effective in addressing colonias housing needs, mitigating reported problems such as predatory lending practices, and result in housing that meets accepted standards for safety, adequacy, and sanitation.

Specifically, this report assesses how housing is presently financed in the colonias, why it is financed using these methods, and what data is available to measure colonia home and land financing. The report also proposes financing strategies, actions, and pilot projects that will encourage and enable colonia residents to build and renovate their dwellings to national standards for safe, sanitary, and adequate housing. In this context, thornier issues are addressed about the rates of colonia growth, the need for massive capital investment on basic infrastructure, and the implications both factors for the future. Underlying the report's recommendations is the observation that there are major differences among colonia and the assumption that smaller scale, colonias-specific approaches are likely to be more expensive and less effective in the long-run. As a result, strategies that target types of colonia and develop tactics appropriate to each are recommended.

The formal research questions addressed by this study are:

- What kinds of housing finance mechanisms are in use today in the border colonias? To what extent are these financing mechanisms tracked and data on them collected by local, county, state, or federal public or private entities? What does the available data indicate about the use of housing finance mechanisms tracked in HMDA?

- What does the available data indicate about the number and ratio of houses in the colonias that have significant renovation/construction barriers to using existing finance mechanisms (lack of bathrooms, kitchens, rooms)?

- What are the reasons that colonia residents utilize the different financing mechanisms that are used in the colonias? What are the access barriers that residents perceive or have experienced? Do colonia residents face "Fair Housing" barriers, such as rural vs. urban, employment status differences, legal status issues, race and ethnicity, gender issues, etc.?

- What are some of the regulatory and governance barriers or differences that affect access to finance for colonia residents? What are the differences between states (if any) and significant localities?

- What are some alternative housing finance mechanisms, drawn from the literature and recent practice both in the US and internationally, and how do colonia residents perceive their acceptability, attractiveness, and affordability?

The study identifies lending practices (both formal and informal) currently utilized to obtain financing for housing in the colonias, to gain an understanding of how prevalent different mechanisms are in different contexts. Because of the relatively small number of colonia residents interviewed and the non-random nature of their selection, the study only identifies these differences, rather than claiming that they hold true for the entire population of colonia residents.

Information on the barriers to access to formal residential finance mechanisms for colonias residents, such as the lack of infrastructure, no or poor credit history, legal status issues, cultural and language barriers, and income issues were also explored through interviews and focus groups with colonia residents, colonia housing development organizations, and others involved in colonia issues. Colonia residents were asked about their satisfaction with the ways they currently finance their land and homes, and were asked to suggest ideas for financing of lots, residential purchases or construction, and renovation.

Finally, the study identifies the use and acceptability of innovative and new residential finance mechanisms, some of which are drawn from the other studies and from existing models on the border that different organizations, states or countries have created. Some of these organizations address the upgrade and renovation of existing colonia housing through low cost loans, grants, self-help skills training, and tool lending. Each approach has its advantages and disadvantages, which are explored.

This report concludes that new options for affordable housing must be created to address growing affordable housing needs along the border. Measures and mechanisms that have the potential to capture some of the colonia housing market with affordable and adequate housing and appropriate infrastructure are offered. This objective can be accomplished if the concepts that underlie affordable housing programs are rethought and realigned with the economic and cultural realities and desires of the present and future colonia residents. The approach offered asks why colonias form and addresses their present and future residents' housing needs with culturally attractive and affordable alternatives, rather than offering measures to ban the formation of colonias without providing market-responsive alternatives, which have heretofore proven unsuccessful.

III. METHODOLOGY

The methodology of this study is based on a review of the available literature, interviews with stakeholders and residents, focus groups with residents, and an analysis of HMDA and 2000 Census data. The following describes the methodology.

1. LITERATURE REVIEW

Relevant studies were identified and interwoven throughout the report, including finance mechanisms used in Latin America for affordable housing. Included was housing literature describing Latin American affordable housing projects sponsored by governments, non-governmental organizations, and employers.

Much of the available US literature on colonias comes from the State of Texas or Texas institutions of higher education and focuses on colonias located in Texas. This is not inappropriate in that Texas is the home to most colonias and most colonia residents, but there are important differences between the states. The researchers reviewed materials from all four states and analyzed relevant differences between them.

2. DATA ANALYSIS

Analyses of housing and residential finance conditions in colonia areas presented in this report draw on Census 2000 data for the four states and for selected areas within them and on 2002 Home Mortgage Disclosure Act (HMDA) data. The HMDA data identified the types of formal lending mechanisms that are available and may be being used by colonia dwellers, including FHA, VA, and conventional loans. The most recent public data release is the source for this information. Application and rejection rates for loans are included in the analysis.

Numerous factors complicate the analysis. First, while Census 2000 data is available by a variety of geographic boundaries – including tract, block group, place, and county, HMDA data is available *only* at the Census tract level and therefore the Census tract must be the unit of analysis in this section. Moreover, the tracts that are used in the 2001 HMDA dataset are 1990 Census tract boundaries. For the 2000 Census, the Bureau of Census worked with state and local authorities to identify colonia boundaries for designation and aggregation of data. The second factor that complicates the analysis is the difficulty in matching colonia boundaries to Census tract boundaries. As noted by Ratcliffe (2001), the lack of a direct relationship between census geographic units and colonias areas creates significant challenges for researchers using census data. Indeed, our analysis revealed that no colonia boundary that we examined (from a sample of 75 colonias that initially appeared as candidates for relatively good correspondence with census tracts) exactly matches a Census tract boundary (in either 1990 or 2000). Typically, a colonia or a cluster of colonias constitute only a small geographic portion of any one Census tract. As a result, it is difficult to isolate residential lending activity occurring purely within the colonias.

Another issue complicating this analysis is the changes in Census tract boundaries from 1990 to 2000. This issue is most critical in the comparison of HMDA data, which uses

1990 Census tract boundaries, but with Census 2000 data which incorporates 2000 boundaries. Thus, there is some degree of error in any Census information pulled from the HMDA reporting System[1].

In an effort to isolate the residential lending patterns occurring within a few "best fit" colonias, this analysis selected a series of tracts within the four Border States that provided the closest approximation to observed characteristics and definition of colonias. Because different data about the colonias exist within each state, a different methodology was developed for each state in order to identify the tracts which would provide the "best fit."

3. INTERVIEWS AND FOCUS GROUPS

Additional data was collected through interviews with key stakeholders, such as government agencies, HUD staff, lending organizations, housing developers, community-based organizations, border community development corporations, and industry organizations. Informal lenders themselves were also interviewed.

The interviews were used to collect information on informal lending activity, local and state programs to address colonia financing issues, ideas for financing mechanisms, and recommendations for improvements in formal lending processes. Only two people on the interviewee list declined to be interviewed, one because his agency was being audited and the other because he was tied up in the state legislature. Some interviews were conducted in person, but most were conducted by telephone.

The researchers conducted 3 Focus Groups of residents: Sunland Park, New Mexico; Montana Vista, Texas and El Progreso, Texas with a total of fifty participants. Each group lasted over two hours, and the topics included how they were presently financing their lots, trailers, and or homes; how they financed home improvements; and what ways would they prefer to finance their homes. We informally collected information on monthly incomes and sources and requested their opinions on what they thought both attractive and workable.

In only one case the focus group as conducted with a group that came together over colonia housing issues. Some participants were participating in non-housing related programs in the colonias like an education program, while others had no such affiliation. One focus group consisted of legal residents and US citizens, but the others included individuals with other types of immigration status. As might be expected, which had the highest income levels because they had greater access to employment at minimum wage levels.

The groups were interviewed in Spanish, and most of the participants were very helpful and cooperative. Community intermediaries were used to set up the groups, and the sessions were conducted in surroundings that were well-known to the participants, such as a community center. The basic information we wanted obtained from various stakeholders was previously structured although a written questionnaire was not distributed to the groups for formal response (see Appendix A for details).

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[1] Census 2000 tracts will be incorporated into HMDA starting with release of 2003 HMDA data in July 2004

IV. BACKGROUND ON COLONIAS

1. INTRODUCTION

a. Definitional Issues: What is a Colonia?

Colonia communities are characterized by their location on or near the US-Mexico border, a lack of basic infrastructure such as paved roads, water and wastewater systems, substandard housing, very low incomes, and a lack of economic development. Individual state and federal agency definitions vary, but all definitions identify this lack of basic infrastructure, unplanned growth, poverty, and substandard housing as key definitional factors. The majority of colonia residents are US citizens whose families at one time immigrated to the US from Mexico; Spanish remains the dominant language, adult educational levels are very low, and only 65 percent of residents are US citizens; most of these citizens are children born in the US.

Federal and state programs have different definitions of a colonia, which frequently changes the programs for which a particular colonia is eligible, and makes developing comprehensive approaches difficult. The range is large: some colonias qualify under a number of federal and state programs, while a few 'orphan' colonias exist that do not qualify for any special programs. An examination of some of these definitions demonstrates some of these inconsistencies. The following are examples of definitions, with a description of the colonias that are excluded under the definition.

The Texas Attorney General's office defines a colonia as an *"...unincorporated border communities that often lack adequate water and sewer systems, paved roads, and safe, sanitary housing."* This definition eliminates colonias that are incorporated, like Sunland Park and Bayard in New Mexico, Douglas and Yuma in Arizona, and others. These colonias are some of the largest on the border.

The Office of the Governor of Texas says that *"In Texas, colonia refers to an unincorporated settlement along the Texas-Mexico border that may lack basic water and sewer systems, electricity, paved roads, and safe and sanitary housing. Most colonias are outside city limits or in isolated areas of the county. Many have a very limited property tax base and are either isolated in a rural area or outside city limits."* This definition first excludes incorporated areas, but then leaves an opening to include them. The City of El Paso, Texas, is home to four enumerated colonias and several areas that were once part of an informal settlement that grew up around the ASARCO metal smelting plant.

The Office of the Secretary of State states that *"...colonias are defined as primarily residential subdivisions in which*

- *water or wastewater services are inadequate to meet the minimal needs of residential users;*
- *financial resources are inadequate to satisfy minimal water and wastewater service needs; and*
- *there are five or more housing units."*

This definition excludes areas that have fewer than five housing units, although these tiny areas are often the seed for a larger colonia development. Early intervention could ensure that infrastructure is available and housing meets standards, so that a colonia does not develop. In addition, addressing infrastructure before development is established is much less expensive than retrofitting infrastructure into an existing colonia.

The definition used by the Texas Water Development Board excludes the hundreds of colonias that have added more than 20 percent of their housing after 1989. It also excludes new colonias: *"An economically distressed area [or colonia] is one in which water supply or wastewater systems do not meet minimal state standards, financial resources are inadequate to provide services to meet those needs, and 80 percent of dwellings in the area were occupied on June 1, 1989. Affected counties are counties adjacent to the Texas-Mexico border or with per capita income 25 percent below the state average and unemployment rates 25 percent above the state average for the most recent three consecutive years for which statistics are available*".

Other definitions state that colonias are unplatted, even though most colonias in Texas were platted. Most definitions limit colonia designations to either the La Paz Agreement boundary, which is roughly sixty miles along the border, or to a zone 150 miles from the border.

For the purposes of consistency with other studies, the definition of a colonia provided by the Cranston-Gonzalez National Affordable Housing Act (NAHA) is used, with one caveat. NAHA defines a colonia as an "identifiable community" (ie. Social and economic interrelationships and identifiable boundary and density) in Arizona, California, New Mexico, or Texas within 150 miles of the US-Mexico border, lacking decent water and sewage systems and decent housing and in existence as a colonia before November 28, 1989. The caveat is that numerous colonias have been created since that date, and indeed, continue to form. Many older colonias continue to grow, and the economic and social conditions that have driven the growth of the colonias remain substantially unchanged.

Although these are the two main areas of our investigation, the nature of the colonia problem – which involves infrastructure and urban development issues as well as the house finance – demands some larger treatment in order to: (a) put home finance in perspective; and (b) lay the basis for further research to complete the picture.

b. Continuing Growth

The number and ratio of Hispanic-Americans is increasing in the United States. If self-identified mixed race respondents are excluded, the number of Hispanics has now exceeded the number of single-race identified African-Americans.[2] Many of the economic changes, human migration patterns, and birth rates that are feeding this growth originate in Latin America —Mexico in particular. These factors continue to be primary drivers of colonias growth.

The border southwest continues to be the fastest growing region of the country[3]. Although virtually every region of the nation has a shortage of affordable housing, the border contains some of the poorest counties in the nation. The border also leads the nation in unemployment, along with the lowest educational levels[4]. At the same time, population growth has accelerated over the past twenty years: the median age is lower, birthrates higher, and families larger than in the rest of the nation. The border states also continue to be one of the main destinations for legal immigrants to the US[5]. Although it is impossible to estimate the number of unofficial immigrants into the US with any precision, within the Border States most are Mexican.

An exact population count of individuals living in the colonias cannot be made as these areas do not correspond to Census geographic areas and a proportion of the residents are not legal. The Texas Water Board in 1995 estimated that over 340,000 residents lived in 1,436 colonias in Texas alone.[6] Given the young population and high birthrate within the colonias, the Border Low Income Housing Coalition estimates that the population within these communities could be growing at a rate of 7 to 10 percent per year.[7]

Although traditionally colonias have been regarded as rural phenomena, in fact, they are primarily a problem of urbanization. Colonias are mostly concentrated around large cities, like El Paso, Texas, although some are located in rural areas and some are actually located within city limits. Colonias lack some or all basic physical infrastructure, such as water and wastewater systems, paved roads, utilities, and generally suffer from other types of public neglect, such as lack of public safety (i.e. fire and police protection) and social services. Housing frequently is built by homeowners themselves, using whatever materials they can afford, in stages as cash becomes available. Land ownership is frequently in question due to an informal system of selling and buying land using contracts for sale which do not convey ownership until paid off. Few, if any, building codes and land use regulations exist.

c. International Context

Americans have looked at the border colonias and attempted to understand them in an American context. Although some allowance is made for cultural and language issues, US observers generally stop their analysis at the border. Newer researchers are placing the growth of colonias in a broader context that looks at similarities in cause and effect in other communities in the world, especially in Latin America. A broader analysis of

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[2] US Census, 2000.
[3] Ibid.
[4] Southwest Economy Issue I January/February 2003 Federal Reserve Bank of Dallas.
[5] Bureau of Citizenship and Immigration (web page) www.uscis.gov
[6] Policy Research Project on Colonia Housing and Infrastructure, Colonia Housing and Infrastructure, Volume 1: Current Characteristics and Future Needs. (1997).
[7] Border Low Income Housing Coalition, "Colonia Facts and Statistics" http://www.bordercoalition.org/Coloniafacts/index.html.

colonia formation is important in predicting future trends for colonia growth and developing appropriate policy responses.

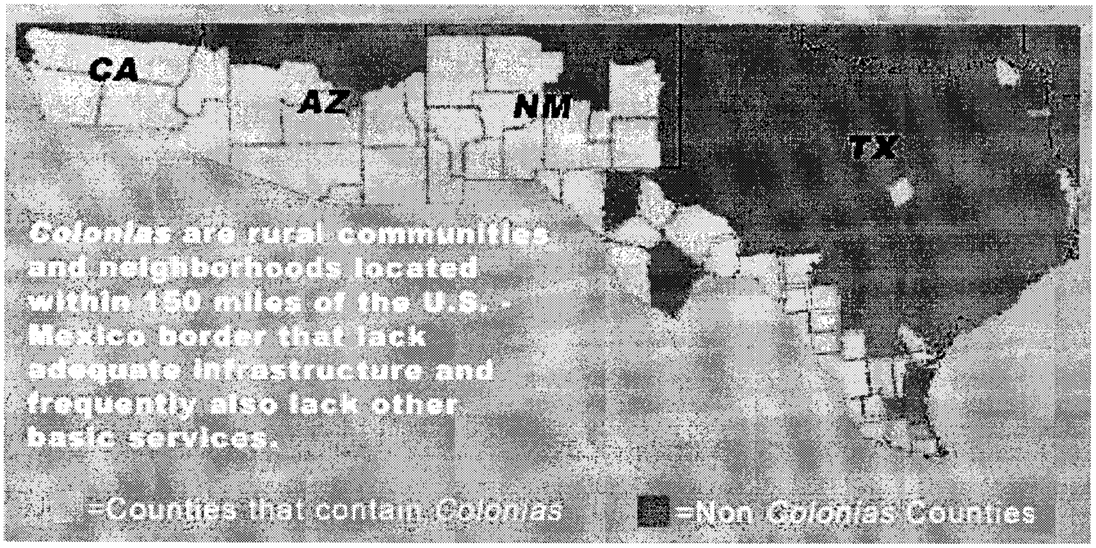
US colonias are a manifestation of a much broader social phenomenon affecting urban areas throughout the world. Throughout Latin America, colonias (variously called favelas, shantytowns, encampments, or irregular settlements) surround all large Latin American cities in an urbanization process that has rapidly transformed Latin America in the past thirty years. As rural dwellers lose their place on the farms, due to reasons as varied as re-concentration of land ownership, drought, military conflict, perception of increased economic opportunities in the urban areas, structural changes in local and regional economies, trade agreements like the North American Free Trade Agreement, and the militarization of both narco-trafficking and law enforcement efforts, they have flooded into the cities all across Latin America.

These internal immigrants arrive with no money, few possessions, and with nowhere to live. They live in vast colonias surrounding the developed urban areas in crowded self-built housing, often squatting on vacant land or buying their lots using informal sales arrangements. These colonias typically begin with no municipal services or infrastructure. Residents, who usually take the least desirable, poorest paying, and most unstable jobs in the cities, or engage in informal income generating activities on the periphery of the above ground economy, finally organize and demand municipal services. Eventually, city and state governments respond and services trickle in. Roughly, the inner ring of colonias begins to look more and more like a developed part of the city; all the while, new colonias spring up even further out and the cycle continues. This has become the defining process for physical urban growth in Latin America, and the expectations on the part of all individuals, including municipalities, colonia residents, and federal and state governments, are that the municipalities will eventually incorporate these areas and provide basic infrastructure and public services. The response of most municipalities in the US has been the opposite, with little interest in incorporating areas that are a likely drain on overall city services because they generate so little tax revenue. Texas, in particular, relies on property taxes for most public services, so cities perform a calculus on revenue vs. cost prior to annexing new areas.

2. COLONIAS: A CLOSER LOOK.

This section explores the demographic, economic, and housing characteristics of the colonias by state, based on literature and 2000 Census data. As discussed in the Introduction, there are over 2,000 colonias throughout the four states that border Mexico: Texas, New Mexico, Arizona, and California. A census of these colonias has never been conducted – analyses of the colonia residents, their housing stock, and any residential finance occurring in the colonias has not yet been undertaken on a systematic, consistent, or complete basis. This section provides a first step toward understanding the characteristics of colonia residents, their economic situations, and the current state of housing conditions and housing finance in the colonias.

Analysis of the 2000 Census has been conducted in two parts for reasons discussed more fully in the methodology section of this report. The first analysis focuses on recently-defined Census Designated Places (CDPs) and cities throughout the border states whose boundaries closely mirrored colonia boundaries. We identified 25 CDPs and cities through discussions with HUD field office staff in Arizona and New Mexico, a Census Bureau official whose research has focused primarily on Texas, and a local county planner in California. Analysis of Census 2000 data for these defined areas provided a good proxy for understanding the current conditions of the colonias in the four states. The second part of the Census 2000 analysis focuses on the Census tracts within these 25 CDPs and cities. It is important to note that CDP or city boundaries rarely align precisely with boundaries of one or a group of Census tracts. In fact, CDPs and cities frequently contain parts – both small and large – of a number of Census tracts. As a result, 26 Census tracts were selected for this second-tier analysis based on their reported demographic, economic, and housing characteristics which, based on recent studies, were hypothesized to most closely match those characteristics of colonias[8].



Those geographic areas that were eliminated from this analysis were assumed to contain portions of cities or other communities which would not, based on current literature, be classified as colonias. This second-tier analysis is required solely for the purposes of defining which Census tracts to include in the analysis of HMDA data so that we could most accurately identify any formal residential housing finance activity occurring in the colonias.

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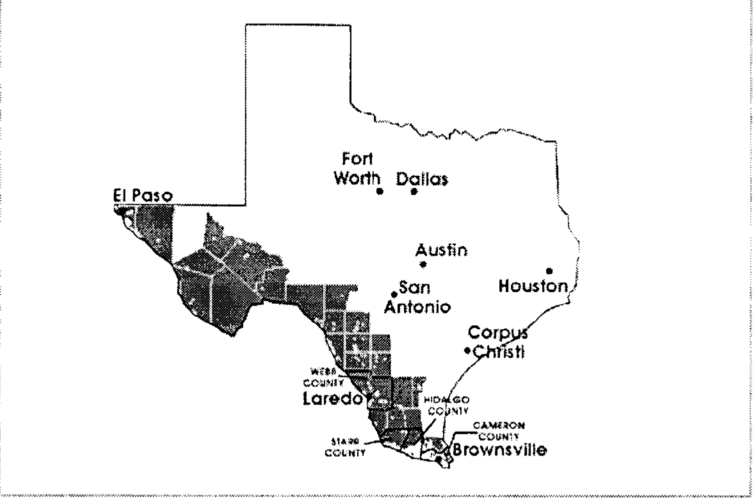
[8] Michael R. Ratcliff, "Identification of Colonia-type Settlements in Census 2000." Paper represented at the "Irregular Settlement and Self-Help Housing in the United States" conference, Lincoln Institute of Land Policy, Cambridge, MA, Sept. 21-22, 2001

a. Texas Colonias

Texas is home to the majority of the colonias in the U.S. According to a recent analysis conducted by Peter Ward at the University of Texas, there are over 1,500 colonias in Texas which are home to approximately 370,000 residents.[9] These colonias represent about two-thirds of the colonia residents in the U.S. Ward reports that: "Generally, the characteristics of Texas colonias are fairly uniform.... Invariably they are low-density peri-urban settlements located within or beyond the Extra Territorial Jurisdiction (ETJ) of cities, lacking in basic services such as running water, drainage, street lighting, and paving. Some do not even have electricity. ... Eighty percent of colonia residents have incomes at or below the poverty level. Their homes are a mixture of trailers and self-built construction.... Colonia population is almost uniformly Hispanic. On average between 65 and 80 percent of adults are U.S. citizens. An estimated one-third of colonia residents do not speak English."[10] Furthermore, the Housing Assistance Council (HAC) notes in a report about the colonias, that the population of the border region has grown at a "rapid rate of 22 percent [throughout the 1990s], almost 10 percentage points greater than the national population growth over that same period. A high birth rate combined with a relatively young population greatly contributed to this growth...."[11] In fact, the proportion of the population in each of these CDPs or cities examined here that is under the age of 18 ranges from 16 percent at the low end to over 50 percent – well over the state average of 28 percent.[12]

Colonias are denoted by light gray in the counties that border Mexico.



The first-tier Census analysis of Texas CDPs and cities whose boundaries are similar to those of colonias demonstrates, to a large extent, the conclusions drawn by Ward. It also shows, however, that some colonias are better off than others – reporting lower poverty rates, higher incomes, and lower housing vacancy rates. Still, other settlements confirm Ward's observations: the populations are characterized by a high proportion of Spanish speaking households, low levels of education, low incomes, high poverty rates, and poor housing conditions. The following chart provides the detailed data for each of the selected CDPs and cities compared to data for the state as a whole.

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[9] Ward, Peter M., Colonias and Public Policy Texas and Mexico (University of Texas Press, 1999), page 2.
[10] Ibid, p. 3.
[11] Housing Assistance Council, "Border Colonias."
[12] Census 2000 data.

Table 4.1
Demographic, Economic, and Housing Characteristics of Selected Texas CDPs and Cities, Census 2000

		Texas	Agua Dulce CDP	Homestead Meadows North CDP	Homestead Meadows South CDP	Lago CDP	Sierra Blanca CDP
Demographic Characteristics	Percent Population Hispanic/Latino	32.0%	92.9%	83.9%	95.0%	100.0%	75.30%
	Percent Households Report Spanish as their Primary Language	25.9%	88.3%	80.2%	97.3%	100.0%	61.70%
	Percent of the Population Under the Age of 18	28.2%	46.1%	36.8%	41.6%	52.5%	31.40%
	Percent of the Population Over the Age of 24 with no HS Diploma	24.3%	45.3%	35.2%	63.3%	76.0%	39.80%
	Percent of Population Urban	82.5%	0.0%	56.2%	100.0%	100.0%	0.0%
	Percent of Population Reporting US Citizenship	90.5%	76.3%	79.4%	70.8%	83.1%	92.8%
Economic Characteristics	Median HH Income	$39,927	$16,696	$30,403	$27,615	$18,235	$26,438
	Percent Population Living Below the Poverty Line	15.0%	41.4%	21.2%	26.5%	68.5%	21.0%
	Percent of Household Earning Less than $20,000	23.6%	62.6%	26.2%	33.3%	76.1%	32.8%
	Percent Population 16 years and over who did not usually work 35 or more hours per week in 1999	57.3%	50.9%	49.4%	51.3%	75.2%	37.8%
Housing Physical Conditions	Vacancy Rate	9.4%	18.0%	11.8%	5.8%	0.0%	19.7%
	Percent of Units that are Mobile Homes or RV or boat	9.4%	42.3%	49.9%	31.8%	0.0%	34.0%
	Percent of Units Lacking Complete Plumbing	1.3%	8.8%	3.2%	6.5%	0.0%	5.3%
	Percent of Units Lacking Complete Kitchen Facilities	1.5%	8.8%	2.1%	7.2%	0.0%	5.7%
Housing Financial Conditions	Owner-Occupied Rate*	63.8%	89.3%	86.0%	88.7%	88.2%	73.5%
	Median Gross Rent	$574	$139	$442	$399	$275	$307
	Percent Owner-occupied Homes without a mortgage	29.2%	17.6%	16.5%	28.5%	48.9%	41.7%
	Owner-occupied mobile homes: Median value	$31,700	$33,200	$34,000	$29,600		$27,500
	Owner-occupied housing units: Median value	$77,800	$35,800	$52,900	$41,300	$32,200	$40,000

*As a percent of the total number of occupied units

The second-tier analysis of Census data for Texas focused on five Census tracts. These tracts were selected, as discussed above, because the characteristics they reported most nearly coincided with the characteristics anticipated for colonias in general based on the literature. Within this selection of tracts, about 93% report their ethnicity as Hispanic or Latino – almost three times greater than the 32% reported for the entire state of Texas. Roughly two-thirds of the population report that they are U.S. citizens with a significant proportion of those born in the U.S. Of the roughly 11,000 households in these areas, over one-quarter speak Spanish and consider themselves "linguistically isolated" – significantly greater than the state average of only 6%. This figure is well in-line with Ward's estimates for colonia residents, cited above. Key statistics are summarized in the table below.

Table 4.2
Demographic, Economic, and Housing Characteristics of Selected Texas Census Tracts, Census 2000

		Texas	Census Tract 103.09, El Paso County	Census Tract 103.18, El Paso County	Census Tract 103.20, El Paso County	Census Tract 9502, Hudspeth County	Census Tract 125.05, Cameron County
Demographic Characteristics	**Percent Population Hispanic/Latino**	32.0%	91.5%	75.2%	86.4%	63.8%	95.4%
	Percent Households Report Spanish as their Primary Language	25.9%	89.1%	76.3%	82.1%	48.6%	95.3%
	Percent of the Population Under the Age of 18	28.2%	41.4%	25.6%	39.4%	30.2%	39.6%
	Percent of the Population Over the Age of 24 with no HS Diploma	24.3%	46.1%	36.7%	42.1%	32.2%	59.6%
	Percent of Population Urban	82.5%	73.1%	75.3%	96.2%	0%	4.4%
	Percent of Population Reporting US Citizenship	90.5%	73.8%	86.0%	78.9%	94.4%	78.5%
Economic Characteristics	**Median HH Income**	$39,927	$23,775	$27,473	$32,659	$28,333	$26,402
	Percent Population Living Below the Poverty Line	15.0%	35.0%	15.6%	22.9%	17.3%	34.5%
	Percent of Household Earning Less than $20,000	23.6%	38.6%	32.3%	26.1%	28.6%	39.7%
	Percent Population 16 yrs. and over who did <u>not</u> usually work 35 or more hours per week in 1999	57.3%	46.0%	50.1%	44.9%	36.4%	49.2%
Physical Housing Conditions	**Vacancy Rate**	9.4%	6.6%	9.8%	6.3%	25.3%	11.9%
	Percent of Units that are Mobile Homes or RV or boat	9.4%	36.6%	55.0%	27.5%	33.3%	23.8%
	Percent of Units Lacking Complete Plumbing	1.3%	3.9%	3.6%	6.0%	8.6%	9.0%
	Percent of Units Lacking Complete Kitchen Facilities	1.5%	2.6%	2.2%	5.3%	9.1%	7.5%
Financial Housing Conditions	**Owner-Occupied Rate***	63.8%	83.2%	77.2%	83.8%	48.9%	77.6%
	Median Gross Rent	$574	$463	$449	$476	$310	$360
	Percent Owner-occupied Homes without a mortgage	29.2%	11.7%	15.9%	19.7%	39.6%	49.0%
	Owner-occupied mobile homes: Median value	$31,700	$37,800	$29,100	$29,400	$30,000	$29,400
	Owner-occupied housing units: Median value	$77,800	$ 51,800	$47,100	$61,700	$40,000	$37,400

*As a percent of the total number of occupied units

It is important to note that the figures presented in this section may not present data about colonias and colonia residents in isolation of the other residents living in the same Census tract. Nevertheless, the data about these Census tracts continues to support Ward's conclusions and mirrors the results of the analysis presented above for the colonia CDPs and cities.

The economic characteristics of the selected Census tracts indicate particularly dismal conditions for residents of the colonias – not dissimilar from the situation described by Ward and in studies such as Federal Reserve Bank of Dallas (2001).[13] In only one case does the median income per tract reach above $30,000 – only about three-fourths of the state-wide median income. However, this reported level is significantly greater than what other studies have reported and anecdotal evidence has indicated for specific colonias in Texas, suggesting that the tracts selected for this study include some non-colonia areas in which wealthier residents live. For example, the Federal Reserve Bank report cites a 1994 Texas Department of Housing and Community Affairs-financed study that found 906 households out of 1,092 surveyed in the Brownsville-area Cameron Park colonia earned less than $10,000. Controlling for inflation and holding all else constant, about 90 percent of those surveyed would still be earning less than $12,382 in 2003.

Nevertheless, the selected Census tracts paint a fairly gloomy picture for these colonia and adjacent non-colonia residents. In two of the five tracts, about 35% of the population lives below the poverty level and only slightly more than half of the population over the age of 16 report "usually" working full-time in the last year. This poverty figure is significantly greater than the 15% living below poverty throughout the state but is still less than the 80% estimated by Ward.

Poor housing conditions throughout the border region are also noted by numerous organizations and reports. The HAC study summarizes these observations, noting that housing conditions in the region are "deeply impacted by the demographic and economic forces along the border." Nevertheless, residents tend to show a commitment to homeownership and work to continue to improve their living conditions, as focus groups and interviews confirmed. Ward (2001) found that colonias homes ranged from used trailers to owner-built units. Whatever the form of original colonias structure, Ward asserted that residents' ultimate objective was to achieve a self-contained brick home. The HAC reports asserts that housing values along the border region are much lower in the colonias than elsewhere in the region, with a significantly high proportion of the housing stock reported to be mobile homes.

Housing conditions in the selected Census tracts reflect these observations. Housing vacancy in two of the tracts is slightly greater than the state figure of 9.4 percent and in one tract vacancy is reportedly almost three times greater than the state average. Furthermore, mobile home units are significantly more prevalent than the statewide occurrence. This fact is supported by the HAC study that describes the process whereby colonia residents typically move into mobile homes first, then work to build a stick-built house while maintaining the mobile home on the lot for other family members

[13] Federal Reserve Bank of Dallas, Texas Colonias: A Thumbnail Sketch of the Conditions, Issues, Challenges, and Opportunities.

to use if necessary. Homeownership is also higher in these selected tracts when compared to the state's average, likely a reflection of the contract-for-deed arrangements that many colonia residents have for the purchase of their property. Homes in the selected colonias areas are also less likely to have complete plumbing facilities and kitchen facilities. However, for colonias areas in Texas and the other border states, reporting of physical housing conditions may not accurately reflect actual conditions as residents frequently expressed confusion as to what constituted plumbing or kitchen facilities during the administration of Census 2000 (Ratcliffe, 2003).

b. Arizona Colonias

There are far fewer colonias in Arizona than in Texas. As of 2002 there were 77 designated colonias, fully one-third of these are incorporated cities and towns. Arizona colonias also present a type of settlement that is quite different from those in Texas. According to Huntoon and Becker (2001), Arizona colonias are much smaller in geographic territory as well as in absolute population and generally have lower population density than colonias in Texas.[14] Furthermore, they tend not to be clustered along the border and represent a mixture of both rural and urban employment and settlement. Residents are likely to live in households below the county mean income – a benchmark that is higher than the US poverty threshold. Residents are somewhat more likely to be Hispanic and to speak Spanish than residents of other settlements and are marginally more likely to be foreign-born than the average for the state. Based on a physical survey of seven colonias in southern Arizona, more than 50 miles from the US-Mexican border, the authors found a mixed level of utility provision and a diversity in housing quality. According to Donelson and Holguin (2002), "Many of the colonia-designated communities in Arizona meet the federal definition, but they do not resemble the self-help homestead types of colonias common in New Mexico and Texas. Many Arizona cities and towns that are designated colonias have substantially more capacity to manage their own affairs than do homestead communities."

The first-tier analysis of 2000 Census data for four selected CDPs and cities whose boundaries closely mirror those of colonias supports Huntoon and Becker's conclusions and Donelson and Holguin's observations. For three of the four CDPs, over three-quarters of the population is Hispanic or Latino and for all CDPs, over half in all of the CDPs report Hispanic descent. Again, in three of the four CDPs, over three-fourths of households report Spanish as their primary language. Median income in these CDPs is severely behind the state median of just over $40,000 and almost half of the population over the age of 16 reported that they were not "usually" employed full-time in 1999. Similar to the colonia CDPs in Texas, mobile homes or RVs or boats are reported at least twice (and, in one case, up to four times) as frequently as housing units as they are throughout the state. The median value of owner-occupied homes – in all CDPs – is, at best, about 30 percent less than the state median and, at worst, only 40% of the state median. The following chart provides detailed data for the four selected CDPs in Arizona.

[14] Laura Huntoon & Barbara Becker, "Colonias in Arizona: Definition with Changing Location," page 1.

Table 4.3
Demographic, Economic, and Housing Characteristics of Selected Arizona CDPs and Cities, Census 2000

		Arizona	Gadsden CDP	Maricopa CDP	Naco CDP	Tacna CDP
Demographic Characteristics	Percent Population Hispanic/Latino	25.2%	96.2%	78.5%	86.9%	53.9%
	Percent Households Report Spanish as their Primary Language	18.5%	96.6%	77.9%	80.3%	40.4%
	Percent of the Population Under the Age of 18	26.6%	42.9%	36.8%	37.5%	31.6%
	Percent of the Population Over the Age of 24 with no HS Diploma	19.0%	75.9%	59.1%	47.5%	38.7%
	Percent of Population Urban	88.2%	0.0%	0.0%	0.0%	0.0%
	Percent of Population Reporting US Citizenship	91.0%	58.5%	68.7%	86.2%	87.1%
Economic Characteristics	Median HH Income	$40,558	$21,000	$30,625	$22,045	$25,556
	Percent Population Living Below the Poverty Line	13.6%	45.2%	22.7%	34.1%	25.0%
	Percent of Household Earning Less than $20,000	21.7%	46.6%	28.5%	46.6%	33.5%
	Percent Population 16 years and over who did not usually work 35 or more hours per week in 1999	53.4%	53.6%	44.9%	54.3%	55.8%
Physical Housing Conditions	Vacancy Rate	13.1%	21.7%	6.3%	13.6%	39.3%
	Percent of Units that are Mobile Homes or RV or boat	15.1%	44.80%	49.3%	36.4%	63.2%
	Percent of Units Lacking Complete Plumbing	1.8%	12.1%	4.9%	2.0%	0.0%
	Percent of Units Lacking Complete Kitchen Facilities	1.9%	13.8%	2.1%	5.6%	1.6%
Financial Housing Conditions	Owner-Occupied Rate*	68.0%	69.6%	51.9%	73.2%	83.1%
	Median Gross Rent	$619	$293	$349	$394	$297
	Percent Owner-occupied Homes without a mortgage	20.0%	36.1%	16.5%	28.8%	16.0%
	Owner-occupied mobile homes: Median value	$41,800	$34,500	$33,100	$22,500	$53,300
	Owner-occupied housing units: Median value	$109,400	$46,200	$75,500	$44,700	$64,600

*As a percent of the total number of occupied units

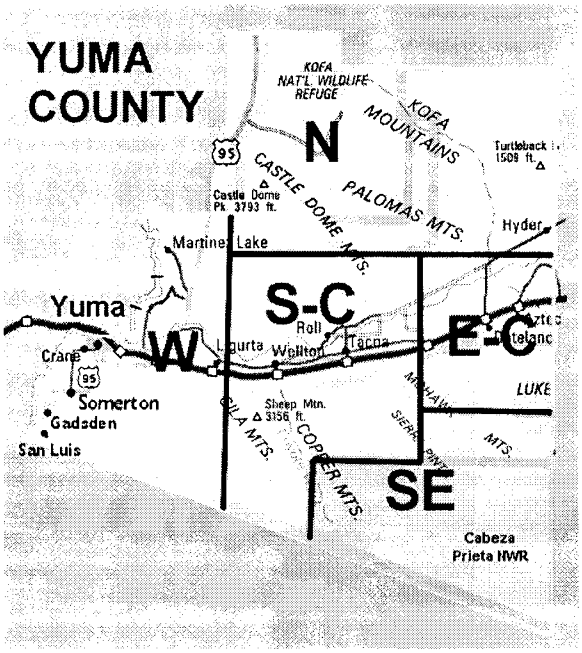
The second-tier analysis of Census data for Arizona focused on five Census tracts. These tracts were selected, as discussed above, because the characteristics they reported most nearly coincided with the characteristics generally anticipated for colonias based on the literature. The tracts are largely Hispanic with a median income ranging from $7,000 to $16,000 less than the state median income for 1999. Moreover, these tracts contain far fewer U.S. citizens than the entire state. This is likely an indication that the tracts selected for this analysis are part of new wildcat subdivisions rather than communities that were settled long ago.[15] The following chart shows Census statistics for selected Census tracts contained within the CDPs as they compare to those same numbers for the State of Arizona.

[15] Angela Donelson & Esperanza Holguin, "Homestead Subdivision/Colonias and Land Market Dynamics in Arizona and New Mexico," page 2.

Table 4.4 Demographic, Economic, and Housing Characteristics of Selected Arizona Census Tracts, Census 2000							
		Arizona	Census Tract 11, Cochise County	Census Tract 17, Pinal County	Census Tract 112, Yuma County	Census Tract 115.01, Yuma County	Census Tract 115.02, Yuma County
Demographic Characteristics	Percent Population Hispanic/Latino	25.2%	43.0%	44.8%	39.3%	65.2%	94.9%
	Percent Households Report Spanish as their Primary Language	18.5%	34.4%	36.7%	33.6%	61.3%	94.4%
	Percent of the Population Under the Age of 18	26.6%	25.7%	33.2%	27.6%	38.0%	39.1%
	Percent of the Population Over the Age of 24 with no HS Diploma	19.0%	25.2%	42.0%	37.0%	55.1%	62.0%
	Percent of Population Urban	88.2%	71.1%	0.0%	0.0%	0.0%	100.0%
	Percent of Population Reporting US Citizenship	91.0%	95.4%	83.5%	85.3%	74.1%	62.4%
Economic Characteristics	Median HH Income	$40,558	$28,537	$33,477	$30,043	$24,570	$26,628
	Percent Population Living Below the Poverty Line	13.6%	17.7%	18.8%	18.3%	39.3%	26.4%
	Percent of Household Earning Less than $20,000	21.7%	33.9%	28.9%	28.8%	40.1%	35.7%
	Percent Population 16 years and over who did not usually work 35 or more hours per week in 1999	53.4%	56.7%	43.4%	57.0%	50.3%	55.0%
Physical Housing Conditions	Vacancy Rate	13.1%	14.3%	16.2%	36.6%	8.5%	7.7%
	Percent of Units that are Mobile Homes or RV or boat	15.1%	9.3%	58.5%	62.4%	23.3%	12.4%
	Percent of Units Lacking Complete Plumbing	1.8%	2.0%	6.0%	2.4%	4.5%	3.0%
	Percent of Units Lacking Complete Kitchen Facilities	1.9%	2.6%	4.1%	3.1%	5.6%	2.7%
Financial Housing Conditions	Owner-Occupied Rate*	68.0%	59.2%	61.2%	49.9%	55.4%	65.6%
	Median Gross Rent	$619	$417	$457	$330	$296	$360
	Percent Owner-occupied Homes without a mortgage	20.0%	44.7%	15.7%	20.0%	37.5%	29.6%
	Owner-occupied mobile homes: Median value	$41,800	$ 27,500	$63,500	$32,700	$ 34,400	$49,100
	Owner-occupied housing units: Median value	$109,400	$ 61,600	$76,900	$62,500	$ 58,500	$67,100

*As a percent of the total number of occupied units

While the Census tracts selected for this analysis are generally poorer, more likely to live below the poverty line, and more likely to live in housing without complete plumbing, there are also some anomalies in these data points. For example, three of the five tracts report that Hispanic or Latino individuals constitute less than half of their total population. Additionally, the proportion of the population less than 18 years old within each of the tracts closely mirrors that of the state. This may be attributable to non-colonia communities included in these tracts. Donelson and Holguin offer Padre Ranchitos, an



extremely low-income, illegal subdivision of 119 people in Yuma County, as an example of the type of non-colonia populations that are likely included in the analysis of these tracts. Interestingly, a door-to-door county income survey verified the population size and approximate income for this small colonia, which comprises about 15% of its Census block group. In contrast, the median housing value for the entire block group was $162,000 as the colonia is located next to the wealthiest neighborhood in Yuma County.

Nevertheless, data from these tracts still indicate dismal economic and housing conditions for these residents. In two of the five tracts, households are about four times more likely to report living in a mobile home, recreational vehicle, or boat than state residents as a whole. The owner-occupancy rate in these tracts is also reportedly less than the state average and estimated values of owner-occupied homes are significantly less than the state median. In comparison to the rate of owner occupancy found in most of the selected census tracts in other states and to the Arizona CDPS shown above, the relatively low rate of owner occupancy is surprising. This result may reflect the greater availability of affordable rental opportunities in these Arizona tracts. The difference in home value ranges from $32,500 to over $50,000 – almost half of the state's median value.

c. New Mexico Colonias

Unlike Arizona's colonias, only about one-tenth of New Mexico's 141 colonias are incorporated communities. A recent paper by Mona Koerner advocated for a characterization of colonias in New Mexico as either MSA or non-MSA due to the significant differences in characteristics. An MSA colonia is one that is located within the Las Cruces MSA consisting of Dona Ana County. These MSA colonias in New Mexico resemble the Texas colonias, which are characterized by high population growth, a primarily young population, a large proportion of families, and a large Hispanic population. A non-MSA colonia includes all other communities that have been designated as colonias. These non-MSA colonias of New Mexico are very different with mixed levels of growth, older populations, fewer families, and a smaller Hispanic population [16] Because the CDP designations of colonias occurred primarily in Dona Ana County, our analysis is focused on these populations. The following chart provides an overview of Census 2000 data for a selection of CDPs in New Mexico whose boundaries closely mirrored those of colonias.

[16] Mona Koerner, "Colonias in New Mexico: Rethinking Policy Approaches to Substandard Housing Problems" (April 2002), page 11.

Table 4.5
Demographic, Economic, and Housing Characteristics of Selected New Mexico CDPs and Cities, Census 2000

		New Mexico	Anthony CDP	Chaparral CDP	Dona Ana CDP	Mesquite CDP	Rincon CDP	Salem CDP	Vado CDP
Demographic Characteristics	Percent Population Hispanic/Latino	42.1%	97.5%	64.5%	85.1%	95.2%	97.9%	95.3%	97.7%
	Percent Households Report Spanish as their Primary Language	33.3%	95.6%	61.9%	79.8%	92.4%	100.0%	93.4%	94.2%
	Percent of the Population Under the Age of 18	27.9%	40.0%	36.3%	24.4%	35.1%	29.0%	48.6%	42.0%
	Percent of the Population Over the Age of 24 with no HS Diploma	21.1%	60.1%	42.1%	39.6%	54.1%	76.2%	78.2%	67.2%
	Percent of Population Urban	75.0%	98.0%	73.6%	100.0%	100.0%	0.0%	0.0%	95.0%
	Percent of Population Reporting US Citizenship	94.6%	71.5%	81.9%	90.5%	80.9%	62.8%	49.4%	63.7%
Economic Characteristics	Median HH Income	$ 34,133	$22,547	$22,692	$27,292	$21,875	$18,929	$14,934	$23,538
	Percent Population Living Below the Poverty Line	18.1%	37.8%	31.3%	22.8%	43.4%	31.7%	53.3%	34.0%
	Percent of Household Earning Less than $20,000	28.7%	44.2%	41.3%	42.5%	44.6%	57.1%	58.0%	38.0%
	Percent Population 16 years and over who did <u>not</u> usually work 35 or more hours per week in 1999	52.2%	52.5%	49.7%	45.4%	50.8%	33.0%	44.1%	47.0%
Physical Housing	Vacancy Rate	13.1%	6.4%	13.9%	1.0%	4.1%	0.0%	9.8%	4.3%
	Percent of Units that are Mobile Homes or RV or boat	19.2%	31.3%	66.2%	58.1%	51.9%	55.0%	70.6%	59.6%
	Percent of Units Lacking Complete Plumbing	3.1%	3.1%	6.1%	0.0%	3.0%	0.0%	3.4%	5.2%
	Percent of Units Lacking Complete Kitchen Facilities	3.1%	2.9%	5.3%	1.2%	3.0%	0.0%	3.4%	2.2%
Financial Housing	Owner-Occupied Rate*	70.0%	67.8%	81.5%	69.9%	72.2%	85.0%	84.2%	79.3%
	Median Gross Rent	$503	$350	$407	$375	$278	$225	$245	$301
	Percent Owner-occupied Homes without a mortgage	26.1%	29.4%	17.00%	12.60%	21.40%	44.10%	22.60%	14.10%
	Owner-occupied mobile homes: Median value	$ 39,800	$19,700	$43,900	$27,700	$16,400	$18,300	$23,300	$26,500
	Owner-occupied housing units: Median value	$ 94,600	$46,600	$52,900	$50,200	$19,900	$22,800	$26,600	$36,500

*As a percent of the total number of occupied units

Consistent with much of the literature developed about the Texas colonias, the New Mexico colonias in Dona Ana county are primarily Hispanic or Latino, a significant proportion of households in each of the CDPs report Spanish as their primary language, and most of the residents over the age of 24 are poorly educated. Moreover, median income in each of the CDPs in this analysis is ranges from $5,000 to $20,000 less than the median income of the state and poverty levels are just as dismal. In one CDP over half of all individuals live beneath the poverty line. While poverty and unemployment are concerns for all colonias in New Mexico, they are particularly problematic in the older, non-MSA communities where counties have designated older farming and mining communities as colonias. In these settlements, levels of income have dropped and poverty has increased – making it even more difficult for these communities to keep their infrastructure in good repair.[17]

While owner-occupancy in the CDPs is, not surprisingly, either equal to or greater than it is throughout the state, residents of these CDPs are significantly more likely to report that they live in a mobile home, RV, or boat than on average for the state. In fact, the CDP reporting the lowest frequency of these types of units is still 10 percent greater than the state average. In all other CDPs, the proportion of these units is two and one-half times more likely than the proportion for the state as a whole. The percent of the population in each of the CDPs less than 18 years old is also generally greater than that same proportion for the state.

According to Koerner, these trends are not surprising. She reports that MSA colonias generally have high occupancy rates, homeownership rates that range between 76 and 92%, and large families with household sizes ranging from 3 to 4.5 persons. These trends are average, however, quite different from those experienced in the non-MSA colonias in New Mexico. According to Koerner, non-MSA colonias generally have lower occupancy rates – hitting as low as 32% in one colonia, a greater proportion of units used for seasonal occupancy (summer homes or winter ski lodges) – as high as 52% of the units, slightly lower homeownership rates – ranging from 66 to 92%, and smaller average household size – reportedly between 2 to 3.5 persons per household.[18]

The physical condition of housing units also differs between MSA and non-MSA colonias in New Mexico. Housing in the MSA settlements tends to improve physically over time as residents make financial gains and invest in their homes (similar to some Texas colonias settlements). Yet, significant deterioration problems exist. Housing in the non-MSA settlements is also very diverse – some which meets building code requirements and some not.[19]

The second-tier analysis of Census data for New Mexico focused on six Census tracts. These tracts were selected, as discussed above, because the characteristics they reported most nearly coincided with the characteristics generally anticipated for colonias based on the literature. Two tracts were eliminated from this analysis because their characteristics significantly different from those expected for colonia communities. Data from these tracts were inconsistent with current literature about the characteristics of colonias. Therefore, it was assumed that it was likely that only a small part of these tracts were included in one of the CDPs analyzed above. Data from these tracts will, however, be included in the HMDA analysis due to differences in tract boundaries between 1990 and 2000 Censuses. The following chart shows Census statistics for selected Census tracts contained within the CDPs as they compare to those same numbers for the State of New Mexico

[17] "New Mexico State University students complete colonias survey."
[18] Koerner, page 14.
[19] Koerner, page 15.

	Table 4.6 Demographic, Economic, and Housing Characteristics of Selected New Mexico Census Tracts, Census 2000	New Mexico	Census Tract 13.02, Dona Ana County	Census Tract 14, Dona Ana County	Census Tract 18.01, Dona Ana County	Census Tract 18.02, Dona Ana County	Census Tract 18.03, Dona Ana County	Census Tract 18.04, Dona Ana County
Demographic Characteristics	Percent Population Hispanic/Latino	42.1%	69.0%	81.4%	87.8%	91.2%	97.0%	64.5%
	Percent Households Report Spanish as their Primary Language	33.3%	58.3%	76.7%	80.9%	88.2%	95.2%	61.9%
	Percent of the Population Under the Age of 18	27.9%	36.5%	38.2%	37.3%	39.0%	39.7%	36.3%
	Percent of the Population Over the Age of 24 with no HS Diploma	21.1%	36.6%	53.7%	51.6%	53.3%	60.3%	42.1%
	Percent of Population Urban	75.0%	65.8%	0%	70.8%	54.3%	98.1%	73.6%
	Percent of Population Reporting US Citizenship	94.6%	84.7%	71.9%	73.8%	73.5%	71.7%	81.9%
Economic Characteristics	Median HH Income	$ 34,133	$28,125	$20,963	$24,317	$23,705	$22,583	$22,692
	Percent Population Living Below the Poverty Line	18.1%	28.4%	37.3%	32.1%	35.7%	38.3%	31.3%
	Percent of Household Earning Less than $20,000	28.7%	33.9%	48.3%	36.3%	40.7%	44.5%	41.3%
	Percent Population 16 years and over who did not usually work 35 or more hours per week in 1999	52.2%	57.7%	47.5%	48.6%	47.6%	52.0%	49.7%
Physical Housing	Vacancy Rate	13.1%	11.4%	13.1%	5.6%	8.2%	6.0%	13.9%
	Percent of Units that are Mobile Homes or RV or boat	19.2%	72.1%	36.1%	59.2%	59.5%	30.5%	66.2%
	Percent of Units Lacking Complete Plumbing	3.1%	0.6%	3.0%	2.3%	4.5%	2.9%	6.1%
	Percent of Units Lacking Complete Kitchen Facilities	3.1%	0.6%	2.3%	1.4%	2.5%	2.7%	5.3%
Financial Housing	Owner-Occupied Rate*	70.0%	71.2%	63.1%	74.1%	72.9%	65.4%	70.2%
	Median Gross Rent	$503	$433	$256	$342	$317	$349	$407
	Percent Owner-occupied Homes without a mortgage	26.1%	5.2%	32.7%	13.7%	22.8%	27.6%	17.0%
	Owner-occupied mobile homes: Median value	$ 39,800	$43,000	$25,900	$24,600	$29,300	$20,800	$43,900
	Owner-occupied housing units: Median value	$ 94,600	$51,400	$40,100	$41,500	$39,600	$49,600	$52,900

*As a percent of the total number of occupied units

Taking a closer look at these Census tracts in Dona Ana County, it is clear that these tracts follow the trends identified above for the CDPs. Generally, these tracts report high Hispanic or Latino populations, low rates of education, lower median incomes than the state median, and higher levels of poverty. In four of the six tracts used for this analysis, at least 60 percent of all occupied housing units were reportedly mobile homes, RVs, or boats. This is significantly higher than the state average of 19 percent of all occupied units. As expected and supported by Koerner's research, homeownership rates in these MSA tracts are higher and utility connections are widely reported. This fact is substantiated by HUD's work in the New Mexico colonias which reports that of the 10 border counties surveyed, all had electricity, gas service, and a potable water system. While these water systems were usually provided by mutual domestic water associations, some were reportedly substandard and without enough water pressure for fire protection. Only 15 were connected to a wastewater treatment system.[20]

d. California Colonias

Similar to Arizona, less research has been conducted concerning the location and characteristics of California colonias. Generally, identified California colonias are located in Imperial County, but some extend beyond the 150-mile definition developed by HUD. Nine CDPs or cities whose boundaries closely reflect colonia boundaries are included in this analysis. California is unique among the four Border States because it contains areas regarded by many as colonias that are not primarily Hispanic or Latino, but rather Native American. Thus, California contains areas similar to colonias in all respects except race/ethnicity. As a result, data for these CDPs and cities are more likely to report more English speaking residents and a greater percentage of US citizens. The following chart provides a sample of population statistics for the selected tracts and the State of California.

Table 4.7
Demographic, Economic, and Housing Characteristics of Selected California CDPs and Cities, Census 2000

		California	Brawley city	Calexico city	Calipatria city	El Centro city	Heber CDP	Niland CDP	Seeley CDP	Westmorland city	Winterhaven CDP
Demographic Characteristics	Percent Population Hispanic/Latino	32.4%	74.7%	95.6%	58.6%	74.6%	97.9%	50.7%	85.0%	83.4%	52.3%
	Percent Households Report Spanish as their Primary Language	22.4%	68.1%	94.1%	66.1%	67.3%	94.2%	42.0%	79.6%	75.7%	47.4%
	Percent of the Population Under the Age of 18	27.2%	34.5%	34.9%	16.3%	33.5%	34.3%	29.4%	38.4%	35.0%	32.8%
	Percent of the Population Over the Age of 24 with no HS Diploma	23.2%	43.4%	52.6%	38.3%	37.1%	60.4%	44.0%	50.7%	28.8%	14.9%
	Percent of Population Urban	94.5%	100.0%	100.0%	99.7%	99.3%	100.0%	0.0%	0.0%	0.0%	100.0%
	Percent of Population Reporting US Citizenship	84.1%	83.1%	68.9%	92.0%	79.6%	73.5%	94.4%	70.6%	76.0%	88.3%
Economic Characteristics	Median HH Income	$47,493	$31,277	$28,929	$30,962	$33,161	$28,221	$25,592	$31,058	$23,365	$11,563
	Percent Population Living Below the Poverty Line	13.9%	26.3%	25.6%	10.6%	22.2%	22.9%	21.4%	26.2%	27.2%	47.1%
	Percent of Household Earning Less than $20,000	19.6%	34.3%	34.5%	32.6%	31.9%	31.4%	32.3%	29.6%	43.9%	64.9%
	Percent Population 16 years and over who did not usually work 35 or more hours per week in 1999	53.5%	51.9%	57.0%	37.5%	50.7%	54.2%	63.0%	53.9%	12.8%	14.6%

[20] "New Mexico State University students complete colonias survey."

Physical Housing Conditions	**Vacancy Rate**	5.8%	5.7%	2.6%	6.4%	6.8%	2.9%	18.6%	5.2%	6.8%	17.3%
	Percent of Units that are Mobile Homes or RV or boat	4.7%	6.5%	2.9%	6.4%	10.7%	20.0%	58.1%	31.9%	5.8%	34.1%
	Percent of Units Lacking Complete Plumbing	0.9%	2.0%	0.7%	0.7%	1.1%	0.9%	6.3%	3.1%	0.0%	8.6%
	Percent of Units Lacking Complete Kitchen Facilities	1.3%	1.8%	0.6%	0.3%	1.3%	1.3%	9.5%	3.1%	0.7%	16.4%
Financial Housing Conditions	**Owner-Occupied Rate***	56.9%	53.6%	55.3%	60.8%	50.4%	71.0%	73.3%	67.5%	51.4%	43.4%
	Median Gross Rent	$747	$481	$517	$481	$527	$540	$466	$509	$423	$400
	Percent Owner-occupied Homes without a mortgage	17.7%	24.4%	17.2%	23.4%	16.2%	28.8%	32.4%	20.5%	28.7%	44.3%
	Owner-occupied mobile homes: Median value	$37,800	$14,400	$11,300	$81,000	$23,400	$35,000	$25,600	$55,800	$87,500	$9,999
	Owner-occupied housing units: Median value	$198,900	$95,600	$106,300	$75,900	$97,700	$87,400	$34,100	$72,600	$83,600	$36,900

*As a percent of the total number of occupied units

Similar to colonias in the other states, residents of California's colonias are generally less likely to earn a livable income and more likely to live below the poverty line. In fact, all of the nine places selected for this analysis report median incomes that are at least $14,000 less than the state median income of $47,500. Only one report a poverty level less than 11%, while only two report that less than 15% of individuals over the age of 16 did not "usually" work full-time in 1999 – indicating a huge per household work effort to make ends meet.

The housing characteristics within each of these places is notably different – ranging from less than 3% of all units in one CDP reported as mobile homes, RVs, or boats to more than half in another CDP. And while most households in all of the CDPs report plumbing and kitchen facilities, two CDPs reported that over nine percent of their households did not contain kitchen facilities.

The second-tier analysis of 2000 Census data includes 10 Census tracts contained within the CDPs or cities included in the first-tier analysis. The chart detailing this analysis is below.

Table 4.8
Demographic, Economic, and Housing Characteristics of Selected California Census Tracts, Census 2000

		California	Census Tract 104, Imperial County	Census Tract 107, Imperial County	Census Tract 112.02, Imperial County	Census Tract 114, Imperial County	Census Tract 115, Imperial County	Census Tract 119, Imperial County	Census Tract 120, Imperial County	Census Tract 121, Imperial County	Census Tract 122, Imperial County	Census Tract 125, Imperial County
Demographic Characteristics	Percent Population Hispanic/Latino	32.4%	92.5%	92.5%	78.7%	85.9%	84.9%	94.5%	93.8%	94.9%	97.9%	31.3%
	Percent Households Report Spanish as their Primary Language	22.4%	89.5%	85.3%	68.4%	84.1%	83.2%	92.8%	90.2%	94.4%	98.3%	27.3%
	Percent of the Population Under the Age of 18	27.2%	38.8%	32.6%	34.2%	36.9%	33.1%	31.3%	35.6%	33.7%	36.5%	34.2%
	Percent of the Population Over the Age of 24 with no HS Diploma	23.2%	63.9%	57.8%	42.2%	67.4%	54.8%	56.3%	46.0%	59.5%	53.9%	41.8%
	Percent of Population Urban	94.5%	100.0%	100.0%	100.0%	100.0%	100.0%	75.2%	100.0%	100.0%	100.0%	29.3%
	Percent of Population Reporting US Citizenship	84.1%	75.7%	78.6%	76.6%	71.9%	75.3%	67.8%	70.3%	66.7%	69.2%	89.6%
Economic Characteristics	Median HH Income	$ 47,493	$ 21,380	$ 27,308	$ 26,732	$ 20,471	$ 18,700	$ 32,273	$ 31,200	$ 21,620	$ 33,750	$20,292
	Percent Population Living Below the Poverty Line	13.9%	38.4%	27.4%	26.7%	40.3%	34.8%	16.2%	24.7%	38.7%	18.5%	34.9%
	Percent of Household Earning Less than $20,000	19.6%	46.3%	39.3%	35.7%	48.9%	54.3%	31.7%	31.9%	46.4%	25.8%	49.4%
	Percent Population 16 years and over who did <u>not</u> usually work 35 or more hours per week in 1999	53.5%	55.8%	57.4%	51.6%	60.4%	58.7%	55.8%	55.6%	63.5%	53.6%	60.8%
Physical Housing	Vacancy Rate	5.8%	5.3%	5.5%	9.6%	4.0%	3.8%	2.7%	2.5%	3.6%	1.4%	17.7%
	Percent of Units that are Mobile Homes or RV or boat	4.7%	7.9%	13.4%	32.0%	0.5%	11.7%	10.1%	0.4%	8.8%	0.0%	44.5%
	Percent of Units Lacking Complete Plumbing	0.9%	4.2%	1.7%	1.5%	0.0%	2.6%	1.0%	0.5%	0.0%	1.6%	6.6%
	Percent of Units Lacking Complete Kitchen Facilities	1.3%	2.6%	0.0%	0.4%	0.6%	3.4%	1.0%	0.6%	0.9%	0.0%	6.9%
Financial Housing	Owner-Occupied Rate*	56.9%	44.0%	52.8%	32.3%	46.8%	37.8%	64.5%	55.2%	31.7%	70.8%	51.7%
	Median Gross Rent	$ 747	$ 438	$ 431	$ 498	$ 439	$ 478	$ 399	$ 569	$ 502	$ 474	$ 351
	Percent Owner-occupied Homes without a mortgage	17.7%	17.1%	34.9%	3.1%	24.4%	20.6%	11.2%	23.3%	28.5%	8.7%	30.3%
	Owner-occupied mobile homes: Median value	$ 37,800	$13,700	$ 21,400	$ 23,500	$ 12,500	$ 12,900	$ 13,300	$ 9,999	$ 11,600	$ -	$10,800
	Owner-occupied housing units: Median value	$ 198,900	$ 85,000	$ 79,200	$ 34,300	$ 83,400	$ 77,200	$105,900	$131,200	$ 93,500	$102,700	$45,700

*As a percent of the total number of occupied units

As noted previously, California is home to colonias that comprise a large Native American population. While nine of the tracts selected for this analysis report that at least three-quarters of their residents are Hispanic or Latino, one tract reports only about 30% Hispanic or Latino. Census Tract 125 is located in the Winterhaven CDP, located in the far southeastern corner of Imperial County with 40 percent of its population identifying themselves as Native American. Still, residents over the age of 24 in Tract 125, as well as the other tracts selected for this analysis, are twice as likely not to have received a high school diploma. Moreover, median incomes among residents in all of these tracts are much lower than the median income reported for the entire state. In fact, in five of these tracts report median incomes less than half that of the state median.

Housing conditions in these tracts are also more dismal than those for residents throughout the state. Residents of these tracts are generally more likely to report a lack of complete plumbing or complete kitchen facilities and ownership rates are consistently lower than the state average in all but two tracts. While some tracts report median values of owner-occupied homes of up to $105,000, this is still about half of the state average.

3. CONCLUSIONS

The Census Bureau's new CDP designations for colonias allows for a more accurate analysis of the demographic, economic, and housing characteristics of some of the colonias. Those that were selected for this analysis support current research purporting the notion of colonias that primarily contain Hispanic and Latino households with larger families, low levels of education and English fluency, low incomes, high poverty rates, poor housing conditions, and a greater proportion living without utility services. Moreover, even when the analysis focuses on a smaller unit of analysis (the Census tract) within each of these CDPs and cities, the trends remain generally the same. What Census data cannot answer, however, is the extent to which traditional lending institutions are venturing into colonias to help finance new construction, purchases, or home repairs through refinances. Analysis of Home Mortgage Disclosure Act (HMDA) data can provide some initial insight into this finance activity. Details of this analysis are included in the next section.

V. RESIDENTIAL FINANCE IN COLONIAS

1. OVERVIEW OF KEY EXISTING RESIDENTIAL FINANCE ISSUES

Qualitative information elicited in focus groups and interviews, supported by descriptions provided in the emerging literature on colonias conditions, all point to similar stories in terms of colonias physical and demographic characteristics and the impacts of those characteristics on housing conditions, housing finance tools available to residents, and infrastructure constraints. Rigorous studies to corroborate these reports of colonias housing finance conditions have yet to be conducted on widespread or consistent bases. The paragraphs below summarize the observations, opinions, and experience of colonias residents and the organizations that have worked with them to meet their housing finance needs.

In order to provide an initial assessment of the degree to which any conventional lending activity occurs within colonias, the subsequent section of this chapter brings together available evidence on conventional lending, to the degree it can be identified, in areas known to contain colonias. This is presented as suggestive, not indicative, of the level of lending activity in colonias areas. With the release of HMDA 2003 data, much greater precision in identifying lending activity at institutions required to report under HMDAwill be possible as 2003 HMDA collection will draw on census designations created for Census 2000, and thus include some CDPs that have been identified as purely "colonias".

The overarching story provided by residents, advocates, nonprofit organizations, and government entities includes the following elements. Colonias residents are reported as facing myriad barriers in their quest to access and to build livable homes and neighborhoods. Their financing choices outside of colonias are very limited (given factors such as low incomes, lack of credit histories, and often informal sources of employment) and they often cannot access housing that meets even minimal standards of safety and decency. Thus, these households elect to locate within colonias.

Neighborhoods typically lack basic infrastructure for water, sewage, roads, and drainage. Legal jurisdictions frequently lack the resources - and the political will - to improve colonias conditions, especially when the costs of doing so appear to exceed the fiscal benefits for long periods of time. In addition, there are numerous anecdotal reports of predatory lending practices that prevent residents from building assets, and reduce the income they have available to purchase food and clothing, renovate their homes, or purchase health care. At the same time, residents overwhelmingly express their desires to own their homes.

Although immigration continues to fuel colonias growth, many colonias families are Mexican immigrants and their children and grandchildren who have lived in the United States for long periods of time or were born here. Focus groups noted that there is a widespread myth that most colonias residents come directly from Mexico to the colonias. Instead, the largest concentrations are former residents of large urban areas such as El Paso and Tucson, to which these residents originally located. Some of these families have been driven from the cities by the lack of decent, affordable housing and limited rental housing stock options; while others move to the colonias for the opportunity to own a piece of land and build a house for their family.

Large portions the border historically have been agricultural, and many colonias heads of families are or were migrant farm workers who entered the US during the bracero program of the 1940s, or as undocumented workers who gained legal status during several 'amnesty' periods in the 1980s and 1990s. For these immigrants, legal status meant they were able to access jobs that paid at least the minimum wage, enabling (or forcing) them to leave farm work for work in the factories and service sector. Others have always worked in the manufacturing and service sectors, as unskilled assemblers, construction workers, day laborers, domestics, babysitters, and mechanics.

Once established in the US, with children who are native born Americans, these families often attempt to purchase land and build a house. Lacking the resources to purchase existing homes in developed areas, they reportedly turn to the colonias, where they are able to buy land and build with informal, cash-based transactions, in areas without building codes with which they cannot afford to comply in other locations. These factors have all combined to fuel the growth of established colonias and the creation of new ones.

2. CHARACTERISTICS OF HOUSING FINANCE IN COLONIAS.

Housing in the colonias is financed using a variety of mechanisms. Rather than acquiring a mortgage for their house and land under one contract, colonia dwellers typically purchase undeveloped land in a separate transaction from their home purchase. Homes themselves are usually mobile homes, or self-constructed units that are improved or expanded over time as family finances allow. Sales contracts that do not convey rights in equity or a legal title reportedly predominate. In the series of interviews and focus groups conducted in April and May of 2003 with colonia residents, all except two were purchasing their lots and/or trailers using sales contracts. Those who were building houses mentioned using sources such as Earned Income Tax Credits, income tax returns, and savings from wages to purchase construction materials.

Other finance arrangements include instances where residents build homes on rented land or rent dwellings on land they are purchasing. Some colonia residents receive cash contributions from relatives in Mexico, an unusual reversal of the typical remittance stream between the US and Mexico. Another arrangement that occurs in colonias involves individuals who reside with family members while they pay off a lot or build a home in the same or nearby colonia, or even on the same lot. This situation mimics the village growth process in the developing world, rather than typical subdivision development in the US, and appears to be a factor in colonia expansion and the establishment of new colonias.

Access to finance opportunities —whether to renovate a dilapidated house, clear a title to obtain a warranty deed, install water and sewerage hook ups, or expand a home— is limited for colonias residents. Some of the barriers to legitimate home financing mentioned by focus group participants include reliance on cash for all purchases and not having generated a credit or banking history; unwillingness to use a bank and a checking account; use of informal credit only (for example, from sources such as door-to-door marketers); and poor credit histories.

The colonias neighborhoods also lack the physical infrastructure that makes them credit-worthy to lending institutions. Colonias lack full utilities, paved roads, storm drainage, potable water, and sewer facilities. Houses themselves often lack minimal features such as indoor plumbing that are prerequisites for financing, including publicly supported financing. Construction may have been by homeowners unfamiliar with building techniques (one woman interviewed built her house brick by brick herself, with no training or experience in housing construction) and may include lean-to rooms, holes cut for doors, and flooring that consists of bricks or plywood layered on dirt. Neighborhoods are sometimes in remote or undesirable locations, miles from any other development or in flood plains, arroyos (gullies), or near landfills.

Water and sewage are complicated issues in the colonias. The cost of extending water and sewerage lines is very high, as shown in Chapter 6, and often colonias are sparsely distributed. States and localities have been reluctant to build new lines to small neighborhoods. Indeed, one entire colonia was relocated two years ago in a land swap so that its residents could be connected to a planned water line: relocation was cheaper than extending water lines to their colonia and residents were unwilling to wait twenty years or more for a water line. No other examples of this kind of direct action were identified in relevant studies or through outreach efforts.

As the nearby cities and communities struggle to finance the necessary infrastructure for current growth, the colonias have become a significant problem that competes for scarce resources. A less tangible, but important, factor is that there is little political will to divert municipal, county and utility funds to invest in a very expensive system that will serve a small group of citizens who are often politically disengaged and who contribute little to the tax base. Adding to complexity of the problem is that in many cases, the water wells (water rights are owned by the utility companies or districts) that serve a nearby municipality are located in areas that are close to or in a colonia, yet the distribution system is far and expensive to extend to serve these communities.

Colonia residents face legal barriers to improving their homes and neighborhoods. No state has reliable counts or estimates of how many residents have purchased their lots using contracts for deed because these contracts are private and not officially recorded. In Arizona and Texas, state legislatures have not extended greater regulatory powers to counties, although the county governments are 'closer to the ground' and more aware of colonias expansion. The respective legislatures have not provided enforcement mechanisms and resources to county governments so that they can investigate illegal land subdivision and fraudulent land sales.

Focus group participants related reports that land sellers have resorted to threats to extort additional money from land buyers. Moreover, most land has passed through several layers of ownership and division before it is purchased as a home lot, further complicating recovery efforts.

Texas Legislation in 1996 established a new form of legal conveyance for colonia land buyers, a warranty deed. This deed gives lot buyers the ability to use the value of the lot to secure a home renovation loan and establishes a process that a seller must go through to cancel the contract. The law requires that contracts be provided in the language of the buyer, usually Spanish. It also requires disclosure of interest rates and fees charged the buyer.

This study included site visits to some colonias in Texas to collect information on compliance with these requirements. Residents asserted that buyers were receiving warranty deeds, but that none of the associated contracts were written in Spanish. Buyers were actually receiving several contracts, one of which stated that no interest was being charged. Technically that may have been true, but only because the interest charges were added to the purchase price

a. Factors affecting access to conventional housing finance

The standard loan criteria that banks and credit unions must apply constitute regulatory barriers to most colonia families. Given some localized hostility to Mexican immigrants and new concerns about national security, efforts to assist immigrants to establish the banking and credit histories have dwindled so that in some cases colonias residents do not even have legal identification. Through its consulates, the Mexican government has promoted a new effort to provide identification cards, such as a Mexican passport or "matricula consular", that individuals can use as identification to open bank accounts or attain drivers license. The US government has not agreed yet to this measure.

Only five colonia residents interviewed claimed to have a bank loan to buy a lot and house. Several indicated that they had initiated the application process at a lending institution, but found their incomes were too low to qualify. It did not seem that they had actually completed a loan application. Mortgage lenders often conduct a verbal screening prior to starting the formal application process. However, most had never applied for a loan from a bank or other lending institution. The idea that a potential loan applicant might compare the costs of different loan sources was not something participants had considered.

Six out of 50 colonia residents interviewed had bank accounts, generally checking accounts. As is typical with largely unbanked populations, most residents used money orders to make payments. Programs directly provided by units of government and privately-sponsored initiatives sponsored by banks such as Wells Fargo are encouraging colonia residents to establish bank accounts, and are also providing financial education services. The level of saturation for these efforts is difficult to measure, but the proportion of colonia residents receiving training is probably limited. Given that a very high proportion of colonia families have school-age children, more impact might come from a school-based program that reaches out to parents.

Many adult colonias residents do not speak English, or may have some speaking skills but do not read or write English. At the same time, these adults usually have a limited education in Mexico, often less than sixth grade. Mere translation of English language materials into Spanish does not ensure that consumer education is effective, given low education levels. In addition, Spanish varies along the border, depending on the degree of acculturation. Texas has taken the approach that mandating the use of written Spanish translations of contracts and other legal documents is sufficient.

The focus groups conducted with a total of 50 colonia residents in Texas and New Mexico indicated that a popular method for financing home construction materials is through annual tax refunds. Several mentioned periodic unemployment as a reason not to finance home construction, since they did not receive refunds or credits. Residents did not view the purchase of their lots the same way, accepting that they must be financed. However, very few seemed to relate monthly payment amounts, length of term, and interest rates to the final sum paid for the lot. Likewise, residents did not report any price comparisons when selecting a lot to buy. Some prices paid for lots exceeded the cost of a modest but fully serviced lot in the nearby city. Of course, relatively few lots are sold in the city separate from the house that will be built on the lot.

According to other studies and interviews, many current colonias residents are employed as construction workers, day laborers primarily in the agricultural and manufacturing sectors, housekeepers and babysitters, or as self-employed handymen and landscapers. Their jobs are not always predictable and stable. This makes it more difficult for them to qualify for loans and mortgages and makes them reluctant to take a loan or mortgage from an institution. Often colonias residents are employed in the underground, cash economy. In these instances, employers generally will not provide documentation of wages earned, often because they are paying less than minimum wage and not paying federal taxes.

Between 65% and 70% of colonias residents are US citizens, In addition, a relatively high proportion of colonias residents reportedly are children, under the age of 16. Adult residents face numerous barriers relating to immigration status, including fear of deportation, inability to access income supports such as Food Stamps, and backlogs in the INS citizenship process. Employment opportunities, including wages and benefits, are directly affected. Many families contain mixed nationalities: some members are US citizens (children), some are legal residents (often one parent), and some are undocumented (the other parent, older children). CDC representatives and residents noted that these families often will not report crime or fraud for fear of attracting law enforcement attention. Similarly, colonia residents may avoid bank accounts and loan applications because of their immigration status. This was mentioned in the one focus group whose participants were all legal residents or US citizens (the Spanish GED students in Montana Vista). Interestingly, the undocumented residents in the New Mexico focus group were open about their immigration status.

Colonia residents often participate in finance systems that range from informal no interest loans from family members to high interest loans offered by loan sharks, pawn shops, and car title and payday lenders. Small bank loan opportunities are not available, whereby a family could establish a credit record by taking out very small loans, repaying them, and then qualifying for successively larger loans. These types of loans are expensive to manage for a banking institution and the return is small over the near-term. In the interim, although states such as California and Texas have recently legislatively addressed usurious lending practices, on-the-ground enforcement is weak, leaving colonias populations vulnerable to predatory lending practices. As is the case among unbanked communities throughout the US, alternate lenders exist because there is a need for small loans and conventional bank institutions are not convinced that the market for such loans is feasible or worthwhile.[21]

Many times, however, it is these alternative lenders who look to make high commissions off of naïve borrowers who are unaware of other lending products available to them from mainstream lending institutions. These unscrupulous lenders use many tactics to

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[21] A growing body of research on the unbanked population within the U.S. may provide useful insights for financial issues within the colonias. See, for example, John Caskey (February 2002), "Check Cashing Outlets in a Changing Financial System", Federal Reserve Bank of Philadelphia Working Paper and (January 2002), Bringing Unbanked Households into the Banking System", The Brookings Institution Capital Xchange.

increase their profits, including harmful loan structuring techniques; excessive fees and costs; and fraudulent, deceptive, and abusive practices. These loans also frequently lack a transparent quality – meaning that borrowers are truly unaware of the excessive fees they are being charged – and also contain a waiver of legal redress leaving borrowers without remedy. It is likely that colonia residents may be a target for these predatory practices, however the challenge in measuring and combating these practices in traditional low-income communities are magnified in the colonias where individuals are generally less educated and less likely to speak English.

The residential finance problems faced in colonias vary. One distinction emerges between colonias that surround large urban areas like El Paso and Tucson, and colonias that are truly rural, as in parts of New Mexico and West Texas. Within the large urban areas, community groups have formed to provide services and advocate for their own interests. Such groups were not reported in colonias located in rural areas. Residents of rural colonias also reported facing resistance (or, they felt, discrimination) from small towns that might provide them with public and financial services. Although once incorporated and part of the tax base, that problem reportedly is alleviated to some degree.

Poor coordination among multiple state agencies exacerbate colonias housing finance barriers. For example, Texas has one program that provides grants and loans for water and sewage hook ups. However, a prerequisite for participation is that the house must have standard indoor plumbing to qualify. A second program loans money to provide indoor plumbing, but to qualify, the house must already have a water and sewage line hook up. Many residents cannot qualify for either program because the household cannot install plumbing without a water hook up but cannot get the water hook up without plumbing. Focus group participants in Montana Vista mentioned frustration with the cost ($2,000) for a water hookup, and about half lacked water in their homes because of the cost.[22] Water is so valued that residents expressed greater interest in some kind of loan program that would allow them to connect to water lines, more than interest in loans to finance home construction and renovation.

b. Key points from focus groups and interviews

The stakeholder interviews and focus groups to date give a clear overall picture of how colonia residents finance their lot and the improvement of their home:

- Colonia residents continue to seek and acquire contracts for deed to finance the purchase of their lots. Essentially, they put small amounts down and pay sums of typically $100 to $250 per month to the land developer, who takes back this financing. Few colonia residents have converted their contracts for deeds to warranty deeds and other more secure legal instruments. Hence, they are vulnerable to loosing their lots if they miss three payments.

[22] Anecdotal evidence indicates that sometimes residents lack indoor plumbing, but that they seek hookups to fill cisterns. Some carry water in in trucks or there is a distribution service to fill cisterns. In other instances, residents might build the plumbing system even without immediate access to the hookup, expecting to have access sometime in the future. Finally, plumbing also sometimes is installed with sewage lines that are connected to septic systems.

About half the respondents in the focus group of Sunland Park – a relatively poor colonia – were behind on their payments and running some risk of losing their property – although nonprofit groups and residents indicated that they ultimately do make the payments. In Montana Vista, the average colonia resident has 7 to 9 years of payments left on these contract for deeds and owes around $9,000 in the colonias visited. However, the ranges are much larger – from fully paid off to $32,000 for debt and from paid off to up to 15 years of additional payments. In Sparks – which is a substantially older colonia – a majority of residents reportedly have paid off their contract for deed and own their land.

The developers of some of the newer colonias (such as newer parts of Agua Dulce) tend to leave the Contract for Deed in place only a short time before replacing it with a Warranty Deed. However, review by the researchers and the Community Development Corporations of these Warranty Deeds shows that they may give households very modest additional legal protection and the financial obligations of the family remain the same – that is, they must pay high interest rates and large sums per month for relatively modest loan amounts. Reportedly very few households have taken advantage of Texas state deed conversion programs to replace their contract for deed with a Warranty Deed and debt at much lower interest rates. The El Paso County center in Agua Dulce allowed residents to pay back their Warranty Deed with labor at the community center at the locally substantial wage of $20/hour.

- Warranty Deeds – even if they provide only marginally more legal protection – are the prerequisite for access to virtually all state and federal programs. A financial institution or other lender cannot secure a first mortgage without a warranty deed. Hence, converting contracts for deed to warranty deeds is a fundamental step given the current housing finance context.

  However, such conversions are problematic. Underlying title problems, like multiple previous owners and lack of clean title and or current tax liens, cloud the rights of many colonia households that hold or have paid off contracts for deeds. These problems are largely not observable to residents. In developing countries, however, housing microfinance typically occurs without full title to the land (unclouded warranty deed). Developers reportedly can solve problems such as tax liens by negotiating discounts with local governments. In the US, local government typically requires colonia residents to pay full tax liabilities and that reductions in the amount of tax owed (inherited from the previous owner) are not legally possible. This is an area for additional research.

- Roughly half of households in the focus groups were living in mobile homes and the other half in actual houses. In Sparks – an older colonia – about 75% live in houses and 25% live in trailers. Most households occupy these two unit types in sequence. Once a lot is acquired, a cost effective method for initial housing on the lot is to move an older, used mobile home onto it. Typically, households purposely spend little on these units in order to save money for anticipated house construction. A small proportion of households, however, acquire modern doublewide manufactured houses and build onto them to create their homes.

  As old mobile homes cost relatively little (i.e., averaging $10,000 in 2003), households sometimes pay for them in cash obtained from savings. If they lack such savings or if the mobile home is newer, larger and hence more expensive, households use a similar method to that for lot finance. They make monthly payments to the original owner. According to information from the focus groups, these payments range from $100 to $200 per month.

- Households at least partially finance house construction through forced savings such as yearly receipt of the earned income tax credit (if they are eligible to receive the credit). Many automatically invest their tax return in the improvement of their home each year. This appears to be a popular source of finance for purchase of home construction materials. Very few households hold credit cards (e.g., only one person in the Montana Vista focus group) and use them to finance the purchase of building materials. In some communities, neighborhoods undertake collective building of a house in the form of house-building parties (Montana Vista). Similarly, a very small number of participants have accessed some sort of institutional finance (primarily through government programs, although recipients could not identify the funding sources and nonprofits used whatever was available to them rather than expressing preferences for specific programs). Occasionally, a household that already owns (has paid off) its land in a relatively consolidated colonia and has built a reasonable house gets an equity loan to finish it or expand it. Focus group participants reported no cases of sub-prime lending for home construction.

- As expected, participants reported that lowest income families are those that tend to rent. Some families – typically, the female-headed households – often earn $500 or less per month, primarily in the form of public assistance and food stamps. Newly single mothers and those whose partners have been disabled and cannot work are those most likely to rent. A rental unit often consists of one or more rooms in a large colonia structure/house that has been divided up for this purpose. A few live in multi-story apartment buildings in colonias.

  Despite these conditions, even the poorest U.S. colonias were characterized by residents as having a strong sense of purpose, interest in working, and optimism to better their lives and improve their living conditions – if not for themselves, for their children. This desire expresses itself foremost in a passion for owning their homes. Residents indicate that they live in colonias fundamentally because colonias offer this opportunity.

- Two housing development corporations interviewed – Lower Valley Housing Corp and McAllen Affordable Homes – develop low-cost housing (selling in the low $40,000s) for households with incomes comparable to higher income colonia residents (roughly $12,000 to $25,000 per year). The key to success in both cases is that they acquire flexible home purchase mortgage financing for their purchaser-borrowers through sources that are not underwritten using Fannie Mae or Freddie Mac guidelines, which are too strict to accommodate these families. For example, McAllen Affordable Homes has a $18 million revolving fund that this CDC leverages with financing from local commercial banks, who then hold the resulting loans in their portfolios. Lower Valley: 1) gets mortgage finance for their buyers from the USDA Section 502 program and local commercial banks; 2) continues to hold the note and do the servicing on the loans; 3) takes the credit risk by committing to re-purchase any bad loans; and 4) homeowners pay 9.5% and Lower Valley pays the bank 7.5% in one payment for all its households every month (easy servicing), thus keeping a 2% margin that finances Lower Valley's administrative costs. Both these cases have resulted in low arrears rates, according to both corporations.

3. CURRENT ESTIMATED LENDING ACTIVITY IN COLONIAS

While the qualitative information summarized above points to an absence of, or at best negligible, formal lending activity in colonias areas. The only reliable, available source of formal lending activity, HMDA annual lending reports, is examined for 2002 to verify the reported lack of formal lending activity. Thus, the subsequent analysis of HMDA data provides a starting point to quantitatively assess the level of lending activity occurring within the colonias.

However, there exists one significant obstacle to truly isolating lending activity in these communities: inadequate geo-coding of each of the loans in the dataset. The geographic aggregation – even at the finest level available in the 2002 HMDA dataset – is larger than most colonias or contains only portions of colonias along with portions of other, wealthier communities. As a result, the data capture loans that are not necessarily being made to colonia residents or for housing located in colonias. Nevertheless, this analysis provides a baseline for understanding current lending activity in colonias. While focus groups indicated virtually no formal lending activity, interviews with lending institutions acknowledged that some applications likely were being made and loans originated, as well as the growing recognition of a market among the upper income tier of colonias and would-be colonias residents.

The following tables summarize the key indicators of lending activity for those Census tracts analyzed in the previous chapter.

a. Texas Colonias

In three of the four Census tracts (103.09 in El Paso County, 125.05 in Cameron County, and 9502 in Hudspeth County) selected for analysis, there are some clear indications that finance activity in these areas is less frequent, borrowers are more likely to have lower incomes, and loans are smaller than the state of Texas as a whole. In fact, Census tract 125.05 in Cameron County reported absolutely no lending activity at all. Moreover, loan applications in the two Census tracts reporting data are denied at a higher rate than applications denied throughout the state. Tract 103.20 in El Paso County shows the exact opposite trend. It is important to note, however, that there were only 11 total mortgage applications from that tract (as was also the case for Tract 9502 in Hudspeth County), an extremely small sample from which to draw any conclusions. The following chart provides summary data of residential lending activity in the state of Texas and in the three tracts identified for analysis.

Table 5.1
Residential Finance Activity in Selected Texas Census Tracts, HMDA 2002

	Texas	Census Tract 103.09, El Paso County	Census Tract 103.20, El Paso County	Census Tract 9502, Hudspeth County	Census Tract 125.05, Cameron County
Total Mortgage Applications	1,723,597	381	11	11	0
Number Applicants Hispanic	250,870	206	7	1	0
Percent Hispanic Applicants	14.6%	54.1%	63.6%	9.1%	0
Number of Applications Denied	280,568	146	0	4	0
Percent Denied[2]	16.3%	38.3%	0.0%	36.4%	0
Number of Applications Approved[1]	937,344	132	11	3	0
Percent Approved[2]	54.4%	34.6%	100.0%	27.3%	0
Average Loan Amount	$108,054	$49,606	$121,182	$56,364	0
Median Loan Amount	$87,000	$42,000	$129,000	$60,000	0
Average Income of Applicant	$96,483	$39,643	$71,636	$66,000	0
Median Income of Applicant	$63,000	$34,000	$79,000	$50,500	0

[1] Approved applications are defined as applications for which loans were originated or applications that were approved but were not accepted by applicant.

[2] Other application action types include: Application withdrawn by applicant; File closed for incompleteness; and Loan purchased by the institution.

<u>*Loan Applications and Actions Taken*</u>. In the Texas tracts chosen, 403 loan applications were made in 2002. Within these tracts, in addition to the approval and denial rates noted above. 5.5% of applications were approved by not accepted by the applicants, 10.4% were withdrawn by the applicants, and 1.7% did not proceed due to incomplete information in the loan file. For the state, 7% of applications were approved but not accepted, 10% were withdrawn, and 3% closed for incompleteness. For these loan actions, the colonias tracts performed similarly to the state.

For the poorest applicants earning less than $20,000 per year (e.g., those most likely to be colonias residents in these tracts), 19 loans were approved and 28 loans were denied. In fact, denials exceeded approvals for all applicants earning less than $50,000, and for those applicants earning between $50,000 and $60,000 the number of denials was only slightly less than the number of approved loans. 42% of applicants had incomes below $40,000. As expected, the percentage of denials by income category drops steadily with income, although interestingly, approvals fall and denials increase for the $80,000 to $100,000 category.

<u>*Reasons for Loan Denial*</u>. Several tables in the Appendix explore denial reason by applicant income. Credit history is a major factor for all applicants with incomes in all categories; however, for applicants in the lowest three categories debt to income ratio, collateral, and "other" issues also are factors.

Among applicants whose housing loan applications were denied and for whom a reason for that denial was reported, about 25% of colonias tract applicants received denials with their credit history as the principal reason for denial. For state applicants, 30% also were denied due to poor and/or inadequate credit history, indicating that areas encompassing colonias perform no worse than the state as a whole by reason for denials. Having debt to income ratios that exceed underwriting standards accounted for about 15% of the denials reported in the colonias tracts (and 14% of statewide denials), and insufficient collateral accounted for 8% of main denial reasons in colonias tracts and for 12% of denials across Texas. It should be noted that a sizeable number of denied applications throughout the state and in the selected tracts either did not report a reason for the denial or reported it as an "other" reason. Thus, while credit history and the need to establish acceptable credit records emerge as key foci for efforts to create appropriate residential finance mechanisms for colonias residents in Texas and, as shown below, for the other states as well; additional research should be conducted to better understand what other issues are affecting denial rates that banks are reporting as "other" reasons.

Racial/Ethnic Characteristics of Loan Applicants. In two of the tracts selected for this analysis, the number of Hispanic applicants outnumbered the number of applicants reported other races – including those who did not report a race at all. In Hudspeth County tract, only 9.1% are reported as Hispanic and in the Cameron County tract, none are. Those figures likely reflect that lack of colonias lending activity in these tracts.

As noted in the methodology appendix, HMDA contains a high number of cases with applicant race not provided as that field is exempt from telephone, internet and other types of loan application processes. Of the 250 loan applications with race/ethnicity information reported, 86% were Hispanic, 11% White, and about 3% Native American, Black, or other. On the other hand, only 20% of applicants across the state who reported a race or ethnicity were Hispanic and 65 % were white.

Gender. By gender, for the three tracts selected for analysis that reported loans made in 2002, males account for slightly over half (51%) of all applicants while they account for slightly more (57%) of all applicants in the state as a whole. Female applicants constituted about 13% of colonias area applicants and about 20% of the state's applicant pool. It should be noted that over 35% of all applicants in the selected tracts and about 23 percent of state applicants did not report a gender.

In tract 103.09 in El Paso county where 381 mortgage applications were reported, 26 of the 48 women applicants – slightly over half – reported income less than $30,000 while only 61 out of the 196 male applicants (or about one-third) of all male applicants in this tract reported earning that same income. Although the number of observations is small, the figures for female applicants may point to a role for home loan programs aimed at female-headed, often single-parent households. These loan programs might incorporate specific marketing techniques that target this population or programs that allow higher loan-to-value rates than that which is generally accepted in the prime market.

With respect to income, nearly 35% of all applicants in the colonias tract had annual incomes under $30,000 while only about 10% of applicants statewide reported earning that same income. Another third of all applicants in the colonias tracts reported earning $30,000 to $50,000 – compared to only 21% of all state applicants. At the upper income levels, only one-quarter of all applicants in the selected Census tracts reported earning more than $50,000 while over 35% of all applicants statewide reported that same income. It should be noted that a sizeable number of applicants did not report their income (for more detail about these figures, see Appendix C). These figures indicate the presence of non-colonias households within the tracts, which is unavoidable given the level of detail available.

For all income levels, very few files were closed for lack of complete documentation, which is surprising as interviews indicated that situation as a significant problem in working with colonias and other lower-income applicants.

Loan Purpose. The distribution of loans by purpose among income categories detailed in Appendix E reveals that in 2002 the number of applications received in the selected tracts was almost equally divided between home purchases and refinancing. This trend is similar to that reported for the state as a whole. Also, as income increases both in the colonia tracts as well as throughout the state, the proportion of loans for home improvement increases. In the selected tracts, 59 loan applications were received from applicants in the two lowest income groups ($0-$9,999 and $10,000-$19,999) – 27 applications for home purchase and 32 applications for home improvement of refinancing. In the next two income categories ($20,000-$29,999 and $30,000-$39,999), the number of refinance applications is almost exactly equal to the number of loans for home purchase. Two trends may underlie the high number of refinancing. The first clearly is the fall in interest rates during this time period. The second may be the trend to refinance contracts for deeds. This is an area that suggests further research, especially given prevailing low rates and the potential these offer to affordably extricate households from tenuous ownership arrangements.

b. Arizona Colonias

In Arizona, a different picture emerges. Here, the approval rates for the colonias tracts and for the state are nearly identical (44% and 50% respectively). The percent approved is higher than the 31 percent approved in the Texas colonias tracts. The proportion of loan applications denied is almost half that reported in the Texas tracts. It should be noted that in Arizona colonias areas tend to be very small and the tracts within which they are located very large in area. As a result, the Arizona tracts may pick up a greater number of non-colonias neighborhoods which will have a direct effect on the number of loans made and the incomes reported for loan applicants.

Table 5.2
Residential Finance Activity in Selected Arizona Census Tracts, HMDA 2002

	Arizona	Census Tract 11, Cochise County	Census Tract 17, Pinal County	Census Tract 112, Yuma County	Census Tract 115, Yuma County
Total Mortgage Applications	800,734	347	2250	191	388
Number Applicants Hispanic	88,325	39	245	37	239
Percent Hispanic Applicants	11.0%	11.2%	10.9%	19.4%	61.6%
Number of Applications Denied	114,251	97	364	55	106
Percent Denied[2]	14.3%	28.0%	16.2%	28.8%	27.3%
Number of Applications Approved[1]	453,746	178	1089	102	203
Percent Approved[2]	56.7%	51.3%	48.4%	53.4%	52.3%
Average Loan Amount	$130,249	$58,530	$110,561	$66,545	$64,688
Median Loan Amount	$110,000	$54,000	$116,000	$60,000	$62,000
Average Income of Applicant	$82,391	$48,041	$60,679	$61,458	$45,494

Median Income of Applicant	$59,000	$39,000	$51,000	$43,000	$38,000

[1] Approved applications are defined as applications for which loans were originated or applications that were approved but were not accepted by applicant.

[2] Other application action types include: Application withdrawn by applicant; File closed for incompleteness; and Loan purchased by the institution.

Loan Applications and Actions Taken. As detailed in the descriptive statistics for Arizona selected tracts and for the state in the technical appendix, the selected Arizona tracts reported 3,176 residential loan applications in 2002. Of these, 44% were approved, 20% denied, 6% approved but not accepted by the applicant. About 10% were withdrawn by the applicant. As in the other state's selected tracts, only a small number (2%) were closed for incompleteness. In contrast, 48% of the state's applications were approved and only 16% rejected. Unfortunately, these results mask conditions within actual colonias. With HMDA 2003, greater precision will be possible, although survey research, such as that contemplated by HUD and the US Census Bureau is necessary to provide a reliable estimate of colonias lending activity and outcomes.

Of the 142 mortgage applications submitted by individuals earning less than $20,000 in the selected Arizona tracts, 56 – over one-third – were denied and 52 applications resulted in loan originations. These proportions are similar to those reported statewide indicating that the tracts selected for the analysis of lending activity in Arizona colonias are likely to contain communities that are far wealthier and contain better housing than what is expected in the colonias based on feedback collected through the focus groups.

Reasons for Denials. Consistent with the data from other state's selected tracts and Arizona state data, credit history is the principal reason for denial of loan applications. Thirty-three percent of applications in the selected tracts were denied for this reason – similar to the 30% reported for statewide denied applications. As is the case for data from the other states, unacceptable debt-to-income ratios and lack of sufficient collateral follow as main reasons for denial.

In terms of reasons for denial by income, credit history is the primary reason for denial for applicants in the lowest income categories while debt-to-income ratio arises as a frequently cited denial reasons in the middle-income brackets. Although this table reviews only a small portion of the denials reported for all colonias residents, it highlights the need for colonias residents to establish acceptable credit histories and possibly a role for different underwriting standards for colonias and other similar lower-income residents in these areas. Another need for colonias residents that these data point out is better access to programs that reduce mortgage burdens, possibly extending terms for longer periods of time.

Racial/Ethnic Characteristics of Applicants. For all Arizona tract applications, only 18% identified themselves as Hispanic and while 52% reported themselves White. Again, the number of applications with race not provided or not applicable was large (27%). These numbers, however, are striking in light of the fact that at least one-third of all households in each of the four tracts were Hispanic in 2000. The large number of White applicants in Census tract 17 in Pinal County is the primary driver of these numbers. This tract also had the highest reported median household income in 1999 of the four Census tracts selected for this analysis of Arizona clearly indicating that non-colonias communities are likely included in this tract.

Of those identified as Hispanic, about 25% reported incomes less than $30,000 while only eight percent reported an income greater than $80,000. Statewide, these numbers are slightly different and show an applicant pool in the selected tracts that is less wealthy – particularly among the Hispanic residents. Across the state of Arizona, about 20% of Hispanic applicants reported incomes less than $30,000 and over 10% earning more than $80,000.

Gender. Male applicants account for about 60% of all mortgage applicants in all but one of the tracts selected for this analysis. Across the state, that number drops slightly to about 57%. Census tract 11 in Cochise County – a tract in which 347 mortgage applications were received out of an estimated 1,600 households in the County – reported only 35% of applicants as male. It is interesting to note that this tract also reported that a sizeable proportion of applicants (35%) which did not report their gender. This is the largest proportion of "not reported" responses of all the selected tracts and is comparable to the 39% of "not reported" race classification responses that was also reported for that same tract. This may be an indication that some tracts which may have a greater proportion of colonia residents also have poorer reporting rates among their applicants – a factor that could complicate all future analyses unless efforts are made to improve reporting in these areas.

Income. Thirty-one percent of selected colonias tract applications were from persons with incomes below $40,000 (compared to 21% for the state), 15% from persons with incomes below $30,000 (compared to 10% of all state applications), and about 5% from persons with incomes less than $20,000 (versus three percent for the state). These tracts pick up significant amounts of higher income applicants, of which 52% have incomes above $50,000. However, given the 142 loans made to persons with incomes under $20,000, it is likely that the selected tracts indeed are picking up some lending activities within the colonias contained in those tracts.

Loan Purpose. While 62% of all applications statewide were for refinancing, only about 40% in the selected tracts were for that purpose. On the other hand, 1,721 applications – or 54% – were received for home purchases from applicants in these tracts while only 34% of applications throughout Arizona were for purchase. The lower refinance frequency among residents in the selected tracts may be an indication that the contract for deed issue prevalent in Texas is as not a significant a factor in the Arizona colonias.

c. New Mexico Colonias

Three Census tracts were selected for this analysis – all located in Dona Ana County. Of these three tracts, two show a significant proportion of Hispanic mortgage applicants. These two tracts also report significantly lower median incomes among applicants as well as a higher denial rate. The following chart provides basic statistics about loan applicants in 2002 in these three tracts and in the state as a whole.

Table 5.3
Residential Finance Activity in Selected New Mexico Census Tracts, HMDA 2002

	New Mexico	Census Tract 13, Dona Ana County	Census Tract 14, Dona Ana County	Census Tract 18, Dona Ana County
Total Mortgage Applications	164,080	2299	242	940
Number Applicants Hispanic	38,211	547	139	467
Percent Hispanic Applicants	23.3%	23.8%	57.4%	49.7%
Number of Applications Denied	30,758	441	79	442
Percent Denied[2]	18.7%	19.2%	32.6%	47.0%
Number of Applications Approved[1]	91,091	1176	117	369
Percent Approved[2]	55.5%	51.2%	48.3%	39.3%
Average Loan Amount	$111,387	$86,531	$51,409	$56,137
Median Loan Amount	$96,000	$84,000	$47,000	$50,000
Average Income of Applicant	$68,753	$56,759	$40,622	$43,877
Median Income of Applicant	$52,000	$47,000	$32,000	$36,000

[1] Approved applications are defined as applications for which loans were originated or applications that were approved but were not accepted by applicant.

[2] Other application action types include: Application withdrawn by applicant; File closed for incompleteness; and Loan purchased by the institution.

Loan Applications and Actions Taken. The assessment of New Mexico tract lending activity draws on 3,481 loan applications made in 2002. Of these, 41% were approved and originated (compared to 49% statewide) and 28% were denied (versus 19% for the state). For other action types, the tracts mirror the state. About 9% of colonias tract applications were withdrawn by the applicant (identical to the statewide rate), 7% were approved but not accepted (again, the same as the statewide rate), and about 2% were closed for lack of documentation in both the selected tracts as well as the state as a whole. These figures indicate that the colonias tracts used are primarily within MSAs, as noted above, and that they contain non-colonias residents whose home borrowing behavior is as high as or higher than that of the remainder of the state. In addition, because interest rates encouraged borrowing over most of 2002, even lower-income applicants can be expected to have ratcheted up their borrowing for housing purposes.

Loan actions by income within selected New Mexico tracts show that only 6% of all loans originated in the selected tracts were to applicants reporting income of less than $20,000. Statewide, however, that number drops to only 3%. On the other hand, about 18% of all denials in the three tracts accrued to these low income individuals while statewide, only about 12% were to those applicants reporting less than $20,000 of income. Nearly 50% of tract loans were to applicants with annual incomes less than $50,000. For those with incomes less than $20,000, there was a slightly greater likelihood that their application would be denied than approved (including those approvals which were not accepted). Thus, while there are applications among these very low income groups, a significant number result in denials.

Reasons for Loan Denial. Within the tracts, credit history again is the overwhelming reason for loan denials, accounting for 30% of all principal denial reasons. This is followed by problems with the applicant's debt-to-income ratios (16%) and a lack of sufficient or acceptable collateral (10%). It is important to note that over 30% of all denied applications in these tracts did not report a reason for the denial. For the state as a whole, credit history accounts for 27% of all principal denial reasons, followed by collateral problems (15%) and issues related to the applicant's debt-to-income ratio (13%). Credit history is the dominant reason for all denials across all income brackets.

Racial/Ethnic Characteristics of Applicants. Across all tract applicants included here, 33 % were Hispanic and 28% were white. Excluding those applicants who did not report a race, 53% of applicants were Hispanic and 44% were white. On the other hand, only 23% of all applicants statewide were Hispanic and 42% were white. Excluding applications that did not provide race information, 33% of applicants statewide were from Hispanic applicants and 60% were from white.

Gender. Only 17% of applications were from women; however, gender was not reported in about 23% of all applications so the data for sex of applicant are not indicative of actual loan activity by gender. For the state as a whole, 21% of 2002 mortgage loan applicants were female with about 20 percent not reporting gender. Female applicants tend to be more concentrated in the lower income brackets, as expected.

Income. About 40% of applicants in the selected Census tracts reported incomes below $40,000 and nearly 10% documented incomes below $20,000. In comparison, 28% of applicants from all of New Mexico had incomes below $40,000 and only four percent under $20,000. These figures highlight some of the key differences by state. For example, as shown above, in Arizona only 2% of state applicants had incomes below $20,000.

Loan Purpose. In terms of loan purpose, about 35% of all loans made to residents living within the selected tracts were for home purchase – about exactly equal to the figure reported for the state of New Mexico as a whole. The proportion of loans dedicated to refinancing activities was also similar in the selected tracts (58%) and the state as a whole (61%). The proportion of loans dedicated to home improvement, however, was twice as high as the proportion of loans dedicated to that same purpose throughout the state. In the tracts, about 8% of all loans were earmarked for home improvement while only four percent of loans statewide were reportedly for this purpose.

d. California Colonias

Ten Census tracts were selected for this analysis of home mortgage lending activities in and around the colonias in California. All of these tracts are located in Imperial County and all but one house predominantly Hispanic residents. Census tract 125 is the westernmost tract selected for analysis and its residents are more predominantly Native American. Nevertheless, it is considered a colonias due to the nature of the housing stock and the level of services provided to the community. The following table show lending activity in each of these tracts compared to lending activity reported for the state of California as a whole.

Table 5.4
Residential Finance Activity in Selected California Census Tracts, HMDA 2002

	California	Census Tract 104, Imperial County	Census Tract 107, Imperial County	Census Tract 112.02, Imperial County	Census Tract 114, Imperial County	Census Tract 115, Imperial County	Census Tract 119, Imperial County	Census Tract 120, Imperial County	Census Tract 121, Imperial County	Census Tract 122, Imperial County	Census Tract 125, Imperial County
Total Mortgage Applications	4,940,431	175	151	689	213	246	599	856	359	627	42
Number Applicants Hispanic	657,769	82	87	287	113	135	421	534	245	391	6
Percent Hispanic Applicants	13.3%	46.9%	57.6%	41.7%	53.1%	54.9%	70.3%	62.4%	68.2%	62.4%	14.3%
Number of Applications Denied	558,800	45	45	101	63	64	98	173	79	154	19
Percent Denied[2]	11.3%	25.7%	29.8%	14.7%	29.6%	26.0%	16.4%	20.2%	22.0%	24.6%	45.2%
Number of Applications Approved[1]	2,911,776	78	61	364	82	104	319	437	159	272	17
Percent Approved[2]	58.9%	44.6%	40.4%	52.8%	38.5%	42.3%	53.3%	51.1%	44.3%	43.4%	40.5%
Average Loan Amount	$225,192	$72,537	$77,781	$132,729	$82,070	$86,037	$106,801	$115,431	$99,791	$96,482	$74,286
Median Loan Amount	$189,000	$80,000	$81,000	$142,000	$77,000	$85,000	$116,000	$122,000	$105,000	$100,000	$59,000
Average Income of Applicant	$108,094	$43,261	$44,912	$79,131	$51,000	$53,128	$55,888	$66,924	$55,260	$52,044	$54,385
Median Income of Applicant	$81,000	$38,000	$38,000	$72,000	$35,000	$44,000	$44,000	$58,000	$45,000	$44,000	$39,000

[1] Approved applications are defined as applications for which loans were originated or applications that were approved but were not accepted by applicant.

[2] Other application action types include: Application withdrawn by applicant; File closed for incompleteness; and Loan purchased by the institution.

<u>Loan Applications and Actions Taken</u>. In the selected California census tracts, 3,396 loan applications were made in 2002. Of these 40% were approved and originated and 23% were denied, in line with the results in the colonias in the three other states. Comparisons to the state as a whole are difficult, given the diversity of California; however, statewide, 51% of applications are approved and originated and only 11% were denied.

<u>Reasons for Loan Denial</u>. Credit history again is the principal reason for denials, accounting for 30% of denied applications. Problematic debt-to-income ratios follows, accounting for 12% of all denials with collateral issues the third more frequently cited reason for denial (11%). About five percent of denials were based on incomplete applications – an issue noted by banks which argues for assistance in completing loan applications, possibly language assistance, and financial literacy training. For the state as a whole, credit history is the main denial reason (27%), followed by debt-to-income ratio (15%) and collateral (10%).

By income category, there were only 10 loan applications from individuals with incomes under $10,000. Of those 10 applications, seven were denied, two loans approved (but only one originated) and 1 withdrawn by the applicant (see detail on applicant income by tract). In the next range, 35 loans were originated (40 approved) and 52 were denied. Drilling down to applicant income by denial reason, credit history and debt-to-income ratios are the major impediments faced by applicants with incomes less than $20,000

<u>Racial/Ethnic Characteristics of Applicants</u>. As is the case in the other colonias, Hispanic applicants dominate. Among those applicants living in the selected tracts reporting a racial/ethnic characteristic, 88% were Hispanic and 8% were white. In contrast, only 19% of all applications statewide were from Hispanic applicants while about 60% were from white individuals.

Gender. The proportion of male and female applicants within the selected tracts is about the same as that reported for the state as a whole. In the colonias tracts, about 16% of all applicants were from a woman while about 18% of all applications statewide originated from a female applicant. By income, these female applicants tended to be in the lower income cohorts while the male applicants were more equally distributed across all income brackets.

Income. About 4% of all colonias tract applicants reported incomes less than $20,000 (compared to 1% of all applicants statewide) and 13% had incomes within the $20,000 to $30,000 range (versus three percent for the state). As noted earlier these tracts selected for this analysis are very poor, with the highest median income in all of the tracts still not surpassing the $35,000 mark - $12,000 less than the statewide median income reported in 1999.

Loan Purpose. Refinancing was the major loan purpose in 2002 for both the colonias tract residents as well as residents throughout the state of California. About 61 percent of all loan applications received for homes located in these tracts were for refinancing – slightly less than the 70% of all loans statewide. Thirty-five of all loans originated in the tracts were for home purchases while only 27% of loans statewide were for this purpose. For the poorest applicants in the selected tracts reporting income less than $20,000, 150 loans were made – but only 38 were for home purchases. Moreover, none of these 38 loans were to individuals reporting income less than $10,000.

4. CONCLUSIONS

The principal factors driving families to colonias – low incomes and lack of affordable housing opportunities elsewhere, desire for homeownership, cultural affinities and language issues, and legal status issues – also drive existing housing finance methods. These methods tend to be informal, to accommodate low and often episodic income streams and lack of credit histories, and to address a largely un-banked population.

Focus groups and interviews indicated very little formal lending activity; however, this evidence is qualitative only, based on many anecdotal reports and on a nonrandom pool of focus group participants and interviewees. As a result, HMDA data for 2002 was explored to detect loan applications and loan actions in areas known to contain colonias populations. Because the Census tracts used by HMDA do not conform perfectly to any identified colonias, the HMDA data picks up non-colonias activity as well and thus provides an overestimate of loan applications and actions. Actual lending activity is likely to be greater than that reported by residents but less than that suggested by HMDA.

The tracts included in the HMDA analysis tend to include high proportions of Hispanic and Hispanic Spanish-speaking individuals, lower incomes, higher poverty rates, low education levels, and large families. Owner-occupancy generally is higher than state averages, although that is not always the case. The value of units tends to be less than state averages. As to physical housing conditions, these areas contain high numbers of mobile homes as well as of units without full plumbing or kitchen facilities, thereby limiting the number of units that would meet standard underwriting criteria.

Overall, a general picture of lending activity within the tracts that encompass colonias emerges from each of the states assessed. At the outset, lending activity within these areas was expected to be well below state norms and, to the extent that tracts conformed as much as possible to colonias boundaries, perhaps negligible as focus groups had indicated. The picture provided by HMDA data confirms a lower degree of overall lending activity, with fewer applications and a greater percentage of denials than would be expected in non-colonias areas.

For example, in New Mexico, 16.5% of selected tract households applied for loans, compared to 22.6% for the State of New Mexico. In California, where the tracts that conformed in terms of income and other criteria are located more in very rural areas, only 13% applied for loans as compared to 33.8% for the state. Although less than statewide loan application rates, these numbers are far higher than what focus groups and interviews indicated was occurring. Even with these tracts picking up some non-colonias loan activity, these figures suggest that there is some formal lending activity occurring within and adjacent to colonias. Approvals in both states are less than the state averages and less than colonias tract approvals in either Texas or Arizona. Denial rates in both states are very similar as well: 32.3% in New Mexico and 33.2% in California. These are higher than state averages but may be less than what might be found in colonias that are not defined by census tract as they are in this report. As a general trend, where any loan activity is reported, denial rates in the selected tracts are higher than those reported for their respective states.

Median loan amounts and applicant incomes confirm that non-colonias households are included in each tract leading to a greater amount of conventional loan activity than focus groups indicated. As data that conforms strictly with colonias boundaries (for Census geo-designations that were made for Census 2000) becomes available with the 2004 release of HMDA, a reliable baseline estimate of formal lending activity in types of colonias can be made.

VI. INTERNATIONAL PERSPECTIVES

This section examines colonias internationally based on the literature in order to distill strategic lessons for the Untied States. We start with an overview of the colonia phenomenon in low and middle-income countries, followed by a comparison of colonias in Mexico with those in the U.S. Southwest. This section concludes with strategic lessons from international experience for U.S. colonias.

1. OVERVIEW OF COLONIAS INTERNATIONALLY

In a broad sense, colonias are settlements outside the planning process that lack basic services. As such, they constitute one of the main means of urban development in many low-income and middle-income countries and cities. For example, informal settlement accounts for 60% of Caracas, 40% of Rio de Janeiro, 75% of Santo Domingo, 30% to 40% of most large Southeast Asian cities, and 50% of most Mexican cities.

Informal settlement takes many forms. The two most prevalent overall categories of informal settlement are squatting and informal subdivisions. Typically, squatting involves organized land invasions by groups of low-income households of a parcel identified as vulnerable. The most vulnerable parcels are usually those of governmental organisms – municipalities, paraestatal agencies, and central government ministries. Less frequently, land invasions target privately owned parcels.

The second main mode of informal settlement - informal (i.e. unplatted) subdivisions - closely resembles the process of colonia formation on the U.S. border with Mexico.[23] Typically, a developer – either the original landowner or a subsequent purchaser – subdivides the parcel and sells raw land to households, taking back finance with instruments that function similarly to contracts for deeds in the U.S. In effect, the developer typically leases the lot to households, who must put down a small amount and make monthly payments over a period of time – often 3 to 5 years in developing countries. At the end of the payment period, the idea is that the developer delivers ownership. In reality, the form of ownership delivered is rarely full legal title, and often only a purchase receipt. If the families misses a few payments, they are vulnerable to having the subdivider repossess the property – similar to a contract for deed.

Once they have acquired a lot from one of these settlement methods, households then quickly erect a temporary unit to secure the land – sometimes overnight - and gradually replace the temporary dwelling through improvement and expansion over 5 to 15 years. Although this process is broadly described as "self-help", it often involves not only the labor of family members on weekends and other free time, but that of friends and family, the community through reciprocal obligations, paid contractors, and others. Households usually finance this home building incrementally with individual savings, savings clubs[24],

[23] The state governments along the U.S. border with Mexico and various entities of the federal government define "colonia" somewhat differently.
[24] Savings clubs operate through each member contributing a specified amount each month over a period of years. A different member wins the pot each month through lot until all participants have received funding. This mutual forced savings mechanism is widely practiced in many low and moderate-income countries

occasional windfalls, and remittances from family members living abroad. Housing microfinance, however, has increased in importance recently in supplementing these other sources (discussed below). As the settlement densifies and as households improve their individual dwellings, the community pressures government to extend basic services.

The informal settlement and consolidation process is ritualized in many developing countries. Governments, politicians, households, and infrastructure supply agencies know their roles and how to interact with each other. In particular, households occupy land (either through squatting or informal subdivision) with a clear understanding of the course on which they are involved. In turn, politicians and government officials understand that the establishment of an informal settlement creates a moral and political obligation to gradually extend infrastructure and incorporate the settlement into the city over a period of time. Conflicts do occur – particularly at transition points. At initial occupation, for example, squatting households run substantial risks - of losing their lives and property defending their new land. In turn, local governments not only allow but actually promote informal settlements in suitable areas. Indeed, politicians and powerful local families are often in this business of informal settlement either as a means to gain votes and create a political clientele, or as the investors behind the developers. However, local governments – such as that of Juarez – will frequently use all the powers at their disposal to evict new beachheads of informal settlements located in inappropriate areas – such as sites far from infrastructure lines that require great expenditures to service, high-value central areas programmed to be used for critical community facilities, and land directly above aquifers or next to potable water sources.

Thus, the households of Mexican-American heritage that populate colonias in the U.S. Southwest bring a deep cultural understanding of informal settlement and the role they must play to succeed at it. In contrast, those familiar with colonias in both the U.S. and emerging countries (such as Ward, 1996) agree that governments in the U.S. have much less understanding of the nature of colonias and their potential options for dealing with these settlements.

The current state of knowledge into colonias from an international perspective can be summed up as follows:

a. Colonia Formation

Although colonias typically have socio-economic indices (disease, lack of education, and unemployment levels etc.) many times worse than those of more affluent area, the root problem is essentially one of housing. Colonias form when large proportions of the population that are poor (30% to 50%) have little access to entry-level housing that they can afford. In housing supply and demand terms, large pressures for colonia formation arise when new household formation substantially exceeds the production of new entry-level units.

Thus, colonia formation is a structural issue involving low incomes and housing. In most Latin American countries, the bottom 70% of the population (Ferguson, 1999) cannot afford to purchase the most inexpensive unit produced and financed commercially.

(especially much of Latin America and Asia), particularly among low-income households and in countries with undeveloped financial systems. Often, members use their winnings to invest in their house.

Hence, these families must house themselves through other means. On the US border with Mexico, most counties report that 35%-45% of their population is poor, about 30% cannot afford to pay the fair market rents for a one-bedroom apartment, and virtually no new housing affordable to these households (in the range of $40,000 to $50,000) gets built.

Under such circumstances, many low/moderate-income households will seek homeownership through various types of informal or other unsanctioned means. Colonias (unplatted subdivisions) are one of these forms. If colonias are suppressed, however, this demand for housing and homeownership will emerge in other ways, through overcrowding of existing colonias and other areas, central-city tenement formation, or other means.

It is possible to stop new colonia formation. However, success requires a concerted, massive, well-funded, and long-term effort to produce entry-level housing. For example, both Chile and Costa Rica have stopped colonia formation by channeling a 3% to 5% of their central government budget into housing (compared to roughly 2% in the U.S.) over the last twenty years and developing large-scale delivery systems to produce entry-level housing (see Ferguson, 1996). In contrast to most countries in Latin America and other developing regions, both Chile (experience described below) and Costa Rica have largely halted new informal settlement.

Thus, the main means of slowing colonia formation internationally has been to produce substantially more entry-level housing affordable for would-be colonia residents. In contrast, prohibiting colonias formation through planning sanctions and, even, refusal to extends services to new areas has proved an exercise in futility. Households settle anyway. Indeed, the vast areas of informal settlements of most developing country cities have made land-use and master planning largely into a fiction.

b. Colonias solve the individual's housing problem but at great public and private cost.

Although colonias solve the individual family's housing problem, they do so at great cost to the household and to society at large.[25] The public costs are most apparent in terms of the infrastructure package, while the private ones are borne largely by the colonia household and community. In Latin America, the provision of a basic infrastructure package by government though colonia upgrading (re-ordering, land title, water, sewer, drainage, street paving) costs various multiples the amount of providing this same package to a new housing project. Metrovivienda – a large public land development agency in Bogotá, Colombia – has calculated that the cost of providing basic infrastructure to informal settlements costs three times that for new development (Municipalidad Mayor de Bogotá; also see Ferguson, 1996b).[26] Various students of

[25] This fundamental conclusion has been constant of colonia work in developing countries (Ferguson, 2003). Recently, U.S. housing experts have started formulating this finding in virtually identical form. Henneberger on p. 2, for example, notes: "For all of the problems, colonias do solve the individual's housing problem."

[26] See pp. 57-58 of Municipalidad Mayor de Bogotá, 2002. Paving informal settlements costs 1.3 times that in formal-settlements, sewers cost 3.2 times, and storm sewers cost 2.8 times. In addition to this added

colonias in the US have made similar observations (Ward, 1996; Chapa, 1997). Chapa (1996, vol. 2, p. 17) notes: "The cost of extending infrastructure to colonias is more expensive than new affordable housing." Section 6.4.a of this report contains preliminary comparisons of the cost of colonia upgrading in the US versus that of new development that support this finding.

The policy implication is clear: fixing a broken settlement problem costs much more than preventing one (through building new entry-level housing), and burdens government with large unfunded public liabilities mainly in the form of subsequent infrastructure extension costs (but also in extra health and social service expenditures). Although the mandate of this report is to deal with finance of the home and land in colonias – rather than infrastructure – keeping this fundamental policy lesson in mind is critical to effective approaches to U.S. colonias, in general.

That said, however, no democratically elected government has succeeded in consistently eradicating colonias once established.[27] Thus, although slowing colonia formation through new entry-level housing is highly desirable, government faces a moral and political imperative to provide services and upgrade colonias once established. In practical terms, colonias that have existed for more than a couple of years are generally impossible to remove, will not disappear, and must be dealt with.

c. Upgrading and/or slowing colonia formation requires a wide range of housing "solutions."

The alternatives for upgrading of existing colonias and for new entry-level development that can help prevent colonia formation are best thought of as a wide range of housing "solutions" rather than just the purchase of a complete single-family unit. These options include secure tenure of the property (in the US colonias, conversion of the contract for deed into a warranty deed), improvement, expansion, construction of a core unit on a lot owned by the family, additional accessory units on the lot (for family members and for rental), and different housing technologies (modular and prefabricated homes). The housing institutes of Mexico's 32 state governments – as other housing entities that focus on low/moderate-income households in developing countries - typically focus on these and other types of lower-cost housing solutions. In contrast, the purchase of a commercially-built, complete stick-built unit is the highest cost form of housing affordable only to the upper middle class in the great bulk of low and middle-income countries.

Affordable housing in developing countries also involves gradual upgrading of the ownership rights of households of their property – from illegal occupation to secure tenure and – sometimes – full legal title. Payne has identified seven common forms of residential tenure to property used in low and moderate-income countries (also see Durand-Laserve and Royston). Some developing country cities have undertaken large-scale experiments with forms of ownership intended to preserve the affordability of low/moderate-income housing. Similarly, upgrading of U.S. Colonias involves

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infrastructure costs, government must re-order settlements by straightening roads, leaving space for communal facilities, and - as a result - relocating a portion of households.

[27] In contrast, the authoritarian governments of the Soviet Union and China stopped rural to urban migration and the formation of new urban settlements of migrants from the 1950s through the 1980s using systems of internal passports and outright repression.

improvements not only of the house structure and the community infrastructure, but also, the legal status of the individual properties and neighborhoods. Box 6.1 illustrates this comparing the housing and tenure "solutions" of developing countries with that of the U.S.

Box 6.1 – Range of Unit Types and Tenure in the U.S. and Developing Countries

Alternatives to freehold tenure in the U.S. include cooperative housing, housing for special populations with use restrictions (such as senior communities that only permit residents over age 55), and community land trusts. These other forms of tenure place limits on the use of the property beyond the restrictions normally associated with freehold (such as zoning and land use). These restrictions lower the property's market value in order to preserve access to this housing solution - often by low and moderate-income households and/or other special populations (e.g. the elderly).

However, these forms of alternative tenure are miniscule in size and variety in the U.S. relative to that of developing countries. In most developing countries, 30% to 70% of owner-occupants hold rights short of full legal tenure (60% in Mexico, 47% in Nicaragua). One expert on the topic identifies seven forms of tenure that convey ten different levels of property rights in most developing countries.[28] Some developing countries and cities have created types of tenure specifically to maintain housing affordable to low/moderate-income families on an on-going basis. In contrast, a miniscule share of owner-occupants hold rights in some form other than freehold title in the U.S.

The situation is similar with the unit type. The main physical alternatives to a detached single-family house in the U.S. are condominiums, town homes, mobile homes, and manufactured homes. The share of these alternatives, however, represents less than one fifth of the housing stock. In some areas – affluent suburbs, for example – zoning and subdivision standards prohibit alternatives to the detached Single Family Housing outright or eliminate their economic viability.

Similar to the scarcity of alternatives to freehold title, this modest diversity of lower cost housing solutions suitable to low/moderate-income households in the U.S. is far less than that of developing countries. The limited diversity that does exists in U.S. housing also achieves comparatively little in cost savings capable of reaching down to families to bring them onto the ladder of homeownership. In comparison, the cost of a serviced lot ($2,500 to $4,000) – the starting point of many low-income families on the ladder of homeownership – is only 6% to 20% that of a complete basic unit ($20,000 to $35,000) in Mexico.[29]

[28] See G. Payne, "Chapter One – Introduction" in G. Payne (ed*). Land, Rights, and Innovation, ITDG Publishing*. London. 2002. Many of these forms of tenure and the property rights are de facto in developing countries. In other words, long use and tradition has resulted in their widespread acceptance and institutionalization. The legal systems of developing countries often function unevenly in recognizing different types of de facto tenure.

[29] For example, low/moderate-income housing solutions and their cost in Mexico include minor improvement ($5,000-$1,500), an unserviced lot ($500-$2,000), major improvement ($1,500-$3,000), a serviced lot ($2,500-$4,000), replacement of a deteriorated unit with a new core unit or construction of an accessory unit on a lot owned by the family ($4,000-$6,000), purchase of a new commercially built semi-finished core expandable unit of 30 to 45 square meters ($10,000-$18,000), and purchase of a finished complete unit of 45 to 60 square meters ($20,000-$35,000).

In summary, the lack of choice in tenure and unit type hampers the ability of U.S. households to get on the ladder of homeownership and move up. Expanded choice has a critical role to play in well-functioning markets, in general, and in housing markets, in particular. Households require different types of housing solutions for different stages of the life cycle and households with widely different incomes find their housing in different niche markets. Hence, it is quite a paradox that developing countries offer a wide choice in housing types and tenure compared to the rigidities that characterize U.S. supply.

d. Financing.

Two financial mechanisms developed largely in Latin America bear particular relevance to colonias and to low/moderate-income housing in the U.S.: direct demand subsidy delivery systems and housing microfinance.

i. Direct Demand Subsidy Delivery Systems

Direct demand subsidy delivery systems join three categories of finance to produce new entry-level solutions for would-be colonia residents: household savings, subsidies, and credit.

The direct demand subsidy program of Chile is the best known example, and has become the standard for other Latin American countries. Chile's housing system and direct demand subsidies have been analyzed in depth (for example, see Ferguson, 1996a; and Rojas, 1998), and are dealt with only briefly here. Until the mid 1970s, Chile had a confusing and unsystematic variety of approaches to finance of low/moderate-income housing that proved ineffective, and resulted in substantial new colonia formation. In 1976, Chile adopted its current direct demand subsidy system. In essence, this system provides a portable voucher in the amount of US $4,000 to $7,000 to first-time homebuyers that meet income eligibility guidelines for the purchase of a new core expandable unit. Households must match this voucher (the direct demand subsidy) with a down payment and a market-rate mortgage. The point system used to select among applicant households rewards (gives more points for) greater need in the form of lower income, larger family size, and poorer existing housing and for greater effort in the form of the length of time and regularity with which households have made deposits into a bank account for their down payment and the amount of the down payment. Production of new core units under Chile's direct demand subsidy system has exceeded new household formation in Chile for the last fifteen years. Largely as result, formation of new informal settlements has stopped in this country.

The financial mechanism employed in direct demand subsidy systems is also of interest as it: (a) mutually leverages three categories of finance (household savings, subsidies, and credit); (b) provides incentives for households to help themselves (more and more regular savings) rather than just have lower incomes; and (c) stimulates financial institutions to work with and serve moderate-income households through lowering the loan-to-value ratios and creating effective demand by bridging the affordability gap with the portable voucher. A similar approach may have use in the U.S. both for colonias and entry-level housing more generally (Ferguson, 2002; Merrill, 2002). Many of the current approaches to colonias upgrading – for example, Individual Development Accounts, which stimulate household savings – have begun to address part of the finance challenge, but leave out much.

Chile's direct demand subsidy system including its "tripartite" finance package has served as a model for the rest of Latin America (Ferguson, 1996a). Costa Rica has made particularly good use of this low/moderate-income housing delivery system, and tailored it to this country's conditions. Experience in the rest of Latin America with direct demand subsidies, however, has proved less successful than in Chile and Costa Rica for a series of reasons.[30] Most fundamental, home-finance institutions have been unwilling to extend a mortgage to low-income households even when these families can afford the payments on these credits. The small size of the loan (with correspondingly small profits, ceteris paribus), less standard credit of the borrower, frequent lack of full legal title, the location of these houses in low-income neighborhoods (diminishing its value as collateral), and other factors join to make this business unattractive to conventional home lenders. In somewhat similar fashion, as we shall see, home finance institutions in the U.S. have made little effort to serve many families with sufficient income to afford a basic house that otherwise might settle in colonias along the U.S. border with Mexico.

ii. Housing Microfinance

Housing microfinance is emerging as a key solution to the drawbacks of other approaches to low/moderate-income housing finance in low and moderate-income countries (Ferguson; 1999; Ferguson; 2000; Ferguson; 2003; Daphnis and Ferguson; 2003). From a public policy perspective, housing microfinance (HMF) has the potential to transform programs in developing countries by providing the missing link: sustainable credit finance to low/moderate-income households.

HMF lies at the intersection of microfinance and traditional mortgage finance, with characteristics intermediary between these two practices. Loan amounts (US $500 to $5,000) are much smaller than mortgage loans but somewhat larger than microenteprise loans. Loan terms (1 year to 8 years) are much shorter than traditional home credits, but longer than those of micro business lending. Security for small home improvement/expansion loans consists typically of co-signers, jewelry (India), the borrower's forced savings (many Asian countries), holding the para-legal documents to the property, and other non-mortgage collateral. Some HMF lenders take a mortgage lien when the costs and legal structure permit for larger loans for new construction of a core unit.

A number of key reasons lie behind the great potential importance of HMF in developing countries. Most fundamental, the characteristics of HMF well suit the progressive

[30] Direct demand subsidies have spread to other regions, including South Africa (Department of Local Government and Housing).The less positive performance of direct demand subsidies outside of Chile and Costa Rica comes mainly from three factors. First, a direct demand system requires a fairly high level of administrative competence, capacity for information management, and a reasonable level of transparency joined with strong safeguards against corruption (to avoid patronage via channeling the subsidy to political supporters and friends). Chile has these characteristics, but much of Latin America lacks one or more. Second, direct demand subsidy programs require a sizeable continuous funding stream to be effective. Typically, the funding stream must be at least 1-2% of central government budgets and continue for a minimum of ten years. Many central governments are unable to meet such a fiscal commitment. Third, the financial structure of the direct demand subsidy has drawbacks in reaching the lowest income households. In particular, Latin American financial institutions typically are uninterested in extending credit to low-income and most moderate-income households, even if they can afford this credit. Hence, the credit piece is unavailable to leverage the direct demand subsidy.

housing process used by the great bulk of low/moderate-income majority to build their homes over five to fifteen year periods. In additional to better suiting households, the short terms of housing microfinance much better fit the short-term funding sources (with the bulk of financial liabilities often one year or less) available to financial institutions in developing countries. Hence, HMF is the type of home finance best suited to fund most housing investment in most developing countries. Consequently, the effective demand for HMF is typically large in this context.

Microfinance institutions (MFIs) have a competitive advantage in developing HMF relative to traditional home lenders. MFIs understand and have systems in place to lend to low/moderate-income households, while traditional home lenders (which have experience extending credit only to the middle-class and above in developing countries, and often face regulatory constraints that require a mortgage lien) do not. Recognizing this important business opportunity, most large microfinance institutions in Latin America now offer a housing product, in addition to their micro enterprise product. The example of MiBanco in Peru is illustrative – see Box 6.2.

The U.S. context is dramatically different in key respects from that of the low and middle-income countries in which housing microfinance has developed. Most fundamental, the U.S. financial system is the deepest and most sophisticated in the world and has succeeded to a fair degree in "democratizing credit" – i.e. going down-market. Nevertheless, as progressive housing in colonias and other approaches to solving the housing affordability problem gain ground in the U.S. and as gaps in credit provision for housing continue, housing microfinance may have some market niches in this country (Ferguson in Fannie Mae, 2002).

Box 6.2 – Housing Microfinance in Latin America; the Experience of Mibanco in Peru[31]

With 70,000 active borrowers, Mibanco is one of the largest MFIs in Latin America. The organization started as an NGO but became a commercial bank in 1998. The conversion into a deposit-taking institution gave Mibanco the funding necessary to expand from micro enterprise lending into other areas. In mid 2000, Mibanco added a housing product, Micasa – in the form of a loan for improvement, expansion, sub-division, or rebuilding or replacement of existing housing. After 12 months of operation, Micasa had 3,000 clients, with portfolio at risk greater than 30 days of 0.6% and a return on loan portfolio of 7-9%. Loan size ranged from $250 to $4,000, and averaged $916. Interest rates were 50% to 70% per annum. These rates are less than those Mibanco charges on micro enterprise loans. Loan tenors were as much up to 36 months, but most households preferred loans of 6 to 12 months, and the average loan tenor was 11 months. Mibanco uses its analysis of repayment potential and household assets to guarantee most loans. Mortgage liens are sometimes taken, but only on larger loans – those above $4,000 – if the client already has clear legal title. In total, mortgage liens secure only 7% of Mibanco's home loans. The housing loan product has strong profitability and demand, and Mibanco expects such loans to represent half of its portfolio within three years. The market and loan process:

- The market is huge. Roughly one half of the population of Peru has both the effective demand and need for the type of home loan that Mibanco offers. Virtually no other commercial financial institution offers such a product, and the government programs that attempt to serve this group work poorly, offer large per-unit subsidies, and – hence – have very small scale.
- A two-month pilot test in four of Mibanco's branches preceded the launch of the full program. Little promotion is necessary to sell the product, and its marketing occurs by word-of-mouth recommendations.
- Mibanco uses its branch network and its existing loan officers to market the product.
- Mibanco targets the upper rung of low-income households in formal-sector employment. About 90% of these borrowers earn less than $250 per month. About 85% of these households have a stand-a-lone home. About half are women.
- Loan processing is rapid and loan approval occurs in three days. Experienced loan officers with high-quality portfolios are allowed to approve their own loans.
- Mibanco provides no assistance to the household borrower in construction, although the borrower is required to submit a construction budget as part of their loan application.
- Mibanco loan officers visit the few clients who have not repaid on time within a couple days of the payment becoming late. Clients who remain delinquent after this first visit received further follow-up visits and notification letters. Loan officers have a strong incentive not to allow clients to reach this point as their incentive pay is reduced when clients are transferred to collection.

[31] This summary is derived from a full-length case study of Micasa sponsored by Cities Alliance. See Brown and Garcia, 2002.

2. COMPARAISON OF COLONIAS IN MEXICO AND IN THE U.S.

Colonias on the U.S. border and those in Mexico share many broad similarities. In essence, they are both informal settlements. They form because of a large mismatch between supply and demand for entry-level housing in a context of widespread low incomes. As regards unplatted subdivisions, developers use similar methods to subdivide raw land and use lease-to-purchase instruments to sell these unserviced lots to families. Families quickly arrange for temporary units (stick-built shacks in Mexico, often old trailers in the U.S.) and then build their permanent home over longer periods (average of 8 years in the U.S., 5 to 15 years in Mexico). Households then pressure government to provide services, although Mexican colonias are much more organized and politically astute than U.S. ones. The resulting settlements are heavily homeowner (85% in U.S. colonias; and 85% in recently settled Mexican colonias, although a large rental market develops in old, established Mexican colonias).

Perhaps most important, both U.S. and Mexican colonias are "slums of hope." Residents are a self-selected group that are actively striving to better their situation – if not for themselves, for a better life for their children (a recurring phrase in focus groups in U.S. colonias conducted by this research), which gets expressed as a passion for homeownership and home improvement.

However, Mexican and U.S. colonias also demonstrate differences with important implications:

a. Colonia Formation

Unplatted subdivisions are one of the two most common overall categories of Mexican colonia formation (with the other as organized land invasions). However, a large number of permutations (over 30) of informal settlement have been identified (ILD), as noted above. In the U.S., colonia formation is much more homogenous (Ward). Typically, the original landowner (often a farmer) either acts as the developer or sells his land (frequently at double the price for agricultural uses) to a developer. Important financial groups and local families are with some frequency either the investors behind the developer or the landowner. The developer then gets a surveyor or engineer to develop the subdivision on paper. The next step is advertising the lots. As laws concerning unplatted subdivisions have become more restrictive in U.S. Border States, this advertising has become more clandestine. The developer then sells lots at very low down payments – even as low as $25 – and enters into a contract for deed with the lot buyer stipulating monthly payments of $100 to $300 until the debt is paid off – with terms often of around 10 years. By the time local officials realize a colonia is developing, hundreds of lots may be sold and many families may be living there.

b. Location

Mexican colonias are more urban and closer to infrastructure lines. With decades of experience in colonia formation, Mexican officials in most municipalities will actively combat new informal settlements in distant and other highly inappropriate areas, knowing that eventually they will have to pay the high cost of gradual infrastructure extension to these sites. Although some U.S. colonias are urban, the bulk are semi-rural and rural, and much farther from infrastructure lines. This feature of U.S. colonias puzzles Mexican officials familiar with them.[32] One Juarez planner interviewed noted: "U.S. planners must be crazy to allow these distant settlements."

c. Size and Density

Typically, Mexican colonias are of much greater population size and more dense than Texas colonias. A number of identifiable colonias exist within the Mexico city area of well over one million people each. The average Texas colonia contains around 250 people. The closer location, greater population, and greater density of Mexican colonias make service provision less expensive. In Latin America, the consensus as regards established colonias is that they should be "incorporated into the texture of the city" – the phrase frequently used by academics and planning professionals.

d. Jurisdiction

U.S. colonias almost invariably lie outside city government boundaries in unincorporated counties. U.S. city governments have generally refused to incorporate adjacent colonia areas or to consider them part of their extra territorial jurisdictions because of the perceived costs (Ward, p. 108). Hence, colonias end up seeking services from a range of infrastructure supply agencies[33], while the responsibility for service provision is less defined except in such exceptional cases as Sunland Park, New Mexico, an urban colonia of 17,000 people near El Paso that incorporated as a city. The powers of county governments that usually deal with colonias differ greatly. While California counties have the same zoning and land-use power as cities, Texas counties lack them. As the Latin American municipality encompasses both urban and rural areas, much less jurisdictional fragmentation exists. Hence, the costs and benefits of action or lack of action on colonias are internalized within one government in Latin America, promoting more rational behavior than in the U.S.

e. Development Standards

In low and middle-income countries, governments typically create dual development standards for subdivision and building (Ward). One set of standards applies for middle and upper-income housing. These higher standards are similar to that used in advanced industrial countries. The other set of standards applies for low-income housing – particularly for government-assisted projects. These alternate standards allow lower cost materials, less generous dimensions, and progressive provision – starting with the basics and adding gradually. Frequently, local governments in low and moderate-income countries designate certain areas as "social housing zones" (the term used in Latin America and the Caribbean) to encourage low-cost entry-level housing solutions by public and private-sector developers and progressive improvement over time.

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[32] Ferguson and Marez (2003 forthcoming) and Ward (1999, p. 134) observe that Juarez as many other Latin American cities will not provide services to distant colonia areas.

[33] Ward (1999) notes on p. 142 that Texas colonias must get water generally from outside of incorporated cities. Nonprofit rural wate supply corporations service about one-half of Texas colonias that have water. Other alternatives include shallow wells, coin-operated tanks, trucks, neighbors, and irrigation ditches. The Texas Water Development Board requires that a legally recognized area (city, nonprofit water supply company or other such entity) must sponsor a colonia to get water.

U.S. jurisdictions including those along the Border typically use only one set of high standards, thus discouraging creativity in production of low-cost housing. To the extent that subdivision norms differ, U.S. governments have attempted to enforce higher standards in areas under pressure for colonia formation in an attempt to prevent these settlements. For example, the state of Texas now requires enforcement of its Model Subdivision Rules in unincorporated counties along the border, but not in counties beyond the border, which still are unable to enforce such ordinances.

f. Community Organization

Mexican colonias typically enjoy a much higher degree of community organization and political influence than U.S. colonias for a series of reasons. The much greater population – half of the electorate in Mexico - location of the colonia within the municipality and in closer proximity to urban areas, and clear understanding that improvement of the colonias comes with organization and exercise of political pressure promotes the greater level of organization of Mexican colonias. Although the great bulk (over 80%) of U.S. colonia residents are U.S. citizens, fear of deportation, language barriers, and unfamiliarity with U.S. institutions contributes to stunting the level of organization and political influence of colonias in the U.S. Thus, relative to Mexican colonias, U.S. colonias enjoy fewer organizational tools for improvement.

g. Overall View of Colonias

After in-depth study of colonias on both sides of the U.S.-Mexican Border, Ward (1999) comes to the conclusion that colonias are viewed in fundamentally different ways. In Mexico, colonias are viewed as permanent settlements resulting from a mismatch in housing demand and supply. The solution is to provide services to incorporate these areas gradually into the texture of the city and to produce more entry-level housing. In the United States, Ward notes, colonias are viewed more as a "health problem" and an "aberration." In short, the current U.S. view resembles that of low and middle-income countries forty-five years ago when informal settlements were first rapidly expanding in their major cities. At that time, developing country governments sought to prohibit or eradicate informal settlements.

Resources available for colonia upgrading. Notwithstanding Ward's characterization, the great difference in the resource base potentially available to upgrade colonias supports a somewhat distinct view of this problem and appropriate strategies for its solution in the United States compared to Mexico. For example, the city of San Diego has an annual budget over 61 times that of the municipality of Tijuana (Ward, p. 22). A HUD staff person with long experience in working on both sides of the border in colonias sums up the implications: "The money is there to deal with colonias in the U.S., if we can identify and apply it.[34]"

[34] Interview with Esperanza Holguin.

3. STRATEGIC LESSONS FOR THE US FROM INTERNATIONAL EXPERIENCE

Thus, a number of fundamental strategic lessons emerge from international experience with colonias for the U.S.

Colonias are essentially a housing problem. They arise when new household formation substantially exceeds the production of new entry-level housing where a substantial share of the population (typically 30% to 50%) has low incomes. This situation now characterizes most of the U.S. border with Mexico. Henneberger notes that 37% to 47% of households cannot afford the fair market rents in Texas counties along the border, while Ward (1999) notes that Texas counties along the border report that 35 to 45% of residents have incomes below the poverty line. As to new production of entry-level housing, local government missed the opportunity to build massively in the 1970s and early 1980s (Henneberger) when federal funding was available for this purpose. Resources for affordable housing production have now shrunk to about a quarter (Chapa) of their former level.[35]

Two overall approaches have relevance for dealing with the colonia housing problem: upgrading of existing colonias and production of new entry-level housing for would-be colonia residents.

Once colonias have been established for a couple of years, they will not disappear, because the mismatch in entry-level housing supply and demand continues to replenish their population. Thus, eradication of existing colonias will not work. Similarly, prohibiting colonias through regulations and exercise of police power tends to shift the location and form of informal housing, rather than stop it. Nonetheless, elimination has been the main focus of U.S. public policy on colonias (Chapa, vol. 1, p. 30).

In this regard, experience in low and moderate-income countries teaches a fundamental lesson. The existence of settlements without the minimum services necessary for modern life (water, sanitation, and electricity) has proven politically and morally unacceptable even in developing countries. Hence, democratically elected governments throughout the world end up upgrading the great bulk of established colonias. In addition, attempting to stop informal settlement is counter-productive as long as demand pressures (new household formation) greatly exceed supply (new entry-level housing) in a context of widespread low incomes. This lesson has gradually begun to dawn on policy makers in the U.S. For example, a study of the Texas Water Development Board (p. 21) notes: "Most local officials report that colonias cannot continue to develop, but they do." In addition, the large thinly settled areas that constitute most existing U.S. colonias offer ample room to absorb new demand through densification, a process now underway.

Upgrading involves two sets of substantial investments: in infrastructure and in home construction. The heavy cost of infrastructure investment means that governments should plan ahead in a variety of ways. First, governments typically must stagger infrastructure provision over a substantial time period to make it affordable. Some municipalities in Latin America establish an official policy to inform the public and guide

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[35] Chapa notes on p. 9 of volume 1 : "From 1979 to 1990, federal funding for low-income housing fell 75% - from \$40.8 billion to \$10.2 billion."

infrastructure provision to colonias. For example, the municipality of Juarez, Mexico – adjacent to El Paso, Texas – extends services to colonias in three phases of five years in its upgrading program. The first phase of five years extends water and secures the household's property tenure. The second consists largely of drainage and green areas. The third involves provision of local schools and other community facilities. Thus, Juarez seeks to move every informal settlement to the next phase every five years – resulting in a fifteen-year goal for completion of upgrading. Ward (2003) as others emphasizes that the "sequencing of infrastructure" is critical. Proactive governments also channel informal settlement – particularly by actively discouraging new colonias in inappropriate locations such as distant sites far from infrastructure lines that require great expenditures to service.

Infrastructure provision involves a large public subsidy. Home construction, however, can occur largely by leveraging the resources of households. In this regard, the key piece is housing microfinance – which is, in effect, the form of credit finance best suited to incremental homebuilding process used by colonia residents. Rather than focus exclusively on new commercially-produced stick-built units – the highest cost housing solution – both upgrading and new entry-level housing best provide a wide range of housing alternatives, including improvement, expansion, core expandable units, accessory units, and manufactured and prefabricated homes.

The other main approach to colonias – still relatively untried in the U.S. - is to produce substantially more new entry-level housing for would-be colonia residents. This approach is highly preferable to upgrading colonias because new development costs are much less in the long run (in infrastructure costs, health and social expenditures etc.) and new development produces superior living environments. However, entry-level housing production is more difficult strategically because it requires establishing a housing delivery system to achieve scale. Joining a demand voucher, with a market-rate credit, and the household's down payment constitutes the delivery system used in most of Latin America for new entry-level housing. In the U.S. – as we shall see – a key bottleneck to greater production has been the lack of availability of mortgage money with the flexible underwriting standards necessary to qualify would-be colonia households earning $15,000 to $25,000 per year.

Development of new low-cost housing has great importance for moderate-income housing markets, not just low-income ones. Moderate-income households tend to occupy units affordable to low-income families in a context of scarcity of affordable housing. In this regard, Chapa (1996, p. 11, vol. 1) notes that "only one-third of households occupying units affordable to families earning less than the HUD adjusted median family income were actually occupied by families earning below this amount" along the Texas border. In effect, low-income families are typically the last in line for low-cost units, and end up paying more than many moderate-income families for housing.[36]

It is possible to stop colonia formation by raising production of entry-level housing to a substantial share of low/moderate-income household formation. However, success requires a streamlined delivery system and a substantial investment over the long-term. Short of such a concerted effort, it is possible, however, to slow colonia formation through expanding production of entry-level housing.

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[36] Chapa continues: "Low-income families pay excessive housing costs because two-thirds of low-cost units are occupied by families who can afford to pay more."

VII. STRATEGIES AND MECHANISMS FOR ADDRESSING COLONIAS HOUSING CONDITIONS

1. OVERARCHING THEMES

Over time in the U.S., federal and local policies have addressed the key housing issues of availability, adequacy, and affordability with often slow, but steady, success - although within distressed communities and areas of the country, these problems persist. In particular housing markets and with fluctuations in economic conditions, these problems often reemerge or become more severe. For colonias areas of the U.S. Southwest, these fundamental problems characterize the communities and, as new colonias appear and existing colonias expand, these housing issues pose major threats to a rapidly escalating population group.

Within the colonias areas examined in this report and based on anecdotal evidence from nonprofit organizations working in the colonias, a substantial share of the population (typically 30% to 50%) has incomes sufficiently low as to make finding affordable rental housing difficult, place homeownership out of reach, and, as a result, fail to stimulate formal-sector development of needed housing. This situation currently characterizes a significant proportion of the U.S. border with Mexico. Henneberger (1997) notes that between 37% to 47% of households cannot afford rents equivalent to HUD's fair market rent levels in Texas counties along the border. According to Ward (1999), Texas counties along the border report that 35% to 45% of residents had incomes below the poverty line.

At the same time, focus groups, interviews, and other studies confirm the overwhelming preferences of existing and potential colonias residents for homeownership. Given their preferences, income levels, and the lack of rental housing options, these households are purchasing land or land and dwelling units in a variety of traditional and nontraditional ways. However, the housing available to them at affordable prices typically is substandard.

Based on the growing literature on colonias housing, interviews, and the data available to assess housing conditions and needs, as stated in the previous chapter, two overall approaches are proposed in order to address the growing colonias housing problem: (1) production of new entry-level housing for "would-be" colonias residents in areas where growth can be cost-effectively accommodated; and (2) upgrading of existing colonias housing and infrastructure. The next three sections of this chapter elaborate these strategies and the issues attendant in their development, and propose policy and program recommendations to implement them. The final section provides recommendations on future, key action-oriented research necessary for development of effective colonia programs and policy.

2. PROVISION OF NEW ENTRY-LEVEL HOUSING: PRODUCTION AND FINANCE.

Households earning within the $15,000 to $25,000 income range are estimated to constitute most of the upper third of many colonias, especially those located in or adjacent to urban areas. The production of entry-level housing affordable to families within this or a similar income range could directly reduce the unmet demand for homeownership that continues to fuel colonia growth. Equally important, providing homeownership opportunities for these relatively better-off families frees up more of the existing low-income housing stock in the colonias for the relatively lower income families to rent or try to purchase.[37]

Issues of the quality of colonias rental and owner-occupied housing stock aside, given the general scarcity of colonias housing units, initiating a filtering process through development of new entry-level units could provide a start in alleviating housing availability problems. Currently, many of the wealthier colonias households occupy units that would be affordable to worse-off, lower-income families. New entry-level units would be available to those colonias families that can qualify for conventional housing finance (and, to the degree possible, to the income tier just beneath that level), thereby freeing the more affordable stock to lower-income households. For instance, Chapa (1996a) notes that low-income families in colonias wind up paying excessive housing costs as roughly two thirds of the units affordable to low-income families are occupied by those who can afford to pay higher rents or house payments. In effect, low-income households are typically the last in line for low-cost units, and end up paying more than many moderate-income families for housing.

a. Need for Flexible Mortgage Credit.

The lack of flexible mortgage money (See Box 6.2) for creditworthy households earning $15,000 to $25,000 (or whatever income range a particular project is structured to target) is the single most important obstacle to expanding the production of entry-level housing for this group. Only 40% of mortgage applicants in selected areas in Border counties containing colonias resulted in loan originations. Such numbers and the statements of many respondents interviewed as part of this report strongly suggest that a substantial share of creditworthy households earning $15,000 to $25,000 per annum along the Border are unable to find a mortgage to purchase a home, even when a suitable unit is available.

The most striking evidence of the lack of flexible mortgage money involves the experience of housing developers that have produced a $40,000 to $50,000 product affordable to these households. The low-cost developers that have lacked access to flexible take-out mortgage finance have failed, and been unable to commercialize their product at a scale sufficient to justify continuing in this business. Various community development corporations that have developed sources of flexible mortgage money and

[37] Interviews, observations, and CDCs indicate that the rental stock in the colonias is very small. When units are rented, the lease is often tied to a lot purchase. For example, a family might rent a trailer on a piece of land while they buy the land and build their house. When their house is sufficiently built out to move into, the trailer may or may not be placed elsewhere and used as rental stock. This is not typical rental stock.

joined this credit with modest subsidies have succeeded, while arrears rates have been low.

Box 7.1 - Flexible Mortgage Money

Fannie Mae and Freddie Mac set the rules for underwriting virtually all mortgages loans in the "prime" market because: (a) these secondary market financial institutions purchase about 60% of all mortgage loans. In order to sell a loan to Fannie or Freddie, the first-tier lender Savings and Loans, mortgage banks and brokers, commercial banks, credit unions etc. - must certify that it meets their rules (contained in underwriting manuals) and use their forms; (b) even if the first-tier institution does not immediately sell the loan it originates to Fannie or Freddie, most institutions highly prefer to have the option of doing so at a latter point. Again, in order to do this, the first-tier institution must follow Fannie and Freddie rules and use their forms when originating the loan.

-The Fannie and Freddie rules deal with two sets of general concerns.[38] The first have to do with the property and structure. The property and structure must have a market value sufficient to support the loan, and must also meet certain other standards – for example, be on a permanent, suitable foundation, be a finished unit, etc. The second set of rules have to do with the creditworthiness of the client. These rules have taken the overall form of a credit score. A credit score (such as that by Fair and Isaacs Company – the "Fica" score) is calculated based on a series of parameters including the length of employment of the household, the extent of past credit (typically, charge cards, auto loans, and mortgages), and the quality of use (faithful payment) of past credit, but does not take into account the types of payments that families that are out of or new to the mainstream make – on utility bills, rental payments).

-These double sets of underwriting screens (for the property and for the creditworthiness of the household) are certainly highly usefulness and appropriate for most middle-class families that are part of the U.S. mainstream. However, they do not work well for many families that are out of the mainstream, including: (a) relatively new immigrants or long-time residents of enclaves with little or no employment and credit history; (b) non-standard types of housing, including the progressive housing units that families build gradually over years in the colonias; (c) families that use alternative forms of credit; (d) houses located in communities without full complete and standard infrastructure; and (e) non-standard (part-time, seasonal) jobs or household composition; for example, if a large extended family lives together in a unit, many more than one or two working adults may be contributing to the mortgage payment from income from many sources (part-time jobs).

An increasing share of U.S. families fall into these non-standard categories and have difficulty getting traditional mortgage finance. The dramatic growth of "sub-prime" lending over the last decade – in essence, high interest rate loans that do not meet conventional (Fannie and Freddie) underwriting standards – is evidence. The great bulk of colonia residents and many other low/moderate-income families along the U.S. border with Mexico cannot get standard mortgage finance for this reason. Ironically, experience in other countries (e.g. Mexico) shows that creditworthy low/moderate-income families that have been excluded from the system, in fact, value credit more and can be better credit risks (pay more regularly) than middle-income households if given the chance and if the lending is done appropriately.

-In this context, "flexible mortgage money" has the characteristics necessary to suit these creditworthy low/moderate-income households that are now excluded from receiving conventional mortgage finance. These characteristics, essentially, involve a wider range of property types and a wider range of credit and income arrangements. The variety of property and collateral should include: (a) core expandable units, which start with a basic unit and are expanded vertically or horizontally over time: (b) manufactured and modular homes and additions; (c) neighborhoods with partial infrastructure (water, sanitation, electricity); and (d) use of a variety of different types

[38] Mortgage insurers – such as FHA and private mortgage insurance companies – which Fannie and Freddie require for loans above certain loan to value ratios (80% for rental property, for instance) – also have rules for the property and the underwriting, which the originator must meet.

of collateral such as co-signers instead of just a mortgage lien. The variety of income and credit should include: (a) part-time, seasonal, and self-employment; (b) regular money transfers from family members in other parts of the U.S. or other countries; (c) non-standard household composition, involving more than one nuclear family; (d) credit history from paying rent, utility bills, and other types of debt typical of low/moderate-income families.

Developers of low-cost housing who solve the mortgage finance problem have a much greater chance of success. One example is the Lower Valley Housing Development Corporation (LVHDC) in Fabens, which makes home loans to families earning as little as \$9,600 annually, with a very low default rate. LVHDC succeeds by developing and building its own housing, utilizing sweat equity from self-help groups of eight to ten families, as is common in similar programs in other U.S. communities. The corporation packages the loans and guarantees payment to the two banks with whom it works. In addition, it services the loans and provides counseling to assist and support families through financial crises, such as job losses, by covering the full mortgage payment until the family gets back on its feet and can resume payments. Since the participating banks are paid in full for their loans through LVHDC each month, they are willing to carry LVHDC loans on their books that they otherwise could not make. To cover its costs, LVHDC charges a small interest rate premium to the homebuyer as well as solicits grants to augment down payment assistance for families.

In contrast, the experience of the Oasis Ranch project in El Paso illustrates the negative experience of developers that are unable to solve the mortgage-finance problem (see Box 7.2). In 1998, Geo – the largest Mexican homebuilder – and Beazer Homes – the sixth largest U.S. builder – formed a joint venture to mass produce low-cost, entry-level housing along the Border and other appropriate areas in the U.S. This joint venture's initial project was a 450-unit development in El Paso. Although numerous interested families visited the first phase of the development – many with incomes sufficient to make the monthly payment (according to the companies' sales agents) - 90% of those that applied to buy the initial 200 units failed to score sufficiently high on FICA credit ratings to qualify for the loan. The resulting slow rate of sales fell substantially below the partnership's goals for economies of scale. The partnership dissolved after building half the intended units, and sold the project to an employee to complete.

The delivery systems used by successful organizations for developing new housing for would-be colonia residents on the border join flexible mortgage money, credit enhancements that attract the participation of local commercial banks, and use of modest subsidies. McAllen Affordable Homes (MAH) leverages an \$18.5 million revolving fund with first mortgages from local banks, which are willing to allow the use of flexible underwriting standards similar to those guarantees for Veterans Administration mortgage. LVHDC services loans for banks and provides the guarantee to purchase any loan that becomes problematic. The CDCs and their commercial bank partners extend these loans at 100 to 200 basis points above the prime rate. These organizations then develop homes for sale to would-be colonia residents with household incomes in the range of approximately \$15,000 to \$25,000 per year, at sales prices averaging \$50,000/unit. Their minimum qualifying income in early 2003 was approximately \$9,600/year. Arrears rates on both loan portfolios have been below 4%.

Box 7.2 - Failing to solve the mortgage money problem: the experience of Oasis Ranch in El Paso

In 1997, GEO – the largest Mexican developer – and Beazer Homes – the sixth largest U.S. residential developer – formed a partnership to build low-cost housing projects along the U.S. border with Mexico and in Florida. The idea behind the venture was simple: achieve low price through mass production of core units. Their short-term goal was to build 3,000 homes per year along the border for the following 5 years.

Homes were to meet codes, but be smaller than most units on the market. For example, in a typical design, bedroom size is no more than nine by nine or ten feet, there are virtually no hallways, no real entryway, and bathrooms are small relative to market. These compact houses also achieve cost savings by utilizing the same floor plan without modifications, constructing on small lots, and constructing some units duplexes (a type of home that sells well in Mexico).

Starting with a project in El Paso. Geo and Beazer invested $13 million without subsidies and broke ground in 1999. Named the Oasis Ranch Project, this development was intended to include 430 single-family attached homes ranging in size from 727 to 1,227 square feet in a planned community with landscaping, recreational facilities, and a community center. As it does in Mexico, Geo constructed a facility in El Paso to manufacture the basic blocks and special components for construction of these low-cost homes, which were to sell for approximately $45,000. Fannie Mae extended a $3 million credit line for construction and TDHCA and HUD HOME funds were allocated to help 430 families with annual incomes below 70% of the median come up with the necessary down payment (in effect, requiring only 2% from the family).

At the outset, the subdivision's developers encountered a critical problem. Although the project attracted great interest and reported visits from thousands of families, only a fraction of those interested and with sufficient income to make monthly payments could qualify for a loan. According to one of the sales agents of the project at the time, 90% of buyers' loan applications were rejected. Typically, these potential homebuyers failed to score above the cut-off point on automatic underwriting programs of Fannie Mae and Freddie Mac – the two secondary market institutions that, together, purchase most loans originated by first-tier primary lenders .

The project ran into other problems as well – slow development approval processing and resistance of some higher-income buyers to features of the project such as aesthetics, design and lot size. However, the inability of the many households to qualify for mortgages clearly was the major factor in the project's slow build out. The success of the project was tied to a rapid rate of construction and sales to cover financing costs. The reasons families did not qualify included no credit history, bad credit (usually tied to credit cards, utilities, vehicle loans), and very low incomes. But LVDC has demonstrated that these constraints can be overcome. In contrast, in the Oasis Ranch example the developers had no intention of servicing the loans, guaranteeing mortgage payments, or providing other related services.

As a result, the project sold at rates far below those projected by the partnership and those required by its low-cost, economy of scale approach. By 2000, the Geo/Beazer joint venture was in serious financial trouble. Frustrated by the inability to build and sell large numbers of low-cost homes quickly as they did in Mexico, Geo backed out and the partnership dissolved after only half of the total number of units planned were built. The partnership sold the project to an employee who continued to build out an sell the development slowly over the next two years (2000 to 2002). The local Fannie Mae manager sums up the project's experience: "They built nice, very affordable homes, but the mortgage problem slowed sales to way below Geo's expectations."

Source: Ferguson and Marez in Daphnis and Ferguson, forthcoming 2003.

The housing development corporations frequently utilize modest subsidies (interviews indicated a range of $5,000 to $12,000 per unit) to help go down market, largely in the form of either soft second mortgages or deferred mortgages (which, in effect, reduce the net present value of repayments by 40% to 50%), and profit foregone on the housing development. In addition, MAH solicits grant funds for down payment assistance, generally coupled with a self-help component. From a public expenditure perspective, these modest subsidies are typically much more cost-effective than the costs associated with infrastructure extensions and other costs such as health and social service outlays and lost revenue (in property taxes and other charges) if this the families they serve were to opt for units within colonia – generally their only other alternative for homeownership. Funding for subsidies to qualifying households is obtained from all available federal and local sources.[39] Equally important, such modest subsidization of new development also results in a living environment significantly superior to those in colonias. However, the managers of both LVHC and MAH emphasize that they continue to be constrained by the lack of flexible mortgage money (rather than subsidies) for take-out mortgage finance of the purchasers of their units as the key bottleneck in their business. In this regard, both LVHDC and MAH have had discussions with Fannie Mae, which is interested in purchasing portfolios of seasoned loans for the developments of these organizations, although no such sales had occurred as of summer 2003.

Housing development corporations are the primary drivers in the provision of new entry-level housing in these areas. With regard to the need for flexible mortgage money (see box 6.3), these and other non-profit development corporations along the Border can succeed in providing more affordable homeownership opportunities for would-be colonia residents by joining the following three elements:

- ***Development of an entry-level housing product at low cost.*** Successful low-income housing developers must be able to build homes that can sell within the $40,000 to $60,000 price range in order to reach target households (in this report those are assumed to be households with annual incomes between $15,000 and $25,000). Several CDC developers indicated that they extend grants to purchasers obtained from the profit margins on sales. For example, the Brownsville CDC provides a second mortgage to households in the amount of this profit – generally from $5,000 to $10,000 – and forgives this debt if the family remains in the home for more than five years.

- ***Innovations in production.*** International experience – particularly that of Mexico – suggests that innovations to reduce the physical cost of the product can also play an important role in increasing the availability of affordable units to households otherwise looking to locate within colonias. The standard affordable housing product in Mexico, for example, is a core expandable attached unit that is initially 400 to 700 square feet, rather than the full-sized finished detached single-family house (1,200 square feet) built by community development corporations along the U.S. border with Mexico.[40] A similar core expandable unit

[39] Interview with housing development nonprofits indicated that subsidy funding sources are drawn on fairly indiscriminately, and that the groups generally are unable to identify sources without conducting additional effort.

[40] In Mexico, these core expandable units are designed to expand horizontally and vertically in preprogrammed steps, typically two to three times the original size as the families needs and resources changes. The density of these core-unit subdivisions (15 to 20 units per acre) also substantially exceeds those of typically affordable housing subdivisions in the U.S. (6 to 10 units per acre), further reducing

could be commercially produced at prices of $40,000 to $45,000 along the U.S. side of much of the border without subsidy, as described in Box 7.3

Thus, development of an entry-level unit involves cutting costs through both product and financial innovation. For example, a pilot project development of "core unit" homes could be designed and implemented for market testing. A core unit, as utilized in international programs, is defined as a basic house of approximately 20 to 45 square meters in area that contains a multi-purpose room, a bedroom, a kitchen, and one bathroom. Typically these units are designed to be expanded in area over time, either horizontally, vertically, or both.

From a colonias buyer preference standpoint, the core unit concept is attractive as many families already buy or build a simple one or two room substandard dwelling, and then start partitioning off rooms, and adding square footage as family needs change and their budgets allow. The core unit approach is typical in Mexico and increasingly so on an ad hoc basis in colonias as well as in older neighborhood areas around cities such as El Paso. In the colonias, families also purchase housing shells, dividing them into special purpose rooms as money becomes available. Proyecto Azteca in Texas has developed and sold shell houses in the $25,000-30,000 price range.

- **Lowering the risk for financial institutions to provide flexible mortgage money through credit enhancement mechanisms.** One of the most important keys to expanding entry-level housing on the border and bringing production to scale is the provision of expanded, more standardized credit enhancements. Various options exist to accomplish this objective. For example, one of the most direct methods would be to create a fund to cover a portion of the risk of loans made by participating finance institutions to target households. Other credit-enhancement methods that have some currency in the literature and policy debate include creating an FHA insurance product (or greater flexibility in the current product like the physical characteristics of the home or the financial requirements for the buyer) and/or establishing measures to support an affordable housing secondary market for such loans, such as pool insurance. In addition, subventions (see below) can help lower commercial credit risk. These risk-reduction methods can help attract both primary and secondary market lending.

  Additional tools and programs to attract mortgage money include:

  - Explicitly structuring programs to allow primary lenders to charge a modest premium in interest rate. For example, LVHDC and its participating commercial lenders – as well as the other cases of successful low-cost housing lending investigated here - charge 100 to 200 basis points above the rate of prime loans to the purchasers of affordable homes.

  - Use of modest subsidies: CDCs along the U.S. border with Mexico have utilized subsidies ranging from $5,000 to $12,000 per unit, although in

costs. Large Mexican developers such as GEO build subdivisions with a minimum of 300 to many thousands of these core expandable units, allowing economies of scale in mass production. Such units could be built and sold to low-income households without subsidy in the U.S., although local building and subdivision codes in many cases would limit their development.

various forms. These include: 1) granting foregone profits to the family through a lower purchase price; 2) providing soft and/or forgivable second mortgages; 3) providing below-market interest rate loans; and 4) use of deferred loans. While subsidies can enable the individual project go down market and reach the intended income groups, from a policy and programmatic perspective, reliance on subsidies has negative aspects, the most important of which is that the scarcity of grant funds limits the production and coverage of programs that rely on them.

Box 7.3 - Core expandable units: an entry-level housing alternative that can reach many creditworthy low-income Border households without subsidy

Las Palomas[41] is situated on the edge of Juárez. Like many "social interest" housing projects in Mexico, it is built on a large scale. Nearly 6,000 units have been built and sold, with an additional 5,000 planned or under construction. Las Palomas is laid out in a grid. The streets are paved and defined by curbs and gutters. The lot for each home is small – 1,300 square feet compared to 4,500 square feet standard lot in El Paso. The design of the unit integrates some purely aesthetic architectural features, such as arches over the windows, in order to soften and add variety to the otherwise angular lines of the units. The 660 square foot interior of the model home accommodates two bedrooms, each with its own closet; a kitchen; bathroom; and a living room and dining area. However, prospective buyers are also taken through the "dream" unit, which is the basic model expanded into 1,100 square feet in two stories and containing three bedrooms and two baths. At the time of closing the homebuilder will provide buyers with the "Progressive Housing Manual", which contains the floor plans, instructions, and a list of the tools and materials that the homebuyer will need to complete the expansion.

What is most notable about the core expandable homes for sale in Las Palomas is their price. The lowest priced home (450 square ft.) sells for US$18,000. Across the border in El Paso, the lowest priced commercially produced new home sells for around $60,000. Construction materials and land costs are broadly similar in Juarez and El Paso. The difference largely has to do with smaller size and higher density in Mexico, although lower permit and impact fees and, to a smaller extent, lower construction labor costs also play a role (Ferguson and Marez, 2003). Similar core expandable units in the U.S. border area in much of Texas, Arizona, and New Mexico could sell for $40,000 to $45,000, making them affordable without subsidy to a low-income household earning $18,000 per year (e.g., the minimum wage for a full-time principal wage earner and half-time for the spouse).

Some form of dual development standards is a pre-requisite for many low-cost housing solutions and, in general, for creativity in unit and tenure type in low/moderate-income housing development. Many low and moderate-income countries have officially established two sets of development standards – one for middle and upper-income housing, and another for low/moderate-income housing development. The "social housing" lower-cost subdivision standards and building codes allow gradual upgrading of the neighborhood and the house. No U.S. jurisdiction has set such differential standards, although many jurisdictions have a de facto policy of enforcing their one set of standards differently in different contexts.

[41] This is a fictional name as the developer of this project required anonymity.

3. ADDITIONAL APPROPRIATIONS FOR NEW ENTRY LEVEL HOUSING

These examples suggest directions that HUD might take to stimulate entry-level housing along the U.S. border with Mexico. Essentially, these methods adapt the successful formula used by border CDCs through assistance in credit enhancement for liquidity, use of modest subventions, and institutional capacity building to expand the number of households assisted over time within the region.

a. Credit Enhancement to Expand Liquidity

Flexible mortgage money represents the single most important ingredient to expanding production of entry-level housing (at a 2003 estimated price range of approximately $40,000 to $55,000/unit) for creditworthy households earning within the $15,000 to $25,000 income tier along the U.S. border. As the experience of a number of border CDCs such as Agua Dulce Self Help Center indicates, commercial banks and secondary market institutions are willing to provide mortgage money for these households if credit enhancements lower the credit risk of such loans.

As previously mentioned, the creation of a rotating loan-loss reserve fund for qualified mortgages constitutes the most direct and flexible way of providing such credit enhancement. Such a fund could cover the top 10% to 25% of the credit risk of qualified loans. Thus, participating lenders would be able to recover up to a specified share of lost principal and interest on credits extended for the intended purpose. The participating lenders would absorb the losses beyond these percentages. This fund could be administered by the State Housing Finance Agencies.

The key qualifying criteria for projects eligible for the fund would include maximum sales price of the house and a maximum income of the borrowing household. For example, a maximum sales price of $55,000 and a maximum household income of $25,000 per annum would ensure that the fund reaches most target groups. Initially, the operation of the fund could be geographically limited to the 26 counties along the U.S. border with Mexico. The fund design should avoid specifying the type of unit and, thus, allow flexibility to experiment with promising products such as core expandable units. In addition, the fund might refrain from setting interest-rate ceilings on the loans to be made so that both CDCs and their commercial bank lending partners can charge modest interest-rate premia on their take-out loans to families if circumstances warrant.

Basic parameters such as these could stimulate the production of a substantial amount of entry-level housing for would-be colonia residents with a relatively modest investment. The initial capitalization should be large enough to significantly increase affordable housing production along the border – perhaps to double it – but small enough to test the project concept in manageable form. For example, assuming a coverage of the top 15% of the loan balance, a loan-loss reserve fund of US $10 million could initially stimulate the production of somewhat more than 1,300 affordable units (assuming loans of $53,000 per family). In comparison, roughly half a dozen of the more sophisticated CDCs along the border area (e.g. Lower Valley, Brownsville, and McAllen Affordable Homes) have produced around 100 units per year each over the past 5 years.

As the principal on the participating loans covered by the reserve repays through normal amortization, refinance, and sale to the secondary market (minus any losses), the resources of the reserve fund would rotate to credit enhance new loans for the production of additional units. Thus, the fund would promote the "seasoning" of affordable housing loans, so that well-performing portfolios can be sold by participating lenders to the secondary market after two to three years.

The operational structure of such a fund should enable agile and timely responses to lenders and developers. Options to structure and operate such a fund include:

- ***Assignment of reserve fund commitments.*** Assigning reserve-fund commitments to qualified developers for affordable housing development projects. "Qualified developers" would be those that have ample demonstrated experience in such projects – that is developments with parameters that target houses priced at approximately $55,000 or less to households earning $25,000 or less per year. With a commitment from such a reserve fund, the developer could more feasibly obtain credit finance and the participation of commercial lenders. An issue is that anecdotal evidence is the region indicates that existing developers with this type of experience appear to have problems increasing their volume. Assuming that to be the case, then additional developers, such as those with experience in affordable housing for next highest house price tier, such as a $60,000-$80,000 market, should also be fund eligible.

- ***Adjustment of qualifying parameters over time.*** In addition, as income levels, target housing prices, and developer experience and willingness to participate change over time, qualifying parameters should be adjusted. For example, formulae could be established to update parameters on an annual or other basis (e.g., targeting housing price ranges to a percent of the poverty line, multiplied by a tested factor for the capitalization rate on the value on the house).

- ***Determining the pool of qualified developers.*** While limiting the initial group of qualified developers eligible to use the fund to housing non-profits offers advantages (e.g., sustained focus on serving target groups), for-profit private-sector developers – such as Tropicana in the El Paso area, which has joint ventured with the area's leading CDCs – have also entered the market. Allowing the participation of qualified for-profits would stimulate competition and promote greater scale. It also would involve key participants necessary to mainstream this type of pilot project. The pros and cons of the composition of the qualified developer pool need to be weighed in relation to the quality of the potential pool and current conditions.

  Alternatively, a reserve fund pilot project could be executed in two phases. The first phase could be structured as a pilot project that allows participation only of qualified nonprofits for developments in the border counties. The second phase would build on the lessons of the first, involve greater funding, include qualified for-profits for developments in a wider geographic area beyond the 26 border counties, and begin charging a fee for coverage in order to recapitalize the reserve fund.

The operation of this type of loan-loss reserve fund could provide insights into the potential usefulness of two broader and more demanding measures necessary to increase liquidity for affordable housing development along the Border and elsewhere:

1) extending FHA mortgage insurance to cover such developments and 2) specific support for a secondary market in affordable housing loans.

With regard to FHA insurance, although perhaps a promising option in the medium term, changing FHA mortgage insurance to cover development of entry-level housing for families earning a target range such as $15,000 to $25,000 along the U.S. border with Mexico and other, similar areas faces at least two immediate obstacles. First, FHA coverage of 100% of the losses of principal and interest of participating lenders may fail to give sufficient incentive to the lender for the due diligence necessary to extend such credit on a business-like basis, as it occasionally has with experiments in low/moderate-income homeownership in the past (e.g. Section 235). Sharing the credit risk with the lender (for example, covering only the top 10% to 25% of the loan as proposed here) is a more modest and less risky first step. Second, the Minimum Property Standards required by FHA loans may constrain the innovation in the physical product necessary to serve this income group.

In terms of developing a secondary market for these loans, targeted support – such as pool insurance for this type of debt - may or may not be necessary to accommodate the financial and product innovation increasingly necessary for low/moderate-income homeownership in the medium term. The U.S. secondary market institutions (in particular, Fannie Mae, Freddie Mac, and the Federal Home Loan Bank system) have shown substantial capacity to innovate to go down market over the last decade, and may be capable of creating the necessary liquidity, if additional credit enhancement of the underlying credit risk of such loans (through a loan-loss reserve fund) becomes available. Thus, establishing a rotating loan-loss reserve fund is, in effect, the first step and a test of the ability of these secondary market institutions to serve creditworthy households along the U.S. Border with Mexico and similar areas.

b. Subsidies

A good case can be made for adding a modest subsidy to expand entry-level housing development along the Border at sizeable scale. For example, a subsidy of US $5,000 per unit would be sufficient to reduce border CDCs' sale prices of their end product to around $55,000, and thus make the units affordable to households earning around $20,000. An investment of $6.5 million per year could provide the $5,000 subsidy necessary to develop 1,300 of these units. This amount of subvention would roughly double the affordable housing production along the border counties in Texas, Arizona, and New Mexico. It could also help make the loan-loss reserve fund work if tied to the loans that receive credit enhancement from this fund.[42]

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[42] Tying the loans that are credit enhanced by the loan-loss reserve fund to a subsidy has decided advantages and disadvantages. On the positive side, such linkage would help concentrate resources on the projects supported by the reserve fund and, hence, make going down market to serve the desired households (earning $15,000 to $25,000 per annum) easier. On the negative side, such linkage limits competition among developers and slows the development of an unsubsidized market response. Only those developers that receive the subsidy and linked loans supported by the reserve fund will be competitive in this market. Studies and program experience have shown that such housing "supply" subsidies – that is subsidies controlled by supply agents such as developers - tend to benefit households less than "demand" subsidies
(those controlled by families), such as housing down payment vouchers), because supply agents (developers, landowners) tend to absorb an important part of the subvention if they control its use.

A Caveat on Use of Subsidies. International experience demonstrates that in many cases, similar subsidies can be repaid through the revenues generated by development. In Mexico, for example, INFONAVIT credit – which accounts for 300,000 home loans per year and for 70% of the Mexican mortgage market – utilizes an average subsidy of US $5,000 per household. Mexico's official housing strategy sets a figure of US $5,000 per unit as the indicated subsidy amount necessary to make low/moderate-income housing production feasible. Countries (e.g. Chile, Costa Rica) that have provided a subsidy in this range have found that the resulting housing development generates more in public revenues (from property taxes, utility fees, sales taxes on building materials for construction materials for the resulting homes, income tax on additional payroll for new jobs) than the amount of the subvention.

However, these benefits accrue in only in particular circumstances. Within US colonias areas (or areas designated for new production for the colonias market), subsidies are likely to be recaptured only where investments in infrastructure have already been made or where they are minimal. Where supporting infrastructure is absent or significantly incomplete and/or distance makes extension of water, sewer, and electric utility lines a factor, then the general increase in property taxes after development may pay off the subsidy itself, but the infrastructure-related public expenditures will be enormous. In these cases, entry-level new development creates a huge unfunded liability. This issue is addressed in more detail in the subsequent section of this chapter. This report assumes the use of subsidies in those instances where supporting infrastructure investments have already been made or where location of new homes involves low cost connections to adjacent facilities.

Structuring Subsidies to Provide Flexible Mortgage Money for New Housing. The types of subventions addressed here generally are structured as upfront grants. Upfront grants have three key advantages relative to other forms of subvention, particularly below-market interest rates. First, upfront subsidies in the form of grants – either of foregone profit by a CDC or in cash from CDBG funds – lower the loan-to-value ratio, and make the lender more secure. In contrast, deferred loans or below-market interest rates have a much less significant impact in reducing credit risk. Second, upfront subsidies are fixed in amount (relative to deferred loans and below-market interest rates, which vary with market interest rates), and – thus - easier to budget and package for secondary markets. Third, upfront grants are frequently more efficient – that is, they require granting a lower net present value – than other forms of subvention such as below-market interest rates and deferred loans (see note by Lubell, 2003).[43]

Another option for subsidy design would employ upfront demand subsidies (in essence, vouchers assigned to families for use in housing developments of their choice). These can help stimulate competition among developers and thus provide added pricing benefits to households. Upfront demand subsidies for first-time homebuyers are the subvention of choice and are widespread in many countries outside the United States including Latin America and South Africa. In practice, however, such upfront housing demand subsidies (such as vouchers for first-time homebuyers) often require substantial scale, trust, and experience on the part of all key stakeholders (developers, financial

[43] For these and other reasons, upfront subsidies have become the standard used in much of the world outside the United States (see discussion in section VI of this report on "direct demand subsidies" in Latin America).

institutions, and households) involved with these programs to work well. Thus, a supply subsidy - that is linking the grant to the loans credit enhanced by the reserve fund – appears to be offer a practical design for an initial pilot project.

c. Investment in Capacity Building

The more sophisticated housing development nonprofits are likely to be the most important clients of the loan-loss reserve fund and a subsidy designed for entry-level housing production along the U.S. border countries with Mexico. An initiative that is modest in scale and limited to the U.S. border counties with Mexico may require little in the way of capacity building. Particularly if qualified for-profit developers with demonstrated experience in serving households within the target income ranges are eligible to participate – as suggested here – the border counties already contain a sufficient number of experienced and qualified organizations to implement a pilot project.

However, as the capitalization of the loan-loss reserve fund and subsidy grows and the geographic scope of the initiative increases within and/or extends beyond the border counties, building the capacity of housing non-profits will be necessary. Capacity building assistance for CDCs often takes the form of modest amounts of funding for core support – usually, $50,000 to $100,000 per organization per year - over multiple years (three years is becoming common). Frequently, a regional intermediary such as the Neighborhood Reinvestment Corporation or the Local Initiative Support Corporation has the responsibility of administering this assistance, working directly with the CDC, and assessing progress of the CDC against performance benchmarks specified in its support agreement.

4. IMPROVING EXISTING COLONIAS

Once colonias have been established, they become permanent communities. Unless new, low-cost residential development reaches a level sufficient to begin to decrease low-income housing deficits, the mismatch in entry-level housing supply and demand will continue to replenish the population of these informal settlements. For this and other reasons, attempts to relocate or remove existing colonias generally are not feasible, especially given the increasing immigration rate from Mexico, as discussed in Chapter 3.

Very importantly, efforts to prohibit colonia formation through regulations and exercise of police power tend to shift the location and form of informal housing, rather than to stop it. In addition, the large thinly settled areas that constitute most existing U.S. colonias offer ample room to absorb new demand through densification, a process anecdotal evidence and casual observation of informal settlements indicates continues within areas of each of the border states examined in this report, although with recent legislation and more rigorous local monitoring, this process may be slowing in some areas. Finally, as shown in Chapter 4, colonias contain diverse populations by income, a significant portion of which can neither afford to rent nor own elsewhere under foreseeable circumstances.

For these and other reasons, a complete colonia policy must address not only building new housing in appropriate areas to accommodate population that otherwise would locate in colonias - but also confront the upgrading of existing colonias units and related issues such as the health and safety considerations associated with housing conditions. Upgrading involves two sets of substantial investments: in infrastructure and in home construction. The objective of this report is to deal with housing finance, rather than infrastructure finance. Nonetheless, infrastructure provision, availability, and cost is critical to the task of upgrading housing in existing colonias. As a consequence, the recommendations provided below include some suggestions resulting from the international literature review for upgrading the infrastructure of existing colonias. These ideas may serve as useful hypotheses for further research into the topic.

a. Summary of Lessons on Upgrading Colonia Infrastructure

From a financial perspective, colonias formation is a joint strategy on the part of land developers and poor households to assign the large burden of infrastructure finance for new residential development to government. Thus, even the relatively small share of the population currently living in existing colonias along the border in Texas, Arizona, and New Mexico has generated a large unfunded public liability in the form of unmet infrastructure needs. Texas has estimated that the cost of providing adequate sanitation alone, to the state's unserved existing colonias exceeded $600 million.in 1996.

A recently completed El Paso County Regional Water and Waste Water Service Plan conducted by the El Paso Water Utilities in coordination with the El Paso County, has identified that to upgrade the Hueco Tanks Colonia Water Service would cost $29.1 million or $131,679 per connection. This would be for only 221 householders. (This compared to a regular subdivision cost of approximately $ 2,000 to $ 3,000 per household)

Ward (2003) emphasizes that the "sequencing of infrastructure" investment is critical to upgrading U.S. colonias. Addressing this issue, given the high cost of infrastructure investment, indicates that governments need to plan ahead in a variety of ways. First, the relevant state and local government entities that choose to provide and/or upgrade colonias infrastructure will need to stagger infrastructure provision to colonias over a substantial time period to make the large total cost feasible. Some municipalities in Latin America establish an official policy to inform the public and guide infrastructure provision to colonias. For example, the municipality of Juarez, Mexico – adjacent to El Paso, Texas on the other side of the border – extends services to colonias in three phases of five years in its upgrading program. The first phase of five years extends water and secures the occupying household's tenure to the property. The second consists largely development of drainage and green areas. The third involves provision of local schools and other community facilities. Juarez seeks to move every informal settlement to the next phase every five years – resulting in a fifteen-year goal for completion of upgrading.

Proactive governments also employ various strategies to minimize the public costs created by new colonia development through a variety of means. In particular, they stimulate the large-scale production of entry-level new homes for the low/moderate-income households that would otherwise opt for homeownership in colonias (as discussed above). A second strategy is to channel informal settlement – particularly by actively discouraging new colonias in inappropriate, costly locations such as distant sites far from infrastructure lines that require great expenditures to service. For example, municipal officials in Juarez interviewed as part of this study indicated that they will not permit colonia formation in distant areas that would require very high infrastructure investments to service, and expressed shocked that their colleagues in Texas would do so.[44] Avoiding the formation of distant colonias would require much more active vigilance from most U.S. county governments along the border than currently exists. Moreover, measures such as the use of "warranty titles", as recently adopted in Texas that can be used to guarantee state-funded loans for water hook-ups contribute to the problem of ad hoc colonia formation. Warranty titles in Texas do not curtail the subdivision and sale of parcels of land on which substandard, poor quality housing with no infrastructure can be built as the law establishing warranty titles did not provide ordinance-enabling powers and enforcement mechanisms to the counties.

b. Upgrading of the Housing of Existing Colonias

From a housing finance perspective, colonias contain three discrete market segments. These market segments arise as the result of differences in household income and the existing finance mechanisms utilized across households for land and/or unit (mobile home or stick built house) purchase. Each market segment requires a different housing-finance products and approaches.

The characterization below emerges out of the relatively small number of focus groups conducted for this study. Hence, it is preliminary and illustrative only.

Very poor households with little ability to upgrade their homes. A minority of households in most colonias consist of the very poor receiving less than $600 per month in income. Their principal sources of income include public assistance, food stamps, and contributions from other family members (for example, remittances to the U.S. from Mexico), as well as occasional or seasonal low-wage employment.

Many of these very low-income households rent within the colonia (rooms, parts of houses, accessory units often owned by other family members), rather than own. Although focus groups indicated that these households continue to dream of buying a lot in the colonia and of building a home of their own (as focus groups strongly indicated), these very poor renters lack the financial capacity to undertake the colonia homeownership process. Similarly, as indicated in both interviews and focus groups, the owners among this group are vulnerable to defaulting on their contracts for deed (if they have them) and are generally unable to support credit for home improvement.

Households earning approximately $600 to $1,200 per month. These households constitute the majority of colonia residents, according to CDC interviews and focus groups within the colonias. These families generally fall into three groups vis-à-vis the existing finance of their lot and home or trailer. Many of these households have a contract for deed on both lot and on a temporary mobile home unit Some have paid off one of these contracts for deed, but not the other. Finally, a small share appear to have paid off both – and own their homes and lots free and clear. This last group tends to live in relatively consolidated colonias with complete or partial services – such as Montana Vista.[45] A small subset of this last group (those that have paid of all contracts for deeds

[44] In contrast, Mexican municipalities accept and work to gradually service colonias located in central areas. As noted, attempts to prohibit colonias entirely through regulations and exercise of policy simply do not work as long as demand far exceeds supply.

[45] Only about half the residents in Montana Vista have water because the rest cannot afford the $2,000 charged for a water hook-up. Interviews and observations there suggested another barrier to meeting housing needs: the programs are not coordinated and packaged, so even if a water line comes into a colonia, it does not mean that all households have access to water. This is a major problem for potential

living in consolidated colonias) have taken loans from financial institutions – such as equity loans – to improve their home, usually a stick-built home.

According to focus groups and interviews, many of the households in this income group pay $250 to $450 per month total on their lot and/or trailer or home, mainly in the form of payments on contracts for deed. From focus groups, the median outstanding principal on these contracts for deed was $7,000 to $11,000 in the colonia resident focus groups conducted for this report, although this may not be representative of conditions across all types of colonias.

Households earning $1,200 to $2,000 per month. A substantial segment of residents of established colonias adjacent to urban areas fall into this higher income group. They display the same behavior vis-à-vis their existing finance of lot and trailer or house as noted above for the $600 to $1,200 income group.

Finally, a very small share of households make above $2,000 per month and live in colonias reportedly for lifestyle reasons. Anecdotally these include: 1) as per stated preferences, the opportunity to buy a large lot or acreage for family members to move to; 2) illegal status of would-be residents; 3) and the opportunity to conduct informal and/or illegal income-generating activities, such as narcotics trafficking (given minimal law enforcement in the colonias, particularly in the evenings, according to focus groups). In addition, many purchasers in existing colonias are promised water and utilities within a year by the sellers, even though there is no guarantee that these services can or will be extended. As well, even when people have sufficient income, bad credit or no credit history may compel them to utilize a contract for sale in an existing colonias.

Thus, the home-finance market segments in colonias can be thought of as a matrix of household income by existing finance on the lot and trailer or home, as depicted in table 6.1. This grouping is for purposes of focusing recommendations and is not intended to be comprehensive. Clearly, colonias also contain renters and a very small number of households that utilize conventional housing. However, the numbers of each group are small and their respective incomes do not make them the target group for the recommendations presented in this report.

Table 7.1 Market Segments for Home Finance in U.S. Colonias

	Financing on Property	
Household Income Groups	A. Contract for deed on lot and/or mobile home or house	B. Own property free and clear
1. Below $600 per month	1A	1B

retrofit efforts. Interviewees indicated that state agencies only extend the water line and that linkages to funding to provide hook-ups is a missing element.

2. $600 to $1,000 per month	2A	2B
3. $1,000 to $2,000 per month	3A	3B

The share of households in each of these financing categories (each of the numbered boxes) depends largely on the age and location of the colonias. For example, older colonias with mostly long-term residents such as Sparks have a high proportion of households that have paid off their contracts for deed. In colonias with many new families, such as Sunland Park, the majority of households are still paying on both the contract for deed for their lot and for their trailer or stick-built home.

Reaching the poorest group – those in 1A and 1B in table 7.1 – is difficult, and no concerted effort should be made initially to do so as income and income security issues preclude application of the housing finance mechanisms addressed in this report to this group. Many of the households in this lowest income group rent, and the owners live in precarious financial circumstances .

c. Program and Policy Recommendations

Three types of loan products are potentially suited to the higher-income colonia households in the remainder of table 7.1 (boxes 2a, 2b, 3a, and 3b):

- *Refinance of the Contract for Deed on the lot with conversion to Warranty Deed and/or Refinance of the Contract for Deed on the trailer or house.* Contracts for deed carry very high interest rates – often as high as 25% per annum – and offer few legal protections. In particular, households are highly vulnerable to the owner/lender re-possessing, and losing their equity and previous payments when they fall more than a couple of months behind. In addition, many infrastructure agencies and other service providers require a Warranty Deed for providing utility and other services.

  Thus, the refinance of this debt at substantially lower interest rates can save on monthly payments, greatly increase security of tenure, and help colonia households access infrastructure and other services. This refinance involves paying off the original owner/lender, and securing a Warranty Deed to replace the Contract for Deed.

  The state of Texas and other governments have occasionally provided small amounts of highly congressional funds for this purpose. In 2001, the state of Texas rejected a proposal to use bond funds for this purpose on a larger scale. To date, programs operated by state and local governments have not been financially sustainable as they have charged very low or no interest rates on conversion funding. Charging a market rate for conversion of contracts for deed could make finance for this purpose sustainable and greatly increase its scale. It should be noted that these programs have worked best when accompanied by financial education.

In addition, current small-scale, highly-concessional contract-for-deed programs have, so far, served only *individual* households. International experience suggests that the best use this product may be for *groups* of families and *neighborhoods* as part of upgrading efforts that join conversion of contract for deeds with improvement of infrastructure and provision of selected social services. For example, colonia upgrading programs in Latin America typically: 1) organize the community to contribute resources to the effort; 2) regularize the land tenure of the colonia (the equivalent of refinancing the contract for deed); and 3) then extend water, pave selected roads, provide drainage, and establish selected community facilities (such as a daycare or community center). This is the standard approached used in middle-income countries – including Mexico - to upgrade colonias (see Ferguson and Navarrete, 2003; and Brakarz; 2002).[46]

Although the exact potential market of a product that refinances contracts for deeds cannot be estimated, it is likely to consist of many of the households in 2A and 3A, and some in 1A. of Table 7.1. Assessing the market size of these segments is an area for future research.

Refinance of contract(s) for deed plus funding for building materials necessary for a major improvement. Many of the households in 2A and 3A have sufficient income to finance the building materials necessary for physical improvements in addition to refinancing of the principal balance on their contracts for deed. For example: A household earning $1,000 per month owes $7,000 on a contract for deed with payments of $250 per month, and needs $12,000 to buy the building materials for self-help construction of a major addition. The monthly payments on the total loan of $19,000 @9.5% over 10 years are $250 month, affordable to this household and the same amount as currently paid.

- ***Finance of funds necessary to construct a small unit for households owning their property free and clear.*** Some of the households in 2B and the great bulk in 3B have the income sufficient to buy the building materials – costing roughly $25,000 - necessary to build a core unit of 450 square feet on their property.

Focus groups conducted as part of this research and residents experience with conversion of contracts for deeds programs suggests that the great bulk of households in colonias require financial counseling as an adjunct to a loan. Hence, a colonia home finance program would require both a strong financial and homeowner education component to work.

In many respects, a colonia project that provides these loan products would resemble housing microfinance projects on the Mexican side of the border. One possible model is a housing microfinance program in Juarez, called FUNHAVI, managed by the Cooperative Housing Foundation that started with seed money from the Ford Foundation. Box 7.6 describes this program.

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[46] Low and moderate-income countries have honed the methods of colonia upgrading programs over the last three decades. At first, governments such as Ciudad Juarez provided these services on an incremental, generally uncoordinated basis – the usual approach now in the U.S. The disappointing performance of this piecemeal approach led to the "integrated" colonia upgrading programs that are the current state of the art.

As with all financial programs, greater scale allows spreading fixed costs (start-up, equipment, facilities, overhead) over a larger loan volume and greater operational sustainability. Hence, pilot projects must demonstrate the potential to go to scale in order to move forward.

Preliminary financial projections made by this study and by the Cooperative Housing Foundation – the organization that helped establish the FUNHAVI program in Juarez and over a dozen other housing microfinance programs in medium-income countries - suggest the following characteristics of a U.S. colonia home finance project at sufficient scale to test the concept.

Median loan amount: $10,000 to $15,000
Interest rate: 10% to 14% apr declining balance
Median loan term: five to ten years
Cost of funds: 5%
Grant funds necessary for start-up: $950,000
Loan funds necessary for five years of operation: $6,900,000
Number of new loans in five years: 1,500 to 2,000
Operationally sustainable: in Month 28
Financially sustainable: in Month 36
Staffing (annual cost)

-Program director	$48,000
-Finance and admin	$36,000
-Secretary	$24,000
-Architect	$30,000
-Loan officer	$20,400

Box 7.5 - Flexible mortgage money is key to new entry-level housing on the Border: the experience of McAllen Affordable Homes and Lower Valley Housing Corporation

McAllen Affordable Homes (MAH) started as a rehabilitation program 27 years ago. A rotating fund capitalized in the amount of $200,000 from the City of McAllen, Texas and CDBG funds has grown over this time period to $18.5 million. MAH uses its own underwriting standards that are similar to those for Veteran Administration home mortgage insurance. MAH leverages this rotating fund with mortgage money from local banks, which are willing to participate because of MAH's track record. Until recently, the local commercial bank has provided a first mortgage in the amount of half of the total principal required to buy the house for ten years at interest rates somewhat above (100 to 200 basis points) those of the prime market. MAH provides a ten-year deferred loan of the remaining half of the principal. The MAH loan starts coming due at the end of the tenth year of the private mortgage (when the private loan has totally paid back). As it is deferred, the net present value of the MAH loan is only about 40% to 50% its face value (at current interest rates). Recently, MAH has increased the share of commercial bank credit to 70% of the principal and requested loan terms of 15 year loans, in order to further leverage its rotating funds (in effect, reducing the subsidy).

MAH uses these funds to finance the purchase of homes built by this community development corporation. MAH has built and financed through its rotating fund/bank mortgages 1,700 homes over 27 years. Households earn a median of $18,000 per year – in the upper range of typical colonia incomes – and loans average $46,000 with payments of $450 per month. The delinquency rate on this loan portfolio is 3.5%, and the organization has foreclosed on 3 homes during this period. The income from its revolving fund now covers the administrative cost of MAH, making the organization administratively self sufficient. A second well-established CDC in a nearby city – the Community Development Corporation of Brownsville – uses a very similar method.

Lower Valley Housing Corporation started in 1986 in Fabens, New Mexico, and works in eastern New Mexico and the El Paso area. This community development corporation also develops 100 homes per year on average based on joining flexible mortgage money, credit enhancement to attract commercial bank participation, and a modest subsidy. LVHC operates largely by getting a commitment from USDA under the 502 program that provides funds at below-market interest rates – typically in the form of a second mortgage - at subsidized interest rates to qualifying families. LVHC then gets first mortgage commitments from participating commercial banks by agreeing to service these loans and purchase them back from the lender if necessary. In effect, LVHC collects monthly payments from households, and makes one large payment to each participating bank each month. Thus, although the Bank makes the first mortgage, LVHC holds the note, and the Bank has the recourse to sell the mortgage back to LVHC if problems arise. The interest rate on loans to households is higher than the most competitive market rates (currently 5%) – at 9.5% per annum - and LVHC keeps a 2% spread as its administrative cost, passing on 7.5% to the participating banks.

Given this commitment and LVHC's track record, banks agree to flexible underwriting standards, and keep these loans in their portfolio. LVHC then builds the housing developments and uses this finance to sell units at $44,000 to would-be colonia residents. Out of a total of 642 loans, LVHC has foreclosed on 4.

Sources: (1) interviews with Bobby Carvillo, McAllen Affordable Homes; and Nancy Hansen, Lower Valley Housing Corporation: and (2) "Affordable Single Family Housing Loans in Southwest Border Region" by Arthur Rieger, HUD research note.

Box 7.6 - Housing Microfinance in Juarez, Mexico: FUNHAVI

The Ford Foundation helped start a successful housing microfinance project that has extended housing finance micro loans successfully for six years. The Cooperative Housing Foundation, headquartered in Silver Spring, Maryland has provided technical and management assistance to establish this program, called FUNHAVI. The characteristics of FUNHAVI loans include:

- Short repayment period (up to 20 months, ranging from six to 36 months)
- Relatively low loan amounts (average of $1,400, ranging from $500 to $2,500)
- Loan amounts based on the clients capacity to pay. For a typical Mexican low-income family earning US $250 per month, this amount is a maximum of around $65 per month. Sixty-two percent of FUNHAVI's clients earn $220 to $550 per month. In comparison, Mexican median household income is about $350 per month. (better to use median income in Juarez, if available, as better comparator)
- Interest rate and pricing designed to lead to operational self-sufficiency. Interest rates have averaged about 36% per year on the original principal, but are declining with the reduction in inflation in Mexico over the last two years.
- Guarantees for the loans are largely in the form of co-signers that are local residents rather than mortgage liens

During most of its operation, FUNHAVI had nine staff. In addition, the organization works with five architects on a contractual basis, who are paid a fixed fee for each client. FUNHAVI also contracts out its loan collection activities.

The steps in the FUNHAVI loan process include:

- First meeting and affordability analysis with the borrower
- Architect site visit to discuss and analyze the applicant's immediate and long-term home improvement needs
- Architect draws up plans and makes cost estimates.
- Technical review by FUNHAVI
- Credit analysis by FUNHAVI
- Construction material purchases. FUNHAVI typically issues vouchers (not cash) to clients and sends them to the building material supplier closest to the client's house. Materials suppliers then invoice FUNHAVI for purchases and FUNHAVI pays the vendor.
- Households can make their loan payments each month at any K-Mart store. After 60 days in arrears, FUNHAVI sends a case to one of its lawyers for collections.

FUNHAVI made 2,200 such small loans from 1996 to 2001, and plans to roughly double its annual originations by 2003 – at which point the organization will be fully covering its cost of operation and capital.

Source: Interview with Eric Adams, FUNHAVI technical assistance manager, Cooperative Housing Foundation. **May, 2003**

Demand studies to quantify the size of the market for financial products represented by the six cells of the matrix on table 6.1, would be an essential precursor to design this pilot project – as discussed under "Further Research" below. Such demand studies would: (a) determine the market for each proposed home-finance product in the colonia(s) to be served; (b) assess and determine the need for services to accompany the loan, including homeownership counseling and technical assistance in designing and budgeting home improvement; and (c) quantify true household incomes (by measuring household expenditures as well as for asking for declarations of income).

5. RECOMMENDATIONS FOR FURTHER RESEARCH

This study, briefly describes the magnitude and complexity of the Colonias. To have better results in any of the proposed initiatives, and pilot programs, it would be necessary to have more detailed studies that should concentrate on the following: Market conditions for entry level housing; renovation of existing homes; and infrastructure costs of existing colonias.

a. Market/Project Design Study

Putting the recommendations of this report into practice for entry-level housing production and housing microfinance to upgrade existing colonias would require a market/program implementation study to design these pilot projects in detail. In addition, a number of other areas call for further action-oriented[47] research. From lot and home sizes, preferred and efficient materials to creditworthiness of the colonia residents.

b. Infrastructure Finance of Colonias

A study on infrastructure finance for upgrading of existing colonias logically follows this report. This is the single largest cost of colonia upgrading and represents a substantial public expenditure. This report found that U.S. jurisdictions typically lack a strategy for upgrading the infrastructure of existing colonias. Instead, they usually take a piecemeal, approach by funding the needed investments one at a time without coordination. Alternatively, some jurisdictions ignore the whole subject, believing that colonias are a temporary phenomenon that better planning and enforcement has now stopped.

As discussed in this report, colonias, in fact, continue to form (albeit at slower rates than in much of the 1990s) and existing colonias continue to densify. Colonia formation and densification is also highly likely to continue as long as low-cost entry-level housing production remains miniscule relation to a rapidly growing low/moderate-income population. Facing similar conditions, many medium-income countries (e.g. most of Latin America) have developed methods to minimize the costs of colonia formation, and effectively upgrade existing colonias.

[47] Although the literature on colonias is now fairly large, little of this material analyzes and details the design and requirements of feasible programs.

Hence, a study could: 1) analyze the colonia infrastructure-finance challenge and estimate its cost[48]; 2) look at the methods used in the U.S. and middle-income countries to finance infrastructure upgrading; and 3) make program and policy recommendations. The observations in the brief infrastructure-finance section of this chapter can serve as hypotheses for this research.

c. Low-cost Entry-level Housing Alternatives

Nine out of ten U.S. homeowners still live in a detached single-family housing. Until very recently, detached Single Family Housing held unchallenged dominance in the U.S. housing market, and alternatives were often shunned as inferior assets and unmarketable. The run-up in housing prices of the late 1990s has changed this picture dramatically. Over the last year, the production of lower-cost condominiums and town homes has exceeded that of detached Singe Family Housing in many metropolitan markets, and condominiums and town homes have appreciated at double the rate of detached Single Family Homes.[49].

However, a wide and relatively unexplored range of other types of low-cost housing solutions exist. Manufactured homes are the main low-cost alternative to town homes. The core expandable unit is the main low-cost housing unit produced in many medium-income countries, and may have application in the U.S., particularly along the border with Mexico. New building technologies may permit the construction of homes in modular fashion at much lower cost than previously. Accessory units are the least cost way of adding to the housing stock in most metropolitan areas. Other types of housing solutions that are very low cost and affordable to even poor households – such as serviced sites with a humid core (lots with infrastructure and a bathroom, kitchen, and multipurpose room attached) – may have niche uses in certain parts of the U.S., including along the U.S. border with Mexico.

One large study could examine not only methods and technology, but also the land-use and development planning implications of a range of low-cost housing alternatives. Alternatively, a series of studies could examine a sub-set of low-cost housing alternatives for particular areas (such as the U.S. border with Mexico), and a final study analyze the results and make overall program and policy recommendations.

6. CONCLUSION

The overall goal of improving the existing housing living standards in the colonias is a daunting task that has to be confronted in many different ways. The Colonias dilemma is not only an economic or housing problem, it also embraces education, culture, health

[48] In addition to surveying the existing literature on infrastructure provision to colonias, its database would include a detailed analysis of the costs of upgrading the infrastructure of existing colonias versus the costs of providing infrastructure to new development in order to determine the validity of a key conclusion for colonia policy from international work: that upgrading the infrastructure of colonias costs two to three times the amount of provision of this infrastructure to new residential development, and that this infrastructure upgrading cost is borne almost entirely by government.

[49] Condos and townhomes appreciated at 15.1% from second quarter 2002 to second quarter 2003, compared to 7.4% for detached SFHs nationwide. See "Condo Resale Rates Pass Houses" in Washington, Post, August 30, 2003.

and sometimes basic human needs. Although the purpose of this study is to identify alternative finance mechanisms for housing in the Colonias, it is not simple to isolate housing from all of the other issues the greatly affect the poor living conditions in these impoverished areas of the US. However, this study focuses on the more limited topic of existing housing characteristics, and potential types of programs on which HUD may draw to improve the housing condition of colonias residents. The following issues listed below will frame any efforts to provide workable programs for existing and would-be colonias residents.

Colonias will continue growing: After witnessing the rapid growth of the Southern Border States, the continuous immigration from Mexico and Latin America, and the significant shortage of low to moderate income housing supply, the colonias will continue to grow, maybe at a higher pace than before. There are no major efforts at the local levels to slow down this growth, as it is felt that immigration is a Federal problem and housing therefore must be handled by the Federal or private sectors. Local authorities also see that the infrastructure improvements are slowly being financed by Federal and State entities, relieving them of this responsibility.

Infrastructure vs. Housing: It is an irony that the same multimillion dollar capital investments in water and wastewater systems, that are or will be completed in the next 5 to 10 years by other State and Federal entities, will fuel and promote colonias growth. As lines are extended other developments will be established and the existing colonias will densify as other residents move in. If this scenario continues, it is recommended that HUD focus its resources only in the Colonias that have or will have basic infrastructure in the near future. This will allow HUD to concentrate on housing programs rather generating millions of dollars in infrastructure costs.

Re-finance Mechanisms: The first step towards developing affordable housing in the colonias starts with the land title. The fastest and most significant progress to be made in this issue is re-financing mechanisms to convert contracts for sale into warranty deeds. Increasing the existing re-finance programs and commitment thorough CDC's could be greatly effective.

Manufactured Homes and New Technologies: The single highest cost of affordable homes is its construction. The need to provide alternative housing technologies and the introduction of acceptable financing for manufactured homes could greatly increase affordable housing in the Colonias. Currently, colonia residents are accustomed to living temporarily in a mobile home with the dream of building a permanent residence next to it. The reality is that in many cases, due to the lack of finance mechanisms or clear land title, the new home is never built for them but their siblings or relatives. The opportunity of providing a higher level of manufactured home or financing of mobile homes with a program that would permanently attach these residences to a foundation (thus making them eligible for conventional financing) could be explored.

Financing, Who Qualifies?: With the majority of the residents earning in the $600 to $1200 per month, subsidies and incentives could become large and ineffective. First it is necessary to do further research as to the undocumented income in the colonias which, if it is significant and can be demonstrated through expenditures on regular payments (such as cell phone bills or rents), could enable additional residents to qualify for financing. In any case, there is a significant (about a third) of residents that earn $ 1200 to $ 2000 per month, who, with flexible finance options as described in this report, could qualify to finance an affordable home.

APPENDIX A: METHODOLOGY

Data Analysis

ICF took the lead in the data analysis required for this study. Two datasets were used for this analysis: Census 2000 and 2002 Home Mortgage Disclosure Act (HMDA) data. Census data provided the basis for the demographic, economic, and housing characteristics for selected places and Census tracts while HMDA data was used for the analysis focused on current lending activity in selected Census tracts.

Numerous factors complicated the analysis. First, while Census 2000 data is available by a variety of geographic boundaries – including tract, block group, place, and county, HMDA data is available *only* at the Census tract level and therefore the Census tract must be the unit of analysis in this section. Moreover, the tracts that are used in the 2002 HMDA dataset are 1990 Census tract boundaries.

The second factor complicating this analysis is the difficulty in matching colonia boundaries to Census tract boundaries – particularly 1990 boundaries. As noted by Ratcliffe (2001), the lack of a direct relationship between Census geographic units and colonias areas creates significant challenges for researchers using Census data. Typically, a colonia or a cluster of colonias are comprised only portions of at least one, if not several, Census tracts. As a result, it is difficult to isolate residential lending activity occurring purely within the colonias.

Another issue complicating this analysis is the changes in Census tract boundaries from 1990 to 2000. This issue is most critical in the comparison of HMDA data, which uses 1990 Census tract boundaries, with Census 2000 data which incorporates 2000 boundaries. Thus, there is some degree of error in comparing results from the analysis of Census data with any results from an analysis of HMDA data of the same tract number.[50]

This analysis was conducted in two steps. The first step looked solely at Census 2000 data. This first step was divided into two tiers. The first tier of analysis focused on Census Designated Places (CDPs) or cities that were identified through interviews with HUD Field Office staff, a Census official, and a local planner in California as corresponding closely with colonia boundaries.[51] Through these interviews, 25 CDPs or cities were identified as places with boundaries that closely mirrored those of one or a series of colonias. This analysis is presented in the Background Material section of this report.

In the second-tier of Census analysis, we first identified the 2000 Census tracts that comprise each of the CDPs or cities used in the first-tier analysis.[52] Forty-one (41) Census tracts were identified through this process. We then identified a series of variables that – based on literature – could be used to provide a good means by which to separate tracts that are largely colonias from tracts that contain only a small portion of a

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[50] Census 2000 tracts will be incorporated into HMDA starting with release of 2003 HMDA data in July 2004.

[51] Interviews conducted with Angela Donelson and Esperanza Holguin, HUD Field Office Staff, Michael Ratcliff, US Census Bureau; Daniel Cardona, Imperial County, CA Community & Economic Development.

[52] This process was completed using the "geo within geo" function of the American Fact Finder tool of the US Census Bureau, http://www.census.gov.

colonia settlement. The variables that were used as a proxy and the hypothesized characteristic based on current literature are listed below:

Variables Used	Hypothesized Characteristic for Colonias
Percent Population Hispanic/Latino	High percentage of Hispanic/Latino population
Percent HHs Speak Primarily Spanish	High percentage of households speaking primarily Spanish
Median HH Income	Low median household income
Percent Population Living Below the Poverty Line	High percentage of individuals living below the poverty line
Percent Units that are Mobile Homes or RV or boat, etc.	High percentage of housing units reportedly mobile homes, RV, or boat
Percent Units Lacking Complete Plumbing	High percentage of housing units lacking complete plumbing
Percent Units Lacking Complete Kitchen Facilities	High percentage of housing units lacking complete kitchen facilities
Median Gross Rent	Low median gross rent
Owner-occupied mobile homes: Median value	Low median value of owner-occupied mobile homes
Owner-occupied housing units: Median value	Low median value of owner-occupied housing units
Percent of Population Under 18	High percentage of population under the age of 18
Percent Population 16 years and over who did not usually work 35 or more hours per week	High percentage of population 16 years or older reporting that they did not usually work 35 or more hours per week

Each Census tract was then assigned a ranking for each of the variables. In cases where no cases were reported, the ranking was based upon only those cases in which values were available. Rankings were structured so that a low rank score indicated that the tract was more likely to contain a colonia settlement. The rankings for each Census tract were then totaled and divided by the total number of variables for which data from that Census tract was available. This ranking process allowed for several variables to contribute to the extent to which the tract includes colonia settlements.

The 41 Census tracts were then placed in rank order according to their average score. The 30 tracts with the lowest scores were then kept for analysis purposes, except in cases where states reported more than 10 tracts. In these cases, we removed those tracts with the highest score within that state so that no more than 10 tracts would be included for any one state. As a result, 26 Census tracts were ultimately included in this analysis.

Following the identification of these tracts, Census 2000 data was analyzed and presented in the Background Materials section.

The second phase of this analysis looked solely at 2002 HMDA data. Because HMDA data geography is based on 1990 Census tracts, we cross-walked the 2000 Census tracts identified in the last phase of the analysis with 1990 Census tracts geography. In three cases, the Census boundaries had been refined to create additional tracts in 2000 to cover an area that was covered by only one tract in 1990. In these cases, the one tract was included in the HMDA analysis. Additionally, there were two cases in which a 2000 Census tract could not be reconciled with 1990 boundaries. These cases were included in the Census analysis but, obviously, could not be included in the analysis of HMDA data.

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APPENDIX C: FOCUS GROUPS, AND INTERVIEW GUIDE

FOCUS GROUPS

There were 3 focus groups conducted under this study with a total of 50 participants: Sunland Park, Dona Ana County, New Mexico; Montana Vista, El Paso County, Texas and El Progreso, Hidalgo County, Texas. The Interviews lasted two hours and there were no handwritten material or questionnaires distributed to the participants. The interviews were conducted in Spanish, in a familiar setting to them with the following guideline or protocol:

INTERVIEW PROTOCOL

Purpose of our research: to investigate possible ways to improve colonias. Need your help and ideas.
Names, introductions, from which colonia
Brief history of your colonia and your story

Views on infrastructure
Availability/method/source/cost of:
a. Water
b. Sanitation
c. Electricity
d. Roads
e. Drainage
f. Schools and community services

Likes, dislikes about colonia infrastructure
Priorities for infrastructure/service provision
Expectations/hopes for infrastructure provision
Community association/relation to local government
Involvement of other organizations in colonia: non-profits, state government, other?
Barriers to infrastructure provision
Ways to overcome barriers
What if staged over a period of time? Preferences for order of infrastructure provision.
Amount household would be willing to pay

Views on land and house
Source/cost/terms of finance of land
Source/cost/terms of finance of initial house
Sources/cost/terms of finance of improvement/expansion of house
Likes/dislikes about house
Priorities for improving home
Interest and ability to pay for loan to improve home
Interest and ability to pay for loan to refinance contract for deed

Conclusion
What would a good colonia improvement program do?
Priorities for financing/improvement:
a. Infrastructure
b. Land/security of tenure
c. House
d. Schools/community services
Who should operate this program?

INTERVIEW GUIDE

Interviews of stakeholders were designed to elicit information on residential financing in the colonias as well as other relevant information that the interviewees could contribute. These were not formal, structured interviews, and the following areas are only to give an idea of the kind of information that was obtained in the interview process.

- Interviewee's agency/business/organization's involvement in colonia housing.
- How colonia residents are paying for or financing land/lot purchase, housing construction, housing renovation.
- Why colonia residents are using these home finance mechanisms.
- Familiarity with any lending programs, organizations, businesses, or agencies that are assisting colonia residents to buy, build, or renovate their homes.
- Comments (positive and negative) from colonia residents on housing finance mechanisms.
- Barriers faced by colonia residents.
- Ideas or suggestions that could assist residents in obtaining financing at a reasonable and affordable cost to purchase and/or renovate their homes.
- Identification of who should take the lead in addressing home finance mechanisms in the colonias and other entities that may participate.