

**Final Report of a Study Commissioned by the
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**“Housing Sustainability, Self-help and Upgrading in Texas
Colonias: A Longitudinal Perspective -- 2002 plus 10”**

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Report # 2.

**DOCUMENTING A DECADE OF CHANGE IN
STARR COUNTY COLONIAS:
SURVEY DESIGN AND RESULTS**

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Executive Summary

This report has four distinct goals. First, we provide a detailed description of how social, economic, and physical (housing and infrastructure) conditions have changed over ten years in ten colonias in Starr County, Texas. To do so, we draw upon two household surveys conducted in both 2002 and 2011. Secondly, using data from these surveys, we describe the changing dynamics of the colonia housing and land markets and their implication for low-income residents. Third, we assess the impact that clear title has had on colonia residents, many of whom experienced serious title-insecurity until the Community Resource Group, a non-profit organization intervened on their behalf and at the request of the State of Texas in the second half of the 1990s. In particular, our primary objective was to test the theory that the provision of clear title encourages investment in the home as well as access to and the use of lending for home improvements. Finally, we have created a survey instrument for use and adaptation by non-profit organizations or local institutions seeking to conduct research on social, economic, and physical conditions in colonias. This English and Spanish-language survey contains a basic core along with more than a dozen removable sections that will allow organizations to tailor the survey to meet their needs. In addition, in order to facilitate successful implementation of the instrument, we also provide a set of “tips” and a methodological guide to implementation of the survey and analysis of the data.

Colonias are poorly-serviced subdivisions typically located in rural areas outside the city limits. Throughout Texas, there are more than 1800 settlements that are classified as colonias, with an estimated 500,000 residents living in such settlements throughout the state. Often colonias lack adequate infrastructure, such as electrical, water, wastewater services, paved roads and storm drainage. Furthermore, because many colonia residents build their homes over time, they are often unfinished or of poor quality, creating health and safety problems for residents.

The development of colonias in Texas began during the 1950s and 1960s, as demand for low-cost housing increased following the rise and fall of the Bracero Program, which brought large numbers of Mexican immigrants to the border region. This demand for affordable housing options, coupled with lax land development regulation in rural areas, a large supply of used agricultural land, profit seeking by developers resulted in the proliferation of poorly serviced subdivisions throughout the state. Prior to intervention by the state in the 1990s, the development of land in colonias was subject to very little oversight, as counties in Texas lack effective powers of planning and ordinance creating ability. Thus, developers often sold poorly delineated lots in undeveloped neighborhoods with the illusory promise that utility services and other infrastructure would eventually follow.

Contract for Deed agreements, in which the buyer agrees to make monthly payments over a series of years, often at exploitative rates of interest (15-18%) and with little protection under the law, are common in colonia land transactions, and present a number of risks to buyers. Indeed, in the cases considered in this study of Starr County, two local developers sold thousands of lots in more than a dozen colonias through Contract for Deed. In many cases, families did not occupy their lots immediately, waiting instead until they had the could afford to construct their own home. These conditions contributed to widespread title irregularities in many colonias, including the selling of certain lots multiple times over.

Beginning in the 1990s, the State of Texas sought to reign-in the expansion of colonias through the implementation of various laws and by actively pursuing developers that violated new regulations, such as the two Starr County developers described in this report. After the Texas

Attorney General intervened in 1995, an NGO – the Community Resource Group (CRG) -- was appointed by the State to receive the property sequestered from these developers, and to pursue the titling and service provision for 15 colonias in Starr County. Eventually, however, it became clear that funding for the installation of infrastructure was insufficient, and the CRG focused its efforts specifically on providing clear title to the more than 2000 residents in the selected colonias.

Although the provision of infrastructure is always likely to be the first priority, the clearing of title impediments also has strong support in the policy arena for various reasons: i) it is believed to reduce insecurity and conflicts over tenure; ii) it leverages financing of infrastructure upgrades through an expansion of the tax base; iii) it encourages homeowner investment in the home due to an increased sense of ownership security; iv) it facilitates access to lending opportunities through the use of the title as collateral; and v), it stimulates the housing and land market by facilitating the formal sale of property in colonias.

Summary of the Principal Findings

This report uses data from two household surveys conducted in 2002 and 2011 in ten of the colonias in which the CRG intervened and achieves three main goals: first we portray current social, economic, and physical conditions in the ten study colonias; second, we provide a detailed description of the colonia housing market performance; and third, we assess the impact of the provision of clear title on the home investment and borrowing practices of colonia residents.

Current Physical Housing Conditions

Since the baseline study in 2002, housing conditions have improved significantly over the decade. Most homeowners continue to pay for home improvements with cash or savings; despite the increasing importance of microloans, the use of formal lending for home improvement remains limited.

- Home Improvements:
 - 74 % of homeowners made major home improvements in the past 10 years.
 - On average homeowners invested \$9,446 in their home over the past 10 years.
- Financing for Home Improvements:
 - 49% used income/savings.
 - 11% used tax returns.
 - 21% used formal loans.
 - Since 2003, 50% have been microloans provided by the CRG.
- Construction Skills:
 - 50% of households had at least one member with construction skills.
 - Households with construction skills were 16% more likely to make major home improvements.

Property Titles

Although the provision of clear title provides homeowners with a sense of security, it appears to have had no discernible impact on their home improvement or borrowing practices.

- The Importance of Title:
 - Two sample populations were studied in a quasi “natural experimental”: the “study group” who received assistance by the CRG due to “clouded” title, and the “control group”, who had no title difficulties and were not subject to CRG intervention. Our results reveal that the control and study groups show similar home improvement and borrowing patterns, suggesting that the provision of clear title, of itself, has little effect on such practices.
 - Nevertheless, and importantly, many respondents confirmed that clear title *does* provide a sense of security for homeowners.
- Recent Property Transfers:
 - Continued Informality: Although less than in the past, 40% of property transfers since 2003 were informal receipts or simply oral contracts
 - Although there is a greater use of formal (Warranty-type) Deeds than in the past, they still only make up one third of formal transfers
 - Limited Use of Wills: 93% of household did not have a will.

Changing Market Dynamics

The colonia housing market remains fairly inactive, and a significant portion of lots (29%) are vacant or unoccupied. Nevertheless, both property (land and dwelling) and land values have risen in recent years. Thus, increased prices and limited financing mechanisms for the purchase of homes—in particular, a continued dependence upon seller-financing—appear to have led to an increase in both the supply and demand for rental accommodation and housing options.

- Land and Housing Values:
 - There has been a 35% increase in the estimated property value over the 10 year period.
 - In 2011, respondents’ average estimate for the value of their property was \$57,076 (up from \$42,256 in 2002, adjusted for inflation).
 - And a 34% increase in estimated cost of vacant land per square foot over 10 years
 - In 2011, the average estimated cost per square foot for vacant land was \$2.26 (up from \$1.69 in 2002, adjusted for inflation).
- Financing for Home Purchase:
 - Increasing dependence upon wage earnings and family support networks as a method of purchase, each of which account for 25% of purchases since 2003.
 - Continued dependence on seller-financing (small payments made to the seller over time), which comprises 50% of purchases since 2003. In addition, even though seller financing remains the norm, sales by previous homeowners now comprise the majority rather than those by developers, as was historically the case.
 - Negligible use of formal loans for home purchase (1% of purchases, historically).
- Renting and Sharing:
 - The number of lots with more than one household doubled over 10 years (from 5.6% to 10.9%).
 - Increasing presence of formal rental complexes in the ten study colonias.

Current Challenges in the Colonias of Starr County

Preventing a Reversion to Informality

Despite the success of the CRG's titling program, as a result of both new forms of seller financing and widespread intestacy, we predict that there will be a significant reversion to informality of property transfers, together with a rise in the number and proportion of "clouded" property titles unless further interventions are made. Potential solutions may include:

- Promote the creation of wills to prevent conflict due to intestacy.
- Facilitate low-cost title transfer services for buyers and sellers.
- Provide legal services for current households with "clouded" titles.

Facilitating Purchases of New and Existing Homes

Unfortunately, few financing options are available to assist with the purchase of existing homes. Seller-financing systems continue to predominate through Contract for Deed or verbal agreements and receipts, all of which entail risks for both buyers and sellers, such that many would-be sellers are reticent to consider it as an option, resulting in residential immobility or recourse to other informal arrangements (such as loaning the house to friends of family, renting the property, etc.). Policy approaches here should:

- Explore formal financing options for the purchase of existing homes:
 - Identify obstacles and potential policy solutions.
- Investigate novel ways to assist with seller-financed sales:
 - Use of non-profits as an intermediary.
 - Use of the income tax return as a financing mechanism or as collateral.
- Encourage financial literacy and saving among potential homebuyers
 - Provide Individual Development Accounts.
 - Leverage tax returns as a saving mechanism.
 - Target growing rental population.
- Pursue policies that promote infill of vacant lots.
 - Identify absentee owners.
 - Facilitate sales of vacant land.

Continue to Support Self-Help Home Improvement

Both the CRG and the Starr County Self-Help Center (SCSHC) have provided invaluable lending, training, and tool rental services to colonia residents. These programs should continue to be supported and, if possible, expanded in certain areas. For example:

- Continue to provide small, revolving loans.
- Promote free or reduced-cost tax returns as a financing option for home improvements.
- Continue to provide training for home improvement skills, tool rental.
- Incorporate cost-effective sustainable design into lending and training programs.

Meeting the Needs of Aging Owners

Thirty percent of households contain two or fewer members, many of whom are often associated with an aging population profile (of this 30%, the average head of household was 60 years old). In addition, 53% of these households had at least one member with a disability (loosely defined as a health problem that impacted their daily lives), and 29% needed to make a home improvement in order to accommodate a person with a disability. With time, these numbers are likely to increase.

The following approaches and solutions merit consideration:

- Expand health-related services:
 - On-site treatment and diagnosis.
 - Transportation to appointments.
- Provide assistance with the completion of disability-related home improvements:
 - Entrance ramps and railings.
 - Bathroom accommodations.
 - Improvements to dwelling climate, including HVAC.

Tools for Survey Research in Colonias

The final goal of this particular part of the research project was to facilitate further policy research of the sort presented in this report by creating a “flexible” survey instrument for use by non-profits or local institutions wishing to better understand social, economic, and physical conditions in colonias. By flexible we mean the instrument that we have designed (see Appendices A and B) contains removable sections, allowing organizations, such as non-profits, community development groups, municipalities, and think-tanks to tailor the survey to meet the specific research goals of their institution.

Bilingual Survey Instrument

Given that many colonia residents speak Spanish, we have provided both an English and Spanish version of the questionnaire. This instrument addresses the following topics:

- Section A: Demographics and General Housing Information
- Section B: Household Information
- Section C: Prior Residence Information
- Section D: Acquisition/Occupation of the Property
- Section E: Inheritance and Title
- Section F: Lot Characteristics
- Section G: Employment and Income
- Section H: Health and Disability
- Section I: Health Habits
- Section J: Education:
- Section K: Transportation
- Section L: Lending
- Section M: Civic Activity
- Section N: Previous Improvements

- Section O: Current Housing Conditions
- Section P: Planned Housing Improvements;
- Section Q: Housing Improvements and Sustainability
- Section R: Dwelling Climate
- Section S: Neighborhood Conditions
- Section T: Land and Home Sales
- Section U: Renter-Occupied Housing
- Section V: Future Housing Plans

While this list is by no means exhaustive, it does address a wide variety of topics of great importance and relevance to both researchers and practitioners alike.

Implementation Guide

We have also created a detailed methodology that will assist institutions seeking to implement the survey. This methodological guide provides a set of “tips” for research teams to follow as they design and implement survey research projects of their own. The final chapter is broken down into the following sections. A brief description of each section is provided here as a quick reference guide.

- *Designing the Instrument*: a detailed description of the survey instrument meant to assist institutions wishing to tailor questions to fit their needs.
- *Selecting the Sample Population*: a variety of strategies for selecting the households to be studied.
- *Identifying and Locating the Sample Population*: various logistical issues to be aware of when conducting research in colonias; a description of how to use resources from the county appraisal district to assist in identifying and locating sample households.
- *Selecting an Implementation Method*: the (dis)advantages of *in-person* and *mail surveys* and how to implement each method.
- *Coding the Data and Creating the Database*: the coding process—how to record survey results in a spreadsheet for statistical analysis.

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Chapter 1. Research Methods

INTRODUCTION

The primary aim of this second report part is to assess the impact of a unique title-clearing program in ten colonias outside Rio Grande City, Texas. The report provides a follow-up to a similar evaluation of the same titling program (Ward et al. 2003), although this particular round of research expands on the prior analysis in three ways: First, by conducting survey research in the same colonias, including 115 of the same homeowners, we provide a rare longitudinal perspective on the impact of legal title on issues such as the home improvement and borrowing practices of colonia homeowners. Second, by collecting a variety of data on social, economic, and physical conditions in the restudy colonias, we describe a decade of change in these settlements. Third, we have designed a survey instrument and methodology guide for organizations seeking to conduct similar research in colonias throughout Texas.

The Report begins with an overview of the methodology and sample framework as we explain the nature of the longitudinal analysis (strictly speaking a two “snapshot” study), and the way in which the two populations form part of a natural experiment that allow us to control for many variables that might, otherwise, be expected to have an endogenous effect on changing housing conditions and self-help housing behaviors. The chapters that follow describe the social, economic, and physical conditions in the ten study colonias, assess the impact of title regularization by the CRG, analyze land and housing market dynamics over the past decade, and make recommendations regarding future policy-making in colonias.

SAMPLE SELECTION

The colonias of Starr County, Texas were developed mostly during the 1980s. Due to lax land development laws, low wages and high demand for affordable housing, and the corrupt dealings of two locally influential developers, the growth of these settlements resulted in high rates of informal land ownership, meaning many residents had incorrect or incomplete property titles, and many others had no title at all.¹ In 1996 the Community Resource Group (CRG), an Arizona based non-profit organization that works to improve water and wastewater infrastructure and to strengthen housing opportunities for residents in low-income, rural communities, was appointed by the State of Texas to lead a land and title regularization² project in 15 colonias throughout Starr County, Texas. In total, these subdivisions contained more than 2500 lots owned by approximately 2000 households.

The data for this report are drawn from three sources: a database compiled by staffers at the CRG during the land titling process and two databases containing the results of households surveys conducted in 2002 and 2011 in ten of the colonias affected by the titling program. These ten settlements were selected based upon two criteria, namely, their size and the degree to which the CRG titling program had impacted the settlement. Thus, this study focuses solely upon the ten largest colonias in order to facilitate statistical analysis between colonias, when

¹ The specific details of this land development process are discussed in greater depth in Chapter 3. An even more extensive description is provided in Ward et al. 2003.

² In this context, land regularization refers to the upgrading or installing of physical infrastructure, while title regularization means the correcting or issuing of property title.

applicable. However, throughout this report, seven colonia subdivisions have been grouped together due to their proximity to each other, and comprise an area known as Las Lomas, located on the outskirts of Rio Grande City.

The results of the 2003 Study (Ward et al. 2003) comprise the responses from the household survey conducted in 2002. Using the original CRG database containing information on the majority of households in the ten selected colonias, residents were divided into two subsamples: those who were relatively unaffected, for whatever reason, by the CRG titling program and who were defined as the “Control Group”; and those that received major assistance from the CRG program who form part of the “Study Group.”³ In total, all 303 Study Group households were selected from the database, and ultimately 195 households (or 64%) were interviewed. Similarly, 400 Control Group cases were identified, and a random selection of 133 (1/3 of the total) were selected to participate in the study, 71 (or 53%) of which were interviewed. Most of those whom we were unable to survey were found to be vacant lots, inaccessible homes (ferocious dogs or barred entry), or homeowners who were not home at the time of first or subsequent visits.

The 2002 survey instrument was designed by the lead researcher (Ward) building off a similar survey that had been successfully used in other colonia subdivisions. Although no pilot survey was run, the survey was tested during training sessions with the local survey workers (*promotoras*), many of whom worked for the CRG and were residents in the study colonias. The survey was adapted for idiomatic uses of language common in South Texas. The *promotoras* were trained over two days in March and April of 2002, and eventually 17 of them conducted the majority of surveys in May and June of that year.

The survey took, on average, between 25-30 minutes to complete. Participants were provided with letters of presentation (in both English and Spanish) which contained further information regarding the purpose of the survey as well as contact information in the event that participants had further questions. Each participant was also provided with a \$15 voucher for use at Wal-Mart as compensation for their time. Although many households were not home at the time of visit, open rates of refusal were very low, as the project had significant community support.

Following completion of the survey (from May to December of 2002), external photos were taken of each dwelling primarily in order to assist researchers in identifying homesteads for any subsequent surveys that we might undertake, particularly in the event it would be ten years before we sought to use these photos as part of the triangulation of dwellings during the 2011 Study, and as a basis to document any significant visible changes to the dwellings over ten years.

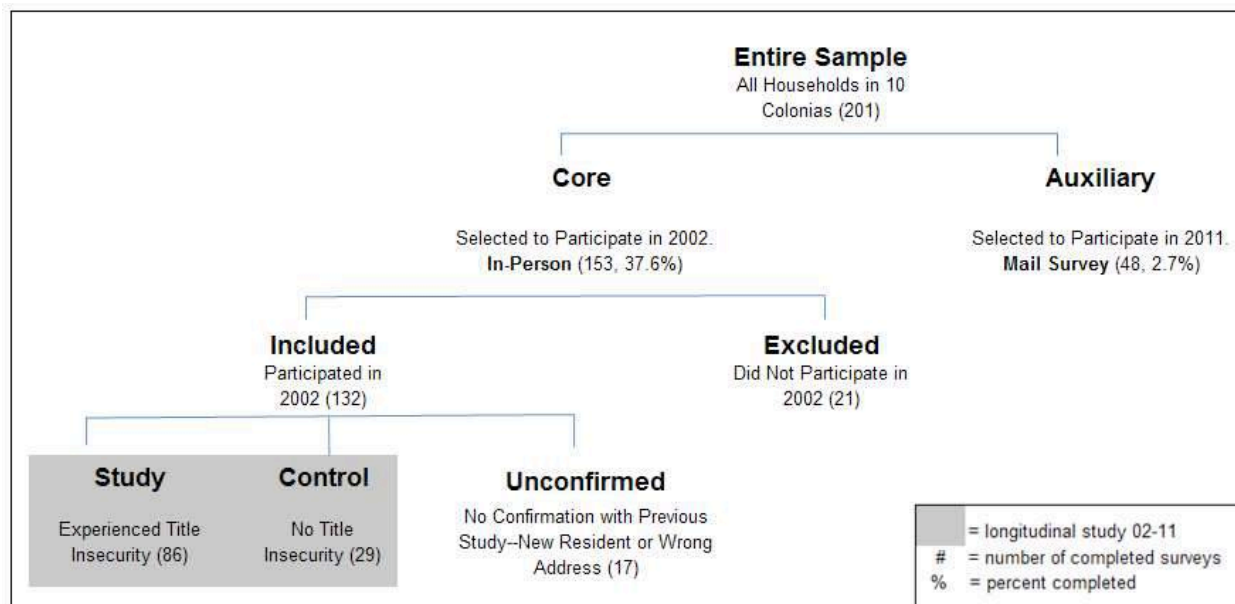
For the current study, we returned to these same ten settlements to assess general housing changes over nine years and, in particular, to evaluate the impact of the titling program on the home investment and borrowing practices of colonia homeowners. Thus, the majority of respondents (148 out of 201) included in the 2011 Study were chosen based upon their previous participation in the 2003 Study (Ward et al. 2003). In total we conducted 201 surveys throughout these ten colonias (seven of which are part of Las Lomas), and all participants fall into one of three groups: the “Included Core Sample,” the “Excluded Core Sample,” and the “Auxiliary Sample”. The Included Core Sample are those residences where a survey was

³ A more in-depth description of the Study and Control Groups is provided in Chapter 3.

administered in 2002;⁴ the Excluded Core Sample are residences selected for study but where researchers were unable to administer a survey in 2002, for whatever reason.⁵ As Figure 1.1 shows, the Included Core Sample comprises three different groups: the Control Group, who experienced little title insecurity and received minimal assistance from the CRG; the Study Group, who were provided clean title by the CRG; and a group of households labeled “unconfirmed,” meaning that in 2011 we were unable to confirm that these were the same residents that had participated in the 2003 Study. Importantly, however, it is the first two of these groups—the Control and Study Groups, that receive most attention throughout this report, since only in these households did we have comparable data from both the 2002 and 2011 surveys. Thus, these cases form the basis for our longitudinal study (snapshot) study to assess a variety of household changes over the past decade.

The 2011 research team had originally intended to focus its efforts solely upon the Included and Excluded Core, as data were available on these household from the CRG titling program database. Nevertheless, due to time constraints and limited labor power, we later decided to distribute mail surveys to additional households (when accessible) within the ten selected colonias in order to expand the sample population. These 48 mail surveys thus comprise the “Auxiliary Sample.” Figure 1.1 provides a visual breakdown of these different groups as well as the number of surveys returned and the rate of completion.

Figure 1.1 The Sample and Sub-Sample Populations



⁴ These cases are therefore referred to as the “Included Core Sample” because they were included in the 2003 Study.

⁵ Thus, these cases are referred to as the “Excluded Core Sample” because they were preselected for participation in the 2003 Study, but were excluded because no survey was in fact completed at these residences.

LOCATING SAMPLE PARTICIPANTS

In order to draw comparisons between the 2002 and 2011 datasets, it was essential that we clearly identify each household that participated in the 2003 Study. To do so, we acquired plat maps⁶ of each colonia from the county appraisal district and used an identifier (containing the colonia, block, and lot number) from the previous study in order to locate each lot. These maps were then color coded and used in conjunction with pictures taken during the 2002 Study to verify the location of each Core Sample lot. Researchers then recorded a description of each of these lots that was later used as a reference point while conducting or distributing the surveys.⁷ Once completed, data from the surveys was used to verify that the household had actually participated in the 2002 Study.⁸

Although using the plat maps to locate each lot was relatively straightforward, certain obstacles made the process more time-consuming than anticipated. In more than one colonia, some of the street names provided on the plat map differed from those on street signs or reported by residents. At other times, certain roads simply did not exist (see images in Chapter 6) often because that portion of the subdivision had never been formally developed. In these cases we used satellite images from Google Maps and mapping technology on cellular phones to confirm the presence or absence of certain roads or to verify the correct location within the colonia.

SURVEY IMPLEMENTATION

As described, the research team initially intended to conduct surveys only in the Core Sample (404 households in total).⁹ Eventually, we decided to expand the sample through the inclusion of a mail (Auxiliary Sample) survey due to time constraints and limited labor power. All of the auxiliary surveys were delivered over two weekends in late June of 2011, as were the majority of the core sample surveys (with a subsequent return during mid-July to visit 70 final core sample lots). The survey team consisted of three Graduate Research Assistants from the LBJ School of Public Affairs and the Department of Sociology who conducted the Core Sample Surveys. In addition, eight college students currently residing in Starr County were hired to distribute the Auxiliary Sample Surveys, although half of these were later trained to implement the Core Sample Surveys as well.

Initially, the local research assistants preferred to work in pairs, but eventually became comfortable enough to work on their own, usually canvassing the same block in order to have a partner nearby. The research team typically visited residences between the hours of 9:00 a.m. and 12:00 p.m. and 3:00 p.m. and 8:00 p.m., as these seemed to be the time when most residents were at home and willing to participate. Although we had anticipated that Saturdays and Sundays would be more productive given that residents would be more likely to be at home, this proved not to be the case, and many residents were in fact not home on the weekends.

⁶ Plats are maps showing formal property divisions that are filed with the county appraisal district prior to the sale of lots.

⁷ These descriptions were typically a permanent defining feature such as the house number, color, or design.

⁸ In order to verify that each household had participated in the prior study, we used a combination of the map code, owner name, and purchase date.

⁹ From both the 2003 Study and the CRG database.

CORE SAMPLE SURVEYS

Upon visiting the Core Sample residences, research assistants described the nature and aims of the research, covered the usual protocols¹⁰ and then conducted surveys whenever possible. Upon completion of the survey, participants received a letter of presentation¹¹ and a \$15 gift card for HEB for which they gave a signed receipt. If Core Sample residents were not home, the researchers left a flyer that explained the purpose of the study and also mentioned the \$15 gift card for compensation and a time at which a researcher would return in order to conduct the interview. In addition, the researchers noted the date and status of the each survey to allow for a subsequent analysis of the completion rate, as detailed in Table 1.1.

In total, 153 core sample surveys were conducted out of 404 pre-selected participants, a completion rate of 32.7%. Of these, 132 (86.3%) were Included Core surveys, while 21 (13.7%) were Excluded Core surveys.¹² The largest impediment to successful completion of the survey was the fact that many residences were not accessible due to locked gates, or the owner was not home at the time of visit (155 in total, or 38.4% of the core sample lots), and the significant presence of vacant, unoccupied, or undeveloped lots (42 in total, or 10.4%).¹³ In the end, 37 out of 198 (18.7%) residents declined to participate in the survey.

		Total	Percentage of Total Core Sample Lots	Percentage of Total Core Residents Contacted
Contact Made with Resident	Included Core Surveys Completed	132	32.7%	66.7%
	Excluded Core Surveys Completed	21	5.2%	10.6%
	Total Core Surveys Completed	153	37.9%	77.3%
	Return Later	8	2.0%	4.0%
	Total Core Declined	37	9.2%	18.7%
	Total Residents Contacted	198	49.0%	N/A
No Contact Made with Resident	Businesses/Non-residences	5	1.2%	--
	Not located	0	0.0%	--
	Combined Lot	4	1.0%	--
	Not Accessible/Not Home	155	38.4%	--
	Vacant/Unoccupied/Undeveloped	42	10.4%	--
	Total Residents Not Contacted	206	51.0%	--
Total Core		404	--	--

Table 1.1 Core Sample Response Rates

¹⁰ See Appendix C for copies of the script used by surveyors

¹¹ See Appendix D.

¹² Again, the Included Core were those that completed a survey in 2002, while the Excluded Core were selected to participate, but for whatever reason did not.

¹³ Undeveloped lots are those where no clearing or leveling of the terrain has occurred, while vacant lots are those which have been cleared and leveled, but no dwelling exists. Unoccupied lots have a structure of some sort that is not currently occupied by a resident.

AUXILIARY SAMPLE SURVEYS

Procedures for the delivery of the Auxiliary Sample surveys differed slightly, and were complicated not only by a large number of vacant or inaccessible lots (as with application of the Core Sample surveys), but also by the rather hit and miss US mail delivery system in colonias. While some residences had easily accessible mailboxes on the street, others had no mailbox at all. This meant that delivering the survey by mail was both impractical and inaccurate. Furthermore, although certain colonias had central PO boxes, it would have been impossible to link these to physical addresses within the colonias, and many mail users did not even live within the settlement.¹⁴

Research assistants, some of whom were residents or former residents in the study colonias, were hired to deliver the Auxiliary Sample surveys. Just as with the core sample surveys, plat maps were used to identify specific lots. Additionally, the research team was provided with a written description of each Included Core Sample lot to use as a landmark. This strategy was very successful, and the research team was only unable to identify 49 (out of 1767, or 2.8%) of the Auxiliary Sample lots due to inconsistencies with the design of the map—most frequently because of the incorrect location of roads..

Wherever possible, the researchers delivered the survey instrument in person along (along with a letter of presentation and a pre-paid self-addressed envelope to simplify the return process), and also took the opportunity to explain the purpose of the project as well as offer instructions for completing and returning the survey. When residents were not home, or the lots were inaccessible due to gates or fences, the researchers left the survey packet either securely on the doorstep, often inside the screen door, or if all else failed, in the mailbox (where they had one). Researchers kept clear records of the status of each undelivered survey so that we could later assess the success of the delivery method and the response rate.

However, three factors drastically limited the success of the auxiliary survey, including a high number of vacant, unoccupied, or undeveloped lots, a large proportion of inaccessible properties, and a significant number of combined lots.¹⁵ In total, 34% (597/1767) of the Auxiliary Sample lots were either undeveloped, vacant, or unoccupied; 13.4% (237/1767) were not accessible or the resident was not home; and 11.9% (210/1767) were part of a combined property, and therefore only one survey was delivered. Finally, we were unable to identify 49 (out of 1767, or 2.8%) of the auxiliary sample lots due to inconsistencies with the design of the map—most frequently because of the incorrect location of roads. In this case, these surveys were not delivered and are annotated as such.

Because of the high number of residences that were inaccessible, it makes sense to calculate the auxiliary survey's success rate based upon the number of residents contacted.¹⁶ This data is shown in the right hand column in Table 1.2. Of those residents contacted, 89.6% (586)

¹⁴ Personal communication with Blanca Juarez, colonias Ombudsperson and local resident, July 12, 2011.

¹⁵ Combined lots refer to multiple adjacent properties occupied by the same household. In this instance, only one survey was delivered to the resident.

¹⁶ By "contacted", we refer to instances where either the head of household was home, or where the property was accessible and a survey could successfully be delivered (either in the mailbox or at the front door). In total, we contacted 654 households.

received copies of the survey. Of these 586, 48 (or 8.2%)¹⁷ completed a survey and returned it by mail. Some 10.4% (68 in total) declined to participate and did not accept the mail surveys.

		Total	Percentage of Total Auxiliary Sample Lots	Percentage of Total Auxiliary Residents Contacted
Contact Made with Resident	Auxiliary Surveys Delivered	586	33.2%	89.6%
	Auxiliary Surveys Returned by Mail	47	2.7%	7.2%
	Auxiliary Surveys Declined	68	3.8%	10.4%
	Total Residents Contacted	654	37.0%	--
No Contact Made with Resident	Businesses	20	1.1%	--
	Not Located	49	2.8%	--
	Combined Lot	210	11.9%	--
	Not Accessible/Not Home	237	13.4%	--
	Vacant/Unoccupied/Undeveloped	597	33.8%	--
	Total Residents Not Contacted	1113	63.0%	--
Total Auxiliary		1767	--	--

Table 1.2 Auxiliary (Mail) Response Rates

CODING AND DATABASE CREATION

This report draws upon primarily upon three separate databases, each of which is available online at the Latin American Housing Network along with coding guides.¹⁸ These are: i) a database containing the results from 264 household surveys conducted in 2002, labeled (02) throughout this report; ii) the results of 2011 surveys, labeled (11); and iii) an integrated dataset containing 115 cases from both the (02) and (11) databases, labeled (02-11).

THE (02) DATABASE

The (02) database is identical to the one used during the 2003 Study, with a few additional calculations used for comparison with the 2011 survey. Most frequently, results from this database are used to portray colonia-wide conditions in 2002. Throughout this report, when these data are portrayed a label (02) will appear in the in the top-left hand corner of any table and the bottom left-hand corner of any graph. However, when results from multiple databases are displayed in the same table, the label (02) will appear next to the variable to which it refers.

THE (11) DATABASE

The second and most frequently used database contains the results of the 2011 survey of 201 households. This database contains information on a number of topics (particularly socio-economic characteristics) that were not addressed in the 2003 Study and will portray current conditions in the ten study colonias. Results from this database are labeled (11) throughout this report.

¹⁷ The difference between this 8.2% return rate and the 7.2% return rate reported in Table 1.2 is due to a change in the denominator. In the former, the return rate is calculated out of all questionnaires delivered (48/586) whereas the 7.2% from Table 1.2 refers to the return rate for all residents with whom contact was made (48/654).

¹⁸ www.lahn.utexas.org & click on the Texas Housing Studies Section

THE (01-11) DATABASE: ASSESSING HOUSEHOLD CHANGES OVER TIME

As we described previously, 115 households participated in both the 2002 and 2011 surveys. In order to assess changes over ten years, we compiled these data into one integrated database containing the results of both of these surveys. Primarily, these data are used to assess the impact of the provision of title on the investment and borrowing practices of the Study and Control Groups in comparative perspective dealing as they do with the same households over two time horizons. Figures and tables throughout this report that are labeled (02-11) are thus a comparison of the *exact same households*, and provide a longitudinal analysis of *actual* changes within specific households.

CHAPTER 2. THE COLONIAS OF STARR COUNTY

INTRODUCTION

This chapter sets out to contextualize the results presented later in this report by clarifying both the historical trajectory of colonias in general, as well as the history and current conditions of the ten colonias upon which this study centers. We begin therefore by discussing competing s of what constitutes a colonia, before describing the conditions that resulted in their proliferation during the second half of the 20th Century. We then provide a brief overview of legislative attempts to curtail their growth in Texas and to protect residents from exploitation. Finally, we contextualize later analyses by providing a detailed description of myriad social, economic, and physical conditions in the ten study settlements.

A COLONIA BY ANY OTHER NAME

Meaning “neighborhood” or “community” in Spanish, the term colonia has come to signify a low-income, informal subdivision along the US-Mexico border typically lacking adequate infrastructure. Nevertheless, what officially constitutes a colonia depends largely upon the government body or institution that seeks to define and classify it. Typically, definitions tend to center around a description of the geographic location, as well as economic and physical conditions in these neighborhoods. The following factors are characteristic of the criteria typically used by a number of government agencies to classify colonia subdivisions:¹⁹

- Geographic Location:
 - Near the border region (in a county in which any part of that county is within 50 to 150 of the border).
 - In an unincorporated part of a county.
- Economic:
 - Primarily occupied by low or very low income families.
- Physical:
 - Poor or non-existent utility services.
 - Lack of paved roads.

These criteria are not uniformly adopted, but rather, according to the Texas Secretary of State, “agency definitions will vary due to funding requirements. The differences among its applied definitions are attributed to the varying emphases placed on its specific characteristics by government agencies and codes. Consequently, the characteristics that define a colonia differ according to the type of agency, government code or issue being addressed at any given time” (Texas Secretary of State 2011). Undoubtedly, this flexible set of criteria complicates efforts to define what is and what is not a colonia, and recent research points to the fact that current Federal definitions are equally problematic. Mukhija and Monkkonen (2006) argue that because Federal definitions, which are based largely upon Texas’ own criteria, are too broad, they “fail to distinguish between inherently distinct areas and investment needs.” Paradoxically, however, they are equally too narrow; the authors argue that colonia-like settlements in California fail to

¹⁹ These are condensed from descriptions provided by the Texas Secretary of State
http://www.sos.state.tx.us/border/colonias/what_colonia.shtml

qualify as colonias but have severe housing and infrastructure needs nonetheless. The first claim—that is, that definitions of what constitutes a colonia are too broad—is undoubtedly the case in Texas. This is not to say that too many settlements are currently classified as colonias, but that the definitions obscure wide variation in conditions between settlements, such as “size, layout, mode of development, housing types and mixes, lot dimensions, soil and vegetation characteristics, lot occupancy rates, level of servicing, development prospects, land market turnover, ethnic composition, income levels, and levels of relative poverty” (Ward et al. 2003, 4).

Given the variation that is typical between these settlements, the colonias described in this report should not be considered typical of all colonias; rather, we portray conditions in a ten subdivisions which have densified and consolidated over a quarter century, have had a history of community activism and mobilization, and have received significant assistance from government agencies and non-profit organizations. Nevertheless, to the extent that the conditions described in this report are similar to those in other colonias throughout the border region, we believe this analysis will contribute significantly to current understandings of a variety of social, economic, and physical issues that deserve further attention by policy makers.

THE RISE OF COLONIAS

Despite the financial risks and social disadvantages associated with living on informally-titled lots in poorly-serviced subdivisions, buying a lot in a colonia is often the only opportunity of homeownership for many low-income families along the US-Mexico border. Colonias first began to develop in Texas in the 1950s, as the Bracero Program attracted Mexican laborers to the border region. Four factors contributed to the proliferation of these settlements in Texas in the later half of the 20th Century: high demand for affordable housing, a large supply of agriculture land, lax land development laws, and a flexible legal mechanism for land sales known as Contract for Deed (Ward 1999).

Historically, the high cost of land and housing and the structure of low incomes has effectively excluded low-income would-be homeowners from entering the housing market within cities. However, until 1989, the development of rural land was relatively unregulated in Texas. It was precisely this reason that most colonias developed outside municipalities, where land development regulations were less comprehensive and difficult to enforce. Lax regulations thus allowed developers to circumvent many of the infrastructural and utility requirements in urban subdivisions, and the lack of services and distant location made the financial cost to buyers very minimal. As we discuss later, however, the social costs associated with living in colonias is often quite high.

Despite the low cost of land in colonias, purchasing a lot outright was difficult for many low-income families. Thus, many developers provided would be homeowners with the credit necessary to purchase a lot through seller financing and through Contract for Deed, a low-cost legal mechanism through which the buyer agrees to purchase the property from the seller but cannot in fact claim ownership (i.e., possess the title) until the purchase price has been paid in full (Texas Secretary of State 2011; Ward 1999).

Contract for Deed agreements, which are common throughout Texas, as well nationally, are one of the few means of acquiring property for low-income families, many of whom simply cannot afford a down payment or would not qualify for a typical mortgage (Texas Secretary of State 2011; Ward 1999).²⁰ Although nationally a number of mechanisms have been implemented to

²⁰ Contract for Deed agreements are sometimes referred to as the “poor man’s mortgage” (Ward 1999, 91).

limit the risk for buyers,²¹ this has not historically been the case in Texas: “[i]n effect, until 1995 a buyer under Contract for Deed had no equity protection,” and most contracts “contained forfeiture clauses which allowed the seller, after a default by the purchaser, to recover possession of the property along with any improvements that had been made, as well as to retain all previously paid installments” (Ward 1999, 92).

Despite these risks, however, many colonia residents continue to buy property through contract for deed agreements because they are affordable, allow for immediate occupation of the property (if the family chooses), entail little transaction costs and typically small (or no) down payments, and allow buyers to make steady payments over time. Sellers, on the other hand, have benefited from a lack of oversight of property transactions and exploitative forfeiture clauses that disadvantaged purchasers (Texas Secretary of State 2011), many of whom could not read the contracts, which were historically written in English. In certain contexts, such as the colonias we studied in Rio Grande City, developers often bypassed formal Contracts for Deed entirely, making oral agreements with purchasers and providing at best receipts of monthly payments, or at times no documentation at all. Understandably, lacking a formal agreement can be extremely problematic for colonia residents seeking to claim ownership to their land; in fact, technically, oral agreements are subject to the Statute of Frauds²² and are not technically enforceable. Thus, lacking a formal Contract for Deed agreement often results in insecure tenure for many colonia residents, as was the case in Starr County. Nevertheless, there are many exceptions to the Statute of Frauds, meaning it would likely not apply for many colonias homeowners who purchased their property through an oral agreement, though these decisions are enforced “on a case by case basis”²³.

EFFORTS TO PREVENT THE GROWTH OF COLONIAS

Two efforts have taken place throughout Texas, beginning in the late 1980s, to stop the growth of colonias and to limit the risks experienced by colonia residents. These have entailed attempts to control the subdivision and development of such settlements through what are known as Model Subdivision Rules (MSRs), and legislation designed to make Contract for Deed less exploitative of buyers.

Beginning in 1995 with the passage of Senate Bill 336, the state began to provide much needed protections for buyers using Contract for Deed. This law required developers using Contract for Deed to disclose to buyers the property conditions and the availability of utilities prior to purchase, and to provide annual summaries of payments and the remaining balance as well as Spanish copies of all documents. SB336 also included restrictions on forfeiture rules such that once the buyer had completed 48 monthly payments (or 40% of the purchase price) forced forfeiture was no longer an option in the event that the buyer defaulted on a payment. Although these rules originally applied only to border counties, they were expanded to cover Contract for Deed agreements throughout the state in 2001. These additions, as well as subsequent revisions, also required that purchasers, in the event of a default, be given a period of time (30

²¹ Ward (1999, 91) provides a detailed description of the variety of protections that have developed nationally.

²² The Statute of Frauds is a law requiring that contracts concerning the sale of real estate, among other things, be written in order to be valid.

²³ Personal communication with Heather Way, Director of the Community Development Clinic at The University of Texas at Austin, December 12, 2011.

days for new contracts after August of 2003, 15 to 60 days for older contracts) to provide payment (Texas Attorney General 2011).

However, prior to 1995, other legislation had begun to focus on land development regulation and was designed to limit the growth of colonias in the border region, and subsequently, throughout Texas. In 1989, Texas Senate Bill 2 (SB2) established the Economically Distressed Areas Program (EDAP) which provided funds to border counties in order to complete water and wastewater projects in colonias. In order to qualify, these counties were required to conform with MSRs, which regulated the subdivision and development of residential land. Specifically, MSRs required the formal platting of new subdivisions as well as the provision of adequate water and wastewater infrastructure (Texas Attorney General 2011). Although well intentioned, SB2 lacked the enforcement mechanisms necessary to prevent further colonia development; later laws allowed intervention by then State Attorney General, Dan Morales, whose “Colonias Strike Force” became the enforcer of the MSRs specifically by targeting unscrupulous developers that flouted the new laws (Ward 1999). As we explain in Chapter 3, at that time Morales played a key role in targeting two such corrupt developers in Starr County.

A variety of land development rules are now in place that regulate the creation of new residential subdivisions near the border region. These regulations require, among other things, that the land be formally surveyed, platted and recorded with the county clerk, that adequate drainage be provided, and that services be either installed or that a financial guarantee be provided for their future provision. This requirement is commonly referred to as “Build it or Bond it.” (Texas Attorney General 2011). Beginning in 2005, counties (or cities within counties) outside the border region have been eligible for EDAP funds if they meet MSRs (Texas Water Development Board 2011).²⁴

SURVEY SETTLEMENT DESCRIPTIONS

This report focuses on housing and social conditions in ten colonia subdivisions in Starr County, Texas. As we will explain in greater depth later, these subdivisions were chosen because many of their residents had been significantly impacted by the title clearing program led by the CRG. Although the conditions described throughout this report are likely similar to those in other colonias, we must emphasize that our results pertain only to the ten study colonias and, while fairly typical, are not necessarily extrapolative to all colonias throughout Starr County (of which there are more than 240).²⁵

²⁴ As of February of 2009, more than 40 Texas counties and 58 cities had adopted MSRs.

²⁵ This number comes from the Attorney General of Texas colonia viewer:
https://maps.oag.state.tx.us/colgeog/colgeog_online.html#app=a527&1d99-selectedIndex=0

Figure 2.1 Location of Study Colonias: Aerial Photograph



LAS LOMAS

Las Lomas comprises seven separate colonia subdivisions. However, due to their proximity and similar development histories, they are essentially one large colonia, containing more than 1200 lots in total. Although Las Lomas was originally located a few miles to the north east of Rio Grande City, the city has since expanded significantly, with the settlement now falling within its extraterritorial jurisdiction (ETJ).²⁷ Las Lomas was originally developed in the mid-1980s, and five of the seven subdivisions had been formally platted, while two (Share 52 and AB130), were partitioned through the CRG titling effort. Most lots in Las Lomas, as well as the other study colonias measure 50 feet (frontage) by 100 feet (depth). The exception here is Mike's, where lots are significantly larger, often measuring a quarter acre.

Because it was developed early on, many of the residents living in the formally platted subdivisions within Las Lomas had paid off and received their deeds prior to the intervention by the CRG. Thus, all of the Control Group respondents live in Las Lomas, as these had limited titling difficulties, if any.²⁸ In addition, this settlement was the first of the study colonias to receive water and sewage service, and all but a few streets are now paved, although flooding continues to be a serious problem due to insufficient storm drainage.²⁹

²⁶ Image taken from Google Earth.

²⁷ In Texas, an ETJ is an area outside the city limits within which the city has limited regulatory authority. In border colonias, cities with a population of more than 5000 have an ETJ of five miles, and are required to follow certain land development and subdivision regulations (Texas Attorney General).

²⁸ You will recall that the Control Group is comprised of those households that received minimal title assistance by the CRG, while the Study Group experienced severe title insecurity and thus more assistance through the titling program.

²⁹ On more than one occasion we interviewed residents that had taken flooding prevention into their own hands, either by intentionally building elevated dwellings or by constructing either concrete or earthen berms to prevent flooding from entering the home.

Possibly due to both its size and its proximity to Rio Grande City, Las Lomas has developed a micro-economy of sorts, with a variety of businesses scattered throughout the neighborhood. A fairly large convenience store and Laundromat are located on the settlement's main road, as is a mechanic's shop. Other local residents operate small businesses, such as beauty salons and food preparation outlets³⁰ that remain busy thanks to the high level of traffic through the neighborhood.³¹ Additionally, a number of apartment complexes have been built in the neighborhood, most likely by local residents that have sought to capitalize on the high demand for low-cost housing in the area.

Figure 2.2 Las Lomas: Aerial Photograph



³⁰ See Giusti 2010 for an interesting discussion of microbusinesses in Texas Colonias.

³¹ Embassy Street, the main road through Las Lomas, continues north for approximately 3.5 miles before intersecting with FM 755, a primary route north. Thus, Embassy is likely the chosen shortcut for residents on the east side of Rio Grande City.

³² Image taken from Google Earth.

Photo 2.1 Las Lomas: Street View



COLONIA B & E

Colonia B & E (Blas and Elías – named for the two developers), one of the newer colonias, is located just east of (though not contiguous to) Las Lomas. This colonia is essentially a long, thin strip running north to south. One main road leads into the settlement, which is only accessible through another colonia to the south. Colonia B & E is difficult to access and has little traffic, other than those who live in the colonia, which is rather limited.³³ Thus, unlike Las Lomas, this neighborhood has few, if any, small businesses or apartment complexes.

Although the majority of the roads are now paved, no storm drainage is available, and the colonia continues to have issues with flooding. The hilliest of all the study colonias, many houses are built upon the edge a hillside, with often dangerously steep driveways.

³³ Colonia B & E is comprised of only 164 lots in total.

Figure 2.3 B & E: Aerial Photograph



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Photo 2.2 B & E: Neighborhood View



³⁴ Image taken from Google Earth.

MIKE'S

Mike's, which was not formally platted until 1989, is the newest of the colonias included in this study. Located off of FM 2360 on the eastern edge of Starr County, it seems likely that many residents in Mike's work in relatively equal numbers in both Hidalgo and Starr County. Most lots in Mike's were sold in the mid-1990s, and many remain vacant today. While half of the lots measure 50 by 100 feet, much like lots in the other nine colonias, the other half were platted as ½ acre lots, many of which have since been subdivided and occupied by multiple families.

Mike's experiences significant traffic, similar to that in Las Lomas. As a result, a number of businesses operate throughout the colonia, but most notably on the western edge bordering FM 2360. These include a restaurant and food vendors, a convenient store, and mechanic's shop.

Figure 2.4 Mike's: Aerial Photograph



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³⁵ Image taken from Google Earth.

Photo 2.3 Mike's: Street View



WEST ALTO BONITO

Located on the eastern edge of Starr County, right off of Highway 83, West Alto Bonito is the largest single subdivision in the study, with more than 500 lots. Although formally platted, some residents purchased lots in what was later discovered to be a dry stream bed (arroyo). After severe flooding and damage to their homes, these families were relocated during the CRG titling project. Despite County efforts to control storm runoff, flooding continues to be a problem in certain areas.³⁶

Traffic within the colonia itself is rather limited, as there is no through street. Nevertheless, a convenient store located just off of the highway stays busy with local residents and passersby alike.

³⁶ One road in particular was impassable by researchers during the survey project.

Figure 2.5 West Alto Bonito: Aerial Photograph



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Photo 2.4 West Alto Bonito: Street View



³⁷ Image taken from Google Earth.

UTILITY SERVICES

Most residents in the ten study colonias now receive basic utility services (Table 2.1), although the design of the survey instrument prevented an accurate estimate of the actual number of respondents with each specific service.³⁸ Nevertheless, none of the households interviewed in-person appeared to lack electricity or water service. However, many of these residents did live for years without basic services. Thus although the median year in which residents occupied their lot was 1992,³⁹ many services were not installed until considerably later, and some services such as electricity were not installed until colonia residents themselves mobilized local community members and visited Austin in protest (Arizmendi et al. 2010). In general, Las Lomas received services earliest and has the most complete infrastructure to date, largely due to its size and proximity to Rio Grande City. Both Mike's and West Alto Bonito continue to depend upon septic tanks – fairly typical for those colonias which are located a long way from municipalities.

(11)	Electricity	Piped Water	Septic System		Sewer System		Garbage Collection	
	Median Year of Installation (MYI)		Percent of Households	MYI	Percent of Households	MYI	Percent of Households	MYI
Las Lomas	1992	1994	7.1%	1993	92.9%	2003	88.6%	2003
Mike's	1994	1994	100.0%	1996	0.0%	N/A	92.2%	2001
B & E	1994	1996	35.3%	1991	64.7%	2006	58.8%	2001
West Alto Bonito	1994	1994	100.0%	1994	0.0%	N/A	71.4%	2002

Table 2.1 Years of Service Installation in the Study Colonias

A PORTRAIT OF THE STUDY HOUSEHOLDS

Before proceeding to the results of the study, it may be helpful to paint a picture of the broader social, economic, and physical conditions in the ten colonias. It is our hope that these data will provide insight regarding the current and future needs of residents in these colonias and inform the analyses in later chapters. As this section will show, a number of factors have changed significantly over time. Specifically and in summary:

- The vast majority of homeowners have completed significant home improvements or expansions over the past decade.
 - Knowledge/use of sustainable home improvements remains limited.
- Most residents are content with the condition of their neighborhood, though lacking infrastructure continues to be a concern for many.

³⁸ The instrument asked respondents (or surveyors) to specify which services were available in the dwelling by ticking a box next to each utility service (including electricity, piped water, sewage, septic systems, garbage collection, and the collection of recycling). In retrospect, it would have been more accurate to ask respondents to select either yes or no for each service. In the coding process it became apparent that a number of surveys lacked checkmarks for certain utility services, though we believe these are typically due to surveyor or respondent error rather than an actual lack of that specific service. Including a yes or no option for each service would have been more accurate, as it would have allowed researchers to differentiate between missing responses and negative responses. For this reason, no percentages are provided for the households' electricity and water services, although we expect it is close to 100%.

³⁹ This refers to all residents in all colonias.

- While a variety of economic indicators reveal a large proportion of financial-distressed households, social factors such as years of education have improved dramatically over time.
- New demographic trends associated with aging homeowners and changing household structures present a variety of policy dilemmas.

EMPLOYMENT AND INCOME

Starr County is one of the poorest counties in the nation; median income in the County in 2010 was \$23,698, less than half of that of Texas. Additionally, more than a third of families live below the poverty rate — nearly three times the state average. In the colonias of Starr County, conditions are even starker: 64.9% of respondents on the 2011 survey earned less than \$19,200 a year, and 34.7% earned less than \$12,000.

Historically, the border region has suffered from higher unemployment and lower wages than elsewhere throughout Texas (Ward 1999), with residents in Starr County often experiencing significantly more hardship than those in other counties along the US-Mexico border (Martinez 2010). This is still largely the case, as the 2010 American Community Survey estimates an unemployment rate of 11.2% in Starr County, compared with 7.4% in Texas as a whole (ACS 2010, 3-Year Estimate). Overwhelmingly, Starr County's economy depends upon the education, health, and social assistance services industries: at 43.1% of all positions, employment in this sector more than doubles the state average (21.2%). In the ten study colonias, 29.7% of workers held education, health, and social assistance positions, the majority of which were in-home health care providers. Other industries in which many colonia residents worked are construction (17.9%), leisure/hospitality services (8.0%), transportation (6.6%), and agriculture (5.7%).

	Texas	Starr County	Rio Grande City	Las Lomas CDP	Survey Data (11)
Average Household Size*	2.75	3.54	3.38	4.05	3.71
With a mortgage*	41.8%	16.5%	25.4%	7.7%	--
Owned free and clear*	21.9%	61.5%	45.1%	70.5%	--
Vacant housing units*	10.6%	12.9%	10.3%	7.4%	
Owner-occupied housing units*	63.7%	78.0%	70.4%	78.2%	
Employment					
Agriculture, fish, and mining	2.9%	6.8%	--	--	5.7%
Construction	8.5%	7.4%	--	--	17.9%
Manufacturing	9.6%	3.1%	--	--	2.8%
Wholesale trade	3.1%	2.1%	--	--	--
Retail trade	11.6%	10.8%	--	--	5.2%
Transportation and warehousing	5.6%	5.9%	--	--	6.6%
Information	2.0%	0.4%	--	--	--
Finance, insurance, and real estate	6.8%	2.1%	--	--	--
Professional, scientific, and management	10.7%	5.4%	--	--	1.4%
Educational services, health care and social assistance	21.2%	43.1%	--	--	29.7%
Leisure/hospitality	8.4%	4.0%	--	--	8%
Other services, except public administration	5.2%	4.4%	--	--	3.3%
Public administration	4.4%	4.6%	--	--	--
Poverty Rates - all families	13.2%	37.3%	--	--	--
Income					
Median household income	\$49,585	\$23,698	--	--	--
Mean household income	\$68,367	\$41,501	--	--	--
% Households earning:					Survey Categories
- < \$10,000	7.7%	16.4%	--	--	14.2% < \$7.4k
\$10,000 - \$15,000	5.7%	16.0%	--	--	20.5% \$7.4-12k
\$15,000 - \$24,999	11.6%	19.6%	--	--	33.2% \$12-19.2k

* Data denoted with an asterisk are provided by the 2010 US Census. All other data state and county data are provided by 2008-2010 ACS 3-Year Estimates.

Table 2.2 Socio-Economic Indicators in the Study Colonias

(11)	Las Lomas and B & E	Mike's and West Alto Bonito	All Colonias
Weekly Transport Cost	\$91.66	\$74.49	\$84.87
Average # of Working Vehicles	1.72	1.59	1.67
Average # of Workers Traveling each Week	1.16	0.92	1.06
Percent of Households Using Public Transport	9.4%	19.3%	13.3%
Transportation to Work			
Households with Members Traveling More than 2 Hours	--	--	9.4%
Average Distance (1-way)*	16.33	21.18	18.15
Average Time (1-way)*	20.27	27.43	22.97
Drive Own Vehicle**	95.3%	87.0%	92.4%
Get a Ride**	2.4%	10.9%	5.3%
Walk/bike**	2.4%	0.0%	1.5%
Bus**	0.0%	2.2%	0.8%

*Estimate excludes any person traveling more than 120 miles, as these are considered "out-of-town laborers."

**Refers only to those who work outside of the home.

Table 2.3 Means of Transportation in the Study Colonias

TRANSPORTATION

Given the low cost of housing in colonias, one of residents' primary expenses is transportation. Likely due to the distant location from the urban centers and the lack of public transportation, workers relied heavily upon their own vehicle to get to and from work. Although the Community Action Council of South Texas (CACST) operates a public transport service available to the county's rural residents, only a 1 in 8 of the households⁴⁰ interviewed used any sort of public transport regularly. Thus, 92.4% of those who work outside of the home drive their own vehicles, while only 1.5% walk or bike and .8% ride the bus.

Table 2.3 presents a variety of transportation data for colonia residents. We have grouped Las Lomas and Colonia B & E separate from Mike's and West Alto Bonito because these colonias are located in different parts of Starr County. Both Las Lomas and Colonia B & E are located just a few miles east of Rio Grande City, while Mike's and West Alto Bonito are some 11 miles from the city, on the eastern edge of Starr County. For this reason, residents in Mike's and West Alto Bonito travel longer distances to work than those who live closer in to Rio Grande City. Interestingly, however, they spend less per household per week on transportation than: \$74.49 (n=70) per week versus \$91.66 (n=107) in Las Lomas or Colonia B & E. This may be due to the lower number of workers and vehicles per household in Mike's and Alto Bonito, and/or to better access to public transport, given they are closer to Hidalgo County.

⁴⁰ More than half of these respondents used public transport to attend doctors' visits (55%), and many of these are likely elderly.

ETHNICITY

Residents in the colonias of Starr County are overwhelmingly of Mexican origin.⁴¹ For obvious reasons, we did not ask questions on the 2011 household survey regarding citizenship or residency status, though we believe most residents reside in the United States lawfully. However, 80% of respondents reported having been born in Mexico, 18% identified as Mexican American, and 1.5% identified as a Hispanic of non-Mexican origin. According to the results of the 2011 survey, most residents have lived in the same colonia for nearly two decades,⁴² and those born in Mexico have lived in the United States on average for 26.75 years. Thus many children and young adults in the colonias were likely born in the US. It is unlikely that many homeowners are undocumented immigrants or should be considered as such.

GENDER

Of the households interviewed, women comprised 53.2% of all residents. Overwhelmingly, women are more common in the 36-45 and 46-55 age ranges, comprising 60.4% and 55.6% of the household populations, respectively. Whether this is due to men's absence from the home due to employment, unmarried/widowed women's increased likelihood of living with kin, or other factors, is unclear. Generally women were more likely to be home at the time of the interview and for this reason more than three-quarters (77.0%) of respondents in the Core Sample surveys were women,⁴³ in contrast to only 52.1% respondents from the Auxiliary Sample. Nevertheless, in terms of responses to our survey we identified no significant differences in responses between men and women.

(11)	0 - 17	18 - 25	26 - 35	36 - 45	46 - 55	56 and up	Total
Male	48.6%	44.7%	51.7%	39.6%	44.4%	50.4%	46.8%
Female	51.4%	55.3%	48.3%	60.4%	55.6%	49.6%	53.2%

Table 2.4 Age Differences by Gender for Respondents

EDUCATION

Levels of educational attainment are very low in Starr County, and even lower in the study colonias. Nevertheless, younger (second generation) colonia residents are undoubtedly completing more years of grade school and are more likely to complete post-secondary programs than are older residents. While only 9.9% of Texans 25 and older had less than 9 years of schooling, this rate was 38.6% in Starr County and 61.2% in the study colonias. Understandably, given the low rates of secondary school completion, very few residents attend institutions of higher education, with only 5.2% and 1.9% receiving Associate's (or post-secondary training) and Bachelor's degrees, respectively. Thus, study participants were more likely to receive Associate's degrees than Bachelor's degrees, while the reverse is true throughout the county and the state. Two factors may have led to these results. First of all, because the 2011 survey asked if residents had completed a "2-year degree or training," the results may overestimate actual completion of Associate's degrees. Secondly, the proximity of South Texas College (STC), which operates a campus out of Starr County, likely attracts a

⁴¹ 95.7% of residents in Starr County are Hispanic or Latino, and 92.3% are of Mexican origin (2010 US Census).

⁴² The average year in which residents occupied their lot was 1992.

⁴³ No difference was present between the Control and Study Groups.

number of local residents for whom travel to McAllen, or farther even, is simply too expensive or inconvenient. Because STC provides more than 50 Associate degree programs and close to as many certificate programs, many colonia residents may opt to continue their education at this local branch. These two factors thus likely explain the discrepancy between the number of colonia residents with Associate's and Bachelor's degrees. Nevertheless, despite the higher rate of completion of Associate's degrees, overall completion of higher education is far lower in for colonia residents than the state average.

Ages 25 and up	Less than 9th grade	Associate's degree	Bachelor's degree
Texas	9.9%	6.3%	17.2%
Starr County	38.6%	2.4%	6.7%
Survey Data (11)	61.2%	5.2%*	1.9%

Non-survey data provided by 2008-2010 ACS 3-Year Estimates
Table 2.5 Education Levels.

Encouragingly, however, our analysis reveals vastly different levels of educational attainment by age group, meaning younger residents are far more likely to complete primary and secondary school and to receive Associate's or Bachelor's degrees than are older members. 6.3% and 9.4% of people between the ages of 25 and 34 had received Bachelor's and Associate's degrees, respectively, while no one over the age of 65, and few between the ages of 45 and 64, had done so. Furthermore, younger household members were far more likely to have completed more years of schooling than older members; including Associate's and Bachelor's degrees, household members between the ages of 18-24 had completed 12.26 years of school on average, compared with 6.11 and 3.60 for those between the ages of 45-64 and 65 and older, respectively. Thus, as expected younger colonia residents are attending school for much longer than their parents, although overall levels of educational attainment continue to be far below those of Starr County and Texas in general.

		18 -24	25 - 34	35 - 44	45 - 64	65 and up
Bachelor's degree or higher	Texas	7.10%	25.7%	27.4%	27.0%	20.7%
	Starr County	5.00%	12.8%	11.5%	5.3%	6.4%
	Survey Data (11)	10.60%	6.3%	1.1%	1.3%	0.0%
Associate's degree	Survey Data (11)	14.00%	9.4%	8.7%	3.2%	0.0%
Years of School (excluding higher ed)	Survey Data (11)	11.68	10.35	8.84	5.99	3.60
Years of School (including higher ed)	Survey Data (11)	12.26	10.81	8.97	6.11	3.60

Non-survey data provided by 2008-2010 ACS 3-Year Estimates
Table 2.6 Years of Schooling Data.

AGE, HEALTH AND DISABILITY

For reasons that are yet unclear, Starr County has higher rates of disability than are present throughout the state. Results from our survey confirm this conclusion: 22.7% of household members between the age of 18 and 64 had a disability, compared with 18.9% for Starr County and 10.1% for the state of Texas. While the percentage of colonia residents 65 or older with a disability (54.8%) was lower than the county estimate (72.7%), it is nonetheless higher than throughout Texas (41.2%). Given the low incomes of many colonia families, disabilities may have a disproportionate impact on these residents. While only 23.5% of Texans lack health insurance coverage, this rate is as high 40.7% in Starr County (2008-2010 American Community Survey 3-Year Estimates). Other research estimates that uninsured residents make up 42% of the colonia population in Starr and Hidalgo Counties (Ortiz, Arizmendi, and Llewellyn 2004).⁴⁴

Although a number of local clinics provide basic medical services, access to complete medical care is limited by distance and transportation difficulties; the nearest hospital with comprehensive services, the Rio Grande Regional Hospital, is a 50-minute drive from Rio Grande City. Not surprisingly, many elderly respondents relied upon buses, or assistance from Colonias Unidas, to attend a doctor's appointment.

Households Needing Disability-Related Home Improvements (11)		17.4%
Handicap accessible bathroom (11)		12.4%
Other handicap assistance (11)		6.5%
Percent with a Disability	18-64	65 and over
Texas	10.1%	41.2%
Starr County	18.9%	72.7%
Survey Data (11)	22.7%	53.8%

Non-survey data provided by 2008-2010 ACS 3-Year Estimates

Table 2.7 Disability Levels .

These health and disability statistics are striking, but our research points to deeper concerns. In fact, our data point to the changing nature of colonia communities, with serious implications for resident health. In total, 31.8% of households surveyed in 2011 had 2 or fewer members, compared with only 16.5% in 2002. Thus, the percentage of small households has nearly doubled in just under ten years. This is largely due to growing presence of elderly couples. Furthermore, while the average age of heads of household was 46.7 and 41.9 for families of 6 or more and 3 to 5 members, respectively, households with 2 or fewer members were headed by people who were on average 57.4 years old (Table 2.8). Smaller households are not only older on average, but they earn far less than larger households: 46.7% of households with two or less members earned less than \$12,000 per year, compared with only 28.0% and 33.3% of households with 3 to 5 and 6 or more, respectively. Thus, as time passes, the number of smaller households is likely to grow as children move out of the family home to settle elsewhere in the colonia, or further out. Undoubtedly, many of these older households have family and friends

⁴⁴ Although we did not ask this question on the 2011 Starr County survey, it has been included in the questionnaire that we have designed for distribution. See Appendices A and B.

living nearby, and thus receive support with errands, transportation needs, and home improvements. But this is not necessarily always the case.

Lack of income, age, and rates of disability may therefore make it difficult for elderly residents to make necessary home improvements. In general, more than one in six households (17.4%) needed to complete some sort of disability-related home improvement, with 12.4% needing handicap accessible bathrooms. However, our data reveal that more than a quarter (28.8%) of households with two or less members needed to make a home improvement for disability reasons. Thus, as household members age, many households often need to make certain home improvements to accommodate higher levels of disability among older populations, and are less likely to have the financial wherewithal to do so. In this respect intervention by local organizations can be especially important.

(11)	2 or Less	3 - 5	6 or More
Average Age of Head of Household	57.4	46.7	41.9
< 12k per Year	46.7%	28.0%	33.3%
12k - 19.2k per Year	26.7%	41.0%	20.0%
19.2k - 38.4k per Year	20.0%	22.0%	33.3%
> 38.4k per Year	6.7%	9.0%	13.3%

Table 2.8 Household Income by Size of Household.

COLONIA HOUSING, THE HOME CONSTRUCTION PROCESS, & SATISFACTION WITH COLONIA RESIDENCE

Many residents in Starr County's colonias choose to live in their subdivision precisely because the lower cost provided an economical opportunity to establish a home and build assets. This was particularly the case in the early years of colonia development, when multiple land developers sold property cheaply and on credit, often with flexible terms and conditions. Most residents in the ten study colonias bought vacant lots and built (or financed the building) of their home over time as the family structure necessitated and as resources allowed. It is precisely the self-built nature of many colonia homes that has allowed homeowners in these colonias to build significant assets, largely through their own "sweat equity."

We will discuss the colonia housing market in greater detail in Chapter 4, but several overarching points are worth mentioning here. The incremental building process shapes the structure of the colonia housing market in two ways. First, because many colonia homes are self-built, selling them on the market is often very difficult. Second, even if they could sell, many homeowners are loath to do so given the significant amount of time, effort, and money that has gone into building their homes. Thus, these colonias are, in general, long-term neighborhoods with low rates of turn-over: more than two-thirds (67.6%) of all homeowners purchased their property before 1995 and only 10.1% after 2003, revealing the stable long-term nature of home

ownership in these neighborhoods. Once rooted, homeowners tend to stay in their homes for decades, even after their children leave the home.

The trajectory of home purchase and occupation in colonias is unlike that of formal subdivision and deserves attention at this point. Although the homebuilding process is unique for each family, the following scenarios are fairly typical. Homeowners buy the lot, historically from the developer, often through Contract for Deed agreements or other legal mechanisms that allow flexible payments to the seller over time. Typically there is a delay between the time the lot is purchased and when it is occupied—in the 2002 survey, only 37.3% moved onto the lot immediately after beginning payments, and those who did not, took an average of 2.4 years to occupy the lot. This delay is often due to insufficient financing or lack of services in the colonia.

Unlike homeowners in medium to formal middle and high income subdivisions—where homes are finished prior to purchase, or at least before they are occupied—colonia homeowners often occupied the property while the dwellings were largely unfinished, and continued to make significant improvements over time. Once they have purchased the land and are ready to occupy, the lot is cleared and sections of it leveled (if necessary). Only then do colonia homeowners occupy the lot and start the process of self-building or self-management of the housing process.

MANUFACTURED HOMES, SELF BUILDING, AND MODULAR HOMES; HYBRID DWELLING STRUCTURES

Colonia homeowners choose from a variety of types of homes, including manufactured, self-built, and modular homes, as well as a mix of these designs. Technically, a manufactured home has a chassis underneath and often wheels as well, and arrives on-site fully-finished. Many manufactured homes are purchased at low cost (\$1-2,000) second-hand, and facilitate the family's initial move onto the property (see Figure 2.6).⁴⁵ Sometimes, too, instead of a manufactured home (a single or doublewide trailer), a family will first live out of a Recreational Vehicle (RV) or “camper” and follow this with a trailer of some sort (see Figure 2.7). As is clear in Figures 2.6 and 2.7 (below), the second-hand nature of the dwellings often necessitates the construction of additional roofing above the trailer or RV to prevent damage from rain and to decrease the cooling expenses due to direct exposure from the sun.

⁴⁵ Manufactured homes are similar to trailers in that they are pre-constructed off-site. Unlike trailers, however, they are typically placed on a block or concrete foundation.

Photo 2.5 Manufactured (Trailer) Homes



Photo 2.6 Recreational Vehicles



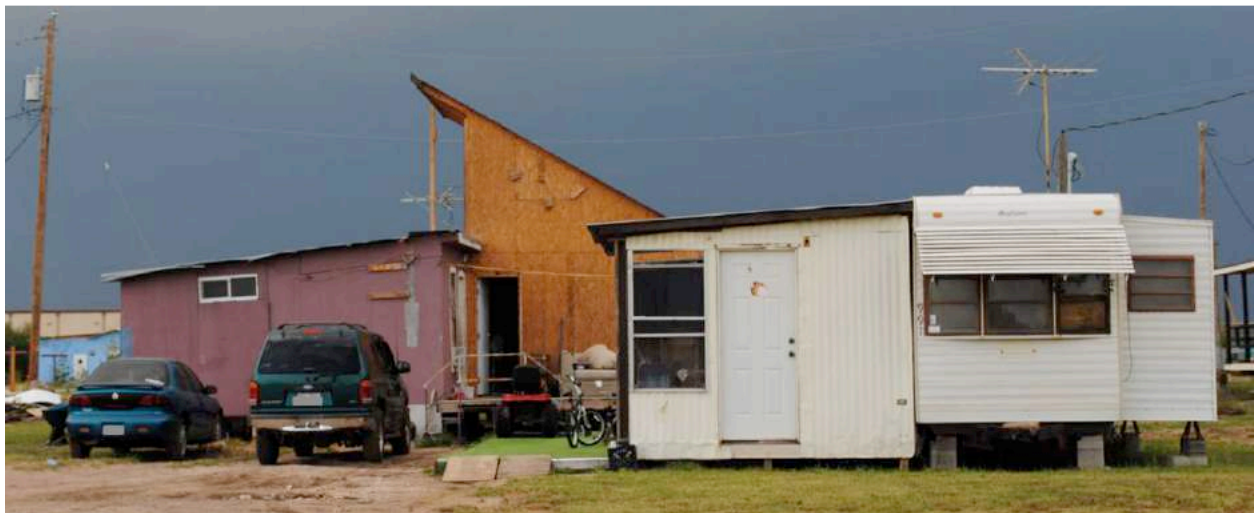
Other homeowners begin the process of building a consolidated home through self help. First, a concrete foundation and concrete block shell are built (Figures 2.8a and 2.8b), and the roof, doors and windows are installed (Figure 2.8c). At this stage, many families also move on to the lot and begin fitting out the house slowly over time and as resources permit; this is likely the case in the second photo below (Figure 2.8a) where, while unfinished, the dwelling appears nonetheless to be occupied.

***Photos 2.7a (above), 2.7b (middle), and 2.7c (below)
The Stages of Concrete Block Self-Help Construction***



While this process is typical of many homeowners in the study colonias, however, other processes are also worth mentioning. Rather than replacing the initial manufactured home (or camper), families will often expand the rooms available to them by building upon, or extending, the existing dwelling. This process is often highly creative and may lead to the creation of a hybrid dwelling as homeowners attempt to join two very distinct structures. It is not unusual for a manufactured home to be extended by building an additional room using a typical frame construction with the room elevated on posts.

Photos 2.8a (above) and 2.8b (below) Hybrid Dwelling Structures



Other times, homeowners construct cinderblock buildings next to the manufactured home, and a doorway serves to connect the two dwellings.⁴⁶ Although these processes constitute creative solutions to housing problems, and they undoubtedly improve the use value of the home—the

⁴⁶ See the following section for images.

role the housing plays for the residents—they nonetheless complicate both further home improvement efforts and market transactions, as we will discuss later.

In the 2002 study many homes were described as “modular” but it now appears than many of these were, in fact, self-built homes constructed on a slab. Modular homes, like manufactured homes, are produced off-site in a factory or building yard and are built to the specifications of local building codes. They usually comprise completed “shell” of sorts—four walls, a floor, and a roof—that homeowners place on the lot and finish out over time. These prefabricated homes provide a number of benefits over manufactured homes, or trailers: modular homes can be tailored to adhere to local building codes as well as to the design specifications of the buyers; they are often placed on permanent foundations and can be outfitted with additions to resemble site-built homes; and they are reported to appreciate in value over time, unlike manufactured homes. In addition, modular homes are typically considered less expensive than other site-built homes; a 2011 publication by the Manufactured Housing Institute (MHI) reported savings of 10-35%, depending upon the region of the country.

However, as we describe below, we found limited use of modular homes in the ten study colonias — probably as a result of the social and economic conditions that prevail in Starr County. First, many potential homeowners simply do not have high enough credit scores⁴⁷ to qualify for the loans required to buy modular homes. Secondly, the cost of modular homes often remains too high for many colonia homeowners — according to the MHI (Manufactured Housing 2011) the estimated the price in 2009 of a 1,125 square foot modular home, with installation costs was \$39,600 (not including the cost of land); once the price of a vacant lot (\$11,994) is included, the total cost is roughly equal to the average home value across the ten study colonias (\$50,908). Third, the purchase of a completed modular home bypasses what is, for many homeowners, the primary cost-saving component of colonia homeownership, namely the self-build process and the accumulation of “sweat equity.” It is precisely for this reason that many families build their home themselves rather than buying a modular home; the initial cost of modular homes, even despite the fact that the interior is often unfinished, is simply too high for many new colonia homeowners. Finally, given that 50% of households in the 2011 study reported having members that possess construction skills, completing the house through self-help methods is a practical, affordable option. By capitalizing on their own “sweat equity,” many residents have built attractive, comfortable homes of significant value.

These conditions explain why, of all homeowners surveyed in 2011, nearly half (46.8%, or 81/171) had built their own home, less than a third (29.8%, or 51/171) had paid a contractor to build it, and only 8.2% (14/171) and 2.3% (4/171) bought a modular home or trailer, respectively.⁴⁸ Often, families begin with a trailer and either replace it or on add onto it with a self-built addition; 11% (19/171) had a mixed-construction home that combined two or more types of construction. Thus, by taking advantage of the reduced price of colonia lots and by building their homes incrementally over time, most households have been very successful in building medium to high-quality homes worth substantial amounts: in 2011, the average property value (land and house) in the 10 study colonias totaled \$50,908. Though modest by most US real estate markets, these homes represent significant assets for colonia homeowners, many of whom earn some of the lowest wages in the nation.

⁴⁷ See Chapters 3 and 4.

⁴⁸ This estimate for the number of manufactured (trailer) homes is significantly lower than expected, possibly due to errors by the survey team in distinguishing between the two dwelling types. Thus, many of the 8% of homes that were classified as modular may in fact be trailers.

Case Study of the Housing Construction and Consolidation Process

In order to illustrate some of the more nuanced elements of the housing construction and consolidation process we conducted intensive interviews with selected households. These interviews capture complexities such as the family trajectory (history)—particularly as it related to the purchase, construction, and completion of the home—that would have been too complicated to research using a questionnaire survey. While these intensive interviews are by no means representative of *all* colonia homeowners, we are confident that the housing trajectories documented through our interviews reveal unique processes that are common to many households living in the study colonias.

The Gutierrez Family

Juana and Enrique Gutierrez⁴⁹ purchased a vacant lot in one of the study colonias for \$1,700 in 1987 (\$3,440 in 2012 dollars), receiving title to their land that same year. Shortly thereafter the couple also purchased a second-hand trailer with three bedrooms, one bathroom, and one living room,⁵⁰ which they placed on lot. Together, the family—two adults and three children (one of them an adult himself)—lived on this lot for one year before their eldest son, Michael, was married and moved in with his in-laws.

In 1991, the family's only daughter, Celeste, was also married; that same year her husband came to live with the Gutierrez family, and the following year they had their first child. This addition to the family put new pressures on the design of the dwelling, as the family needed more space to accommodate a family that was expected to grow, at least until Celeste and her husband were able to construct a home of their own on a nearby lot. It was around this time that Juana and Enrique decided to expand the existing dwelling by adding an additional bedroom, bathroom, and kitchen onto the existing mobile home. This type of hybrid construction—in which a cement block or stick frame home is built onto an existing dwelling, and in this case a hallway is built to connect the two dwellings⁵¹—is common in colonias and presents serious obstacles to the repair, renovation, and perhaps sale of the dwelling. Figures 2.10 and 2.11 provide a visual representation of the Gutierrez family's home in various stages.

The Gutierrez family worked for more than a year to complete this new addition. First, the family borrowed \$12,500 in the form of a bank loan in order to pay for the cost of the foundation, walls, and roof—the rest of the construction was completed with help from family and friends, and additional assistance from Colonias Unidas. While the family structure remained the same for the following two decades—that is, until Celeste and her family moved to their own home nearby in 2010—the dwelling itself continued to demand significant investment by the Gutierrez family. Because it was used at the time of purchase, the mobile home had deteriorated significantly by the time of the interview in the summer of 2011. Although the Gutierrez family received a \$17,000 grant for housing rehabilitation and \$7,500 in home improvement loans from the Community Resource Group, the family was unable to complete the renovation of the trailer; the poor workmanship of the contractors hired with the grant money left the family with insufficient insulation and a severely leaky roof while high medical and extraneous bills

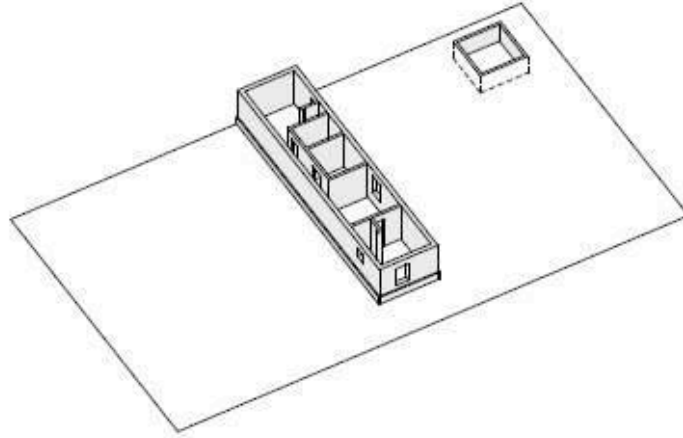
⁴⁹ For confidentiality, the names have been changed.

⁵⁰ See Figure 2.10.

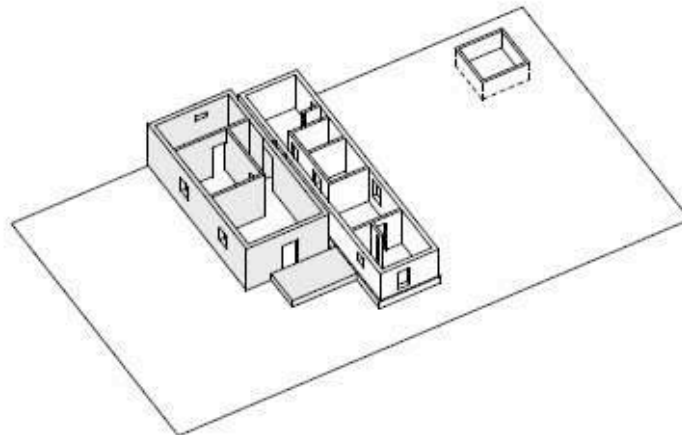
⁵¹ See Figure 2.11.

prevented the Gutierrez family from investing more than \$2,000 in actual home improvements. Thus, post 1993, the only major renovations or additions to the home include the installation of a new septic tank and the construction of an awning in the backyard.

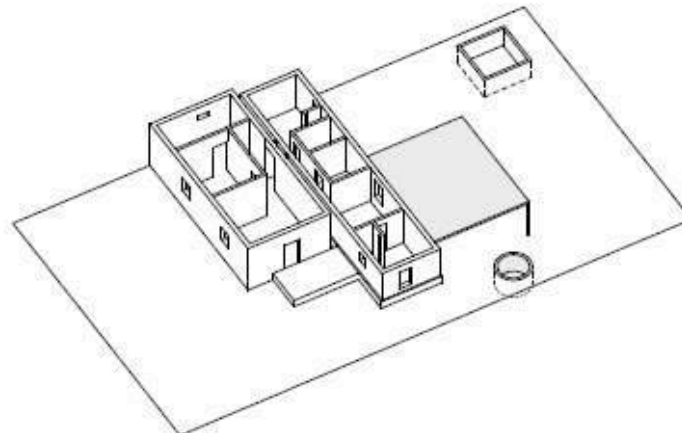
Figure 2.6 Case Study: 3-D Reconstruction of the Home over Time



1987 Purchase

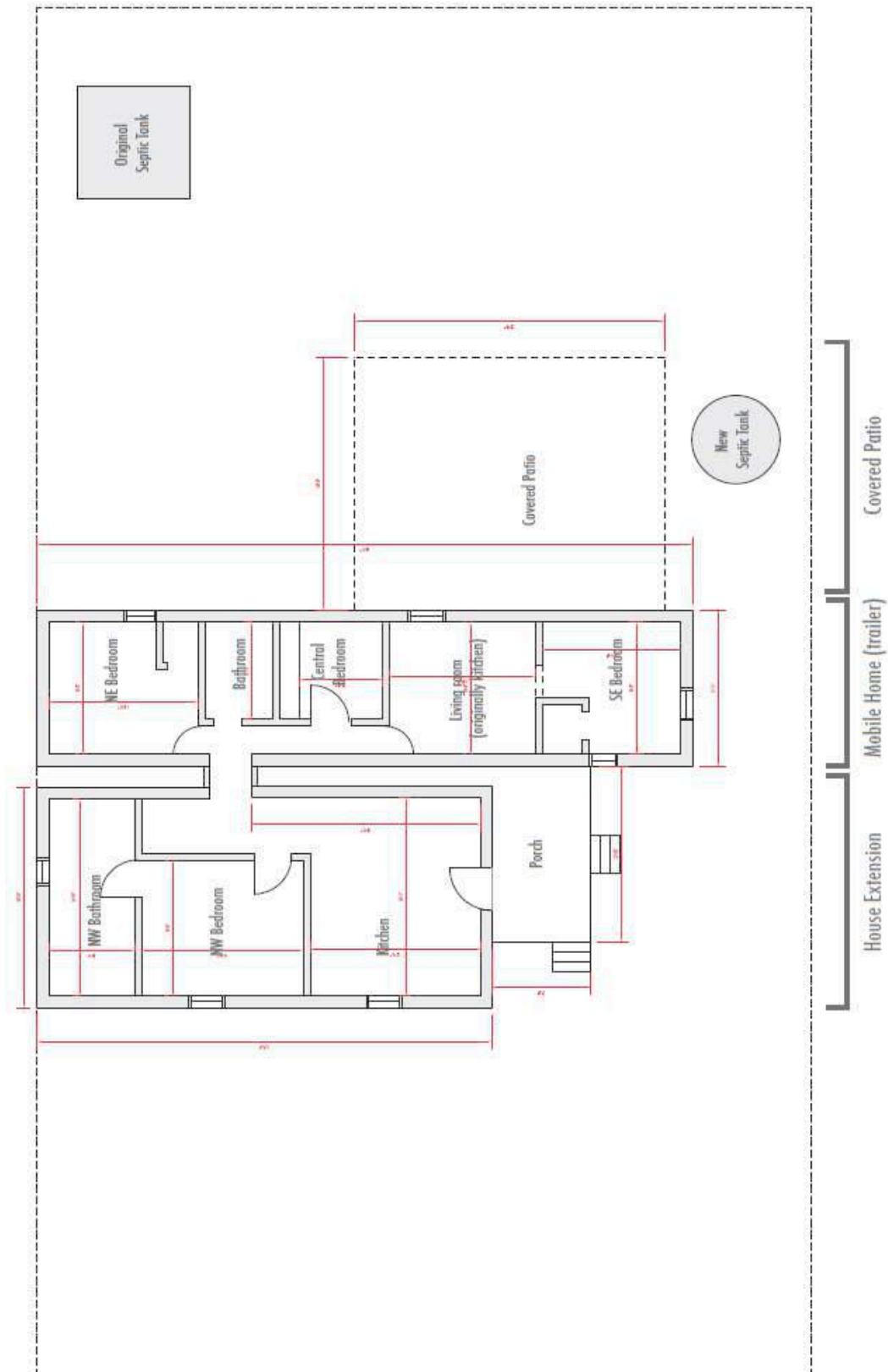


1993 Build out



Post-1993 Build out

Figure 2.7 Case Study: Layout of the Home at Present



While certainly not characteristic of all colonia homeowners, the Gutierrez's family trajectory reveals significant points that are not uncommon in such settlements, at least amongst many residents surveyed during this study. First, the structure of the family changes dramatically over time as adult children marry and leave or join the home with their families. Second, and as a result, the pressures put on the dwelling structure change significantly as well, leading families to expand or improve the existing dwelling. Third, many low-income homeowners, whether out of necessity or resourcefulness, complete construction projects themselves, thus building "sweat equity" while saving money on labor costs.

Settlement Conditions and Resident Satisfaction

Our study shows that the broader conditions in the ten study colonias have improved considerably over the decade of study, and many residents appear to be quite satisfied with their neighborhood. In the 2011 study participants were asked what they thought were the advantages and disadvantages of living in a colonia. Overwhelmingly, the responses reveal that relationships with neighbors, the proximity of family and friends, the safety of the neighborhood, and the relaxed nature of colonia living were the primary advantages. Thus almost 40% reported that they had nice neighbors, 32.2% answered that they lived close to family or friends, 28.9% felt that the neighborhood was safe, and 28.3% thought that the colonia was calm or relaxed. Only 6.7% replied that there were no advantages. When we asked respondents to list any disadvantages of living in a colonia, one fifth said that there were none, while 25.1% mentioned unpaved roads, 21.0% spoke of crime, and 17.4% disliked the lack of (or problems with) utility services.

CURRENT HOUSING CONDITIONS

Because many colonia homeowners have built their homes themselves, and often incrementally over time, residents have often lived for years in unfinished or inadequate dwellings. However, our data present an optimistic image of housing, at least in the aggregate. Despite exceedingly low incomes, nearly three-quarters of all homeowners had completed at least one major home improvement over the past 10 years.⁵² When revisiting the colonias for the 2011 study, it was clear simply by driving through the neighborhoods that a significant number of households had made major improvements to their home since the 2003 Study; many families had expanded their home, built a garage or carport, built or improved an exterior fence or wall, or completed improvements in their yards or gardens.

Nevertheless, most improvements have entailed "finishing" the existing dwelling, rather than expanding it. This is borne out by the fact that the average size of dwellings in the colonias has changed very little over the past ten years: the average number of bedrooms rose from 2.73 in 2002 to 2.91 in 2011, while the number of full baths rose from 1.20 to 1.28. Nevertheless, these modest increases in the size of dwellings, coupled with decreases in family size,⁵³ have resulted in less crowding in the home, with the number of people per bedroom decreasing dramatically from 1.69 to 1.34 between 2002 to 2011 while the percentage of "overcrowded"⁵⁴ households fell from 18.3% in 2002 to 10.8% in 2011.

⁵² These home improvements receive more attention in Chapter 3.

⁵³ The average size of households in which the owner lived on the lot fell from 4.22 in 2002 to 3.73 in 2011.

⁵⁴ The US Department of Housing and Urban Development classifies households with more than 2 people per bedroom as "overcrowded" (HUD 2007).

It is important to underscore that these results may not be representative of all colonias in the border region, nor all of those in Texas, although our (still) ongoing studies in six border counties do suggest that many if not all colonias have managed to achieve some upgrading in both the settlement and housing conditions over the past decade. But we also recognize that our study documents housing changes in ten colonias that have enjoyed a particular developmental patterns with higher levels of community activism and mobilization than is often the case (through Colonias Unidas), and have received significant support from government and non-profit programs. Moreover one should not gloss over the fact that many residents in the ten study colonia continue to suffer from poverty and deprivation and have great many of their housing needs still unsatisfied.

Furthermore, although housing conditions have improved greatly since 2002, many homeowners have yet to complete the self-help home improvement process. In fact, 60.1% of all respondents reported that there were unfinished aspects of their current dwelling. Most importantly, 19% of houses lack adequate insulation, 7% needed windows, and 5% needed roofing in at least part of their dwelling.

(11)	Number of Dwellings Needing Each Improvement	Percentage of All Dwellings Needing Each Improvement	Average Rooms Needing Each Improvement
No Flooring	50	25%	3.02
No Doors	49	24%	2.37
No Insulation	38	19%	3.29
No Sheetrock	32	16%	2.15
Need Storage or Fixtures	26	13%	2.00
No Trim or Baseboards	24	12%	3.57
No Wiring	20	10%	3.05
No Plumbing	16	8%	1.23
No Windows	14	7%	2.50
Need Roof	10	5%	1.33
Other	7	3%	N/A

Table 2.9 Arenas of Home Improvement Still Required

Certainly, houses lacking in any of these components are likely uncomfortable, if not unhealthy or unsafe. When asked if there were any problems with their home that they wished to fix, 45.8% of reported problems that were structural in nature, typically referring to the poor quality of foundations and roofs. Thus, although housing conditions have improved significantly over the past decade, some residents continue to occupy dilapidated, unsafe, or unhealthy homes. This has been exacerbated by severe weather, insufficient infrastructure, and poor or unstable construction. Hurricane Dolly, for example, ravaged many colonias homes in South Texas. Though the colonias of Cameron and Hidalgo County were most severely affected, flooding and high winds from the storm caused damage in the colonias of Starr County as well (Janes 2009; 2010). Indeed, many residents are still recovering and reconstructing from the destruction caused by these storms.

(11)	Number of Problems Reported	Percentage of all Problems
Physical Structure	151	45.8%
Property/Yard	19	5.8%
Utilities/Appliances	73	22.1%
Cosmetic/Comfort	48	14.5%
Kitchen/Bathroom	39	11.8%

Table 2.10 Principal Problem Areas Remaining

Weatherization and Sustainability in Colonia Housing

Recent legislation—most notably President Obama’s Weatherization Assistance Program (WAP)—has focused on supporting energy efficiency in low-income households through the installation of weatherization home improvements⁵⁵ and by educating homeowners regarding energy efficiency. On average, Texas receives around \$13 million a year through the WAP program, which serves roughly 3,700 household per year, though there are roughly 4 times that amount (14,000) on the waiting list (Texas Department of Housing and Community Affairs 2011).

However, as we describe later in this report, many colonia homeowners fail to qualify for certain federal programs, largely because project leaders are only permitted to make improvements to the home if the dwelling is brought entirely up to code. Because they have been built by the homeowners themselves, many homes may fail to conform to a number of local building codes, and the amount of improvements needed to bring the house up to code exceeds the permitted allocation. In such cases, it may in fact be less expensive to simply build a new home.

Even when funding for home improvements is available to colonia homeowners, the self-built design can make retrofitting these homes difficult, ineffective, and expensive. For example, many self-built homes lack insulation—a necessity in the South Texas heat—and the cinderblock construction, unlike typical frame houses, prevents easy retrofitting for energy efficiency.⁵⁶ Thus, rehabilitation efforts in colonias require unique solutions that match both the limited financing ability of low-income homeowners and the unique design characteristics of self-built housing.⁵⁷

⁵⁵ These include conducting an energy audit to assess where gains in efficiency can be made, improvements to caulking and weather-stripping, installation of insulation, or repair or replacement of HVAC systems, among other things.

⁵⁶ Typically, in order to retrofit a cinderblock house such as these a piece of insulation board is placed on the inside of the block wall. However, to work well, thicker insulation is needed, and this tends to reduce the size of the room considerably once drywall is installed as well. While powder insulation can be blown between the cinderblocks, a cement platform near the top of the exterior wall known as the *llave*, or “key,” makes this impractical, as the roofing joists typically sit atop this platform.

⁵⁷ For more on this topic, see Sullivan and Ward 2011.

Weatherization and sustainable home improvements have rarely been implemented in the ten study colonias, and few colonia residents are familiar with these concepts or the methods associated with them. While contractor-led home improvement programs, such as those operated by the Starr County Self Help Center employ sustainable methods such as improved weatherization, these methods will need to be more broadly promoted if the majority of colonia homeowners are to adopt them.⁵⁸ In 2011, 43.5% of respondents replied that they had never heard of sustainable or “green” home improvements, 20.9% said they had heard of the terms but did not know their meaning, 34.6% knew a little about these improvements, and only 1.0% said they knew a lot about the topic. Nevertheless, when prompted, 67.7% of respondents actually had adopted some sustainable home improvement,⁵⁹ mostly energy-efficient light bulbs and improved insulation.

⁵⁸ Nearly half of all houses were built by the owner, and 50% of households had at least one member with construction skills.

⁵⁹ This likely underestimates the actual use of home improvements, as the Auxiliary Sample (mail survey) respondents were far less likely to report these sustainable methods. This was due to the design of the survey, which instructed respondents to skip the questioning regarding the use of the methods. This was changed by researchers in the field, and thus the Core Sample (in-person) surveys show a higher use of such methods: 74.8% compared with only 33.3% from the Auxiliary Sample.

CHAPTER 3. THE IMPACT OF TITLE REGULARIZATION

INTRODUCTION

As we described earlier, growth of colonias throughout the border region resulted from the high demand for low-cost housing, lax land development regulations, a large supply of rural land, and the use of Contract for Deed to facilitate the sale of land. In areas like Starr County, by the 1990s widespread corruption by local developers had led to large-scale title irregularities in many of these colonias. While some colonia residents had clouded or incomplete titles to their property, others lacked any ownership documentation at all. It was precisely this set of circumstances that led to the appointment in 1995 of the CRG as the organization charged with resolving the myriad titling issues in 15 colonias in Starr County Texas.

This chapter has three goals: first, we contextualize the work of the CRG by describing the international background of title cleaning and “regularization” in informal settlements similar to colonias. Second, we describe the factors that resulted in the high rates of unclear title in the colonias of Starr County, and outline the steps taken by the CRG to remedy these problems. And third, we assess the impact of the titling effort on homeowners’ access to lending for home improvements and their level of investment in the home. Significantly, in light of some of the conventional wisdoms about clean title leading to improved access to finance, we find inconclusive evidence that the provision of clear title results in increased levels of borrowing or home improvement. Instead, other factors, such as the size, age, and income of families, appear to play a more significant role in guiding investment decisions.

TITLE REGULARIZATION IN CONTEXT

The effort to regularize title—in other words, to formalize and legalize ownership—has been a widespread policy adopted by governments and multi-lateral organizations throughout Latin America since the 1980s, as has infrastructural regularization through the installation or upgrading, of roads and utility services. The theory in support of these regularization programs is now well established. To summarize, the frequently posed arguments in favor of land and title regularization are that they:

1. Provide Security Against Evictions
 2. Provide Incentives that will Stimulate Investments in Home Improvements and Consolidation
 3. Facilitate and Provide for the Introduction of Services such as Electricity and Water
 4. Generate Access to Credit Using the Home as Collateral
 5. Incorporate Residents into the Property-Owning Democracy and Citizenry
 6. Integrate Settlements and Property into the Tax and Regulatory Base of the City.
- (Ward et al. 2003, 8).

These six distinct arguments form the foundation for many title and land regularization efforts throughout both Latin America and the United States. The underlying assumptions of each argument are as follows. The first argument posits that access to clear title provides residents in informal settlements with protection against eviction (or, as in the case of Starr County, against conflicting claims of ownership) and several other publications (Ward et al. 2003; Ward et al. 2011) demonstrate that having “*el titulo en la mano*”—the title in hand—does provide

homeowners with both a sense of pride and security of ownership – and this is amply confirmed in our research reported here. The second argument builds upon this idea of homeowners having a greater sense of security in so far as it encourages investment in the home. However, as we will show below, title per se does not appear to significantly incentivize investment in the home. Nor does legal title appear to be the trigger for provision of utility services (the third argument), since this depends largely upon the context, and while in some cases clear title may be a prerequisite in order to install utilities hookups on a new property (as it is in Starr County), it is often wider legal restrictions that shape the ability of individual households to hook up to utility services rather than any unwillingness on the part of the utility companies themselves to provide them in the first place.⁶⁰

A fourth argument in favor of title regularization is that it integrates settlements and property into the tax and regulatory base of the city. It is certainly true that large-scale title regularization results in an expanded tax base, as it did in the colonias of Starr County, and that the revenues gained can thus be used to finance infrastructure improvements, such as roads and utilities. However, title regularization itself does not ensure that the tax base will be sufficient to provide for the complete provision of services needed in such settlements.⁶¹ In fact, part of the reason that regularization has failed to facilitate the complete installation of services is that the taxes collected on many colonia homes are simply too low to provide adequate funding for infrastructure provision. Furthermore, depending upon the circumstances, title regularization may be insufficient to effectively integrate settlements into the regulatory base of nearby cities. At least in Texas, many local municipalities are loath to incorporate nearby colonias, even those within their Extra Territorial Jurisdiction (ETJ).

Another similar argument in support of title regularization is that it incorporates residents into the property-owning democracy and citizenry. Assessing whether or not the provision of title by the CRG has led increased political or social activity is beyond the scope of this project. Nevertheless, the fact that many colonias are located in unincorporated areas may prevent many residents from participating actively in municipal governments.⁶²

Finally, one of the most powerful arguments in favor of regularization programs is that the provision of clear title expands homeowners' access to credit by allowing them to use their home as collateral. The logic for this argument is clear: given that the home is the primary financial asset for many low-income families, clear title should allow homeowners to leverage their title in order to receive a loan. Nevertheless, a number of factors make widespread use of the home as collateral for a loan unlikely. First, because many homes in informal subdivisions are self-built, assessing their value is a complicated process, and many lenders may be reticent to accept titles to unfinished or what they view as run-down houses as collateral. Secondly, and especially in the current economic climate and after the sub-prime mortgage crisis, few if any are willing to extend credit to low-income families given the stagnant market conditions in

⁶⁰ This fact was revealed through key informant interviews with local officials in Starr County, but is corroborated by work by Varley in Mexico City (Varley 1987).

⁶¹ In fact, many of the services, such as water and electricity, were installed in the colonias of Starr County in response to community mobilization (Arizmendi et al. 2011) and prior to large-scale regularization, while other services such as sewage and paved roads are still lacking in some colonias.

⁶² This is likely the case in Las Lomas, where the Rio Grande City has grown to the point where annexation of the settlement seems inevitable. Nevertheless, this has yet to occur, and residents continue to lack a voice, for example, in city council decisions. One informed resident suggested that the Rio Grande City is reticent to incorporate Las Lomas in part because it would reshape the city council.

colonias and the limited resale potential in the event of foreclosure. Third, many residents are acutely aware of the risk of losing their home, and therefore seem unlikely to pursue the use of the title as collateral. Combined, these factors make it unlikely that many colonia homeowners will attempt to leverage their homes in order to receive a loan, and those that do will likely face difficulties in meeting lending' criteria.

THE BACKGROUND TO REGULARIZATION IN STARR COUNTY

We now move to a discussion of the circumstances that led to the title regularization program headed by the CRG. The need for title regularization efforts in Starr County arose out of a distinct set of circumstances. By the middle of the 1990s, high demand for affordable housing, lax oversight of land development, and corruption by a few influential developers resulted in large-scale titling problems in many colonias throughout Starr County.

Most developers began selling lots in colonias in the early 1980s. Typically, the buyer made a down payment—whatever he or she had available, and sometimes a significant portion of the purchase price, sometimes 10-20% (Ward 1999)—and would then agree to make low monthly payments of \$80 and \$120 until the cost was paid in full (Ward et al. 2003). While the actual price of each lot varied according to the seller, the level of infrastructure, location, and year of purchase, the average cost was around \$2,500 in 1983 constant prices (Ward et al. 2003).⁶³

As the colonias of Starr County expanded, two distinct policy dilemmas began to emerge. First, the absence of infrastructure created pressing societal and health risks. Despite the lack of services, paved roads, and storm drainage, many buyers were persuaded by the developers' promise of the eventual provision of such infrastructure. These promises proved illusory; eventually, and ultimately these services would only be acquired largely as a result of political mobilization by colonia residents themselves (Arizmendi et al. 2011). Needless to say, for many years the lack of water, electricity, and sewer service created serious health risks for many colonia residents. In addition, flooding was also a serious problem in certain colonias. Some residents lived in what were later clearly identified as dry stream beds—in fact, one entire subdivision (Durango) was deemed uninhabitable due to flooding.

A second policy dilemma resulted from rampant informality and corruption in the land sale process, which led to large numbers of colonia lots with “clouded”⁶⁴ title. One complication was the result of the developers' failure to “plat” the subdivisions—in other words, to map the property divisions, streets, utility easements, etc. Platting thus serves as the foundation for the formal documentation of land title, and without it, some residents were unable to record their deeds in the county court. Furthermore, because many of the properties were delineated by “metes and bounds”—in other words, using physical characteristics of the land; from that tree to this rock, for example—property divisions were often tenuous at best. Thus, at the time of the intervention by the CRG, some residents were living on their neighbors' property or, at times, even in what had been officially platted as the street.

Failure to appropriately document purchases of land also led to clouded title. Despite the flexibility and low transaction cost of Contract for Deed agreements, Chapa and López frequently bypassed this process entirely, simply providing buyers with receipts of monthly

⁶³ Results from the 2001 survey reveal an average cost of \$2,553 in 1983 prices (median \$2,346). In 2011 prices this would be \$5,804 and \$5,333 respectively.

⁶⁴ Lawyers refer to defective title as “clouded,” or compromised.

payment, and in some limited cases, no documentation at all. Typically, when a buyer had paid the entire purchase price of the lot, the developers would provide them with a deed, although whether or not the deed was then registered and recorded in the county courthouse varied. At times, the information provided on the deed was either incomplete or incorrect; at others, Chapa and López simply refused to provide a deed at all, even after all of the payments were made, and buyers were left in limbo. Other times, developers sold the same lot multiple times to separate people, knowing that delayed occupation and unclear property divisions would prevent many owners from discovering fraudulent sales (Ward et al. 2003) and in certain cases, Chapa and López sold land to which they did not have clear title, having foreclosed on two subdivisions (Charco Grande and Jobs) which they had failed to finance. Finally, both developers failed to pay property taxes for years and accumulated large tax liens which were then transferred to the buyers.⁶⁵ This lack of documentation often resulted in conflicting claims of ownership and severely complicated the titling effort by the CRG, as we discuss shortly.

TITLING INTERVENTION BY THE CRG

The intervention by the CRG came at a time when policymakers throughout Texas were beginning to pay close attention to the growth of colonias. Dan Morales, Texas Attorney General at the time, played an active role in addressing the growth of colonias throughout the state and in Starr County as well. “A.G. Morales’ goal was to find a source of money (private and not public) to pay for the infrastructure and services these communities lacked. His tools were civil enforcement actions backed by fines and forfeitures” (Ward et al. 2003, 61). In Starr County, the brunt of Morales’ law enforcement tools were targeted at Chapa and López and he filed a civil suit against the two developers for violation of a number of the newer subdivision laws. Eventually, in 1995, Chapa and López agreed to combined fines of \$21,600,000, surrendered all of their assets, and were prevented from conducting further land sales in the specified colonias. The State then planned to use the forfeited property to pay for the upgrading of infrastructure in these settlements (Ward et al. 2003).

The following year, the CRG was appointed the Receiver⁶⁶ of all of forfeited assets, including title to all of the lots in the 15 affected colonias. Although the CRG began working in 1996, little progress was achieved during the first years due to insufficient funding. The State’s initial plan was for the CRG to provide both land and title regularization using these forfeited assets—that is, to provide both clear title and the necessary upgrades to infrastructure. In the end, this plan proved to be unviable given the limited cash available⁶⁷ from the settlement, and the high cost of the infrastructure improvements. After much deliberation—and some dissatisfaction among colonia residents—the CRG decided to move forward with only the title clearing efforts. Three years passed before the CRG began the titling process in 1998, and three more would pass before the process had finished. The delays, which were due largely to the complexity of the sequestered estates and not to any fault of the CRG, however, had resulted in a lack of “confidence in the Receivership’s ability to resolve these legal problems” (Ward et al. 2003, 66),

⁶⁵ Because a tax lien is applied to the property itself, responsibility for the lien is transferred to the buyer. Because of the informal nature of colonia land transactions—meaning no title search was completed prior to purchase—many buyers were simply unaware of the presence of the lien. Nevertheless, the CRG subsequently eliminated the tax liability through a structured bankruptcy.

⁶⁶ A receiver is an entity that has been appointed to manage assets that are subject to litigation.

⁶⁷ After inventorying the assets of both Chapa and López, only \$27,000 dollars of cash and \$600,000 in accounts receivable were left to cover the cost of infrastructure provision (Ward et al. 2003).

and the long period of inaction on the part of the CRG led some residents to fear that they might lose their home.

Building community support for the titling effort was a difficult task, and many residents questioned the point of clear title given that many residents still lacked basic services. Thus, an essential part of the CRG's effort to promote the titling effort was the participation of well-known and respected community members. Eventually, the CRG office was moved to *Colonias Unidas*, a local community organization that has operated out of Las Lomas since 1995. Two staffers at the CRG, both of whom were local residents, became the face of the CRG titling effort and helped to build support for the program by raising awareness of the risks associated with unclear title.

In the end, a new organization known as the Starr County Colonia Assistance Corporation SCCAC⁶⁸ oversaw the multi-step titling process that entailed surveying and partitioning the lands, clearing tax liens through bankruptcy, correcting existing deeds, condemning uninhabitable land, relocating certain residents, and providing clear title to residents through a claims process. In total, five unplatted colonias were surveyed and partitioned. While about two-thirds of buyers had received a deed, many of these were either incomplete or incorrect. Furthermore, in the settlements that had never been formally platted, corrections to the title could not occur until the surveying and partitioning process had been completed.

Eventually, all owners in the selected colonias were required to make a claim to the Receivership, who under the terms of the agreement had taken legal possession of all of the lots. Interestingly, those with deeds were difficult to bring into the claims process—despite the fact that they were required to make a claim for it to the Receivership, many were slow to do so. In fact, “[i]t was only as community awareness grew about the legal defects in the conveyances and deeds, as well as the burden of the tax and judgment liens, that deed-holders also saw the benefit to making a claim” (Ward et al. 2003, 82). During the claims process, staff at the CRG collected basic data regarding the purchase, condition, and documentation of the lot. In the end, of the roughly 2000 claimants, 900 had some kind as proof of purchase, 150 had a contract for deed, and the rest had receipts, many of which were incomplete. Obviously, those with deeds were easier to process, as many simply needed to be checked for errors. In 40 to 50 cases, two owners possessed clear documentation of ownership for the same plot. When this occurred, the Receivership typically gave clear title to the family that currently resided on the property, if this was the case, and provided the other claimant with title to another unsold lot in the colonia (Ward et al. 2003).

Through the claims process, most owners were provided with a “special warranty deed”, which meant that the SCCAC promised to defend the title against any claims on the property, in the event that any were to be made. According to the 2003 Report (Ward et al. 2003, 88):

Each case decided in favor of a claimant resulted in one of four final outcomes; 1) If no debt remained on the land contract, SCCAC conveyed the land to the owner by a special warranty deed; 2) If a debt of less than \$3000 remained, SCCAC conveyed the land to the owner by a special warranty deed, and took back an unsecured note for the balance; 3) If a debt of more than \$3000 remained, SCCAC converted the contract into a mortgage note secured by a deed of trust, and conveyed the land to the owner by a special warranty deed;

⁶⁸ The CRG was morphed into the SCCAC for the purpose of the claims process, but was staffed by the same workers as the Receivership.

and finally, 4) If the owner already had a deed originating in Chapa and/or López, SCCAC corrected any legal errors in that document through a court order...or facilitated the exchange of quitclaim deeds between claimants holding incorrect deeds.

In either outcome 2 or 3, described above, the note was then assigned to the CRG, who renegotiated payment agreements in order to ensure affordability and continued to collect payments for outstanding balances.⁶⁹

THE DURABILITY OF TITLE REGULARIZATION

Despite the success of the CRG's titling program, a number of conditions point to the need for future title clearing efforts. As discussed earlier, in the initial stages of colonia growth, most transactions were informally documented—meaning the buyer received a receipt or oral agreement. In the period from 1970 to 1989, more than 80% of all sales were informally documented. Indeed, it was precisely for this reason that the CRG was commissioned to conduct title regularization efforts in the late 1990s. Interestingly, although the use of informal documentation for new acquisitions (either purchase or inheritance) has fallen in recent years, informal land transfers continue to comprise a significant portion of new transactions: 26.7% (4/15) of those who acquired their land since 2003 received only receipts of payment, while 13.3% (2/15) had made only an oral agreement regarding the transfer of ownership (Table 3.1).

The reasons behind this continued use of informal documentation is unclear, though it clearly relates in part to the continuation of seller financing, and probably from the practical need to avoid the costs associated with formal exchange and registration of the title. We do not view it as a reversion to traditional customs. Regardless of its cause, the continuation of informal property transfers presents a serious complication for public policy actors, and ongoing title clearing efforts will be needed to ensure that large-scale reversion to informality does not occur as properties change hands.

(11) Year of Acquisition	Contract for Deed	Deed	Receipt	Oral Agreement	Other
1970-1989	6.1% (4/66)	13.6% (9/66)	77.3% (51/66)	3.0% (2/66)	0.0% (0/66)
1990-1994	4.3% (2/47)	10.6% (5/47)	74.5% (35/47)	8.5% (4/47)	2.1% (1/47)
1995-2002	16.1% (5/31)	16.1% (5/31)	58.1% (18/31)	3.2% (1/31)	3.2% (1/31)
2003-2011	26.7% (4/15)	33.3% (5/15)	26.7% (4/15)	13.3% (2/15)	0.0% (0/15)
Total	9.4% (15/159)	15.1% (24/159)	67.9% (108/159)	5.0% (8/159)	0.6% (1/159)

Table 3.1. Types of Land Contracts and Sale Transactions for Different Time Periods

⁶⁹ The CRG did not charge interest for the first five years. After five years, the interest rate was to be set at 5%.

Interestingly, despite efforts by the CRG to encourage the creation of wills during the title regularization process, very few participants did so.⁷⁰ Earlier research suggested that this was likely due to a desire to avoid family conflicts that may have arisen if inheritance plans were made public and put in writing. In 2011, in 93% of households (158/170) that owned their lot, neither the respondent nor their spouse (if applicable) had a will. Although we did not ask during the 2011 survey whether or not families had made informal arrangements regarding who would inherit the property, this is likely the case. In fact, when asked who they believed would inherit the lot in the event of their death, a number of respondents replied that it would depend on the situation—often that the property would go to the person who lived with and/or cared for them prior to their death. In this sense, it seems that many respondents have a clear idea of who they think *will* or *should* inherit their property.

These data illustrate that efforts to regularize title are by no means a one-off policy solution (Ward et al 2011). As homeowners sell their property, they appear to continue to rely upon informal agreements such as receipts or oral contracts, and which appear less likely to end up with valid titles in the name of the grantee. Additionally, due to the limited use of wills, ownership will likely be contested in the event of the homeowner's death, as the property is subject to Texas intestacy laws, and if not resolved this, too, will result in the clouding of previously "good" titles.

ASSESSING THE IMPACT OF TITLE REGULARIZATION

A central goal of this report is to assess the impact of the CRG's titling program on the home investment and borrowing practices of colonia residents. Did the provision of clean title lead colonia homeowners in these ten settlements to make significant home improvements? Did the provision of title facilitate access to and encourage the use of formal loans for home improvement? And finally, did clear title allow and encourage residents to leverage their home as collateral? In each case, we find no conclusive evidence that title per se has had much of such an impact on the home improvement and borrowing practices of homeowners. Before answering these questions in detail, however, certain methodological considerations deserve attention.

COMPARING THE CONTROL AND STUDY GROUPS

Before discussing the impact of title regularization on the home improvement activities of our study population, it is important to discuss certain limitations that made quantifying the impact of clear title difficult. First of all, residents in the study colonias experienced very different levels of title insecurity. While some residents had received deeds early on in the settlements' history (and thus likely felt quite secure regarding their ownership status), many had no formal documentation at all, and 40 to 50 households had purchased (and often occupied) land that other residents now claimed was their own. Thus, the lack of clear title—and also deliberation and delays by the CRG—resulted in anxiety among some colonia residents. The following quote by one participant in a focus group conducted for the 2003 study expressed this anxiety clearly: "[i]t was really the lack of trust we had, because it was not being resolved soon. We were afraid of losing everything" (Ward et al. 2003, 66).

⁷⁰ Nine percent of survey respondents in 2003 had a will, and most of these had received it during the titling process (Ward et al. 2003). This estimate is supported a survey of more than 1200 households (research ongoing at the time of this writing) in six border counties (Cameron, El Paso, Hidalgo, Maverick, Starr, and Webb) in which 9% of respondents in owner-occupied households had wills.

As described in Chapter 1, two groups were selected to participate in this study. Those who received significant intervention by the CRG were categorized as the “Study Group,” while those who required limited assistance, for whatever reason, formed part of the “Control Group.” Thus, the null hypothesis we are testing argues that the provision of title should result in increased rates of home improvement and use of formal loans. In other words, the Study Group, who experience greater title insecurity, should exhibit a surge in investment in the home post regularization. However, certain factors made it difficult to assess the impact of the CRG intervention on these two groups. Although the socio-economic status of both groups is fairly similar, the occupancy trajectory of these households varies to a significant extent. On average most members of the Control Group purchased their property in 1988, occupied their lot in 1989, and received their title in 1991. Members of the Study Group, on the other hand, purchased their property on average in 1990 and occupied their lot in 1992, but did not receive title until 1998 (2011 survey data). Because of these differences, and because intervention by the CRG took place over four years, it is difficult to determine an exact comparative timeframe during which to assess the impact of the provision of clear title.

Thus, our assessment of the impact of title takes place over a greater period of time that may not match the home improvement practices of many homeowners. The current study presents data on the home improvement practices over the past 10 years, although we are unable to analyze investment patterns since the time in which owners actually received clear title to their property. Nevertheless, if the provision of clear title did in fact result in increased levels of investment in the home, one would expect to see higher levels of investment among the Study Group over the past 10 years on the grounds that, by providing a sense of security of ownership rights, the provision of clear title should incentivize homeowners to invest in their home.

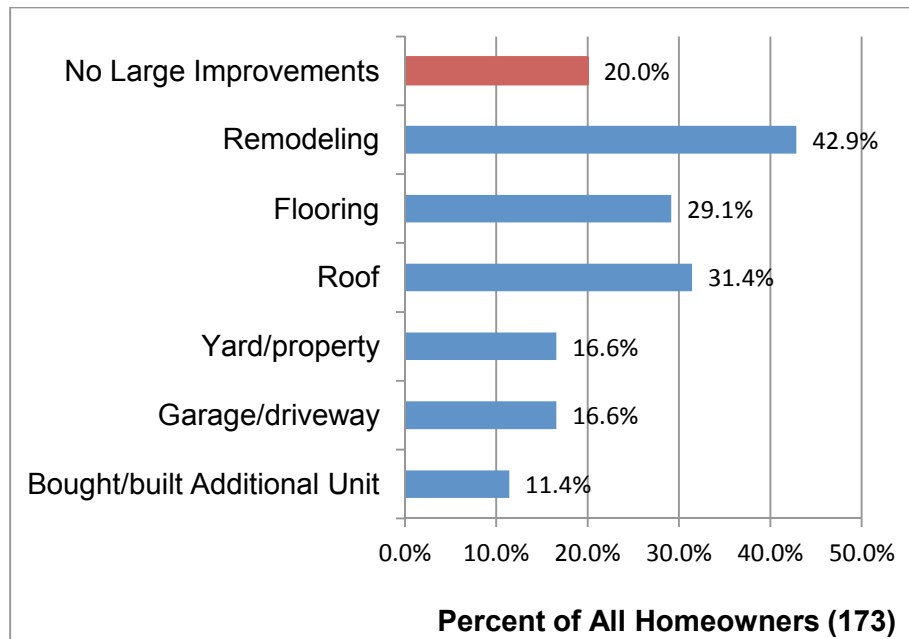
As we described earlier in this report, a similar logic applies to the borrowing practices of colonia homeowners, namely, that legal title integrates residents into formal credit markets and allows them to use their title as collateral for a loan. To assess the impact of title on borrowing practices, we gathered data on the number of loans received for home improvement, the year and provider of each loan, and the total value of all loans. Because we initially aimed to use the frequency and time of each loan as a measure of borrowing practices, we neglected to ask homeowners for the value of each loan. We understand that this limits our analysis for two reasons. First, knowing the value of each loan would have allowed us to compare the amount borrowed with the number of years since clear title was received, possibly providing more fine-tuned data regarding borrowing practices immediately following the provision of title. Second, knowing the value of each loan and the year would have allowed us to adjust amounts in real terms taking account for inflation. Thus, here we can only provide very broad brush estimates.

HOME IMPROVEMENT

Given that most colonia homeowners have self-built their homes over time, it is not surprising that 74% of owners interviewed in 2011 reported having made significant home improvements in the past 10 years. These include the remodeling of a room, improvements to flooring, roofing, a garage or carport, the land or yard, and the building, expanding, or the buying of additional housing.⁷¹ The percent of owners that made large improvements are shown in Table 3.2, while the distribution of all improvements are displayed in Figure 3.1. Of all homeowners, 43% had

⁷¹ These improvements are considered major improvements because they require significant monetary investment in most cases. Although many respondents reported having completed other improvements as well—such as painting, installing plumbing and electrical, and doors or windows—these were excluded from the analysis for two reasons. First, the amount of investment that each of these improvements entails is either rather small (in the case of painting),

Figure 3.1 Extent and Types of Improvements



remodeled a room, while 31.4% had made improvements to the roof and 29.1% had made flooring improvements (Figure 3.1). Undoubtedly, this high level of home improvement entails substantial monetary investments, even when many households complete the improvements themselves, and thus save on labor costs. Of the 74% who reported that they had undertaken home improvements, the average family has spent \$9,446 since 2001. Although at face value not an especially large amount, this nonetheless represents a significant investment for low-income families such as colonia residents.

Nevertheless, these considerable levels of home improvement do not, of themselves indicate investment in the home spurred by the acquisition of clean title. Nearly half of all respondents had built their home themselves, and many others have made substantial additions and improvements over time, just as they had in previous decades and as they did before receiving clear title. Thus, high rates of home improvement among these households simply suggest that many households have not yet completed the housing consolidation process. This is illustrated by the fact that nearly 60% of all households reported that part of their house was still unfinished (Table 3.2)

or difficult to assess (in the case of plumbing or electrical improvements). Secondly, these were add-in improvements—meaning they were not one of the pre-coded options provided on the survey instrument itself—and therefore are overrepresented in the core (in-person) sample; many Auxiliary Sample respondents did not write in these improvements, though these were frequently mentioned during in-person Core Sample interviews. Thus, they have been excluded in order for comparability with the Auxiliary (mail) survey.

(11)	Control	Study	Auxiliary	All Cases
Percent of Households with Current Unfinished Aspects	35.7% (10/28)	64.5% (51/79)	71.4% (25/35)	60.1% (104/173)
Percent that Made Major Home Improvements Since 2001	92.3% (24/26)	70.6% (53/75)	62.5% (20/32)	74.2% (121/163)
Total Cost of Home Improvements Since 2001	\$9,232 (n=20)	\$8,426 (n=39)	\$9,025 (n=12)	\$9,446 (n=88)

Table 3.2 Home Improvements Made by Different Groups, 2001-2011

Despite the significant improvements made to the home over the past 10 years, the provision of clear title appears to have had little discernible impact on homeowners' willingness or ability to make investments in the home. Interestingly, Control Group households were more likely to have made major home improvements than the Study Group: 92.3% of Control Group respondents made at least one major improvement in the past 10 years, compared with only 70.6% of the Study Group. These findings contradict the notion that the provision of title encourages investment in the home, as we would therefore expect to see a higher occurrence of major home improvements among the Study Group, rather than the Control Group. Furthermore, not only were Control Group participants more likely to have made a major home improvement, but when they did so, they spent more on average: the Control Group spent an average of \$9,232 compared with \$8,426 for the study group, although the difference is not statistically significant. However, compared with the Control Group the Study Group population was half as likely to report that they had completed *all* improvements to their home, suggesting that those who had received their titles may have started consolidation in earnest somewhat earlier. However, our inability to fix the start point (year) of home improvements prevents us from exploring this idea further.

These data point to the fact that title regularization has probably had little or no impact on homeowners' willingness to invest in their home. Instead, other factors such as economic conditions, family structure, housing needs (space), construction skills, and support from local organizations likely play a large role in determining when and how families make major home improvements.

HOUSEHOLD INCOME, EMPLOYMENT, AND THE HOME IMPROVEMENT PROCESS

Just as for the manner in which they purchased the lot, the vast majority of home owners continue to depend on their own income or savings to finance such improvements (Table 3.3): 49.1% of those who completed major home improvements in the past year paid for them using income or savings and 10.5% used their income tax return. In addition, a significant portion of homeowners depended upon outside support to make home improvements: 9.6% of those who made major improvements were able to do so as a result of assistance from local non-profits or government programs, while 7.9% depended upon assistance from family members. Finally, only slightly more than 1 in 5 homeowners (21.1%) that made major home improvements did so using formal credit (mostly loans, though two respondents had used a credit card).

(11)	
Credit (Formal Loan or Credit Card)	21.1%
	(24/114)
Income/Savings	49.1%
	(56/114)
Assistance (Non-profits and Government Programs)	9.6%
	(11/114)
Income Tax Return	10.5%
	(12/114)
Assistance from Family	7.9%
	(9/114)
Other	1.8%
	(2/114)

Table 3.3. Sources of Financing for Home Improvements

Because the majority of homeowners (59.6%) depend upon income, savings, or their income tax return in order to make home improvements, there is little doubt that broader economic conditions and local employment rates and relative wages are likely to have a significant impact on colonia homeowners' ability to invest in their home. Other results from the 2011 survey support this assumption. When asked to what extent the 2008 recession had impacted their ability to make home improvement, 51.7% of respondents replied that it had affected them "a lot" or "severely."⁷² (In our other report [#1] we also sought to analyze the extent to which lot occupancy and densification might have changed as a result of the crisis – either through throwing people out of the formal sector into informal subdivisions and colonias, or by some colonia homeowners walking away from their lots and housing investments. However, while there appears to have been some densification of lot occupancy over the ten year period, we are unable to gauge the extent to which this might relate to the 2008 crisis and economic downturn. In another [ongoing] study we are exploring the reasons for non-occupancy and abandonment.)

Furthermore, distinct socio-economic characteristics of the Control and Study Groups may also explain the different levels of investment in the home between the two samples. Interestingly, despite their older age and the smaller size of their households, only 17.2% of the Control Group earned less \$12,000 compared with 33.7% of the Study Group.⁷³ Add to this the fact that 37.9% of Control group households had no employed workers (compared with 27.7% for the Study Group), and it seems likely that a significant number of control group households receive Social Security or pension payments. Thus, it appears that the Control Group households have somewhat different home improvement needs but also different abilities to finance such improvements. Nevertheless, Control Group or not, the vast majority of respondents continue to live on very meager earnings: more than two-thirds (67.9%) of all households lived on less than \$19,200 per year.⁷⁴

⁷² 43% of the Study Group, versus 59% of the Control Group.

⁷⁴ The poorest group was by far the auxiliary (mail) sample, of whom 77.5% earned less than \$19,200 per year

Income per Household per Year			
(11)	Study	Control	All Cases
Less than \$12,000	33.7% (28/83)	17.2% (5/29)	34.7% (66/190)
\$12,000 to \$19,199	28.9% (24/83)	48.3% (14/29)	25.3% (48/190)
\$19,200 to \$38,399	25.3% (21/83)	27.6% (8/29)	19.5% (37/190)
More than \$38,400	12.0% (10/83)	6.9% (2/29)	7.9% (15/190)
Number of Paid Workers per Household			
(11)	Study	Control	All Cases
None	27.7% (23/83)	37.9% (11/29)	27.9% (55/197)
One	41.0% (34/83)	37.9% (11/29)	44.2% (87/197)
Two or more	31.3% (26/83)	24.1% (7/29)	27.9% (55/197)

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Table 3.4 Employment and Incomes for the Study and Control Groups

SUPPORT FOR SELF-HELP HOME IMPROVEMENT

Besides broader economic conditions, other factors may also explain some of the differences in the rate of home improvements between the Control and Study Groups. For example, the possession of construction skills is likely to be an important resource for colonia homeowners hoping to improve their housing. Not surprisingly, households with members that possessed at least one construction skill were 17% more likely to have completed home improvements over the past 10 years. This fact may also explain why more Control Group (92%) than Study Group (71%) households reported that they had completed major home improvements, given that they were more likely to have members of the household with construction skills (68% compared to 54% of Study Group).

Fortunately, a couple of programs provide support for self-help home improvements in the colonias of Starr County. While lending for home improvement will receive more attention in the following section, here we focus on grant-funding and skill training programs provided by the Starr County Self Help Center (SCSHC) in order to support home improvement process. Funding for the SCSHC programs comes from Community Development Block Grant (CDBG) monies provided by the U.S. Department of Housing and Urban Development (HUD). In Starr County the SCSHC offers two distinct programs for both large and small projects in a maximum of five colonias at a time. The first is a grant-funded program that will cover the entire cost for small-scale home improvements for households that fail to qualify for the SCSHC's home

⁷⁵ These differences were not statistically significant. A Chi-square test between the Control and Study Groups and income categories (excluding those earning greater than \$38,400 due to limited responses) produced a Chi-square statistic of 4.223 with a p-value of .121. A Chi-square test of the number of workers per household in the Study and Control Groups produced a Chi-square statistic of 1.165 and a p-value of .558.

improvement lending program (the latter is discussed in the next section). In this program, an inspector visits the home and prepares a detailed plan of which improvements are needed. SCSHC officials then meet with homeowners to identify their primary and most pressing home improvement needs. The SCSHC then purchases the materials and provides them to the homeowner, who then has roughly two weeks to complete the home improvement.⁷⁶

The second is the SCSHC's support for self-help housing through technical assistance, training, and the provision of tools. Through the SCSHC, residents in any of Starr County's colonias may rent tools for up to seven days, provided that they meet low-income requirements, provide a Social Security Number, picture ID, and pay a deposit of 20% of the tool's value, which is refunded in-full upon return of the rented item. The SCSHC also provides free construction classes during the evenings which, although targeted toward colonia residents, are open to the public as well. These lessons focus on skills such as plumbing, masonry, electrical, carpentry, and painting that are essential for homeowners planning to make home improvements themselves.⁷⁷

HOUSEHOLD STRUCTURE, AGE, AND SIZE: LIKELY DETERMINANTS OF INVESTMENT IN THE HOME

Finally, family structure also likely plays a significant role in guiding investment decisions. As families grow over time, the household often goes through a series of expansions and contractions. While these changes likely impact the economic resources available to the household, they simultaneously place new demands upon the functionality of the home.

(11)	Average Age of Head of Household			
Number in Household	Study	Control	Auxiliary	All Cases
2 or less	57.7	65.2	55.2	57.4
3 to 5	48.0	53.9	44.3	46.7
6 or more	42.2	43.2	45.6	41.9
All Households	50.9	56.9	48.1	49.2

Table 3.5 Household Size and Age of Heads of Household..

Other factors complicate any attempt to assess the impact of clear title separate from the unique characteristics of the households themselves. In the early stages of a family's trajectory the household grows significantly in size, putting pressure on the family to expand and improve the dwelling. As the children reach adulthood, many seek jobs but continue to live at home, often with their spouses and own children, and these increase the resources available to the anchor household but also put new demands on the living space. Later, children move out of their childhood home and acquire property nearby, leaving the vestige household with limited resources especially if the elderly parents are reliant upon pensions and social security. Thus, over the life course the capacity and incentives of the primary household to expand and improve the dwelling also changes.

⁷⁶ Although this time period is flexible, it may limit some homeowners' ability to make use of the program nonetheless. One survey respondent remarked that the two-week period was too short for her to make the necessary improvements, and thus decided not to participate.

⁷⁷ Personal communication with Anna Villarreal, Director, Starr County Self Help Center, July 14, 2011.

So, is there any indication that differences in the household structure partially explain difference in rates of home improvement between the Control and Study Groups? Certainly it appears that heads of household from the Control Group tend to be older than those from either the study or auxiliary samples (Table 3.5 -- 56.9yrs. for the Control Group, compared with 50.9 and 48.1 for the Study and Auxiliary Groups, respectively; two-tailed t-test Sig. of .02). That the Control Group comprises older heads of household confirms our earlier commentary that they purchased and occupied their property earlier. Older households have somewhat different housing needs than younger ones. Moreover, smaller households from both the Control and Study Groups tend to be headed by older residents, whose children have likely since moved out of the house, and vice versa: younger households are much larger (Table 3.5). Furthermore, these older and smaller households are disproportionately represented in the Control Group (41.4% two or less members) compared with only 26.7% of the Study Group.

	Study (02-11)		Control (02-11)		All Cases (11)
Number in Household	2001	2011	2001	2011	2011
2 or less	16.3%	26.7%	20.7%	41.4%	30.4%
3 to 5	67.4%	58.1%	69.0%	37.9%	53.0%
6 or more	16.3%	15.1%	10.3%	20.7%	16.5%

Table 3.6 Average Household Size by Survey Group

LENDING FOR HOME IMPROVEMENTS

Our research revealed inconclusive evidence regarding the impact of clear title on the borrowing practices of colonia homeowners. Although the use of formal lending⁷⁸ for home improvements has grown significantly over the past 10 years, it is unclear whether or not this is a result of access to clear title. In fact, many other issues point to the fact that despite having clear title, many colonia homeowners continue to be excluded from formal lending opportunities; lending for low-income families is limited, and many colonia residents fail to qualify home improvement loans. What is more, those who do qualify are often reticent to take out loans for home improvement, and in particular to use their title as collateral, due to the perceived risk involved.

(02-11)	Study	Control	Auxiliary	All Cases
2002	18.6% (13/70)	n/a n/a	n/a n/a	n/a n/a
2011	37.3% (28/75)	37.9% (11/29)	32.4% (12/37)	31.2% (53/170)

Table 3.7 Loans for Home Improvement by Survey Group

⁷⁸By formal we mean a loan from a bank, non-profit, or finance shop, as opposed to loans from family or friends.

In 2002 just under one-third of all respondents (31.2%) reported that they had received some sort of loan in order to make home improvements.⁷⁹ This appears to be a significant increase from 2002. Among participants from the Study Group, the use of formal loans for home improvement has doubled over the past decade, up from 18.6% in 2002 to 37.3% in 2011 (Table 3.7). Unfortunately, no data was collected from the Control Group in 2002 regarding the use of loans for home improvement, so we were unable to assess changes in borrowing patterns over ten years between the various sample populations. Thus, it is unclear whether or not the increase in borrowing by the Study Group over 10 years is a result of access to clear title, or if rates of borrowing have simply increased in general due to greater access to lending opportunities, particularly those provided by government and non-profit programs such as the CRG.

(11)	Study	Control	Auxiliary	All Cases
Number of cases	27	11	12	53
Mean	\$20,500	\$10,500	\$6,958	\$14,717
Trimmed Mean	\$17,733	\$10,333	\$6,509	\$12,272

Table 3.8. Average Loans for Home Improvement by Housing Group

Interestingly, however, although the Control and Study Groups were equally likely to have received a loan for home improvement, the latter borrowed significantly more on average than either the Control or Auxiliary Groups. Of those who received loans for home improvement, the Study Group borrowed, on average, \$20,500, compared with only \$10,500 and \$6,958 for the Control and Auxiliary Groups, respectively. Whether or not the larger amounts borrowed by the Study Group are a product of their receiving legal title is unclear. Unfortunately, the small sample sizes means that despite the substantial differences between Study and Control Groups neither is statistically significant (two-tailed t-test Sig. of .208).

ACCESS TO LENDING FOR HOME IMPROVEMENT

While in theory colonia residents have access to a variety of financing options—these include banks, finance companies,⁸⁰ retail stores, pawn shops, and non-profits and government programs—few of these provide loans at the affordable rates and with the flexible terms that best suit the needs of colonia homeowners. However, certain government programs and non-profits offer a number of lending programs to assist with the home improvement process.

Banks

Many banks offer loans for home improvements, although just as with traditional mortgages, many colonia residents fail to qualify due to low credit scores, low incomes, or unsteady employment history. Also, many colonia households simply have irregular income streams, sometimes due to seasonal agricultural and service-sector work (construction, yardwork, etc.), which make repaying traditional loans difficult. Additional obstacles prevent certain homeowners from qualifying for lower-interest home-improvement loans: those

⁷⁹ This estimate refers to any loans during any time period, and thus differs from the estimate provided in Table 3.7, which refers only to the past 10 years.

⁸⁰ Finance companies provide small, short-term loans to businesses or individuals often at high rates. These are sometimes referred to as finance shops or pay-day lenders.

without clear title, or those with Contract for Deed agreements, may fail to qualify for home improvement loans, and therefore often resort to consumer loans, which have significantly higher interest rates (Ward et al. 2003).

Less Formal Lending

Because they fail to qualify for bank loans, some colonia homeowners seek lending from less formal institutions, such as finance shops, pawn shops, and retail stores, where the qualifying requirements are much less stringent and approval times are quicker. While these lenders provide borrowers with small loans, interest rates are often exorbitant—in general between 50% and 85% per year, but sometimes more than 100% or 200%—and the terms and conditions are often unclear (Ward et al. 2003).

Non-Profit and Government Programs

Despite the limits of formal lending opportunities, a number of successful programs in Starr County promote access to affordable, safe, and environmentally sustainable housing. These range from assistance with self-help home improvements to the construction of new, “green,” affordable homes.

1) The CRG’s Nuestra Casa Program

The CRG’s *Nuestra Casa* (NC) lending program (“Our House” in Spanish), provides 2-year loans between \$2,500 and \$3,500 to residents in Starr County’s colonias. These loans have an annual interest rate of 9%, and typically require payments of around \$115 per month. Although no stipulations are placed upon the use of these loans,⁸¹ borrowers must have clear title to their property (deed or contract for deed), but only to verify ownership and not as collateral.⁸² Since its inception in 2000, the NC program has made more than 1000 loans at a total value of over \$2 million (Giusti and Estevez 2011).

Despite the success of the program, lending through NC has decreased in recent years, largely due to limited staff. Although the CRG used to advertise the NC program by posting fliers, publishing newspaper advertisements, as well as by hosting presentations at local schools, this is no longer the case. Thus, most current borrowers are returnees who have received loans in the past.⁸³

2) USDA Section 504 Repair Loans

The USDA’s Section 504 program is designed to assist very low-income households living in rural areas⁸⁴ to repair their homes: “Loan funds are available for repairs to improve or modernize a home, make it safer or more sanitary, or remove health or safety hazards” (Rural

⁸¹ According to Giusti and Estevez (2011, 311), the “highest percentage of upgrades is in air conditioning and insulation (15%), followed by floor work (12%), roof (11.5%), fence (8%), cabinets (7%), wall (5%), and annex (4%).”

⁸² Personal communication with Amada Villarreal, employee at the CRG, July 7 2011.

⁸³ Ibid.

⁸⁴ Rural areas are classified in this context as “open country and places with population of 10,000 or less and, under certain conditions, towns and cities between 10,000 and 25,000 population (USDA Texas Rural Development 2005).

Development 2005, 3). In order to qualify, households must earn less than the very low income limit for the area,⁸⁵ must have a reliable credit history, and must be able to document ownership. While many local colonia residents undoubtedly qualify for the income limits, many lack sufficient credit scores to qualify for Section 504 loans and some may be limited by continued unclear title.

Section 504 loans are issued with a maximum term of 20 years and at an interest rate of 1%. The maximum value of all outstanding Section 504 loans cannot exceed \$20,000 at any given time for any household. In addition, for those households that fail to qualify, grants of up to \$7,500 are also available to cover the cost of home repairs, although in the event that the homeowner sells their home within three years of grant approval, the entire value of the grant must be repaid in full (Rural Development 2005).

3. Home Improvement Loans from the Starr County Self Help Center

In addition to the grant funding and construction classes discussed earlier, the SCSHC also provides large home improvement loans for qualifying colonia households. This program provides funds of \$15,000 to \$25,000 for applicants to repair larger projects such as roofing, windows, doors, plumbing, and electrical repairs. Once applicants are approved, inspectors evaluate the conditions of the home and make recommendations for repair, although manufactured homes (trailers) do not qualify due to the higher cost of rehabilitation.⁸⁶ Despite this much-needed source of lending, many residents fail to qualify simply because contractors are required to ensure that the improved housing be fully up to code and because no rehabilitation assistance is permitted for households needing improvements of more than \$25,000. Thus loans of \$15,000-\$25,000 may be insufficient to meet the relatively high code standards often required by federal and state law.

Inevitably, therefore, affordable lending opportunities for colonia homeowners have historically been very limited. While a number of programs in Starr County strive to expand access to home improvement lending to colonia residents, the low income structure and poor credit of many borrowers continue to limit homeowners' ability or willingness to take advantage of these loans. This notwithstanding, the number of Study Group households utilizing loans has doubled over the past year mostly as a result of the homeowners' use of the CRG's microloan program (see below).

THE USE OF LENDING FOR HOME IMPROVEMENT

Although the impact of clear title on the borrowing practices of colonia homeowners is inconclusive, borrowing practices do appear to have changed over the last decade, largely due to expanded access to low-interest micro-loans provided by the CRG.

⁸⁵ Source materials from the local USDA branch estimate that the very low income level for a family of four was \$24,300 per year for Starr County.

⁸⁶ Personal communication with Anna Villarreal, Director, Starr County Self Help Center, July 14, 2011.

	2002 (02)		2011 (11)	
	Number	Percent of All Loans	Number	Percent of All Loans
Bank	32	71.1%	38	49.4%
CRG	4	8.8%	24	31.2%
Finance Company	2	4.4%	7	9.1%
FHA	3	6.6%	2	2.6%
Other	4	8.8%	6	7.8%

Table 3.9. Source of Loans 2002 & 2011

Respondents from both the 2002 and 2011 survey were asked whether or not they had received a loan to make home improvements, although results from the 2002 survey come primarily from the Study Group, since this question was applied to that group and not the Control, thereby preventing us from comparing changes between both groups over nine years. Nevertheless, the data provided in Table 3.9 is probably an accurate reflection of overall borrowing patterns. Prior to 2002, few residents would have received a loan from the CRG (the *Nuestra Casa* program only began in 2000), and thus the majority who sought a formal loan would have had recourse to a bank, as is the case in Table 3.9. The important thing to note here is not the number of loans received,⁸⁷ but the relative importance of each type of loan. While bank loans comprised 71.1% of all lending for home improvement in 2002, this had fallen to 49.4% by 2011, largely due to the increasing prevalence of borrowing through CRG's *Nuestra Casa* program.

(11)	Bank	CRG	Finance Company	Other	Percentage of All Loans by Year
Before 2000	90.0% (9/10)	0.0% (0/10)	10.0% (1/10)	0.0% (0/10)	16.4% (10/61)
2000 to 2003	52.2% (12/23)	26.1% (6/23)	8.7% (2/23)	13.0% (3/23)	37.7% (23/61)
2004 to 2007	58.3% (7/12)	25.0% (3/12)	0.0% (0/12)	16.7% (2/12)	19.7% (12/61)
2008 to 2011	25.0% (4/16)	50.0% (8/16)	12.5% (2/16)	12.5% (2/16)	26.2% (16/61)

Table 3.10 Financing Sources over Time

However, the introduction of micro-loans may not be the only factor reshaping the borrowing practices of *colonia* homeowners. Over the past 12 years, actual use of loans from banks has decreased significantly. In order to assess changing borrowing practices we tracked the type of loans received by respondents over time. From 2000 to 2003, respondents acquired 12 loans

⁸⁷ The number of loans is not directly comparable, given that the data is taken from the (02) and (11) databases, and not the (02-11). This means that in this table we are not comparing changes between the same households over nine years, but rather the distribution of the different types of loans between two (somewhat) different samples.

(or 52% of all loans from that period) from banks; this number had fallen to only 4 loans between 2008 and 2011. Although this decrease may be partially due to more stringent lending standards since the 2008 recession, it is equally likely that homeowners have opted for the shorter-term micro-loans provided by the CRG. Whatever the cause, smaller loans (be they from finance shops or from the CRG) have been the primary method of borrowing (62.5%) in the last few years. Given this greater reliance in recent years upon smaller loans, it is perhaps troubling that the CRG has ceased to promote its *Nuestra Casa* microloan program. As we described earlier, although the CRG continues to offer these loans, it no longer advertises them throughout the community and most loans are going to previous borrowers who are in good standing (i.e. they repaid their earlier loan).

While the use of small, short-term loans has grown in recent years, it is unclear that borrowing in general is on an upward trajectory. As shown in Table 3.10 respondents received a limited number of loans for home improvement prior to 2000,⁸⁸ while more than a third (37.7%) of all loans were acquired between 2000 and 2003. In recent years, the total number of loans received has failed to reach the levels seen between 2000 and 2003.

THE USE OF TITLE AS COLLATERAL

As discussed earlier, an important argument in support of title regularization programs is that they supposedly facilitate access to credit through the use of the title as collateral. We found, however, that regularization of title had no perceivable effect upon the use of the title as collateral. In fact -- and possibly due to high levels of perceived risk post 2008 -- homeowners appear less inclined than ten years ago to use their title as collateral.

In order to better understand the borrowing practices of colonia homeowners, we asked homeowners three specific questions: 1) were they aware that they could use their title as collateral; 2) had they actually done so; and 3) would they be willing to do so in the future? Ninety percent of all homeowners were, indeed, aware that they could use their title as collateral to receive a loan, up by just over 10% 2002.⁸⁹ Additionally, while only 6% had actually used their title as collateral in 2002, by 2011 this had risen to 18%. Thus, it appears that more colonia homeowners have begun to use their title as collateral over the past 10 years.

Nevertheless, it seems unlikely that the increase is a result of title regularization per se. If it were, then we would have expected the Control Group, who received title earlier, to have been more likely to have used their title as collateral, especially early on. However, this appears not to have happened: of those households surveyed in both 2002 and 2011 there is very little difference in the use of collateral between the Control and Study Groups during both time periods. While 6% of the Study Group had used their title as collateral in 2002, 7% of the Control Group had done so; in 2011, 18% of the Study Group had used their title as collateral, while 19% of the Control Group had done the same.

⁸⁸ This estimate may under represent the actual number of loans received prior to 2000, as respondents may have been less certain of the exact year in which they received earlier loans. In total, 45 loans were reported during the 2001 survey (of a sample size of 286), which suggests that undercounting may in fact have occurred.

⁸⁹ This data is taken separately from the (02) and (11) databases.

(02-11)	Used their Title as Collateral for a Loan			Would use their Title as Collateral in the Future.		
	Study	Control	All Cases	Study	Control	All Cases
2002	6%	7%	6%	48%	63%	52%
	(4/72)	(2/27)	(6/99)	(21/44)	(12/19)	(33/63)
2011	18%	19%	18%	42%	50%	44%
	(13/72)	(5/27)	(18/99)	(31/74)	(14/28)	(45/102)

Table 3.11. Use of Title as Collateral for a Loan

Overall, this lack of use of the title as collateral is further evidence that challenges assumptions by writers such as De Soto that providing residents in informal settlements with legal title will encourage or facilitate their participation in formal lending. Such assumptions overlook the fact that many colonia residents may not qualify for standard loans, since their credit scores or incomes may be too low, or their home may be difficult to insure given its self-built design. Equally, from the point of view of colonia homeowners, collateralized lending may simply entail too much risk for many residents (Ward et al. 2011).

The decision not to participate in traditional lending practices is rarely due to ignorance, but arises more from a pragmatic sense of the risk that borrowing—particularly leveraged borrowing—entails (Ward et al. 2011). In fact, colonia homeowners’ willingness to use their title as collateral seems to have decreased significantly over time. In 2002, 52% of respondents replied that they would be willing to use their title as collateral. By 2011 this had fallen to 44%. At the same time, however, one should note that while willingness to use the title as collateral has fallen among both groups, the Study Group remains significantly less willing to do so. This is likely due to the fact that, having already experience significant title insecurity, these residents are loath to risk losing their home by leveraging the title as collateral. In short, for families that have invested significant time and energy into building their home over time, the possibility of losing what is likely their largest asset—not to mention their place of residence—is simply far too great.

Two additional pieces of data provide further insights about the perceived risk involved in leveraging a loan against one’s home. We were interested in assessing whether or not the subprime mortgage crisis had perhaps led lower- and lower middle-income residents from the formal market to “raid” downwards into informal markets, and occupy colonia housing. While an interesting hypothesis that merits greater and more detailed attention, only 5% of respondents in 2011 reported that someone had moved into their household over the past three years after losing their home due to lack of payment. Though these numbers are patently insufficient to confirm our suspicion of an uptake of residence in colonias due to the burst mortgage bubble, the fact that we found anyone at all does suggest that there may be some population “churn” (see Report #1), and that it probably reinforces colonia homeowners’ sense of the serious risks associated with using one’s title as collateral for a formal loan: indeed, 84% of respondents in 2011 felt that using one’s title as collateral entailed high or very high risk.

CONCLUSION: THE RATIONALITY AND STABILITY OF INFORMALITY

In this chapter we have explored policy interventions to promote title regularization in Starr County as a result of the informal land transactions and promotion of lot sales by the two principal developers in the hinterland of Rio Grande City. While such informal development is

quite common in colonias and subdivisions throughout Texas through such seller financing mechanisms as Contract for Deed, unlike in Latin American squatter and self-help settlements it is exceedingly rare in Texas for such a large number of titles to be found to be clouded, requiring policies of title “regularization”. The case of Rio Grande City is singular in that respect and is made even more interesting by virtue of the natural experimental scenario that it presents of having many residents with clean titles that were not affected by the intervention, and many others who were targeted to receive clean titles. Thus we have a natural experiment in which now, after ten years have elapsed we can evaluate the impact of having “el titulo en la mano” (Ward et al. 2011.) Understanding people’s perceptions of title is important in that it allows us to better interpret the role that title plays in enhanced security, housing investment, sources of finance, participation in the formal housing market, level of asset building, etc. – issues of debate and polemic in the literature.

Our analysis shows that there has been significant upgrading in these colonias over the past ten years: both at the colonia (settlement wide) level, as well as in individual dwellings. The large majority of households have improved their homes often at what, for them, involves substantial resources and expenditures. Only a relatively small minority borrow through formal sources of financing (banks), and most use informal financing means (savings, earnings and tax rebates) to undertake home investment and housing improvements. Self-help (DIY) and “sweat equity” is important, and the majority also have some level of experience in basic construction which helps. Those with experience engage more in self-help – as one might expect. To the extent that loans are sought, these are invariably in response not to the formal market but to the supply of micro-credit loans through NGOs and, occasionally through governmental assistance, although the latter tends to be rather more restrictive requiring code compliance. But most people fend for themselves, as they have always done.

Our study allows us to decompose the two groups. Are there significant differences in participation in the formal market and in levels of investment in home improvement between those that had title security from the outset and those who didn’t? Our data suggest that title plays a minimal and relatively insignificant role, although those with title do appear to be earlier arrivals and had a slight jump start on making home improvements and are more likely to argue that they are close to finishing dwelling improvements. But the differences are not large, and the Study Group’s behaviors of loan seeking and improvement are rather similar. To the extent that one sees differences, these appear to arise less from title and more from (sometimes significant) differences in the socio-economic profiles of the two populations. The Control Group settled earlier, tend to be somewhat older, in the downsizing phase of the life course. These features explain the modest differences observed, much more than does having clean title.

The principal reason why homeowners eschew formal loans is fear of the risk that it entails, and few are willing to use their home as collateral to leverage a loan. The sacrifices that they have made; the security of knowing that they don’t have to meet rental payments each month; the ongoing use value of the home as a place of residence in which to raise their family; the social capital of friends and family living nearby; the asset and, ultimately, the patrimony that they can hand onto their children when they pass away – are all just much too important and integral to their survival to put at risk.

At the outset we created the null hypothesis that title would lead to formal loans and formal market interaction. Thus, as we anticipated, that hypothesis provides further evidence of the caveats that should be placed upon the ideas of de Soto and his followers. But this is not to argue that clean title is not important: clearly it is. If one needs to resist a third party claim upon one being the legitimate owner then it is important to have title to prove “ownership”, and for that title to be in the public domain (the county records office where title searches are conducted).

Similarly if one wishes to sell one's property clean title is an imperative, otherwise the transaction will not proceed, or, if it does, it will revert to an informal transaction and the sale will usually be dramatically undervalued. In the following chapter we will dig deeper into this aspect of market (under) performance and explore the ways in which the colonia housing market has morphed in the past 10 years, as a precursor to identify what policies (if any) might be put in place both to make the market function more smoothly and equitably, as well as to promote the home improvement processes through interventions that do appear to be culturally relevant and helpful to what are largely self-managed and often informal processes.

CHAPTER 4. THE COLONIA HOUSING MARKET

INTRODUCTION

As this chapter will show, housing market dynamics have changed significantly over the past decade. We assess these changes in regards to market activity, property and land values, the purchase process and payment method, and the emerging rental market. The data suggest that the process of housing acquisition is changing markedly, with newfound implications for low-income homeowners and would be purchasers in the colonias of Starr County: these include decreasing sales of land due to densification, and a slow increase in the number of homes sold; rising land and property values; and limited financing options for potential homebuyers. While increasing property values is ostensibly good news for homeowners, few are able to liquidate their investment due to a poorly functioning housing market and their freedom to move out is seriously impaired. This impacts potential buyers as well since the supply of lots and homes is stunted, and because they must continue to rely upon seller financing mechanisms, often at high usurious rates. Only if the market can be made to work more smoothly and more equitably will many of these obstacles be overcome. Nor is it rocket science to resolve many of these issues (as we will show), but unless more creative and pragmatic policy approaches are invoked and put in place, we predict a continuation and intensification of many of the informal processes that we will describe below, and a further drive to informality.

THE STATUS QUO ANTE: FINANCING FOR HOMEBUYERS

As is now obvious, financial support for the purchase of new or existing homes is very limited for low-income would be homebuyers in Starr County. Historically, colonia homeowners have not used typical lending opportunities (in other words, formal loans or mortgages) in order to acquire land or housing. Instead, they have relied upon the seller to finance the transaction, allowing the buyer to make small monthly payments rather than a lump sum. Over time, however, the nature of colonia housing market transactions has changed significantly, and this appears to have made access to affordable housing much more difficult for potential colonia homebuyers.

BANKS AND TRADITIONAL MORTGAGE LENDING

For the majority of homeowners throughout the nation, a mortgage is a must-have; and yet this is not the case for many colonia residents. Many simply do not qualify for traditional mortgages, as their incomes and credit scores are often too low, their levels of debt too high, and the required down payment too much of a burden (Ward et al. 2003). Thus, rather than taking out a mortgage, most homeowners have self built or self managed the housing process themselves over time. Even if potential homeowners were able to qualify for mortgage financing, banks are unlikely to lend for the purchase of colonia housing; because the market is informal and poorly understood (by formal institutions); housing is at times haphazard and self built, plagued by low levels of services, and, although invariably appraised and taxed, the actual market value is often undervalued. This makes traditional lending unfeasible, as many banks are unwilling to lend to colonia residents, particularly given the economic downturn and the collapse of the housing bubble in 2007. Nevertheless, as we have seen, even were they able to qualify for mortgages, few colonia residents were willing to take the risk involved.

ASSISTANCE FOR LOW-INCOME BUYERS

Two government-funded programs currently operate out of Starr County, facilitating the purchase of new or existing homes: the CRG's New Home Construction program and The USDA's 502 program. Although these target low-income families, and thus widen homeownership opportunities for these families, they are not without risk for borrowers and lenders alike. Also, because both programs are limited in scope (particularly in recent years), they are unlikely to meet demand from potential homebuyers.

THE CRG'S NEW HOME CONSTRUCTION PROGRAM

The CRG also oversees the construction of new energy-efficient homes⁹⁰ in some of the colonias of Starr County through the New Home Construction program. Currently, the program offers ten different floor plans, and all houses are built using Insulated Concrete Formwork construction (ICF),⁹¹ a cost-effective and energy efficient design.

Photos 4.1a (above) and 4.1b (below) Insulated Concrete Form Pre-Installation



⁹⁰ Although the first ten loans were financed by the CRG as well, this is no longer the case. In recent years, the CRG has simply assisted buyers with the mortgage application process.

⁹¹ ICF is comprised of insulated hollow large brick forms typically made from polystyrene, that are tied together with metal or heavy-duty plastic to create a structure into which concrete is poured. Set onto the slab, these form the walls of the home with the polystyrene forming the insulation layer to which the cladding is added on the outside, and the sheetrock on the inside.



Through the New Home Construction program, the CRG has built close to 100 homes throughout Starr County since construction began in 2004. Prices currently range between \$60,000 and \$120,000 dollars, including the cost of the lot.⁹² Despite the promotion of these high-quality, fairly affordable homes, many colonia residents are unable to qualify for the required loans. According to the CRG website, “[o]ver the past couple of years the nationwide meltdown in the home mortgage market, coupled with the slow recovery from the recession, has made it increasingly difficult for low-income families to secure home mortgage financing. CRG has intentionally slowed housing production, and is currently re-evaluating its border housing strategy” (New Home Construction 2011).⁹³ Thus, the largest impediments to the program are the timeworn ones: low incomes of the borrowers; a lack of savings and high levels of debt, and poor credit scores. In addition, although many families would like their own home, they are reticent to take on the financial obligation due to the risk of losing their home downstream. Nevertheless, only three of the 100 buyers have defaulted on their loan; one of these was foreclosed by the bank, while two were returned to the CRG because the family could no longer afford to make their payments (Amada Villarreal).

The USDA’s 502 Program

The Rural Housing Service (RHS) provides loans to low-income residents in rural areas⁹⁴ for the purchase and/or repair of existing housing, the purchase of a site and construction of a new dwelling, or for the purchase of existing housing. No down payment is required, and loans can be made for up to 100% of the appraised value. However, in order to qualify, the property must meet minimum requirements for quality, including energy efficiency, or must be upgraded to meet these specifications. Third-party inspections must be performed by a qualified inspector, payment of which is agreed upon between the buyer and seller prior to purchase.

⁹² The cost of lots in these neighborhoods ranges between \$10,000 and \$20,000 dollars.

⁹³ <http://www.crg.org/how-we-help/affordable-housing-programs/new-home-construction>

⁹⁴ Rural areas are classified “open country and places with population of 10,000 or less and, under certain conditions, towns and cities between 10,000 and 25,000 population” (Rural Housing Service 2008, 1).

Although the loans can be subsidized to support low-income buyers,⁹⁵ poor credit scores and high levels of debt are again the most likely obstacle for many colonia residents. In order to qualify for a loan, monthly payments, real estate taxes, insurance, and other debts cannot surpass 41% of an applicant's monthly income -- an unlikely scenario in neighborhoods where the average income per year is so low and costs of bare essential survival is a relatively large slice of the household income. Furthermore, additional costs pertaining to the appraisal, escrow, and closing costs may make the purchase of homes impossible for cash-strapped colonia residents. Not surprisingly, then, during the fiscal year ending in 2011, only nine 502 loans were made to residents in Starr County.⁹⁶

SELLER-FINANCING

By far, the most common method of purchase for colonia homebuyers is seller-financing, whereby buyer the purchaser agrees to pay the seller in installments. Typically, small payments are made each month (\$100-150), although large lump sums are also possible if and when resources permit. The buyer, then, does not receive title until the purchase price has been paid in full. Thus, many seller-financed sales likely entail Contract for Deed agreements, whether formally documented or not. Regardless of payment method or the type of agreement, seller-financing typically allows the buyer to occupy the lot or property after the first payment. But if they fall behind and the contract is rescinded, then they lose everything.

Historically, most buyers in the study colonias purchased land from the developer, relying upon the developer to finance the lot purchase. Though interest rates on such purchases are often very high (and not always transparent), many homeowners opt for this method of payment because of the low-transaction cost and lack of large down payment required. However, over time, sellers are more frequently the previous occupant, rather than the developer and this has put new pressures on property transactions, and appears to be severely limiting activity in the housing market. Understandably, current residents, many of whom have invested significant amounts of time, effort, and money into their homes, are often loath to sell their property for anything other than its full value and wish to sell the home outright. But without external financing for would be buyers the vendor faces sale under seller financing – reproducing the Contract for Deed mechanisms or other informal transactions (such as receipts or oral agreements). The risks inherent in selling property through these agreements, however, seems too high for those thinking of selling their home, so they either have to stay put (since they can't afford to buy elsewhere while their own home is tied up in seller financing); close-up the house and hope to sell later; or engage in transactions within kin or friendship networks.⁹⁷

MARKET ACTIVITY

Data collected from both the 2002 and 2011 surveys point to decreasing levels of activity (sales) in the land market, and only marginal increases of activity in the housing market. Respondents were asked a variety of questions regarding what they purchased, when, from whom, and how.

⁹⁵ Typically, applicants who qualify for a subsidized loan pay 24% of their household income towards repayment, property taxes, and insurance.

⁹⁶ Personal communication with Hilda Reyes, Area Technician at Rural Development, USDA, December 16, 2011.

⁹⁷ Open-ended interviews with a number of homeowners that had recently bought, or attempted to sell, their homes support these conclusions, though no quantitative data is available.

Some of this data is represented in Table 4.1.⁹⁸ A few things are immediately apparent. First, although colonia market activity was initially dominated by sales of land (100% of all purchases from 1970 to 1989)—and understandably so given that, initially, all of the plots were vacant when first sold off by the developers—in recent years the acquisition of land with a dwelling has in fact surpassed that of vacant lots (63% of acquisitions since 2003).

(11)	Type of Property		Status	
	Land	Land and House	Year Acquired	Year Occupied
1970-1989	100% (68/68)	0% (0/68)	41.0% (68/166)	30.1% (50/166)
1990-1994	94% (44/47)	6% (3/47)	28.3% (47/166)	34.3% (57/166)
1995-2002	80% (28/35)	20% (7/35)	21.1% (35/166)	24.1% (40/166)
2003-2011	38% (6/16)	63% (10/16)	9.6% (16/166)	10.8% (18/166)
Total	88% (146/166)	12% (20/166)	--	--

Table 4.1. Land-v-Land & Housing Sales 1970-2011

Another useful measure of market activity takes a slightly broader view. In both the 2002 and 2011 surveys, respondents were asked whether or not one of their neighbors had recently purchased their property. We use these responses here to gauge overall market activity. In the 2002 survey, just under 8% of respondents reported that one of their three nearest neighbors (on either side and directly across the street) had bought their property over the previous two years. Given that market transactions prior to 2002 were primarily sales of vacant land, rather than sales of both the lot and a home, these data probably involve land sales.⁹⁹ In the 2011 survey, we asked a similar question regarding market activity on neighboring lots. Although these results are not directly comparable with the 2002 data,¹⁰⁰ they point toward continued activity in both the land and housing markets. Around one-quarter (44 of 172) of respondents reported that an adjoining neighbor (i.e., on either side) had either bought or sold their property within the last ten years.¹⁰¹ This is somewhat higher than expected and shows a greater

⁹⁸ It is important to note that the time periods selected for this graph are not unimportant. 1970-1989 were the initial years of colonia development, when close to a third of families purchased their property but few had in fact occupied the lot. 1990-1994 was the period of highest market activity, and was also the period in which the majority of households occupied the lot. 1995-2002 was the period during which the State and the CRG, at the State's request, intervened in the ten study colonias until the first household survey was conducted. Finally, 2003-2011 were the years between the first and second household survey.

⁹⁹ 80% of those respondents who had purchased their property between 1995 and 2002 purchased only the land.

¹⁰⁰ In retrospect, it would have been methodologically useful, in order for comparability, to have asked the question differently on the 2011 survey –either by referring to an adjoining neighbor, or directly across the street, just as was done in the 2001 survey. Also, in order to gauge market activity over the same time frame, it would have been best to ask the question in reference to the past 2 years, and the past 10 years.

¹⁰¹ 34 of these respondents, or 20%, reported that an adjoining neighbor had purchased and moved onto the land while 22, or 13% had a neighbor who had sold their house and moved.

dynamic that we had anticipated; more than three quarters of this 60% (34 of 56) were incoming households onto formerly vacant lots buying out a former absentee owner or buying from the developer; and less than 40% (22 of 56) were people who sold and left (*traspasos* in Spanish).

Nevertheless, although the number of sales of homes appear to have increased steadily over time, both the land and housing market continue to show only modest activity. Table 4.1 also presents the purchase and move-in dates for all homeowners. Two things are salient here. First, only 9.8% of households acquired their property (either through purchase or inheritance) since 2003. These data reveal that despite modest increases in the sale of homes, overall market activity has decreased significantly in recent decades, particularly as the supply of vacant lots for sale has dwindled. These results demonstrate that the ten study colonias are indeed stable “long-term” neighborhoods. Typically, families purchase the land or dwellings and spend many years investing in the property—in the end, very few sell their homes and move out. This conclusion is supported by looking at state and county trends as well. While only 12.0% of respondents (both owners and non-owners) had moved to their home since 2006, the rates for Starr County and Texas were much higher, at 24.9% and 47.9%, respectively (American Community Survey 2008-2010 3-Year Estimates).

The second feature worth noting is the lag time between acquisition and occupation of the property. The time lapse between purchase and occupation of the lot has narrowed very considerably. This reflects the fact that many purchasers were reluctant to move onto their lots until they had finished paying and/or until there was some modicum of services installed: colonia housing acquisition was a more long term process. With increasing services, the CRG intervention and support, and the modest sales, households appear to be more disposed to move on site with less delay. The fact that some of the more recent sales are of former home owners, and to the extent that there has been some shake out of households from the formal sector due to the housing crisis, one would expect more immediate lot occupancy after purchase.

LOT VACANCIES AND THE COLONIA LAND MARKET

One factor that we believe has a significant impact on dampening activity in the colonia land market is the high number of vacant lots. Almost one-third (29.4%) of lots in the ten study colonias were either undeveloped, vacant or unoccupied.¹⁰² Although this high level of unused land would ostensibly provide a significant supply to meet demand among colonia residents hoping to acquire property, the majority of these properties are not on the market. In 2000 one study for a number of counties explored precisely this issue of absentee lot owners in colonias (Ward 2000; Ward and Carew 2000)¹⁰³ and found that relatively few of these owners actually intended to occupy their vacant lots. Seventy percent of the absentee owners lived in a nearby city, and more than 80% owned the house in which they currently lived. Thus, many purchased the lot as an investment, or possibly as an inheritance for their children, and few had intentions to of ever occupying the lot themselves (Ward 2000).

If this description holds for all ten of the study colonias, it presents a serious impediment to colonia land market dynamics. Few of these vacant lots had “for sale” signs posted, and many

¹⁰² Undeveloped means the property had yet to be cleared and leveled, vacant means the site had been prepared (possibly with a foundation, even) but no structure was present, and unoccupied means there was a structure on the property but it appeared unoccupied.

¹⁰³ One of these was Mike's in Starr County.

of those that did had incorrect or out-of-date contact information.¹⁰⁴ Thus, even were someone interested and capable of purchasing a vacant lot, contacting the current owner would be difficult without clear advertisements. Some of these lots have lapsed into informality by virtue of their being abandoned by the owners or are now in tax default and again, in market “limbo”. These difficulties in actually identifying absentee lot owners may also explain the decline in the sale of vacant land, despite the fact that nearly a third of lots remain unoccupied.

THE PURCHASE PROCESS AND PAYMENT METHOD FOR COLONIA HOMEBUYERS

Another reason for the decrease in market activity has to do with changes in the purchase process in recent years. Three factors are believed to be particularly important in shaping market exchanges: first, the decreasing role of developers in financing land market exchanges followed by an increase in owner-financed sales;¹⁰⁵ second, the negligible use of formal loans to facilitate purchase; and third, the reliance upon social networks in order to finance housing purchases.

Let us begin by discussing how the parties involved in land and housing market transactions have changed, and the impact that this has had on seller-financed sales. Initially, the vast majority (72.5%) of sales took place between a developer and the buyer,¹⁰⁶ while the rest purchased their land from a previous owner. Since then this pattern has shifted markedly as developers are no longer selling lots in these colonias. Since 2003, in the absence of formal land developers, all transfers of land have occurred between residents and consumers. This has had a large impact on market dynamics since purchasing property for low-income, cash-strapped potential buyers is extremely difficult without some form of financing, and historically this financing has come directly from the seller (and thus often the developer). In the absence of developers willing to finance the purchase of land (through monthly payments), access to property has likely become much more difficult for potential buyers.¹⁰⁷ While credit from the seller comprised the method of payment for more than 80% of purchases before 1994, only 44% (7/16) of those who bought since 2003 used seller-financing as a method of payment, pointing to the absence of developers in the sales process.

¹⁰⁴ The author completed additional surveys and interviews with colonia residents attempting to sell their property. This data is not presented, however, in this report.

¹⁰⁵ From this point on, owner-financing refers specifically to previous owners who have financed the sale of their land or house by allowing the buyer to make payments over time, while developer-financing refers only to sales facilitated and financed by the developer himself.

¹⁰⁶ The actual number of purchases from the developer may in fact be higher, as some respondents appeared to have considered the developer to be the “previous owner.” This fact came out in initial discussions with respondents, and the surveyors clarified the definition of “previous owner” in subsequent interviews as meaning someone who had owned the property prior to purchase, but was not a “seller of lots” (or developer). This bias was unaccounted for in the auxiliary (mail) surveys, and may explain the fact that for all time periods 63% of the Auxiliary Sample reported buying their property from the previous owner, compared with only 37% of the Core Sample.

¹⁰⁷ By emphasizing the role that developers played in financing the purchase of land in these colonias, this report does not mean to overlook the corruption on the part of developers. As discussed in greater detail later, these developers often sold land at exploitative rates with unclear documentation and little accountability, sometimes selling the same lot to multiple parties. In fact, part of the reason that colonia land was so easily financed by the developers was that it was unserviced and informally documented, thus reducing the cost for the developer. In no way, then, do we argue for a return to prior conditions, nor do we romanticize the role of developers. Nevertheless, it is important to note that in the absence of these developers, and particularly the financing they were willing to provide, the method of payment for purchases in colonias has changed dramatically, and access to housing is now likely to be more exclusionary.

(11)	Type of Property		Seller				Method of Payment				
	Land	Land and House	Previous Owner	Developer	Inherited from a Family Member	CRG	Income or Savings	Help from Family or Friends	Official Loan	Seller-Financing	
										Previous Owner	Developer
1970-1989	100% (68/68)	0% (0/68)	27.5% (19/69)	72.5% (50/69)	0.0% (0/69)	0.0% (0/69)	16% (11/67)	1% (1/67)	1% (1/67)	24% (16/67)	56.7% (38/67)
1990-1994	94% (44/47)	6% (3/47)	37.0% (17/46)	60.9% (28/46)	2.2% (1/46)	0.0% (0/46)	16% (7/44)	5% (2/44)	0% (0/44)	22.7% (10/44)	56.8% (25/44)
1995-2002	80% (28/35)	20% (7/35)	58.8% (20/34)	29.4% (10/34)	5.9% (2/34)	5.9% (2/34)	21% (7/33)	12% (4/33)	6% (2/33)	33.3% (11/33)	27.3% (9/33)
2003-2011	38% (6/16)	63% (10/16)	82.4% (14/17)	0.0% (0/17)	11.8% (2/17)	5.9% (1/17)	25% (4/16)	25% (4/16)	6% (1/16)	43.8% (7/16)	0.0% (0/16)
Total	88% (146/166)	12% (20/166)	42.2% (70/166)	53.0% (88/166)	3.0% (5/166)	1.8% (3/166)	18% (29/162)	7% (11/162)	2% (4/162)	37.9% (44/116)	62.1% (72/116)

Table 4.2 Housing Acquisition and Methods of Payment 1970-2011

In fact, since 2003 all seven of those who used seller-financing to buy their property, did so with owner- rather than developer-financing. Obviously, this decrease in the prevalence of informal financing presents new challenges to potential buyers. Initial research points to the fact that an unwillingness on the part of the seller to finance the sale of their home may be a primary factor that limits activity in the *colonia* housing market today.¹⁰⁸ Only 2% of all respondents used a formal loan (or mortgage) in order to purchase either the land or dwelling, compared with mortgage rates of 21.0% and 63.3% in Starr County and throughout Texas, respectively (American Community Survey 2008-2010 3-Year Estimates). Thus, in the vacuum created by the drying up of developer lot sales and the decrease of seller-financing, families have begun to rely more heavily on social networks and income or savings to finance the purchase of property. One quarter of those who purchased since 2003 relied upon income or savings as the primary payment method, while another 25% received assistance from family or friends (Table 4.2)¹⁰⁹ These data point to the changing dynamics of property acquisition in *colonias*: as developers have been eclipsed, current owners who wish to sell are having to look at seller financing as a mechanism, despite an apparent reluctance to do so.

Given the obstacles that prevent many homeowners from selling their property, it seems natural that inheritance should play a larger role in market transactions, as it is a low-cost method of property transfer. However, the overall number of inherited properties has changed very little over time (from 0 acquisitions through inheritance from 1970 to 1989, to only 2 since 2003). Nevertheless, due to the general decrease in market activity, the relative share of inherited properties has grown over time: up from 2.2% of acquisitions between 1990 and 1994, 11.8% of all transactions since 2003, although the number of actual cases is very small.

However, the role that inheritance will play in market transactions in future years may increase given the immobility of the population, difficulties in selling up, and the aging of owners. While

¹⁰⁸ The lead author of this report conducted further research on market activity in more than 20 *colonias* in Starr county, including surveys and key informant interviews with homeowners attempting to sell their property. On multiple occasions, respondents reported that they had been unable to sell their property because a majority of the interested parties wanted the owner to finance the purchase through monthly payments, something that was unthinkable for the respondents, who had invested significant time and resources into the homes.

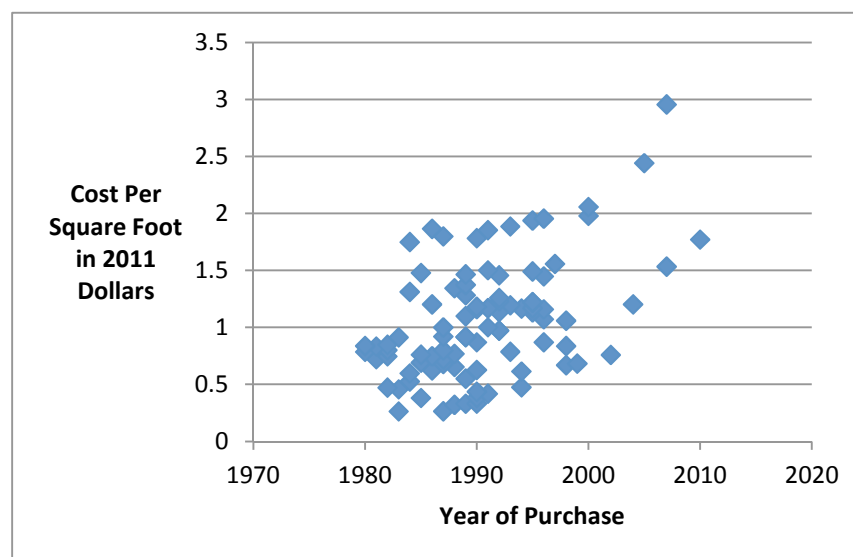
¹⁰⁹ Help from family or friends includes monetary assistance as well as those households that received the property as an inheritance or gift.

many colonia homeowners expect one or more of their their children to inherit the home after their death, it remains unclear if they will ever do so. In many of our interviews with older heads of household it became clear that many children have since moved out of the family home and have purchased their own property nearby, while others have moved out of the colonia, and often out of Starr County. Thus, to the extent that adult children are not interested in occupying their parents' home after their passing, it is unclear what will come of the property given the dysfunction of the housing market. Whether or not these households are able to sell their parents' home will depend largely upon market dynamics and, in particular, financing mechanisms available at that time.

LAND AND HOUSING VALUES

Yet another factor to impede potential buyers' ability to purchase property in the ten study colonias is the market value of both land and dwellings. Over the past ten years, our results reveal significant increase in the estimated sale price of vacant land, as well as the estimated value of colonia homes.

Figure 4.1 Unit Cost Price of Land



LAND VALUE

In the 2011 study, three measures were used to assess changes in land value: these include the price paid by respondents at the time of purchase, respondents' estimates for the value of their land, and estimates of the price of vacant land in the colonia today. Although these measures provide conflicting evidence of changes in land value, we believe the most accurate measure to be the estimated cost of vacant lots. However, we discuss all three measures for the sake of accuracy.

Let us begin with the price paid at the time of purchase. Although the price paid for purchases of land appears to have risen in the past 8 years (see Figure 4.1), too few cases exist to make an accurate assessment of this increase. However, a previous publication (Ward et al. 2003), which drew primarily from the CRG database, and thus had access to the purchase price for

more than 900 lots, found that land prices were relatively flat over time. Furthermore, they assert that the title regularization program by the CRG did not appear to have led to significant increases in prices, and that land prices are largely shaped by social factors—such as relationship with the seller—rather than the physical characteristics of the settlement, such as location (Ward et al 2003).

A second measure used to assess changes in land value were self-estimates provided by homeowners of the value of their land. Similar to the purchase price, these estimates fail to reflect a significant increase in land value over the last 10 years. In both 2002 and 2011, participants were asked to what they thought their land was worth. Adjusted for both inflation and lot size, we see a very limited increase in estimated land value of only 3.1% over ten years, from \$1.61 per square foot in 2002 up to \$1.66 in 2011. Nevertheless, homeowners may fail to account for both inflation and rising market values; in other words, owners may likely assess the value of their land solely in relation to the price they paid at the time of purchase, rather than the actual market value, if they were to sell it today. Thus, it is possible that these estimates significantly undervalue the land.

	Year	2002 (02)	2011 (11)	% increase
Estimated Cost of Vacant Lots	Per Lot	\$8,481	\$11,994	41.4%
	Per Square Foot	\$1.69	\$2.26	33.9%
Estimated Land Value	Per Square Foot	\$1.61	\$1.66	3.1%

Table 4.3. Owner Estimates of Land Values

A final measure of land value, and one that we assume more accurately reflects current market conditions,¹¹⁰ is the estimated value of vacant lots in the colonia. On both the 2002 and 2011 surveys, respondents were asked if they knew the price of a vacant lot in their neighborhood. These estimates show significant increases in the cost of vacant lots over 10 years. Adjusted for inflation, the average estimated price of vacant lots rose from \$8,481 in 2002 to \$11,994 in 2011, an increase of 41.4%. Despite the apparent rise in the cost of vacant land, this estimate overlooks significant variation in lot size between various colonias.¹¹¹ In order to control for such variation, the respondents' own lot size was used as a proxy for the size of vacant lots in each *colonia*, and produced a similar, though slightly smaller estimate for the increase in land value; the average price per square foot for vacant land rose from \$1.69 in 2002 to \$2.26 in 2011, an increase of 33.9%. Thus while we are confident that there has been a significant increase in land prices in recent years, these data should only be read as tentative estimates, not least because we have relatively few cases in recent years and the data are not tied to precise location and size of the lots.

PROPERTY VALUE

One final measure of market value was the estimated value of the entire property (both land and dwelling). In both the 2002 and 2011 surveys, homeowners were asked what they believed both their land and house were worth at that time. In total, 26 respondents replied to this question in

¹¹⁰ 43% of respondents in 2011 replied that they knew what a vacant lot of similar size to their own would sell for in the colonia today. Although these are simply estimates, they likely show the current asking price for colonia land.

¹¹¹ Lots in most of the study colonias average 5,000 square feet (100x50), while those in Mike's are often significantly larger.

both surveys. Table 4.4 displays the results of these estimates, with 2002 estimates adjusted for inflation and displayed in 2011 values. In 2002, the mean estimated property value for these cases was \$42,356 in 2011 values (5% trimmed mean of \$37,399).¹¹² By 2011, this had risen to \$57,076, or a 5% trimmed mean of \$50,908. As we observed in the previous section average homeowners also estimated an increase of around 40% in land costs (Table 4.3) and these estimates also suggest a 35% overall increase in property values, taking account of significant investments in the home.

(02-11) Estimated Property Value	5% Trimmed Mean			Mean		
	2002	2011	% Increase	2002	2011	% Increase
Control (n=9)	\$38,541	\$51,713	34.2%	\$38,910	\$51,166	31.5%
Study (n=17)	\$37,755	\$52,340	38.6%	\$44,180	\$60,205	36.3%
Total (n=26)	\$37,339	\$50,908	36.3%	\$42,356	\$57,076	34.8%

Table 4.4 Average Estimated Property Values by Owners 2002-2011

Typically, rising property values are seen as a benefit to homeowners since increased equity provides owners with expanded credit opportunities and builds the family's financial assets. Nevertheless, as we observed in the previous chapter very few use their homes as collateral to acquire a loan, and willingness to do so appears to have declined in recent years. Furthermore, rather than benefiting colonia homeowners wishing to sell, rising home values actually present a serious impediment to market sales of colonia housing due to the dearth of low-income buyers who can muster sufficient financing to be able to purchase houses worth close to \$50,000, and as we argued before, few sellers seem willing to finance the sale through monthly payments. This lack of effective demand also depresses market values for actual sales that do take place, and reduce the potential return on investment for low income sellers.

RENTING AND SHARING IN COLONIAS

Despite the stagnation in the owner-occupied housing market, demand for affordable housing options in colonias remains high and the vacuum of options for sales has led to a rise in renting and sharing. The percentage of respondents sharing their lot with one or more other households nearly doubled over the nine years. In 2002, less than 6% of lot owners indicated that more than one household lived on their lot, and by 2011, this had grown to 11%.¹¹³ There seems little doubt that such sharing is mediated through kin and social networks, and almost all (86.3% 19/22) of those who shared their lot in 2011 reported that the other households were family members. This is a trend that we expect to increase in the future as families age and hand over their property to one or more adult children who may also look after them in their twilight years (Ward 2007), and as siblings who inherit the lot or a share thereof (through intestacy) also take up occupancy either as individual households or sharing the space with other kinsmen.

Thus, as purchasing a new property has become more difficult, informal subdivision of the lot and sharing with family has grown in importance, and formal renting appears to have increased significantly as well. In 2011, 11.6% of all households interviewed did not own the lot on which they lived and were either renting or were borrowing the dwelling from family or friends. Although no data was collected from non-owners in 2002, we believe the number has grown significantly. Other unpublished research by one of us (Durst) points to the emerging presence

¹¹² The "trimmed mean" removes the top and bottom 5% outlier values.

¹¹³ These data reflect only property owners. Statistics related to renting or borrowing of property are presented below.

of rental properties throughout the colonias. Specifically, a “windshield survey” of the same ten colonias identified 27 rental complexes of two units or larger, with a total of 97 units in 2011. Although no such count was undertaken in 2002, rental properties of this nature were not observed at that time and did not appear on our radar screen. Further discussion of the rental market is beyond the scope of this project, nevertheless it appears that these rental opportunities provide an affordable (and emerging) option for families that are unable to finance the purchase of land or a consolidated home. They also provide attractive investment opportunities for local entrepreneurs looking to invest in the colonia.

MARKET DYNAMICS: A CONCLUSION

Our research shows that performance of the colonia land and housing market has changed significantly in recent years. First, the sale of vacant land has decreased precipitously over the past three decades as developer-financed become less common. Second, the widespread presence of vacant land has not facilitated market transactions as one would normally expect because many of these lots are not up for sale, and absentee lot owners are difficult to identify and contact. Third an absence of financing mechanisms suitable to the needs and life-circumstance of both buyers and sellers appears to be a major impediment that prevents many households from engaging in market transactions. This seems to be true even when transactions are facilitated by (limited) government programs designed to support low-income buyers. Recent increases in both land and property value make the purchase of colonia housing even more difficult, particularly given the absence of financing mechanisms and the poor credit histories and low-incomes of potential buyers. Fourth inheritance, which should be relatively easy to transact, faces hurdles where beneficiaries are unwilling or unable to occupy the inherited property or to sell it. Fifth, and in response to these market dysfunctions, renting and sharing is on the increase, either through lot sharing among additional (usually kin related) households, or by renting the house or constructing rental units on site. All of these changes point to the need for a number of public policy interventions to stimulate the colonia land and housing market, which we discuss in the final chapter.

Chapter 5. Public Policy and the Future of Colonias

What, then, has been the impact of the title regularization program headed by the CRG and what do these data say about the state of colonias in general? Our research reveals that the title regularization program by the CRG conferred on homeowners the benefit of a sense of tenure security. Nevertheless, the overall impact of title provision or cleaning on residents' willingness or ability to make home improvements or to take out loans is unclear, and other factors appear to play a larger role than the provision of clear title. By this we do not mean to suggest that the titling program was unimportant. Undoubtedly, having *el título en la mano*—the title in hand—is essential if homeowners wish to sell their home through formal avenues, leverage their property as collateral for a loan, access government and non-profit support for home improvement or housing rehabilitation, or transfer title through to their children. Nevertheless, the crux of the issue is that a variety of factors prevent households with title from accessing the supposed benefits that title itself is purported to provide.

In what follows we summarize these obstacles, as well as other pressing issues likely to be of increasing significance in the ten study colonias over the coming decade. In addition, we provide suggestions for policy solutions that may alleviate some of the social and housing needs which we have discussed thus far. However, before proceeding further we must emphasize that the data presented in this report are not representative of colonias throughout Texas, nor are they of the more than 240 colonias in Starr County. The age, size, level of occupation (i.e., density), development pattern, level of servicing, distance from city centers, median income, and level of housing consolidation, among other factors, undoubtedly varies both within and between counties – as do the counties themselves in their demographic and socio-economic profiles, although all fall in the poorest and most underprivileged in Texas. Thus, results of this study should not necessarily be taken to represent colonia conditions in general. Rather, they paint a detailed perspective of a decade of changes in a few colonias with a unique history of title irregularity, community mobilization, and an innovative effort to provide clear title. Nevertheless, despite the possible uniqueness of the case, our sense is that there has been marked improvement in many colonias and in most counties, and we believe that the insights offered in this report will shed light on policy dilemmas and potential solutions across the state, even though they may not apply universally.

TITLE AND INHERITANCE: PREVENTING A REVERSION TO INFORMALITY:

Results from this study suggest that the provision of clear title is not a one-off solution. In the case of the intervention by the CRG, we have begun to observe some tendencies and pressures that suggest a reversion to clouded titles. This reversion to informality is also observed in other research both in Latin America (www.lahn.utexas.org ; Ward et al 2011; Way 2009) and in our 2012 Land Title study on behalf of the Texas Department of Housing and Community Affairs. There are a number of reasons why titles may revert to informality and become clouded. The first is discussed here, and relates primarily to complications surrounding inheritance and transfer. The relative absence of wills, complex family dynamics—with some offspring living on the property and others living elsewhere—and a lack of awareness of Texas intestacy laws creates the anticipated (by us) likelihood of both conflict and confusion associated with inheritance and succession.¹¹⁴ Without a Will the formal transfer of title to

¹¹⁴ In one extended interview with a couple—who had 3 adult children together—we discovered that the husband had at least one child with another. Though rather sensitive, the conversation soon revealed that the wife, who knew of

children becomes complicated. With a Will, assignation of property is clear-cut (although it may be challenged) and viability and transfer of title will hinge upon seeing through the process of probate. In the case of Rio Grande City 7% of the surveyed population had a Will. This result—which is comparable with those obtained through our most recent survey of more 1200 households in colonias and Model Subdivisions throughout Texas in which 9% of owner-occupied households had a Will—would likely have been significantly lower if not for efforts by the CRG to provide interested participants with Wills at the time of the titling program.¹¹⁵ But even with a Will it may not be so straightforward. If there are significant transaction and lawyers' costs to prove the Will then it seems likely that some beneficiaries will choose not to conclude the probate process especially if they already have occupancy and possession of the lot, albeit without clear title. Others will not be able to afford the probate costs without selling the property, and we have already seen how problematic it is both to sell, period, let alone get a fair market price. Thus Wills may not be the solution in many cases and unless other policies are in place to reduce probate costs, continued (and even deepening informality) may be the result, making for a policy paradox.

Even though the large majority do not have Wills, many have made some sort of informal arrangement of what will happen to the family home upon their death (TDHCA study 2012). As is so often the case with informality these arrangements are multiplex: whoever lived with and cared for them in their old age; the eldest child; the eldest son; the youngest; the singleton daughter; a grandchild, and so forth. In the two time horizon Starr County study we did not ask respondents if they had oral or informal agreements among family members regarding who would inherit the property although we did enquire about Wills and reasons for not wanting make one. In response to the latter a common observation was that it would cause conflict and squabbles among the children: better let them fight it out after the parents die... And that, of course, is what may well happen with intestacy in which no matter what agreement was informally agreed or not, the fact is that under intestacy law all children have rights to equal shares. If child shareholders cannot agree and sign an affidavit to cede their share, then the would-be owners cannot clear title to his or her name, leading to clouded titles and a need to retitle (Ward et al 2011; Grajeda and Ward 2012).

Transfer of ownership to another party (*traspaso* as it is known in Spanish), provides another example of the potential for a reversion to informality. Our research points to a continuing presence of informal *traspasos*, whether to family members or a third party. The reasons for the lack of clear title in property transfers, or sales, is unclear, but it is likely due to a combination of the costs associated with transferring and registering a new title and the absence of written plans for inheritance – as outlined above. Also, so long as seller financing is the order of the day, people are likely to have recourse to unrecorded contracts for deeds, oral agreements of sale, sales by receipt, etc., rather than by using more formal means such as a Warranty Deed with Vendor's Lien. Also faced by an inability to sell at a fair price, but by a need to vacate the

her husband's additional children, was adamantly opposed to his other offspring inheriting a portion of the family home in the event of his death. Regardless, neither she or her husband had a will and therefore, according to Texas intestacy laws, a portion of the estate would be divided among all of the husband's children in the event of his death. And even if he did have a Will, whereas usually his half of the community property would go to his wife, having other children would prevent his share passing to his wife in order to ensure that his other children were not cut out of his half share of the property.

¹¹⁵ In Mexico, also recent campaigns to promote wills have had a significant effect, and have raised the making of Wills to around 10-12% of low income settlements in which survey work was conducted in 2009 (Ward et al; Grajeda and Ward 2012).

property (for work or because of separation and divorce), the house may be left in the hands of a family member (on loan) and/or rented to the same. In almost all cases, however, the arrangement is informal.

POLICY RECOMMENDATIONS

- Promote the creation of wills to prevent conflict due to intestacy.
- Promote low cost probate and pro bono legal assistance; and or social financing to assist with probate costs.
- Facilitate low-cost title transfer services for buyers and sellers.
- Provide legal services for current households with “clouded” titles.

TITLE, HOME IMPROVEMENT, AND LENDING: SUPPORTING THE SELF-HELP PROCESS

Although the provision of title appears to have a significant impact on homeowners’ sense of security, the impact on home investment and access to formal credit is inconclusive and is not been borne out by our research. The Study Group, who would have received title most recently and had earlier experienced high levels of title insecurity, were found to be equally likely to have received a loan for home improvement or to have used their title when doing so. Furthermore, although the study group had borrowed slightly larger amounts, it is unclear whether or not title was the driving force.

Instead we argue that other factors probably play a more substantial role in guiding borrowing and home improvement practices than the provision of title per se. Family trajectory, socio-economic status, economic conditions, and possession of construction skills are just some of these factors. The Control Group, which tend to be older and have lived on the property for longer, are more likely to be at the stage of family decline (more than 40% have 2 or fewer household members), while many Study Group households (who are younger) are continuing to grow. In addition, Control Group households had fewer workers but higher rates of income (likely due to Social Security or pensions). All of these factors create varied conditions for the capacity and need to complete home improvements. Supporting this hypothesis, it is interesting to recall that although the Study Group was more likely to borrow larger amounts of money for home improvements (\$20,500 for the Study Group and \$10,500 for the Control Group, on average), they were in fact less likely to have spent as much on home improvements as the Control Group (\$8,426 for the Study Group and \$9,232 for the Control Group, on average). Though apparently contradictory, intensive interviews with a small number of cases help to partially explain this conclusion: families who acquire significant loans with the goal of making major home improvements, may be unable to put the funds to that use due to unforeseen expenses or hardship. For example, one family with whom we worked had received multiple loans to repair a leaking roof but had used the money to cover other expenses, such as providing for their grandchildren. Thus, although the Study Group had in fact borrowed more money, they were both less likely to have completed home improvements in the past ten years, and spent less than the Control Group when they did so. All of these results therefore point to the fact that family structure, household trajectory, and income may play a larger part in guiding investment and borrowing decisions than does the provision of title.

Thus clear title has not effectively integrated the majority of households into the formal lending market. The vast majority of those households that made home improvements in the past ten years did so using their own cash or savings, assistance from family or friends, their income tax return, or by acquiring small loans. On the latter, there is no great surprise that all of these financing mechanisms involve small, often revolving, allocations of funds for home

improvement; this staggered use of limited funds points to the nature of self-help home improvements and the colonia home construction process described in Chapter 1. Despite having clear title and being aware of the possibility of using it as collateral, few households had used their title as collateral and less than half would consider doing so in the future. The reason is clear: the risks are simply too high.

Homeowners continue to rely overwhelmingly upon cash or savings and assistance from family or friends to finance home improvements, just as they have for decades. However, certain changes are observable in colonia homeowners' borrowing practices: more and more residents in the study colonias have relied upon more flexible microloans rather than traditional bank loans. Equally interesting is the use of the income tax return as a sort of forced savings, the benefits of which are gained once a year when *nos caen los taxes*, or "when the tax rebate kicks in" to homeowners. There seems little doubt that for homeowners who earn very little, and for whom saving even modest amounts throughout the year is difficult, an income tax return of two or more thousand dollars is a significant windfall. In general, these data reflect the significant role that non-profits can play in supporting home improvements. First, by providing free tax services (or at least at a reduced cost), such organizations could provide substantial increases in income for colonia homeowners. Secondly, through the use of Individual Development Accounts, non-profits could facilitate savings and investment using income tax returns.

Another important factor that appears to shape a household's ability to make major home improvements is whether or not one or more household members has some sort of construction skills. Intuitively, this makes sense, as many *colonia* homeowners have self-built or improved their homes themselves or with the assistance of family or friends. Although not a pre-requisite, households with construction skills were 17% more likely to have completed home improvements. This points to the importance of the support provided by the Starr County Self-Help Center, which offers free classes on specific home improvement skills, in addition to a tool rental service for homeowners. In total, 60% of homes were unfinished, meaning a significant portion of these households could potentially benefit from such classes. In addition, of those aspects of the house that remained unfinished, most involved only cosmetic (or at least non-structural) improvements such that even those with limited or no training could participate.

Significantly, of those homes that were unfinished, nearly 20% were lacking insulation in certain rooms. Although we have no clear estimates it appears also that many homes could benefit from improved weatherization (sealing doors, windows, and cracks as well as improved insulation). Training and information about these energy efficient practices can significantly reduce utility costs. The cost-benefit audit model (C-BHIT) located on the Latin American Housing Network¹¹⁶ will provide organizations such as the Starr County Self-Help Center with a useful tool to effectively measure the potential cost savings of specific sustainable home improvements, allowing them to refine their course offerings accordingly. Additionally, as the current levels of familiarity with and use of sustainable home improvements are fairly low, organizations such as the Starr County Self-Help Center are uniquely placed to promote awareness and the use of a variety of sustainable home improvements that can serve to both increase comfort and decrease expenses in the home.

POLICY RECOMMENDATIONS

- Continue to promote the creation and provision of small revolving loans and encourage new users and expansion of the recipient pool.

¹¹⁶ <http://www.lahn.utexas.org>

- Promote free or reduced-cost tax return preparation and submission in order to maximize tax rebates as a financing option for home improvements
- Continue to provide training for home improvement skills, tool rental
- Incorporate cost-effective sustainable design into lending and training programs

THE COLONIA HOUSING MARKET

Contrary to some expectations, the provision of clear title does not appear to have facilitated formal land and housing market exchanges. In fact, despite significant increases in the value of vacant land within the colonias of Starr County, the housing market continues to display signs of stagnation. First, a large proportion of lots continue to remain unoccupied and, until we extend research along the lines of that conducted in 2000 (Ward and Carew 2000) it will remain unclear who these absentee landowners are and what prevents them from either occupying or selling their lots. Secondly, only 10% of respondents in our sample had purchased their lot since 2003, suggesting a trend of long-term homeownership in colonias and pointing to the fact that very few homeowners have moved, and few have ever tried to sell (5%; 9/165). Thus, relatively few houses in the study colonias enter the market. The question is why?

Limited financing mechanisms appear to be the primary reasons that prevent interested parties from buying or selling property in colonias. Sellers must rely almost exclusively upon seller-financing since there is a nearly non-existent use of mortgages for the purchase of new property. Also, the recent economic recession has further increased reticence on the part of banks to finance purchases of homes in colonias. For this reason, seller-financing continues to be the primary method of payment for purchases of new homes in recent years and yet many homeowners are reluctant to sell their homes on credit after having invested significant time and money into them. Like most of us who are home owners we expect to be able to liquidate our asset in order to invest elsewhere, but most low income households are prevented from doing so since few potential buyers have sufficient financial assets to afford the outright purchase of homes that are valued on average at more than \$50,000.

Given the limited purchasing power of potential home buyers and the continued presence of seller-financing, contract for deed transactions are likely to remain the most feasible method of property sales in colonias and similar low income sub-divisions. Nevertheless, these contracts entail significant risk for buyers, who risk losing their investment in the event of default¹¹⁷ and are usually tied to excessively high interest rates of 15-18 percent.

POLICY RECOMMENDATIONS

- Develop formal and affordable low interest financing options for the purchase of existing homes:
 - Identify obstacles and potential policy solutions.
- Investigate novel ways to assist with seller-financed sales:
 - Use of non-profits as an intermediary.
 - Use of the income tax return as a financing mechanism or as collateral.
- Encourage financial literacy and saving among potential homebuyers
 - Provide Individual Development Accounts.
 - Leverage tax returns as a saving mechanism.
 - Target growing rental population.

¹¹⁷ That is, before the completion of 48 monthly payments or paying 40% of the purchase price.

- Pursue policies that promote infill of vacant lots.
 - Identify absentee owners.
 - Facilitate sales of vacant land.

AGING POPULATIONS: UNDERSTANDING AND MEETING CHANGING NEEDS

The ten study colonias appear to be undergoing a demographic shift: 30% of households comprise two or fewer members; and of these the average head of household was 57 years old. Furthermore, 53% of these households had at least one member with a disability,¹¹⁸ and 29% needed to make a home improvement in order to accommodate a disabled person. With time, these residents are going to require increasing assistance due to age, health, or disability-related problems. Undoubtedly, many of these households likely have family members living in the neighborhood or on the same lot/dwelling. Nevertheless, for those who do not, or who continue to live on their own, a number of simple solutions may significantly increase their quality of life.

POLICY RECOMMENDATIONS

- Expand health-related services:
 - On-site treatment and diagnosis.
 - Transportation to appointments.
- For those household wishing to accommodate elderly parents in situ, promote lot sharing (formal and informal) as a means of keeping them residentially close to adult children who provide care.
- Provide assistance with the completion of disability-related home improvements:
 - Entrance ramps and railings.
 - Bathroom accommodations.
 - Improvements to dwelling climate, including HVAC.

CONCLUSION

As we better understand the dynamics and nature of changes in colonias we have the opportunity to identify more nuanced and culturally sensitive housing and land market policy approaches. Our findings here have shown that despite the success of the CRG's titling program, a reversion to informality is likely to occur unless ongoing support for title updates and transfer of formal ownership is provided to colonia homeowners. Moreover, the colonia housing market continues to function very poorly, and in the absence of adequate financing mechanisms, insufficient effective demand will stymie any opportunities of colonia homeowners from enjoying the benefits of wealth creation (modest though these may appear to be) and to share in the investment benefits of home ownership. We have shown that extensive improvements have been achieved by many over the past ten years, and there are a myriad of ways in which policies might assist in the future, especially those that integrate sustainable housing applications. And as colonia residents age, two factors will become ever important; first, the increased need for new forms of social assistance, including disability-related home improvements and transportation services; and second, given the poorly-functioning housing market and low level of use of Wills to ensure property transfers across generations, it remains unclear what will happen to dwellings when the original homeowners pass away. Failure to address this issue will replicate informality of land and property transfers between family members and across generations.

¹¹⁸ Disability in this context is loosely defined as a health or mobility problem that impacted their daily lives.

Chapter 6. Conducting Survey Research in Colonias

A SURVEY INSTRUMENT AND “TIPS” FOR ITS APPLICATION IN COLONIAS

INTRODUCTION

This Report has provided a variety of data on social, economic, and physical conditions in ten colonias in Starr County, Texas. The majority of data are drawn from two household surveys conducted in these settlements in 2002 and 2011. While the results presented earlier in this report will likely inform public policy related to colonia housing and infrastructure, other organizations active in colonias may find our instruments useful in their own efforts to gather information in other similar settlements elsewhere. Survey questionnaires like the one used in this study are an excellent tool for doing so. While some of this data is readily available through the US Census¹¹⁹ or the American Community Survey,¹²⁰ survey questionnaires can provide important supplemental information on specific populations of interest that are often not included or are under-represented and difficult to isolate in Census data. Thus, this chapter and the associated Appendix presents a methodological guide—in other words, a set of “tips” for organizations seeking to gather such data, as well as a survey instrument for use by non-profits or community organizations. We have designed a flexible bilingual survey instrument so that that each section can be either included or excluded without affecting the integrity of the instrument itself. Thus, each institution may customize the survey to fit its specific research needs and will only then have to reorder the sections and renumber the actual questions.

The survey addresses a wide variety of topics that are likely of interest to organizations committed to colonia residents’ needs. In addition to two core sections that include standard questions for any survey, the instrument also includes removable sections that address:

- Section A: Demographics and General Housing Information
- Section B: Household Information
- Section C: Prior Residence Information
- Section D: Acquisition/Occupation of the Property
- Section E: Inheritance and Title
- Section F: Lot Characteristics
- Section G: Employment and Income
- Section H: Health and Disability
- Section I: Health Habits
- Section J: Education:
- Section K: Transportation
- Section L: Lending
- Section M: Civic Activity
- Section N: Previous Improvements
- Section O: Current Housing Conditions

¹¹⁹ <http://www.census.gov/>

¹²⁰ <http://www.census.gov/acs/www/>

- Section P: Planned Housing Improvements;
- Section Q: Housing Improvements and Sustainability
- Section R: Dwelling Climate
- Section S: Neighborhood Conditions
- Section T: Land and Home Sales
- Section U: Renter-Occupied Housing
- Section V: Future Housing Plans

While this list is by no means exhaustive, we believe it addresses a wide variety of issues that are relevant to both researchers and practitioners. In addition, because it is a standardized instrument, it should produce comparable results across multiple locations. In order to ensure comparability with existing data on colonias, many of the questions were modeled upon, or were copied directly from, survey questionnaires administered in colonias or “informal homestead subdivisions” throughout Texas.¹²¹ By following the methods outlined in this section of the report, organizations can successfully gather data on colonia conditions in order to guide policy and decision-making at the local level.

SELECTION AND DESIGN OF THE INSTRUMENT

The first step for researchers is to determine which questions are most vital. As is clear from the above list, the instrument we have designed covers a wide variety of topics and in its current form it is too extensive and would take too long to administer to be practical. Thus, researchers must whittle down the instrument to the most essential questions. With this goal in mind, the survey that we present in Appendices A and B is designed to allow tailoring to the needs of different organizations. While a few sections are likely to be of interest to all researchers—for example, demographic information (Section A), household characteristics (Section B) socio-economic data (Section G)—others may be inserted to conform with the specific needs and goals of the survey project (education, health, or transportation, for example).

Thus, researchers can pick and choose which sections they want to include in their instrument, and can also eliminate certain questions that they find to be superfluous. While decisions regarding the inclusion or exclusion of certain questions are undoubtedly up to the discretion of the organizations conducting the survey, some sections should be considered more or less “essential.” For example, demographic and employment questions are often useful in ensuring that the survey sample is representative. By comparing the results from these sections with US Census or American Community Survey data, for instance, researchers can assess whether or not their sample is representative of the population living in the communities being studied.

Another issue worth considering is how to most appropriately order the sections. Two issues to keep in mind when making these decisions are the relative importance of certain questions and/or sections of the questionnaire, and the likelihood that not all questions will apply to all respondents (and therefore that prompts or “skips” will be required to direct respondents to move to those sections and questions that do apply). Research teams often decide that certain questions or sections are more important than others, and it is often advisable to put these questions earlier in the instrument in case of unforeseen complications or interruptions with the interview process. For example, in the 2011 Starr County Survey, issues of ownership, the impact of land title, and the occurrence of home improvement activities were essential to the

¹²¹ Copies of these surveys are available at: <http://www.lahn.utexas.org/TexasColonias.html>

research project. For this reason, these sections were placed earlier in the survey to ensure that they were addressed. This may be particularly important if researchers are planning to distribute the questionnaire for mail back; although not common, some of the mail surveys from 2011 study were returned only partially completed but, because many of the most essential questions were located at the beginning, they still provided useful data on the most pressing issues.

A second factor to consider when determining the structure of the instrument is to be aware of the “skips” that have been built into the instrument. Often, some questions are only applicable to certain participants. These skips are designed to direct respondents to the appropriate question. Take the follow questions, for example:

G.39 Since you received title to your lot, have you received any loans from a lending institution for home improvements or to build a new dwelling on your lot (*don't include loans from a family member or friend*)?

☐ ₍₁₎ Yes ☐ ₍₂₎ No *If No, got to question G.42*

G.40 What is the total value of ALL the loans you have received for home improvements and to build new dwellings since you received your title? \$_____

If a respondent were to answer “No” to question G.39, there is no need to ask the following question, G.40. For this reason, a prompt is provided that informs the respondent (or the interviewer) of the need to skip certain questions. It is important to note that these prompts are built into the instrument itself and are highlighted yellow for clarity,¹²² meaning that any change in the structure of the survey may require minor changes to the prompts. These prompts, as well as the numbering of questions, is usually the last task to be done when preparing a survey instrument.

SAMPLE SELECTION

Once the design of the instrument is completed, researchers must choose the population they wish to study. Although most organizations likely have a clear idea of the neighborhoods in which they want to conduct the survey, there are important methodological approaches worth considering. Depending on the size, resources, and time constraints of the research team, organizations will need to expand or shrink their sample size. For example, if a non-profit organization provides services for colonia residents across an entire county, it may simply be unfeasible for that organization to interview some residents in every colonia, let alone every resident. For this reason, the following section presents a variety of sampling techniques that may help to ensure the efficient use of time and resources: these include random, stratified, systematic, and cluster samples, as well as oversamples. For each technique, we have provided a description of the sample selection criteria as well as some examples of how each could be implemented to fit the needs of an organization.

¹²² See Appendices A and B. Also, a copy of both the English and Spanish questionnaires is provided on www.lahn.utexas.org in Microsoft Word to allow for easy editing of these prompts.

TECHNIQUE: SIMPLE RANDOM SAMPLING

A simple random sample means that each household, or each colonia, has an equal chance of being selected to participate in the survey. This could be done by assigning each colonia a number, and then using a random number generator to choose settlements.¹²³

Simple random samples may be useful for research teams intending to gauge conditions “across the board.” In other words, if there are no specific colonias or households that are of more interest than others, this method will help ensure a representative sample. Potential uses for a simple random sample include the following:

- An organization may choose to randomly select which colonias to survey in a specific county. Thus, each colonia would be assigned a number, and a random number generator would be used to select the colonias to be studied.
- In the case of a very large neighborhood with, say 30-40 blocks each with 15-20 lots, one might randomly sample 10 of those blocks to create one’s sample universe. This would be important to ensure that certain blocks alongside main roads or with certain mix of services were not preferentially or more likely to be included, given that their lot populations might be somewhat different (earlier arrivals, better off populations etc.).

TECHNIQUE: STRATIFIED SAMPLING

Stratified sampling entails dividing the population into strata, or groups, with common characteristics and then choosing a random sample from within these groups. This method may be useful if there are distinct groups of interest, each of which you intend to study. For example:

- An organization may theorize that large, medium and small colonias have different needs. For this reason researchers may decide to divide all of the colonias in the county into 3 groups: those with more than 500 lots may be considered large, those with 200 to 500 lots would be of medium size, and those with less than 200 would be small. Once divided in this way, researchers may then decide to conduct surveys at a certain number of colonias in each category, and may select these settlements at random.
- Similarly, an organization may choose to conduct surveys in different communities based on the area median income of that neighborhood (often accessible through US Census and American Community Survey data). As described above, these communities would be divided based on the selected criteria and samples would be chosen from within these groups.

TECHNIQUE: SYSTEMATIC SAMPLING

Systematic sampling entails selecting participants from a population by choosing a random starting point and proceeding at a fixed, periodic interval. This technique would likely be most useful once organizations have chosen the neighborhoods in which they intend to conduct surveys. For example:

- A non-profit may choose to conduct surveys in a colonia with 1500 lots. However, due to resource and time constraints, they may only be capable of administering 300 surveys in total. Thus, the researchers may randomly choose a starting point (using a number generator, perhaps) and proceed to interview every 5th household. One

¹²³See the following website for a random number generator: <http://www.math.usu.edu/~schneit/CTIS/RNG/>

complication with this method, however, is that often the 5th house may be inaccessible, unoccupied, or vacant, and researchers must decide what to do in this case. For instance, if no one is home, will surveyors continue to the immediate adjacent neighbor or to the next 5th household down beyond? Either way, both options are acceptable as each ensures that all residents have an equal likelihood of being chosen to participate.

TECHNIQUE: CLUSTER SAMPLE

Another useful method for selecting sample populations for survey research in colonias is known as Cluster Sampling. In this method, settlements (or lots, perhaps) are grouped into clusters. Some of these clusters are then randomly selected from the population. This method is useful for research of this kind, particularly given that many colonia subdivisions are grouped together, and may comprise larger neighborhoods with similar characteristics.¹²⁴

- An organization may wish to study conditions in a number of parts of the county, but may be unable to conduct surveys in each settlement due to time and budgetary constraints. There may, however, be certain colonias that are grouped closely together, all with very different conditions. Thus, researchers may group these subdivisions into clusters and may then choose randomly among them.

TECHNIQUE: OVERSAMPLING

Oversampling is a method used to gather additional information on particular “subgroups” of a population that might be overlooked by other sampling techniques. It is particularly useful when a subset of the population being studied is particularly small, but nevertheless are still important.

- A local non-profit may wish to compare dwelling conditions throughout the colonia with those of households that have recently received a home improvement grant. For example, 100 households recently received such grants out of 1500 household in the colonia as a whole. Traditional techniques such as systematic or random sampling may return too few surveys of grant recipients, making comparison between the two groups impossible. For this reason, researchers may choose to oversample the grant recipient population by conducting surveys with every single household that received a home improvement grant. Then, other techniques such as random or systematic sampling would be used to select participants from the rest of the colonia residents.

LOCATING SAMPLE PARTICIPANTS

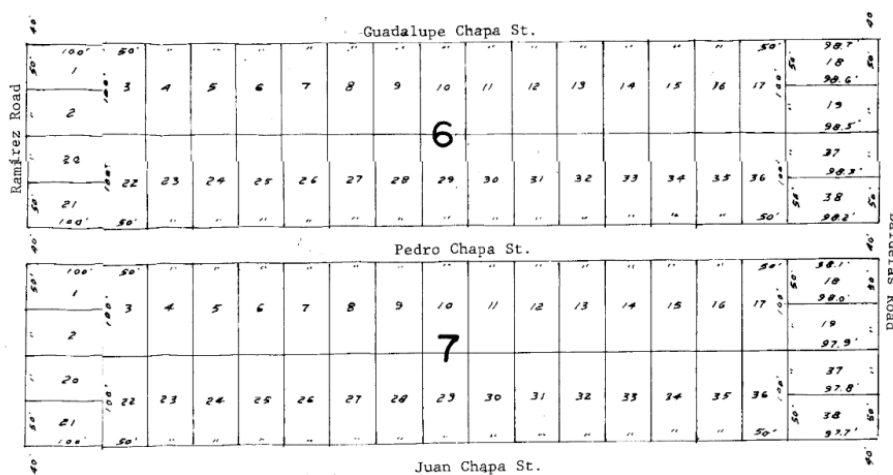
Once the sample population has been chosen, the next step for researchers is to devise a method for locating these residents. This process can vary greatly depending upon the purposes of the survey, the conditions within the colonia, and the presence or absence of accurate subdivision maps. The first step is to acquire a detailed map containing the property divisions, often in the form of a plat map.¹²⁵ Original plat maps are easily acquired through the

¹²⁴ This is the case in Starr County. For example, seven of the colonias studied for this report are located side-by-side in an area known as Las Lomas. Because these subdivisions had similar development histories and are adjacent to each other, it made sense to study all of them together.

¹²⁵ Plat maps are often filed by the developer and show each parcel (in other words, the legal division of the land) within a certain subdivision, with corresponding block and lot numbers.

county appraisal district, although today many counties have up-to-date digital maps displaying current property divisions that are easily accessible on the county tax appraisal website. After acquiring the appropriate maps, researchers must identify the sample population on the map itself. This process will vary greatly depending upon the sampling and implementation method. For example, an organization wishing to survey a random sample of residents in a given *colonia* may simply assign a number to each lot and then use a random number generator to select the study sample. Once identified, the block and lot numbers provided on many maps may be used to label the survey for both confidentiality and tracking purposes. The following image shows an example of how these maps may look. Notice that each block is given a number, as is each lot. These numbers can then be used to identify the property owner if, for example, an organization wishes to conduct surveys only at selected households (say for instance, those that have received home improvement loans).

Figure 6.1 Typical block or Plat Map



Thus, researchers must identify the correct lots before proceeding. The easiest method for doing so is by using the either the homeowner's name or the subdivision name, as well as the block and lot numbers. Many county appraisal district websites will allow you to search for a property appraisal record online, although some require that you make an open records request directly to the office. The following image shows the search page from a county appraisal district

Figures 6.2a (above) and 6.2b (below) Property Search Menu and Appraisal Record

Property Search Options

Select a search type, then enter one or more search terms. Click "Advanced" for more search options.

Search Type:

Owner Name:

Results Display

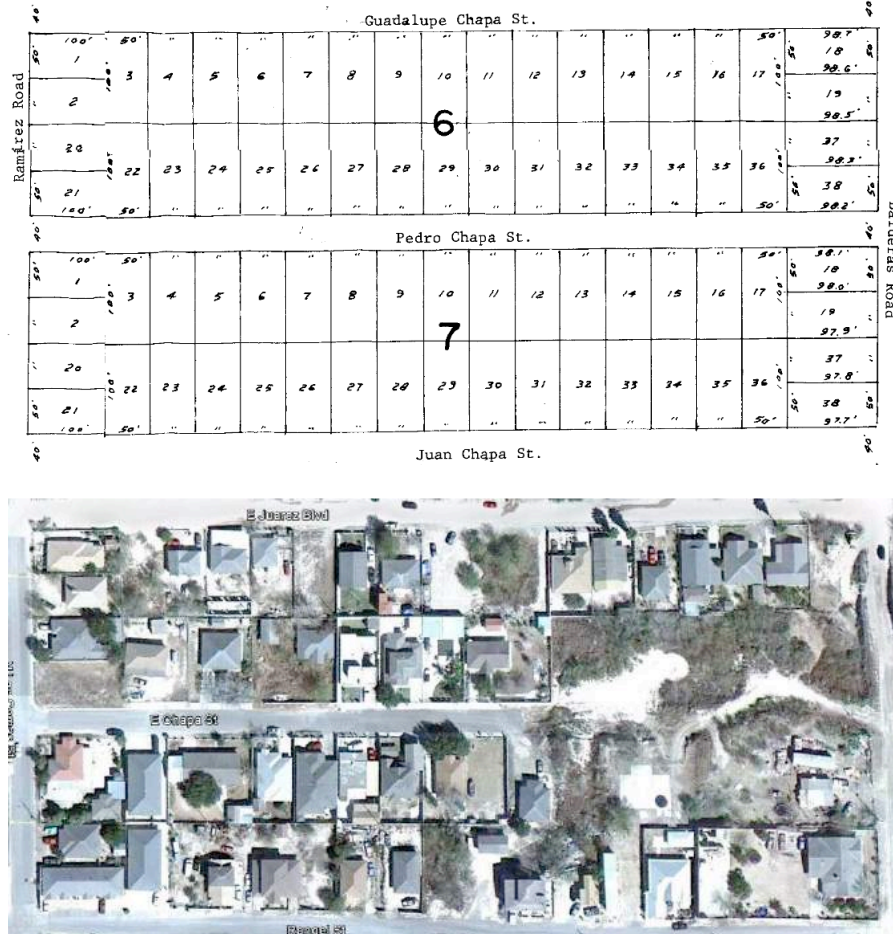
Tax Year:

▼ Property			
Account			
Property ID:	36536	Legal Description:	COLONIA ACACIA SUBDIVISION LOT 7 BLK 14
Geographic ID:	02-2170-0140-0070-00	Agent Code:	
Type:	Real		
Property Use Code:			
Property Use Description:			
Location			
Address:	[REDACTED]	Mapsc:	
Neighborhood:	conv neighborhood	Map ID:	09-14-07
Neighborhood CD:	022170		
Owner			
Name:	[REDACTED]	Owner ID:	39200
Mailing Address:	[REDACTED]	% Ownership:	100.0000000000%
		<u>Exemptions:</u>	HS, OV65

website. Once identified, the property appraisal record will provide the subdivision name, as well as the block and lot number that corresponds to the subdivision plat map. Figure 6.2b provides the results for a property search. Although the owner name and address have been blinded from this image, they will typically appear in any property search. What are most important to note, however, are the block and lot numbers provided for the selected property. These numbers correspond to the plat maps for the selected colonia, and can be used to identify the exact location of the lot once in the field.

However, as our research team found, depending upon the appraisal district records, many of the plat maps may be out-of-date, and large discrepancies between the map and the on-the-ground conditions may exist (for example, street names may have changed, or certain streets may never have been developed). For this reason, cross-checking the plat maps with a satellite image from a program such as Google Maps or Google Earth may provide a more accurate depiction of the neighborhood design. For example, the plat map image presented earlier is also displayed below, as is an aerial image of the same area taken from Google Earth. Notice that not only have the street names changed, but that a portion of the lots between block 6 and 7 were never developed and, in fact, the road was never extended through this part of the colonia. Inconsistencies such as this can easily and quickly be identified via satellite image and will reduce “on-the-ground” confusion and delays.

Figures 6.3a (above) and 6.3b (below) Google Earth Images and Maps



Another method for locating the sample population on the map is by using the property address. Although this method is often less reliable, it may be necessary if the property owner's name is not known or if the sample population contains a large proportion of renters. In this case, researchers can search for an appraisal record for a specific property (either at the appraisal district office or on their website, if applicable) by using the street (physical) address. However, as our research team found, the physical address is often not included on property records or may in fact be incorrect if a change has occurred in the street name. Often, one property may have two or more "correct" physical addresses used in various contexts (for example, the utility company may use one address, while the appraisal district uses another, and both of which refer to the same physical property)

SELECTING AN IMPLEMENTATION METHOD

There are a number of options for implementing the survey, and the appropriateness of each will vary according to the objectives and resources of the research team and the on-the-ground conditions in the colonia. The two basic approaches are in-person surveys and mail surveys, though these approaches can be implemented in a number of different ways. We designed the survey instruments provided in Appendices A and B with these multiple implementation

methods in mind, so that the instrument will function equally well as either an in-person or mail-back survey.

IN-PERSON SURVEYS

In-person surveys entail having a researcher, or teams of researchers, walk through the colonia to conduct the surveys one-on-one. Time and resources-permitting, this is undoubtedly the preferred method and often results in higher completion rates and more reliable data. Before entering the field, however, researchers must be adequately trained. Though time-consuming, this is an essential part of survey research, and failing to adequately prepare surveyors can result in unreliable or unusable data. Typically, training researchers entails three steps: understanding and reinforcing the research objectives, utilizing mapping and tracking systems, and learning the survey instrument.

UNDERSTANDING AND REINFORCING THE RESEARCH OBJECTIVES

Training surveyors entails three distinct steps: familiarizing surveyors with the research objectives, with the neighborhoods and mapping techniques, and with the survey instrument itself. The first step, of course, is to inform surveyors of the organization heading the study, the research objectives, and the potential outcomes of the survey. As surveyors will be the primary contact with residents, it is essential that they be well-informed and prepared to answer general questions regarding the study. Often, it helps if surveyors have a pre-prepared script that they can use when introducing themselves and the research project.¹²⁶ Role play exercises, carefully monitored by project leaders, is often a good way to develop expertise and familiarity with the instrument and protocols of presentation.

Utilizing Mapping and Tracking Systems

The second step in training the surveyors is to familiarize them with the neighborhoods and with the mapping process. If, as was the case in the 2011 Starr County Study, the majority of surveyors are local residents they may already know their way around the colonias—if not, it is certainly advisable that surveyor teams visit the colonias beforehand, or that they use GPS or other mapping technology to navigate the neighborhoods. Once familiar with the neighborhood layout, surveyors must learn to use the plat maps as well as a delivery tracking system. Undoubtedly, some researchers will feel more comfortable using the maps, and it may be helpful to put experienced and inexperienced map users together. Often it is essential to keep track of the status of each survey for later reference. This can be done either on the map, on the survey instrument itself, or both. However it is recorded, it is important that surveyors accurately record the status of each survey, as this information is essential if research teams plan to make subsequent visits to the colonia or if multiple teams will be working in the same neighborhoods. In particular, researchers should be prepared to record completed surveys, participants who declined, those who were not home or whose properties were inaccessible, or those who requested that the surveyors return at a later date. For this reason, having a straightforward process for tracking these data is crucial. Researchers from the 2011 Study used the following codes:

¹²⁶ See Appendix C for an example.

Condition	Symbol on Map	Annotation on Survey
Survey completed	"O"	"Completed"
Resident home, but declined	"X"	"Declined"
Combined lot	Box around combined lots	"Combined with lot ____"
Not home	Nothing	Description, Date and "NH"
Vacant	"V"	"Vacant"
Yard/house not accessible	Nothing	Date and "NA"

Notice that for most conditions, the status of each survey was annotated on both the survey and the map. This allowed the research director to organize each survey according to its status—for example, all “vacant,” “declined,” “completed,” and “combined lot surveys” were set aside for later analysis while any surveys recorded as “not home” or “not accessible” would be visited a second and possibly third time. Annotations were also included on the map to provide a visual representation of the survey status on each lot, as well as to assist surveyors to locate specific properties when making a return visit.

LEARNING THE SURVEY INSTRUMENT

The final task in preparing the research team is to familiarize the surveyors with the instrument itself. Though seemingly straightforward, this process can be both time-consuming and tedious. Nevertheless, it is an indispensable component of the training process. Depending on the survey instrument or the language skills of the surveyors, some words may be unfamiliar. The first step, therefore, is to read through the survey as a group to clarify any unknown or uncommon words. The second step, then, is to discuss the survey protocol, in other words, how the surveyor should go about asking each question. In order to ensure comparability of responses, it is important that all surveyors take the same approach when asking the questions. However, it is only natural that once surveyors become comfortable with the instrument, the survey process will go very smoothly, and one question will often flow into the next. For this reason, some questions should be identified as “potentially misunderstood or misleading.” Take, for example, the following three questions:

1. Does someone in your household own this lot?

☐ ⁽¹⁾ Yes

☐ ⁽²⁾ No

2. Who did you purchase the lot from?

☐ ⁽¹⁾ Previous owner

☐ ⁽²⁾ Developer

☐ ⁽³⁾ Inherited from a family member

☐ ⁽⁸⁸⁾ Other (Please explain) _____

3. How much risk do you believe is involved in using your title as collateral?

Please check the answer that best describes your opinion.

⁽¹⁾ ☐ Very high risk

⁽²⁾ ☐ High risk

⁽³⁾ ☐ Medium risk

⁽⁴⁾ ☐ Low risk

⁽⁵⁾ ☐ No risk

Question 1 is very straightforward, and it is unlikely that there would be much variation in the responses of different surveyors. Question 2, although a fairly straightforward question, could potentially result in distinct responses. For example, some respondents may reply that they purchased the lot from the previous owner even if that previous owner was in fact the developer. For this reason, it is important that surveyors be trained to clarify this question if a respondent answers that they purchased the lot from the previous owner, possibly by asking a follow-up

question such as “So you did not purchase from the developer, or in other words, from the person who was selling multiple vacant lots here in the *colonia*?”

Finally, Question 3 is much more subjective, meaning the surveyors’ form of questioning could significantly impact the type of response. For this reason, questions such as this one should be asked as closely as possible to what is written on the survey itself.¹²⁷ Piloting the instrument in a neighborhood in which one is not going to be the focus of study is always helpful in evaluating which questions work well or are in need of rephrasing (or deleting) the question. As mentioned above, role plays (interviewer and interviewee) are excellent ways of developing familiarity and confidence.

MAIL SURVEYS

Mail surveys have two major difficulties. First, for a mailback survey to work it must be short, simple to read and complete by the respondent unaided. The fact that one can also set it aside for completion later also means that it may not get completed. Thus it requires careful design and testing. Second, mail back surveys have a notoriously low response rate (5-7% is considered normal), and this raises questions about bias entering the effective sample.

Depending upon the presence of on-lot mailboxes within the neighborhood (as opposed to PO boxes) and the accuracy of the addresses recorded by the postal service, mail surveys may be a viable option for research teams, particularly for those with a limited supply of workers to conduct traditional interviews. In general, there are two distinct options for organizations hoping to distribute mail-back surveys in colonias: delivery by mail and delivery by hand. However, regardless of the delivery method, we advise that researcher teams conduct some sort of campaign to inform residents of project and its intentions (possibly by running advertisements in a local paper, distributing flyers throughout the neighborhood, or by word of mouth), as familiarity with the project will likely result in higher return rates.

DELIVERY BY MAIL

A traditional mail survey would be delivered by the US Postal Services and would include a pre-addressed and pre-paid return envelope. Arrangements can be made with the USPS so that charges are incurred for these prepaid envelopes only for those surveys that are actually returned. While this is an attractive option given that it requires far less labor than in-person surveys, mail surveys have two significant drawbacks. First of all, the return rate on mail surveys is far lower than that of in-person surveys.¹²⁸ A second limitation of mail surveys is variation in the mail delivery system itself. Some neighborhoods undoubtedly have mailboxes on each property, while other colonias may have PO boxes in one central location. Others still may have no mail delivery system in the neighborhood itself, and residents may be required to travel to the post office to collect their mail. The feasibility of mail surveys therefore depends on the

¹²⁷ It is important to note that sometimes a respondent may not understand a question the way that it is phrased on the survey. When this occurs, it is important for surveyors to do their best to rephrase the question without leading the respondent toward a specific answer. Additionally, if multiple respondents seem to have difficulty understanding a certain question, it is important to bring this to the attention of the project supervisor in order to standardize a questioning strategy among all surveyor teams.

¹²⁸ As an example, only 8% of the Auxiliary (mail) surveys were returned in the 2011 Study, compared with a completion rate of 38% for the Core (in-person) surveys. However, it is important to note that participants that completed an in-person survey received a \$15 gift card to HEB, while those that received mail-back surveys were not given this option. Likely, as we discuss below, this gift card resulted in higher completion rates among the in-person surveys.

local conditions in the study neighborhoods as well as the access to the mailing addresses of the sample population.

DELIVERY BY HAND

One way to get around these problems is to have researchers deliver the mail-back surveys by hand. Although this method is more labor-intensive, there are a few benefits compared with a traditional mail survey. First of all, in neighborhoods where the postal system is confusing, delivering surveys by hand ensures researchers an accurate count of how many residents received copies of the questionnaire. Secondly, (and this is only our impression) residents may be more likely to complete a survey if they have personal contact with a researcher who can explain the purpose of the project. When delivering mail surveys by hand, researchers would provide participants with a questionnaire, letter of presentation, and a pre-addressed and pre-paid envelope.

Just as with in-person surveys, if the research team plans to distribute mail-back surveys by hand, they should first be familiarized with the colonias and the mapping protocol in order to accurately record which surveys were delivered, which residents declined or were not home, or which properties were vacant or unoccupied. Although the tracking system differs slightly from that used with in-person surveys, the general idea remains the same.¹²⁹

Condition	Symbol on Map	Annotation on Survey
Survey Delivered	"O"	Nothing
Resident home, but declined	"X"	"Declined"
Combined lot	Box around combined lots	"Combined with lot ____"
Not home	Nothing	Description, Date and "NH"
Vacant	"V"	"Vacant"
Yard/house not accessible	Nothing	Date and "NA"

COMPENSATION FOR PARTICIPANTS

One final option worth considering, regardless of the implementation method chosen by the research team, is whether or not to provide respondents with some sort of compensation for their time. During the 2011 Starr County Study, the research team provided participants with a \$15 gift card for HEB as compensation for their time. Our general impression was that providing such compensation did result in higher completion rates. In fact, some participants seemed somewhat reticent until we presented them with the opportunity to receive the HEB gift card—it was often the key to turning a rejection into a completed interview. In addition, one elderly participant emphasized how important the gift cards were to him, stating that even the small amount helped he and his wife to cover their expenses for food, and he jokingly asked if we could return the following day to conduct another interview. Needless to say, in communities where median area income is quite low, a \$15 gift card is not only of benefit to the recipients, but also ensures a higher participation rate than might otherwise be expected.

¹²⁹ The major difference here is that once the survey is delivered to the participant, it cannot be annotated for tracking purposes. Thus, the map should be relied upon to record which households have received a survey.

Coding and Cleaning the Data

CODING

Although the implementation of the survey is undoubtedly the most time-consuming aspect of such research, a great deal of attention must also be paid to the coding, cleaning, and analysis stages. Coding is the process of assigning each variable with a selected number of codes, or responses. In order to facilitate successful coding and analysis of the data, it is useful to have a detailed numbering system for each question. The instrument provided in Appendices A and B is labeled using a combination of letters and numbers which can be used to organize the database. This is particularly useful when one question may have multiple responses; in this instance, a highly specified numbering system allows for accuracy and ease of use during the coding and analysis stage. Take for instance, the following question from the aforementioned questionnaire:

D.4 Did you purchase only the land OR both the land and the house?

☐₍₁₎ Land only (*go to question A*)



A) How much did you pay for the land only?
\$ _____

☐₍₂₎ Land and house (*go to question B*)



B) How much did you pay for both the land and house? \$ _____ ↓
How much of this cost was for the house? \$ _____
How much of this cost was for the land? \$ _____

In this instance, D.4 refers the fourth question of Section D regarding whether the owner purchased the only the land or the land and the house. Depending upon the interviewee's response, he or she will also be asked either question A or the three questions that make up part B. Because of the complexity of questions such as D.4, it is therefore helpful to have a detailed numbering system to keep track of each response. For this example, there would in fact be five separate variables that are then coded and entered into the database.

For the survey included in Appendices A and B, many of these codes are predetermined and are denoted by the small number written in parentheses next to each response. So the first question might be labeled in the database as "D.4.1.Purchased," and would correspond to the question "Did you purchase only the land OR both the land and the house?" Thus, for this question, the coder would enter a 1 if the respondent purchased only the land and a 2 if the respondent purchased both the land and the house. Let us pretend that a respondent bought only the land. He or she would then be asked for the cost of the land. Using the numbering and lettering system just discussed, a variable

named “D.4.1A.Cost” might be created in the database for this response.

In other instances, the response on the survey is not numerical in nature but is also not easily categorized. For example, the following question has an open-ended question with a wide variety of potential responses:

I.54 Are there any other problems with your home that you would like to change?

☐ ₍₁₎ Yes → If Yes, please list the most serious problems (up to five and in order importance)

☐ ₍₂₎ No

1. _____
2. _____
3. _____
4. _____
5. _____

While the yes/no response to the initial question have been pre-coded (1 for yes, 2 for no) this question also includes 5 open-ended responses that will need to be assigned codes after the surveys have been completed. For example, if the respondent replies that the most serious problems in order of importance are a “leaky roof,” “flooding,” “no AC,” “broken shower,” and a “broken faucet,” each answer will need to be classified as a specific code. Choosing these categories is up to the researcher’s discretion. As such, it is often most effective to code open-ended responses such as this once all surveys have been entered into the database. Thus, researchers can scan the open-ended responses to determine which generic codes would be most useful.

In determining codes, it is often important to consider the data’s comparability with other sources. For example, the results of the 2011 Starr County survey are compared with data from a similar survey conducted 2002. For this reason, many of the questions on the Starr County questionnaire were modeled after those from the 2003 Study. During the analysis stage, researchers combined the 2011 database with certain variables from the 2002survey in order to gain a clearer understanding of how colonia conditions have changed in recent years. Thus, when possible, we created similar coding categories in order to draw comparisons between the two databases. The coding process can be long and quite tedious, and it is very easy to make simple mistakes. For this reason, we recommend that a limited number of researchers (3 or less) be involved in coding the surveys, unless of course larger numbers are simply necessary.

CLEANING THE DATABASE

Regardless of how many people code the surveys, once all of the responses have entered, it is important to clean the database. In other words, this is the time to search for inconsistencies or errors in how the surveys have been coded. The simplest way to do this is to search for out-of-place responses. For example, a variable such as “year of purchase” should only include dates (such as “1982”), so a response such as “1” would not make sense. Other errors can be found by running simple analyses and checking for illogical or strange responses. For example, you will likely see a red flag if, for instance, you notice that one household supposedly has 54 people living in their dwelling. To check, you can simply review the paper copy of the instrument to see if the coder simply slipped, and meant to type 5 rather than 55.

Analyzing the Database

Only once the database has been cleaned can one begin to analyze the results. Most databases can best be compiled in software such as Excel which will also allow for some simple analysis to be conducted (counts, percentages, etc). More usually, however the data are uploaded into a statistical software program with which the research team is most familiar (SPSS, SAS, STATA, etc). This has the advantage of being able to label variables and codes and makes for easier reading of basic data displays and Tables and other forms of data manipulation and analysis. The databases from this particular study (as well as the this report, the coding instruments, coding guide, protocols etc. are available on line at: www.lahn.utexas.org (click on “Texas Housing Studies”, then “Ford Foundation 2010 Study” and then “Starr County Documenting a Decade of Change”. You will find the databases available in EXCEL and SPSS. Note that these databases are stripped of any personal identifying information (names and addresses, etc.). This is an absolute imperative if data are to be made available on open access. Only research team leaders and data owners are allowed to keep the full dataset which must be held in a secure and locked location.

CONCLUSION

There are an estimated 400,000 people living in close to 2,300 colonias throughout Texas (Texas Secretary of State 2011). As this report has shown, these low-income residents often experience significant hardship due to poor housing conditions, lacking infrastructure, health and safety dangers, and economic vulnerability. Many of the distinct social and physical problems experienced by colonia residents are still poorly understood. Questionnaire surveys are an excellent and often necessary means for gathering high-quality data related to myriad social, economic, housing, and settlement conditions. In order to facilitate successful collection of this data, this chapter has provided a variety of tips for organizations seeking to conduct this sort of research, including selecting and designing the instrument, choosing the study population, and implementing the survey, and preparing the data. In addition, we have included a bilingual questionnaire and sections that can be tailored to fit the needs of local organizations seeking to collect data on colonia conditions. It is our hope that this tool is useful in promoting awareness of and support for the needs of colonia residents throughout the state.

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APPENDIX A: ENGLISH LANGUAGE QUESTIONNAIRE

SECTION A: DEMOGRAPHICS AND GENERAL HOUSING INFORMATION

Please give this survey to the head of the household or their spouse.

A.1 It is important that the person answering the survey is the head of the household or their spouse. Are you the head of the household or spouse?

☐ ₍₁₎ Yes ☐ ₍₂₎ No *If No, please give to the head of the household or their spouse*

A.2 For the head of the household or their spouse, what is your first and last name?

A.3 Who is the owner of this lot/property? (What is their name?) _____

A.4 What is your current street address? _____

A.5 Are you male or female?

☐ ₍₁₎ Male ☐ ₍₂₎ Female

A.6 What is your ethnicity? *Choose one option—indicate with a checkmark ✓.*

☐ ₍₁₎ Hispanic (Mexican born) → How many years have you lived permanently in the U.S.? _____

☐ ₍₂₎ Hispanic (Mexican American)

☐ ₍₃₎ Hispanic (Other)

☐ ₍₄₎ African American

☐ ₍₅₎ Anglo

☐ ₍₈₈₎ Other (please explain) _____

A.7 Does someone in your household own this lot?

☐ ₍₁₎ Yes *If Yes, go to **Question B.1***

☐ ₍₂₎ No

A.8 What is your tenure status? In other words, do you rent, are you living with a family member who owns the dwelling, or are you borrowing the dwelling from a family member or friend?

☐ ₍₁₎ I am a renter ☐ ₍₂₎ A family member or friend lends the house to me so that I can live here.

☐ ₍₈₈₎ Other (*please specify*) _____

SECTION B: HOUSEHOLD INFORMATION

The following questions deal with the different HOUSEHOLDS living on this lot.

EXPLANATION: Home or household = a separate family unit that usually cooks and eats separately, even though they may or may not form part of the same family. For example: a married son or daughter living in a separate house on the same lot would equal two households. If your son or daughter or another family member (brother/sister) – with or without their own children – share your home, and you generally cook and eat together, then this would form one home and or household.

B.1 How many people live in your household? _____

B.2 How many different homes or households are there on this lot?

☐ ₍₁₎ One households → Go to Question C.1

☐ ₍₂₎ Two households

☐ ₍₃₎ Three households

If there is only 1 household on your lot, go to Question C.1

B.3 Who are the other households; that is, what is the relationship if any to you? Check all that apply.

☐ ₍₁₎ My parents/in-laws

☐ ₍₂₎ Brother/Sister (or in-law)

☐ ₍₃₎ Other family

☐ ₍₄₎ They are friends

☐ ₍₅₎ They are not related to us

☐ ₍₈₈₎ Other (Please explain) _____

B.4 Do you combine your income with the other households to pay for expenses?

☐ ₍₁₎ Yes If Yes, what expenses do you share with the other household (s)? _____

☐ ₍₂₎ No _____

B.5 Do the other households own their portion of the lot?

☐ ₍₁₎ Yes

☐ ₍₂₎ No

SECTION C: PRIOR RESIDENCE INFORMATION

C.1 What city and state did you live in immediately prior to moving to live on this lot?

City _____ State _____

C.2 The home you lived in immediately prior to moving here to this lot – were you owners, renters, or living with family/friends kin?

- ☐ ⁽¹⁾ Owned the house ☐ ⁽³⁾ Rented: from a housing association
☐ ⁽²⁾ Rented: from the owners ☐ ⁽⁴⁾ Shared a home that was owned or rented by family/friends
☐ ⁽⁸⁸⁾ Other (*Please explain*) _____

C.3 Which of type of dwelling did you live in prior to moving this lot? Check all that apply:

- ☐ ⁽¹⁾ Modular Home: *built in parts off site and assembled on a foundation (not on wheels)*
☐ ⁽²⁾ Trailer (Manufactured Home): *built off site and have wheels underneath (but not a camper or R*
☐ ⁽³⁾ Camper or RV: *recreational or motorized vehicle*
☐ ⁽⁴⁾ Custom Home Built by Contractor: *someone was hired to build the home on site*
☐ ⁽⁵⁾ Self-Built Custom Home: *Mostly built by you or other family members on site*
☐ ⁽⁸⁸⁾ Other (Please describe) _____

C.4 How many bedrooms did you have in your previous home? _____

C.5 In total, how many people lived in your previous home? _____

C.6 Why did you decide to move to this lot? _____

SECTION D: ACQUISITION/OCCUPATION OF THE PROPERTY

NOTE: This section is only for OWNERS. If you are a renter, please go to SECTION G and begin with question G.1.

D.1 In what YEAR did you *buy* your lot? _____

D.2 Who did you purchase the lot from?

- ☐₍₁₎ Previous owner ☐₍₂₎ Developer ☐₍₃₎ Inherited from a family member
☐₍₈₈₎ Other (Please explain) _____

D.3 In which YEAR did you first *move* to the neighborhood? _____

D.4 Did you purchase only the land OR both the land and the house?

- ☐₍₁₎ Land only (*go to question A*) ☐₍₂₎ Land and house (*go to question B*)



A) How much did you pay for the land only? \$ _____

B) How much did you pay for both the land and house? \$ _____
↓

How much of this cost was for the house? \$ _____

How much of this cost was for the land? \$ _____

D.5 Do you know the size of the lot?

- ☐₍₁₎ Yes → Please fill one: Square feet: _____ Acreage: _____ Dimensions (feet): _____ by _____
☐₍₂₎ No

D.6 What was the primary method you used to pay for the land and/or the dwelling?

- ☐₍₁₎ Cash ☐₍₄₎ Loan from a credit union
☐₍₂₎ Loan from family/friend ☐₍₅₎ Loan from the seller (made payments to the seller over time)
☐₍₃₎ Loan from a bank ☐₍₈₈₎ Other (*Please explain*) _____

D.7 From whom or how did you find out about the opportunity to buy a lot in this neighborhood?
Check all that apply.

☐ ₍₁₎ Advertisement in newspaper

☐ ₍₂₎ By chance/a visit

☐ ₍₃₎ Word of mouth

☐ ₍₄₎ From neighbors/friends

☐ ₍₅₎ Sign in the neighborhood

☐ ₍₆₎ From relatives

☐ ₍₇₎ At work

☐ ₍₈₈₎ Other (*Specify*) _____

SECTION E: INHERITANCE AND TITLE

E.1 What kind of title/papers did you receive when you purchased this property?

☐ ⁽¹⁾ **Contract for Deed** (This is a contract in which you agree to make payments to the seller and then receive a deed at the end of making all of the payments)

☐ ⁽²⁾ **Deed** (This is a title document signed by the seller which has the words “deed” or “quitclaim deed” or “warranty deed” at the top and is recorded in the county records)

☐ ⁽³⁾ **Receipt**

☐ ⁽⁴⁾ **Oral Agreement**

☐ ⁽⁹⁸⁾ **Don’t know**

☐ ⁽⁸⁸⁾ **Other** (please explain) _____

E.2 What kind of title/papers do you currently have?

☐ ⁽¹⁾ **Contract for Deed** (This is a contract in which you agree to make payments to the seller and then receive a deed at the end of making all of the payments)

☐ ⁽²⁾ **Deed** (This is a title document signed by the seller which has the words “deed” or “quitclaim deed” or “warranty deed” at the top and is recorded in the county records)

☐ ⁽³⁾ **Receipt**

☐ ⁽⁴⁾ **Oral Agreement**

☐ ⁽⁹⁸⁾ **Don’t know**

☐ ⁽⁸⁸⁾ **Other** (please explain) _____

E.3 In what year did you receive your current title/papers? _____

E.4 Have you registered your title/papers at the county court office?

☐ ⁽¹⁾ Yes → *What year?* _____

☐ ⁽²⁾ No

☐ ⁽⁹⁸⁾ Don’t know

E.5 If you have a DEED (warranty, quitclaim, or other), whose name is listed on the title? Please list EVERY person whose name is on the title.

☐ ⁽¹⁾ Male householder/spouse

☐ ⁽³⁾ Both spouses

☐ ⁽⁵⁾ Previous owner

☐ ⁽²⁾ Female householder/spouse

☐ ⁽⁴⁾ My parent(s)/in-laws

☐ ⁽⁹⁸⁾ Don’t know

☐ ⁽⁸⁸⁾ Other (please explain) _____

E.6 Who do you believe will inherit this lot and house in the event of your death?

☐ ⁽¹⁾ The title holder’s spouse

☐ ⁽³⁾ All of the children equally

☐ ⁽²⁾ Son or daughter

☐ ⁽⁴⁾ The parents or grandparents

☐ ⁽⁸⁸⁾ Others (please explain _____)

E.7 Do the people whose names are listed on the title have a will?

- ☐₍₁₎ Yes, all title holders have a will
- ☐₍₂₎ At least one title holder has a will, but not all title holders do
- ☐₍₃₎ No title holder has a will

E.8 Regardless of whether or not you have a will, who would you prefer to leave your lot and house to in the event of your death?

- ☐₍₁₎ The title holder's spouse
- ☐₍₃₎ All of the children equally
- ☐₍₂₎ Son or daughter
- ☐₍₄₎ The parents or grandparents
- ☐₍₈₈₎ Others (please explain _____)

SECTION F: LOT CHARACTERISTICS

F.1 In the table below, check the type of houses on your lot. Check all that apply:

- ☐ ₍₁₎ Modular Home: *built in parts off site and assembled on a foundation (not on wheels)*
- ☐ ₍₂₎ Trailer: *built off site and have wheels underneath (but not a camper or RV)*
- ☐ ₍₃₎ Camper or RV: *recreational or motorized vehicle*
- ☐ ₍₄₎ Custom Home Built by Contractor: *someone was hired to build the home on site*
- ☐ ₍₅₎ Self-Built Custom Home: *Mostly built by you or other family members on site*
- ☐ ₍₈₈₎ Other (Please describe) _____
-

F.2 Which of the following services do you have on this lot? Place a checkmark next to all of the services that you have on your lot. For each service that you have on this lot, please write the year you began receiving this service and clarify any problems you have with it?

	Year service began?	Any problems with this service? Specify which?
<input type="checkbox"/> ₍₁₎ Electricity	_____	_____
<input type="checkbox"/> ₍₂₎ Piped Water	_____	_____
<input type="checkbox"/> ₍₃₎ Septic system	_____	_____
<input type="checkbox"/> ₍₄₎ Sewer lines	_____	_____
<input type="checkbox"/> ₍₅₎ Garbage collection	_____	_____
<input type="checkbox"/> ₍₆₎ Recycling collection	_____	_____

F.3 In total how many lots do you or your spouse own? _____

*If only one, go to **Question G.1***

F.4 If you (or your spouse) own more than one lot, where are the additional lots located?

- ☐ ₍₁₎ Next to the primary lot ☐ ₍₂₎ In another neighborhood
- ☐ ₍₃₎ In the same neighborhood but not next to the primary lot
- ☐ ₍₈₈₎ Other (Please Specify) _____

F.5 For what purpose do you use the other lots that you (or your spouse) own?

- ☐ ₍₁₎ To live on/as a yard/garden ☐ ₍₂₎ I lend it to family member(s) ☐ ₍₃₎ I rent it out to others
- ☐ ₍₄₎ A business is located on it ☐ ₍₅₎ It is vacant
- ☐ ₍₈₈₎ Other (Specify) _____

SECTION G: EMPLOYMENT AND INCOME

G.1 How many persons in your household currently have paid employment? _____

G.2 Please provide details for the three primary wage earners in paid employment.

	Age	Full- or Part-time	Occupation (WHAT is this person's job?)
Worker 1		FT / PT	
Worker 2		FT / PT	
Worker 3		FT / PT	

G.3 What is the estimated income (weekly or monthly) for YOUR household including benefits?

Do not include the incomes of any other households that might live on your property. Estimate EITHER the week OR monthly income—no need to do both.

Estimated Household Income per WEEK		Estimated Household Income per MONTH	
<input type="checkbox"/> ₍₁₎ \$50 - \$149	<input type="checkbox"/> ₍₄₎ \$400 - \$599	<input type="checkbox"/> ₍₁₎ \$200 - \$599	<input type="checkbox"/> ₍₄₎ \$1600 - \$2399
<input type="checkbox"/> ₍₂₎ \$150 - \$249	<input type="checkbox"/> ₍₅₎ \$600 - \$799	<input type="checkbox"/> ₍₂₎ \$600 - \$999	<input type="checkbox"/> ₍₅₎ \$2400 - \$3199
<input type="checkbox"/> ₍₃₎ \$250 - \$399	<input type="checkbox"/> ₍₆₎ more than \$800 <i>how much?</i> _____	<input type="checkbox"/> ₍₃₎ \$1000 - \$1599	<input type="checkbox"/> ₍₆₎ more than \$3200 <i>how much?</i> _____

G.4 Has anyone in your household missed work due to health problems or a disability/injury?

☐₍₁₎ Yes → If Yes, how many days did they miss? _____

☐₍₂₎ No

G.5 Are any of the household children that are migrant workers?

☐₍₁₎ Yes

☐₍₂₎ No

G.6 Are there any members of your household that are interested in receiving job/skill training?

☐₍₁₎ Yes

☐₍₂₎ No *If No, go to* **Question H.1**

G.7 What is the household member's name, age, and what sort of skill/training are they interested in receiving?

	Name	Age	Skill/training
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____

SECTION H: HEALTH AND DISABILITY

H.1 Is anyone in the household classified as being disabled?

- ☐ ₍₁₎ Yes → *If Yes, what is* → Age _____ Disability _____
☐ ₍₂₎ No *their age and* Age _____ Disability _____
disability? Age _____ Disability _____

H.2 In the past 12 months, have any children in your household missed a total of more than 15 days of schooling due to illness?

- ☐ ₍₁₎ Yes → *If Yes, please specify* Age _____ Days missed _____ Illness _____
their age, illness and Age _____ Days missed _____ Illness _____
☐ ₍₂₎ No *days of school missed.*

H.3 Are there any improvements to your house that you need to make for health or disability reasons?

- ☐ ₍₁₎ Yes → If Yes, what improvements are needed? _____
☐ ₍₂₎ No _____

H.4 Do any members of your household have health insurance?

- ☐ ₍₁₎ Yes, all household members have health insurance
☐ ₍₂₎ Yes, some but not all household members have health insurance
☐ ₍₃₎ No one in the household has health insurance

H.5 What type of health insurance do you and members of your household have? Check all that apply.

- ☐ ₍₁₎ Medicare
☐ ₍₂₎ Medicaid
☐ ₍₈₈₎ Other (Please explain) _____
☐ ₍₃₎ Employer insurance
☐ ₍₄₎ Other private insurance
☐ ₍₉₈₎ Don't know

SECTION J: EDUCATION:

J.1 Please list the first name, age, gender, and years of education completed by ALL household members including yourself.

	First Name	Age	Gender (circle one)	Years of grade school completed? (If high school graduate, please specify →)	2-year college degree or training	4-year college degree
1	Respondent:		M F		Y N	Y N
2			M F		Y N	Y N
3			M F		Y N	Y N
4			M F		Y N	Y N
5			M F		Y N	Y N
6			M F		Y N	Y N
7			M F		Y N	Y N
8			M F		Y N	Y N

*The following questions deal specifically with the educational experience of children in the household.
If there are no children in the household, go to **Section K**.*

J.2 How satisfied are you with your neighborhood schools?

☐₍₁₎ Very satisfied ☐₍₂₎ Satisfied ☐₍₃₎ Neutral ☐₍₄₎ Dissatisfied ☐₍₅₎ Very dissatisfied

J.3 If you responded that you are *dissatisfied* or *very dissatisfied* with your neighborhood schools, what specifically are you dissatisfied with?

SECTION K: TRANSPORTATION

K.1 How much would you estimate your household pays on transportation per week? \$ _____

K.2 How many working vehicles are owned or leased by members of your household?

K.3 How many household members need to travel to their work each week? # _____

K.4 Please list the four people who spend the most time working outside of the home, how many miles they travel to get from home to work, and the time it takes them to get to work.

Age	Distance from Home to Work	Time from Home to Work	Type of Transportation <i>Choose from the following:</i> Drive Alone Bus Drive with Others Walk/Bike Other (please explain)
Person 1: _____	_____ miles (one way)	_____ hours _____ minutes (one way)	
Person 2: _____	_____ miles (one way)	_____ hours _____ minutes (one way)	
Person 3: _____	_____ miles (one way)	_____ hours _____ minutes (one way)	
Person 4: _____	_____ miles (one way)	_____ hours _____ minutes (one way)	

K.5 Do any members of your household use public transportation?

☐ ₍₁₎ Yes → What types of public transportation do they use? _____

☐ ₍₂₎ No

K.6 Is traveling to work, school, or elsewhere difficult for you or any members of your household?

☐ ₍₁₎ Yes ☐ ₍₂₎ No If No, go to Question L.1

K.7 Why is traveling difficult for you or other members of your household? _____

SECTION L: LENDING

NOTE: This section is only for OWNERS. If you are a renter, please go to SECTION M and begin with Question M.1.

L.1 Have you received any loans from a lending institution for home improvements or to build a new dwelling on your lot (don't include loans from a family member or friend)?

☐ ₍₁₎ Yes ☐ ₍₂₎ No *If No, go to Question L.7*

L.2 What is the total value of ALL the loans you have received for home improvements and to build new dwellings since you received your title? \$ _____

L.3 When did you receive the last 4 loans and who was the lender? Please write the year you received the last 4 loans and specify who the lender was.

	Year Received	Who was the lender?	What was the \$ value of the loan?
1	_____	Who was the lender? _____	What was the \$ value? _____
2	_____	Who was the lender? _____	What was the \$ value? _____
3	_____	Who was the lender? _____	What was the \$ value? _____
4	_____	Who was the lender? _____	What was the \$ value? _____

L.4 Are you aware of the possibility of using your title as collateral to take out a loan?

☐ ₍₁₎ Yes ☐ ₍₂₎ No *If No, go to Question L.7*

L.5 Have you ever used the title of your house as collateral to receive a loan?

☐ ₍₁₎ Yes ☐ ₍₂₎ No *If No, go to Question L.7*

L.6 If you did use your title as collateral, what was the loan used for?

<input type="checkbox"/> ₍₁₎ Home improvement	<input type="checkbox"/> ₍₄₎ Child's education	<input type="checkbox"/> ₍₆₎ Medical or dental expenses
<input type="checkbox"/> ₍₂₎ Buy a new dwelling/house	<input type="checkbox"/> ₍₅₎ Adult's education/training	<input type="checkbox"/> ₍₇₎ Start or invest in a business
<input type="checkbox"/> ₍₃₎ Buy or fix a vehicle	<input type="checkbox"/> ₍₈₈₎ Other (Please explain) _____	

L.7 Would you consider using your title as collateral for a loan in the future?

☐₍₁₎ Yes ☐₍₂₎ No → If No, why not? _____

L.8 How much risk do you believe is involved in using your title as collateral? *Please check the answer that best describes your opinion.*

☐₍₁₎ Very high risk ☐₍₂₎ High risk ☐₍₃₎ Medium risk ☐₍₄₎ Low risk ☐₍₅₎ No risk

SECTION M: CIVIC ACTIVITY

M.1 Are you registered to vote?

☐₍₁₎ Yes ☐₍₂₎ No *If No, go to* **Question M.4**

M.2 If you are registered to vote, how are you registered?

☐₍₁₎ Democrat ☐₍₂₎ Republican
☐₍₃₎ Independent ☐₍₄₎ Not registered with a specific political party
☐₍₈₈₎ Other (please specify): _____

M.3 Rate the frequency with which you have voted in local and state elections over the past 10 years.

☐₍₁₎ Always ☐₍₂₎ Almost always ☐₍₃₎ Sometimes ☐₍₄₎ Rarely ☐₍₅₎ Never

M.4 Have you communicated with community or political leaders (either locally, throughout the state, or nationally) in the past 10 years?

☐₍₁₎ Yes ☐₍₂₎ No *If No, go to* **Question N.1**

M.5 Who have you communicated with and about what issues? Check all that apply.

Who?	About what issues?
<input type="checkbox"/> ₍₁₎ Local leaders	_____
<input type="checkbox"/> ₍₂₎ State leaders	_____
<input type="checkbox"/> ₍₃₎ National leaders	_____
<input type="checkbox"/> ₍₄₎ Other (please specify) _____	_____

M.6 How have you communicated with these political leaders? Check all that apply.

☐₍₁₎ Talking in person ☐₍₂₎ Group Meetings
☐₍₃₎ Writing letters ☐₍₄₎ Telephone ☐₍₅₎ Email
☐₍₈₈₎ Other (please specify): _____

M.7 How often do you communicate with political leaders?

- ☐₍₁₎ Less than 1 time per year
- ☐₍₂₎ 1 – 5 times per year
- ☐₍₃₎ 6 - 10 times per year
- ☐₍₄₎ More than 10 times per year

SECTION N: PREVIOUS IMPROVEMENTS

N.1 In the last 10 years, have you made any of the following large home improvements? Place a checkmark in this box if yes, then please write the year that you made this improvement

- | | |
|--|---|
| <input type="checkbox"/> ⁽¹⁾ Remodel a room (year _____) | <input type="checkbox"/> ⁽⁴⁾ Roof repair (year _____) |
| <input type="checkbox"/> ⁽²⁾ Flooring (year _____) | <input type="checkbox"/> ⁽⁵⁾ Yard/property improvements (year _____) |
| <input type="checkbox"/> ⁽³⁾ Garage/driveway (year _____) | <input type="checkbox"/> ⁽⁶⁾ Bought additional unit (year _____) |
| <input type="checkbox"/> ⁽⁸⁸⁾ Other (Please explain) (year _____) _____ | |
| <input type="checkbox"/> ⁽⁷⁾ No large improvements made Go to Question N.4 | |

N.2 How did you pay for these home improvements? Check all that apply

- | | | |
|---|---|--|
| <input type="checkbox"/> ⁽¹⁾ Formal loan | <input type="checkbox"/> ⁽³⁾ Loan from friend/family | <input type="checkbox"/> ⁽⁵⁾ Cash/Savings |
| <input type="checkbox"/> ⁽²⁾ Credit card | <input type="checkbox"/> ⁽⁴⁾ With credit from the seller | <input type="checkbox"/> ⁽⁶⁾ Inheritance |
| <input type="checkbox"/> ⁽⁷⁾ Income tax return | | |
| <input type="checkbox"/> ⁽⁸⁸⁾ Other (Please explain) _____ | | |

N.3 In total, how much have you spent on home improvements in the last 10 years? \$ _____

N.4 To what extent has the 2008 housing/financial crisis affected your ability to continue to make home improvements?

- ⁽¹⁾ ☐ Not at all ⁽²⁾ ☐ A little ⁽³⁾ ☐ Somewhat ⁽⁴⁾ ☐ A lot ⁽⁵⁾ ☐ Severely

SECTION O: CURRENT HOUSING CONDITIONS

O.1 How many of the following types of rooms do you have in YOUR HOUSEHOLD (If there are other households living on the lot do not include them in this answer)? Circle the number of rooms of this type that you have in your household.

(1) Kitchen	0	1	2	3	4	5	6
(2) Living room	0	1	2	3	4	5	6
(3) Toilet only (no bath or shower)	0	1	2	3	4	5	6
(4) Bathroom with shower/bath and toilet	0	1	2	3	4	5	6
(5) Dining room	0	1	2	3	4	5	6
(6) Bedroom	0	1	2	3	4	5	6

O.2 Are there any parts of your house that are unfinished?

☐ (1) Yes

☐ (2) No

If No, go to **Question O.4**

O.3 If Yes, put a checkmark next to the type of improvement that is still unfinished and write the number of rooms in the entire house that still need this improvement.

☐ (1) No sheetrock (# of rooms _____)

☐ (5) No plumbing (# of rooms _____)

☐ (2) No doors (# of rooms _____)

☐ (6) Bare flooring (# of rooms _____)

☐ (3) No trim/baseboards (# of rooms _____)

☐ (7) No insulation (# of rooms _____)

☐ (4) No wiring (# of rooms _____)

☐ (88) Other (Please explain) (# of rooms _____) _____

O.4 Are there any other problems with your home that you would like to change?

☐ (1) Yes →

If Yes, please list the most serious problems (up to five and in order of importance)

☐ (2) No

1. _____
2. _____
3. _____
4. _____
5. _____

SECTION P: PLANNED HOUSING IMPROVEMENTS;

P.1 Do you have any large improvements planned for the next 2 years?

☐ ⁽¹⁾ Yes ☐ ⁽²⁾ No *If No, go to* **Question P.5**

P.2 Which of the following large home improvements do you plan on making in the next 2 years?

☐ ⁽¹⁾ Remodel a room ☐ ⁽²⁾ Flooring ☐ ⁽³⁾ Yard/property improvements
☐ ⁽⁴⁾ Garage/driveway ☐ ⁽⁵⁾ Roof repair ☐ ⁽⁶⁾ Buy additional unit
☐ ⁽⁸⁸⁾ Other (Please explain) _____

P.3 How do you plan on paying for these home improvements?

☐ ⁽¹⁾ Formal loan ☐ ⁽³⁾ Loan from friend/family ☐ ⁽⁵⁾ Cash/Savings
☐ ⁽²⁾ Credit card ☐ ⁽⁴⁾ With credit from the seller ☐ ⁽⁶⁾ Inheritance
☐ ⁽⁷⁾ Income Tax Return
☐ ⁽⁸⁸⁾ Other (Please explain) _____

P.4 How much do you plan on spending on home improvements in the next 2 years? \$ _____

P.5 Do any of the members of your household have construction skills?

☐ ⁽¹⁾ Yes ☐ ⁽²⁾ No *If No, go to* **Question Q.1**

P.6 Please provide details on the persons with construction skills.

*(Use the **construction examples below** as guide; you can enter the number next to the construction skill, write in the skill, or if the skill is not listed, please write it in.)*

	<i>Age</i>	<i>Skills this person has (list all that apply)</i>	Examples of Construction Skills		
Person 1			⁽¹⁾ Painting	⁽⁵⁾ Cement	⁽⁹⁾ Plumbing
Person 2			⁽²⁾ Flooring	⁽⁶⁾ Brick/Mortar	⁽¹⁰⁾ HVAC –
Person 3			⁽³⁾ Framing	⁽⁷⁾ Electrical	Heating and
Person 4			⁽⁴⁾ Roofing	⁽⁸⁾ Carpentry	Air Conditioning

SECTION Q: HOUSING IMPROVEMENTS AND SUSTAINABILITY

The next set of questions deal with ‘green’ home improvements and housing sustainability. ‘Green’ housing and housing sustainability refers to changes to the home or property that are environmentally responsible and use resources efficiently.

Q.1 Which of the following statements best describes your knowledge of ‘green’ home improvements and sustainability?

- | | |
|---|---|
| <input type="checkbox"/> ₍₁₎ I have never heard of ‘green’ home improvements and sustainability | <input type="checkbox"/> ₍₃₎ I know some about ‘green’ home improvements and sustainability |
| <input type="checkbox"/> ₍₂₎ I have heard of ‘green’ home improvements and sustainability but don’t know what they are | <input type="checkbox"/> ₍₄₎ I know a lot about ‘green’ home improvements and sustainability |

Q.2 Which of the following ‘green’ home improvements and sustainable methods have you heard of?

<input type="checkbox"/> ₍₁₎ Rainwater capture	<input type="checkbox"/> ₍₅₎ Energy efficient bulbs	<input type="checkbox"/> ₍₉₎ Reduce use of utilities
<input type="checkbox"/> ₍₂₎ Solar panels	<input type="checkbox"/> ₍₆₎ Exterior microclimate	<input type="checkbox"/> ₍₁₀₎ Recycling
<input type="checkbox"/> ₍₃₎ Passive solar water heating	<input type="checkbox"/> ₍₇₎ Improved insulation/ weatherization	<input type="checkbox"/> ₍₁₁₎ Composting
<input type="checkbox"/> ₍₄₎ Passive solar building design	<input type="checkbox"/> ₍₈₎ Energy efficient appliances	
<input type="checkbox"/> ₍₈₈₎ Other (Please explain) _____		

Q.3 Do you actively use any of the ‘green’ home improvements and sustainable methods mentioned above?

- ☐₍₁₎ Yes ☐₍₂₎ No *If No, go to **Question R.1***

Q.4 Which of the following do you actively use?

<input type="checkbox"/> ₍₁₎ Rainwater capture	<input type="checkbox"/> ₍₅₎ Energy efficient bulbs	<input type="checkbox"/> ₍₉₎ Reduce use of utilities
<input type="checkbox"/> ₍₂₎ Solar panels	<input type="checkbox"/> ₍₆₎ Exterior microclimate	<input type="checkbox"/> ₍₁₀₎ Recycling
<input type="checkbox"/> ₍₃₎ Passive solar water heating	<input type="checkbox"/> ₍₇₎ Improved insulation/ weatherization	<input type="checkbox"/> ₍₁₁₎ Composting
<input type="checkbox"/> ₍₄₎ Passive solar building design	<input type="checkbox"/> ₍₈₎ Energy efficient appliances	
<input type="checkbox"/> ₍₈₈₎ Other (Please explain) _____		

Q.5 Where did you learn about these sustainable methods? Check all that apply.

<input type="checkbox"/> ₍₁₎ Family	<input type="checkbox"/> ₍₃₎ Neighbor	<input type="checkbox"/> ₍₅₎ Church
<input type="checkbox"/> ₍₂₎ Child’s school	<input type="checkbox"/> ₍₄₎ Media (TV, radio, periodicals)	<input type="checkbox"/> ₍₆₎ Local community organization
<input type="checkbox"/> ₍₈₈₎ Other (Please explain) _____		

SECTION R: DWELLING CLIMATE

R.1 Do you have air conditioning in your home?

☐₍₁₎ Yes ☐₍₂₎ No *If No, go to* **Question R.3**

R.2 If you have air conditioning, what type and how many units do you have?

☐₍₁₎ Central air ☐₍₂₎ Window or wall unit (Specify number _____)

R.3 Do you perceive the temperature in the dwelling during the summer as too hot?

☐₍₁₎ No/never ☐₍₂₎ Rarely ☐₍₃₎ Sometimes ☐₍₄₎ Often ☐₍₅₎ Always

R.4 If you answered *often* or *always* to the previous question, what is the primary cause for your dwelling being too hot during the summer? _____

R.5 Do you have a heating system in your home?

☐₍₁₎ Yes ☐₍₂₎ No *If No, go to* **Question R.7**

R.6 If you have a heating system, what type and how many units do you have?

☐₍₁₎ Central heat ☐₍₂₎ Wood stove ☐₍₃₎ Portable heater (number of units _____)

R.7 Do you perceive the temperature in the dwelling during the winter season as too cold?

☐₍₁₎ No/never ☐₍₂₎ Rarely ☐₍₃₎ Sometimes ☐₍₄₎ Often ☐₍₅₎ Always

R.8 What is the primary cause for your dwelling being too cold during the winter?

SECTION S: NEIGHBORHOOD CONDITIONS

S.1 In the past 10 years have either of your next door neighbors (to the left and the right) done any of the following?

Subdivided their lot:	<input type="checkbox"/> ₍₁₎ Yes	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ Don't know
Lost their land/house due to default or lack of payment	<input type="checkbox"/> ₍₁₎ Yes	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ Don't know
Bought a vacant lot and occupied it	<input type="checkbox"/> ₍₁₎ Yes	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ Don't know
Sold their <i>house</i> and moved out	<input type="checkbox"/> ₍₁₎ Yes	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ Don't know

S.2 In your opinion, what do you like about living in this neighborhood? Check all that apply.

<input type="checkbox"/> ₍₁₎ Neighbors	<input type="checkbox"/> ₍₄₎ Close to family	<input type="checkbox"/> ₍₆₎ Can build house over time
<input type="checkbox"/> ₍₂₎ Low cost	<input type="checkbox"/> ₍₅₎ Safe	<input type="checkbox"/> ₍₇₎ More space/rural environment
<input type="checkbox"/> ₍₃₎ Good investment	<input type="checkbox"/> ₍₈₈₎ Other (Please explain) _____	

S.3 In your opinion, what do you not like about living in this neighborhood? Check all that apply.

<input type="checkbox"/> ₍₁₎ The neighbors	<input type="checkbox"/> ₍₃₎ Lack of services	<input type="checkbox"/> ₍₅₎ Too far from town/work
<input type="checkbox"/> ₍₂₎ Bad investment	<input type="checkbox"/> ₍₄₎ Unsafe	
<input type="checkbox"/> ₍₈₈₎ Other (Please explain) _____		

SECTION T: LAND AND HOME SALES

T.1 Do you have any idea what a *vacant lot* of a similar size to your own would sell for in this neighborhood today?

☐ ₍₁₎ Yes → If Yes, How much approximately? _____ ☐ ₍₂₎ No

T.2 What do you think both your house and lot combined are worth today if you were to sell?

Approximately \$ _____ ☐ ₍₉₈₎ Don't know

T.3 Of that total, how much is land value and how much is the value of your home and other improvements ?

Land/lot and services to it \$ _____

Home and other improvements \$ _____

T.4 Have you considered moving from this lot/dwelling in the last 2 years?

☐ ₍₁₎ Yes ☐ ₍₂₎ No If No, go to **Question T.9**

T.5 If you have considered moving, why did you want to move?

☐ ₍₁₎ Wanted a nicer home ☐ ₍₃₎ For work ☐ ₍₄₎ To be closer to family

☐ ₍₂₎ Wanted to live in a nicer neighborhood ☐ ₍₅₎ Too expensive here

☐ ₍₈₈₎ Other (Please explain) _____

T.6 Where have you looked to move to?

State _____ City _____ Neighborhood _____

T.7 What has prevented you or is preventing you from moving?

☐ ₍₁₎ Moving is too expensive ☐ ₍₃₎ We have debts here

☐ ₍₂₎ Haven't found anywhere suitable ☐ ₍₄₎ Too much invested in this house

☐ ₍₅₎ Haven't been able to sell the house

☐ ₍₈₈₎ Other (Please explain) _____

T.8 How would you want a new home to be different from this one?

- ☐ ₍₁₎ It would be a different tenure (rent or own) ☐ ₍₃₎ More utility services
☐ ₍₂₎ More bedrooms ☐ ₍₄₎ Nicer neighborhood
☐ ₍₈₈₎ Other (Please explain) _____

T.9 Have you ever tried to sell your land or house?

- ☐ ₍₁₎ Yes → *If Yes, when (what year)?* _____
☐ ₍₂₎ No

T.10 In total how many years were you actively trying to sell your land or house?

- ☐ ₍₁₎ Less than one year ☐ ₍₃₎ 3 to 5 years
☐ ₍₂₎ 1 to 2 years ☐ ₍₄₎ 6 or more years

T.11 After the 2008 financial/housing crisis, has anyone moved onto your lot because they lost their home or could not afford mortgage payments?

- ☐ ₍₁₎ Yes ☐ ₍₂₎ No

SECTION U: RENTER-OCCUPIED HOUSING

*This section is only for renters. If you own your home, you may continue to **SECTION V** below.*

U.1 In what year did you move to this dwelling? _____(year)

U.2 Why did you choose to *rent* instead of buying a house and lot? Check all that apply.

- ☐ ⁽¹⁾ Save money ☐ ⁽²⁾ Can't afford it ☐ ⁽³⁾ Is only temporary
☐ ⁽⁸⁸⁾ Otro (*specify*) _____

U.3 Why did you decide to rent *in this colonia* instead of renting elsewhere?

- ☐ ⁽¹⁾ My family lives here ☐ ⁽³⁾ Close to work ☐ ⁽⁵⁾ I liked the dwelling
☐ ⁽²⁾ I lived here before ☐ ⁽⁴⁾ I liked the neighborhood ☐ ⁽⁶⁾ Good price
☐ ⁽⁸⁸⁾ Other (*specify*) _____

U.4 How did you find out about the opportunity to rent here?

- ☐ ⁽¹⁾ Advertisement in newspaper ☐ ⁽⁵⁾ Sign in the neighborhood
☐ ⁽²⁾ By chance/a visit ☐ ⁽⁶⁾ From relatives
☐ ⁽³⁾ Word of mouth ☐ ⁽⁷⁾ At work
☐ ⁽⁴⁾ From neighbors/friends ☐ ⁽⁸⁸⁾ Other (*Specify*) _____

U.5 Does your landlord accept housing vouchers?

- ☐ ⁽¹⁾ Yes ☐ ⁽²⁾ No ☐ ⁽⁹⁸⁾ Don't know

U.6 Do you use any housing voucher to pay rent?

- ☐ ⁽¹⁾ Yes ☐ ⁽²⁾ No

U.7 How much do you pay to rent the dwelling per month (including any vouchers)?
\$ _____

U.8 What kind of agreement do you have with the owner?

☐₍₁₎ Written contract ☐₍₂₎ Oral contract

U.9 What conditions were required of you to rent (*for example: one month deposit, references, guarantee, etc.*)

☐₍₁₎ One month deposit ☐₍₂₎ References ☐₍₂₎ Nothing
☐₍₈₈₎ Otro (Specify) _____

SECTION V: FUTURE HOUSING PLANS

This section is only for renters.

V.1 Have you thought about moving from this dwelling?

- ☐₍₁₎ Yes → Why? _____
- ☐₍₂₎ No

V.2 Do you plan on buying a house or lot?

- ☐₍₁₎ Already bought one
- ☐₍₂₎ Yes, I plan on it → **Go to question V.7**
- ☐₍₃₎ No

V.3 If you have already bought, what did you buy and when?

- ☐₍₁₎ A house and lot (YEAR _____)
- ☐₍₃₎ A vacant lot (YEAR _____)
- ☐₍₈₈₎ Other (*Specify*) _____ (YEAR _____)

V.4 Did you solicit a loan or mortgage to buy the lot or dwelling?

- ☐₍₁₎ Yes ☐₍₂₎ No → Why not? _____

V.5 How did you pay for the lot/dwelling?

- | | |
|---|---|
| <input type="checkbox"/> ₍₁₎ Cash | <input type="checkbox"/> ₍₄₎ Loan from a credit unión |
| <input type="checkbox"/> ₍₂₎ Loan from family/friend | <input type="checkbox"/> ₍₅₎ Loan from the seller (monthly payments to the seller) |
| <input type="checkbox"/> ₍₃₎ Loan from a bank | <input type="checkbox"/> ₍₆₎ Mortgage → (Did you use the title as collateral?) |
| <input type="checkbox"/> ₍₈₈₎ Other (<i>Specify</i>) _____ | <input type="checkbox"/> ₍₁₎ Yes <input type="checkbox"/> ₍₂₎ No |
- _____

V.6 In total, approximately how much did you pay for the lot/dwelling? \$ _____

If you have already bought a lot, go to question V.11

V.7 If you have plans of buying, what do you plan to buy?

- ☐₍₁₎ A house and lot (YEAR _____)
☐₍₃₎ A vacant lot and contract someone to build the dwelling (YEAR _____)
☐₍₃₎ A vacant lot and build the house myself (YEAR _____)
☐₍₈₈₎ Other (*Specify*) _____ (YEAR _____)

V.8 How do you plan on paying for the house/lot?

- ☐₍₁₎ Cash ☐₍₄₎ Loan from a credit unión
☐₍₂₎ Loan from family/friend ☐₍₅₎ Loan from the seller (monthly payments to the seller)
☐₍₃₎ Loan from a bank ☐₍₆₎ Mortgage → (Did you use the title as collateral? _____)
☐₍₈₈₎ Other (*Specify*) _____

V.9 In total, approximately how much do you plan on spending on the lot/dwelling? _____

V.10 Are you currently saving to buy the lot/dwelling?

- ☐₍₁₎ Yes → How? ☐₍₁₎ Savings account ☐₍₈₈₎ Other (*Specify*)
☐₍₂₎ No

V.11 Do you know your credit score?

- ☐₍₁₎ Yes
☐₍₂₎ No

APPENDIX C: SPANISH LANGUAGE QUESTIONNAIRE

SECCIÓN A: DEMOGRÁFICA E INFORMACIÓN GENERAL DE LA VIVIENDA

Favor de entregarle la encuesta al (la) jefe(a) del hogar.

A.1. Es importante que esta encuesta sea contestado por uno de los jefes (jefa o jefe) del hogar, ¿es Ud. el (la) jefe(a) del hogar?

☐ ₍₁₎ Sí ☐ ₍₂₎ No *Si No, Favor de pasar esta encuesta al (la) jefe(a) del hogar*

A.2 ¿Para el(la) Jefe(a) de la familia:Cuál es su nombre y apellido?

A.3. ¿Quién es el dueño de este predio/solar?(¿Cómo se llama?)_____

A.4 ¿Cuál es la dirección (física) de su casa?_____

A.5 ¿Cuál es su género?

☐ ₍₁₎ Masculino ☐ ₍₂₎ Femenino

A.6 ¿Cuál es su etnicidad? Indique una categoría – (con palomita -- ✓)

☐ ₍₁₎ Mexicano (Nacido en México) → ¿Cuánto tiempo ha vivido en los EE.UU.? (años) _____

☐ ₍₂₎ Hispano (México Americano)

☐ ₍₃₎ Hispano (Otro)

☐ ₍₄₎ Africano Americano

☐ ₍₅₎ Anglo

☐ ₍₈₈₎ Otro (*Especifique*) _____

A.7 ¿El dueño de este lote/solar vive en su hogar?

☐ ₍₁₎ Sí *Si contestó que Sí, pase a la **Pregunta B.1***

☐ ₍₂₎ No

A.8 Si el dueño de este lote/solar no vive en su hogar, ¿que tipo de acuerdo tiene Usted con el dueño? En otras palabras, ¿Renta o vive en una casa prestada?

☐ ₍₁₎ Alquilo/rento la vivienda ☐ ₍₂₎ Un amigo o familiar me presta la vivienda.

☐ ₍₈₈₎ Otro (*especifique*) _____

SECCIÓN B: INFORMACIÓN DEL HOGAR

Las siguientes preguntas se tratan de los hogares (unidades familiares) que viven en el solar.

*EXPLICACIÓN: Hogar o unidad familiar = un hogar (unidad familiar) está formada por un grupo de personas (parientes o no) que usualmente cocinan y comen juntos. Por ejemplo, si su hijo, hija u otro familiar con o sin hijos viven en su misma casa y ustedes generalmente cocinan y comen juntos, entonces todos ustedes forman una sola unidad familiar. (Si son casas separadas esto quiere decir que son **varios** hogares)*

B.1 ¿Cuántas personas viven en su hogar? _____

B.2 ¿Cuántos hogares hay en este solar?

☐ ₍₁₎ Un hogar → Pase a la **Pregunta C.1**

☐ ₍₂₎ Dos hogares

☐ ₍₃₎ Tres hogares

*Si hay solamente un hogar en su solar, pase a la **Pregunta C.1***

B.3 ¿Quiénes son los integrantes de los otros hogares, o qué relación tienen con Ud? Puede marcar más de una respuesta.

☐ ₍₁₎ Padres (suegros)

☐ ₍₂₎ Hermano(a) - cuñado(a)

☐ ₍₃₎ Otro pariente

☐ ₍₄₎ Amigos

☐ ₍₅₎ No hay relación alguna

☐ ₍₈₈₎ Otro (*Especifique*) _____

B.4 ¿Los diferentes hogares juntan sus ingresos para cubrir los gastos?

☐ ₍₁₎ Sí Si, ¿cuáles gastos comparten con los otros hogares? _____

☐ ₍₂₎ No _____

B.5 ¿Algún integrante de los otros hogares es dueño de alguna parte del solar ?

☐ ₍₁₎ Sí

☐ ₍₂₎ No

SECCIÓN C: INFORMACIÓN SOBRE LA VIVIENDA ANTERIOR

C.1 ¿En cuál ciudad y estado vivía inmediatamente antes de mudarse a este solar?

Ciudad _____ Estado _____

C.2 En cuanto a la vivienda en que vivía inmediatamente antes de mudarse a este solar, ¿Era Ud. el dueño, inquilino, o vivía con un familiar?

- ☐ ⁽¹⁾ Eramos los dueños ☐ ⁽³⁾ Rentábamos de una asociación de vivienda
☐ ⁽²⁾ Rentábamos del dueño ☐ ⁽⁴⁾ Compartíamos una casa con familiares/amigos
☐ ⁽⁸⁸⁾ Otro (*Especifique*) _____

C.3 ¿En que tipo de vivienda vivía antes de mudarse a este solar? Puede marcar más de una respuesta.

- ☐ ⁽¹⁾ Vivienda Modular: *construida aparte y se encuentra sobre una plataforma o bloques*
☐ ⁽²⁾ Trailer (Vivienda Manufacturada): *construida aparte y tiene un chasis o plataforma de ruedas abajo*
☐ ⁽³⁾ Camper o RV: *vehículo recreacional*
☐ ⁽⁴⁾ Vivienda Construida por un Contratista en el lugar: *alguién fue contratado para construirla*
☐ ⁽⁵⁾ Vivienda Construida por uno mismo el lugar: *yo la construí por mi mismo o con ayuda familiar*
☐ ⁽⁸⁸⁾ Otro (*Especifique*) _____

C.4 ¿Cuántos dormitorios tenía su vivienda anterior? ____

C.5 En total, ¿Cuántas personas vivía en su vivienda anterior? ____

C.6 ¿Por qué decidió mudarse a este solar? _____

SECCIÓN D: ADQUISICIÓN Y OCUPACIÓN DE LA PROPIEDAD

NOTE: Esta sección es solamente para los DUEÑOS. Si Ud. no es el dueño, pase a la **SECCIÓN G y empiece con la pregunt **G.1**.**

D.1 ¿En qué AÑO compró su lote/solar?_____

D.2 ¿A quién compró el solar?

- ☐₍₁₎ Al dueño anterior ☐₍₂₎ Al fraccionador directamente ☐₍₃₎ Lo heredamos de un pariente
☐₍₈₈₎ Otro (*Especifique*) _____

D.3 ¿En qué AÑO se mudó a esta colonia/barrio? _____

D.4 ¿Compró solamente el solar o ambos el solar con una vivienda?

- ☐₍₁₎ El solar (*pase a la pregunta A*) ☐₍₂₎ El solar con una vivienda (*pase a la pregunta B*)



A) ¿Cuánto pagó por el solar?
\$_____

B) ¿Cuánto pagó por el solar y la vivienda? \$_____

¿De lo que pagó, cuánto costó la vivienda? \$_____

¿De lo que pagó, cuánto costó el solar? \$_____

D.5 ¿Sabe Ud. las medidas del solar?

- ☐₍₁₎ Sí → Especifique uno: Pies cuadrados:_____ Acres: _____ Dimensiones (pies): ____por____
☐₍₂₎ No

D.6 ¿Cuál fue el método principal para pagar el solar y/o la vivienda?

- ☐₍₁₎ Al contado ☐₍₄₎ Préstamo de una caja popular (credit union)
☐₍₂₎ Préstamo de un pariente/amigo ☐₍₅₎ Préstamo del vendedor (pagos mensuales al vendedor)
☐₍₃₎ Préstamo de un banco ☐₍₈₈₎ Otro (*Especifique*)_____

D.7 ¿De quién(es) o cómo supo de la oportunidad de comprar aquí? *Puede marcar más de una respuesta.*

☐ ⁽¹⁾ Anuncio en la prensa

☐ ⁽²⁾ Por casualidad / vista

☐ ⁽³⁾ Se corrió la voz

☐ ⁽⁴⁾ De unos vecinos / amigos

☐ ⁽⁵⁾ Anuncio en la colonia/barrio misma

☐ ⁽⁶⁾ De unos parientes

☐ ⁽⁷⁾ En el trabajo

☐ ⁽⁸⁸⁾ Otro (*Especifique*) _____

SECCIÓN E: HERENCIA Y EL TÍTULO DE PROPIEDAD

E.1 Cuándo Ud. compró este solar, ¿qué documentos le dieron?

- ☐ ⁽¹⁾ **Título de compra y venta (Contract for Deed)** (Esto es un contrato en que se pone de acuerdo a pagar al vendedor, y después de terminar todos los pagos el comprador recibe el título (deed)).
- ☐ ⁽²⁾ **Título de la propiedad (Deed)** (Esto es un documento firmado por el vendedor que contiene las palabras "deed" o "quitclaim deed" o "warranty deed" y se registra en el corte del condado)
- ☐ ⁽³⁾ **Recibos** ☐ ⁽⁴⁾ **Contrato Oral** ☐ ⁽⁹⁸⁾ **No sé**
- ☐ ⁽⁸⁸⁾ **Otro** (*Especifique*) _____

E.2 ¿Qué tipo de documento tiene ahora?

- ☐ ⁽¹⁾ **Título de compra y venta (Contract for Deed)** (Esto es un contrato en que se pone de acuerdo a pagar al vendedor, y después de terminar todos los pagos el comprador recibe el título (deed)).
- ☐ ⁽²⁾ **Título de la propiedad (Deed)** (Esto es un documento firmado por el vendedor que contiene las palabras "deed" o "quitclaim deed" o "warranty deed" y se registra en el corte del condado)
- ☐ ⁽³⁾ **Recibos** ☐ ⁽⁴⁾ **Contrato Oral** ☐ ⁽⁹⁸⁾ **No sé**
- ☐ ⁽⁸⁸⁾ **Otro** (*Especifique*) _____

E.3 ¿En qué año recibió los papeles que tiene hoy en día? _____

E.4 ¿Ha registrado su título/documentos con la corte del condado?

- ☐ ⁽¹⁾ **Sí** → ¿En qué año? _____ ☐ ⁽²⁾ **No** ☐ ⁽⁹⁸⁾ **No sé**

E.5 ¿A nombre de quién está(n) el título/los documentos? Puede marcar más de una respuesta.

- ☐ ⁽¹⁾ **Al nombre del señor** ☐ ⁽³⁾ **A los dos** ☐ ⁽⁵⁾ **Dueño anterior**
- ☐ ⁽²⁾ **Al nombre de la señora** ☐ ⁽⁴⁾ **Mis padres (o suegros)** ☐ ⁽⁹⁸⁾ **No sé**
- ☐ ⁽⁸⁸⁾ **Otros** (*Especifique nombre y relación*) _____

E.6 ¿Quién cree Ud. que heredará el solar y la propiedad cuando Ud o el dueño se muera?

- ☐ ⁽¹⁾ **El conyuge que sobrevive** ☐ ⁽³⁾ **Todos los hijos iguales**
- ☐ ⁽²⁾ **Hijo(a)** ☐ ⁽⁴⁾ **Los padres / abuelos**
- ☐ ⁽⁸⁸⁾ **Otros** (*Especifique*) _____

E.7 ¿Los dueños que aparecen en el título de la propiedad tienen un testamento?

- ☐ ₍₁₎ Sí, todos los dueños tienen testamento
- ☐ ₍₂₎ Por lo menos uno de los dueños tiene testamento
- ☐ ₍₃₎ Ninguno de los dueños tiene testamento

E.8 ¿Quién preferiría Ud. que heredara el solar y la propiedad en caso de que Ud. o el dueño se muriera?

- ☐ ₍₁₎ El conyuge que sobrevive
- ☐ ₍₃₎ Todos los hijos iguales
- ☐ ₍₂₎ Hijo(a)
- ☐ ₍₄₎ Los padres / abuelos
- ☐ ₍₈₈₎ Otros (*Especifique*) _____

SECCIÓN F: CARACTERÍSTICAS DEL SOLAR (Predio/lote)

F.1 En la sección que sigue, marque el tipo de vivienda que hay en su solar. Puede marcar más de una respuesta:

- ☐ ⁽¹⁾ Vivienda Modular: *construida aparte y se encuentra sobre una plataforma o bloques*
- ☐ ⁽²⁾ Trailer (Vivienda Manufacturada): *construida aparte y tiene un chasis o plataforma de ruedas abajo*
- ☐ ⁽³⁾ Camper o RV: *vehículo recreacional*
- ☐ ⁽⁴⁾ Vivienda Construida por un Contratista en el lugar: *alguién fue contratado para construirla*
- ☐ ⁽⁵⁾ Vivienda Construida por uno mismo el lugar: *yo la construí por mi mismo o con ayuda familiar*
- ☐ ⁽⁸⁸⁾ Otro (*Especifique*) _____
- _____

F.2 ¿Con cuáles de estos servicios cuenta el solar? Puede marcar más de una respuesta. Para cada servicio que tiene en este solar, especifique el año que tal servicio empezó y especifique cualquier problema que tenga con tal servicio.

	Año que empezó	¿Tiene problemas con este servicio? <i>Especifique</i>
<input type="checkbox"/> ⁽¹⁾ Electricidad	_____	_____
<input type="checkbox"/> ⁽²⁾ Agua en cañería / tubería	_____	_____
<input type="checkbox"/> ⁽³⁾ Fosa septic	_____	_____
<input type="checkbox"/> ⁽⁴⁾ Drenaje o alcantarilla	_____	_____
<input type="checkbox"/> ⁽⁵⁾ Recolección de basura	_____	_____
<input type="checkbox"/> ⁽⁶⁾ Recolección de reciclaje	_____	_____

F.3 En total, ¿de cuántos solares es Usted (o su cónyuge) dueño? ____

*Si solamente es dueño de un solar, pase a la **Pregunta G.1***

F.4 Si Ud. (o su cónyuge) es dueño de más de un solar, ¿dónde se ubican los otros solares?

- ☐ ⁽¹⁾ Al lado del solar principal ☐ ⁽²⁾ En otra colonia/barrio
- ☐ ⁽³⁾ En la misma colonia/barrio, pero no al lado del solar principal
- ☐ ⁽⁸⁸⁾ Otro (*Especifique*) _____

F.5 ¿Para que utiliza(n) el (los) otro(s) solar(es)?

- ☐ ⁽¹⁾ Vivimos en el ☐ ⁽²⁾ Lo prestamos a parientes ☐ ⁽³⁾ Lo rentamos a otros
- ☐ ⁽⁴⁾ Un negocio/empresa se ubica en el ☐ ⁽⁵⁾ Es baldío
- ☐ ⁽⁸⁸⁾ Otros (*Especifique*) _____

SECCIÓN G: EMPLEO E INGRESOS

G.1 ¿Cuántas personas en su hogar tienen empleo (trabajo) pagado actualmente? _____

G.2 Favor de proveer la siguiente información sobre el empleo: la edad del empleado, jornada de trabajo (tiempo completo o tiempo medio), y el tipo de trabajo.

	Edad	Tiempo Completo o Tiempo Medio	Trabajo (¿A qué se dedica?)
Trabajador 1		TC / TM	
Trabajador 2		TC / TM	
Trabajador 3		TC / TM	

G.3 Aproximadamente, ¿cuál es el ingreso (semanal o mensual) de su hogar incluyendo (todos los miembros) los apoyos económicos que reciban en su hogar? *No incluya los ingresos de otros hogares que vivan en el solar, si hay. Puede especificar o el ingreso semanal o el mensual—no hace falta especificar los dos.*

Ingresos aproximados por SEMANA		Ingreseos aproximados por MES	
<input type="checkbox"/> ₍₁₎ \$50 - \$149	<input type="checkbox"/> ₍₄₎ \$400 - \$599	<input type="checkbox"/> ₍₁₎ \$200 - \$599	<input type="checkbox"/> ₍₄₎ \$1600 - \$2399
<input type="checkbox"/> ₍₂₎ \$150 - \$249	<input type="checkbox"/> ₍₅₎ \$600 - \$799	<input type="checkbox"/> ₍₂₎ \$600 - \$999	<input type="checkbox"/> ₍₅₎ \$2400 - \$3199
<input type="checkbox"/> ₍₃₎ \$250 - \$399	<input type="checkbox"/> ₍₆₎ más de \$800 ¿cuánto? _____	<input type="checkbox"/> ₍₃₎ \$1000 - \$1599	<input type="checkbox"/> ₍₆₎ más de \$3200 ¿cuánto? _____

G.4 ¿Ha faltado algún miembro de su hogar al trabajo a causa de un problema de la salud o de una discapacidad/herido?

- ☐₍₁₎ Sí Si contest que Sí, cuántos días del trabajo faltó? _____
- ☐₍₂₎ No

G.5 ¿Hay niños/adolescentes que son trabajadores migrantes?

- ☐₍₁₎ Sí ☐₍₂₎ No

G.6 ¿Hay miembros de su hogar que tienen interes en participar en programas de capacitación?

- ☐₍₁₎ Sí ☐₍₂₎ No Si No, pase a la pregunta **M.71**

G.7 Si contestó que Sí, ¿cómo se llaman, cuántos años tienen, y que tipo que capacitación quieren recibir?

	Nombre	Edad	Capacitación deseada
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____

SECCIÓN H: SALUD Y DISCAPACIDAD

H.1 Algún miembro de su hogar es discapacitada?

- ☐ ₍₁₎ Sí → ¿Cuál es su edad y su discapacidad? → Edad _____ Discapacidad _____
- ☐ ₍₂₎ No Edad _____ Discapacidad _____
- Edad _____ Discapacidad _____

H.2 En los últimos 12 meses, ¿algún niño de su hogar ha faltado más de 15 días escolares a causa de una enfermedad?

- ☐ ₍₁₎ Sí → ¿Cuál es su edad su enfermedad, y cuántos días faltó? Edad _____ Días que faltó _____ Enfermedad _____
- ☐ ₍₂₎ No Edad _____ Días que faltó _____ Enfermedad _____

H.3 ¿Hay mejoras que necesita hacer a su vivienda para acomodar a alguien con una enfermedad o incapacidad?

- ☐ ₍₁₎ Sí → Si Sí, ¿cuáles mejoras necesita hacer? _____
- ☐ ₍₂₎ No _____

H.4 ¿Tienen los miembros de su hogar seguro medico?

- ☐ ₍₁₎ Sí, todos los miembros tienen seguro médico
- ☐ ₍₂₎ Sí, pero solamente algunos miembros tienen seguro médico
- ☐ ₍₃₎ No, ningún miembro tiene seguro médico

H.5 ¿Qué tipo de seguro medico tienen los varios miembros de su hogar? Puede marcar más de una respuesta.

- ☐ ₍₁₎ Sí—Medicare ☐ ₍₃₎ Sí —Seguro medico del trabajo ☐ ₍₅₎ No
- ☐ ₍₂₎ Sí —Medicaid ☐ ₍₄₎ Sí —Seguro medico de una compania privada ☐ ₍₉₈₎ No sé
- ☐ ₍₈₈₎ Otro (Especifique)
- _____

SECCIÓN J: EDUCACIÓN:

J.1 Favor de apuntar el nombre, edad, género, y el número de años de educación que cada persona ha terminado, empezando por Ud.

	Nombre de pila	Edad	Género (elige uno)	Años de escuela terminado (si terminó la secundaria, especifique →)	Terminó carrera técnica/vocacional (2 años de la universidad)	Terminó la licenciatura (4 años de la Universidad)
1	Encuestado:		M F		S N	S N
2			M F		S N	S N
3			M F		S N	S N
4			M F		S N	S N
5			M F		S N	S N
6			M F		S N	S N
7			M F		S N	S N
8			M F		S N	S N

La siguiente sección se trata de la educación de los niños. Si no hay niños en el hogar, pase a la Sección K.

J.2 En cuanto a las escuelas cercanas, ¿se siente...?

☐₍₁₎ Muy contento ☐₍₂₎ Contento ☐₍₃₎ Más o menos ☐₍₄₎ Descontento ☐₍₅₎ Muy descontento

J.3 Si contestó que se siente descontento o muy descontento con las escuelas cercanas, especifique por que. _____

SECCIÓN K: USO DE TRANSPORTE

K.1 ¿Aproximadamente cuánto cree que gasta su hogar en transporte por semana? \$_____

K.2 ¿Entre todos los miembros de su lugar, cuántos coches (que funcionan) tienen?

K.3 ¿Cuántas personas en su hogar necesitan viajar para llegar al trabajo (empleo) cada semana? #_____

K.4 Favor de anotar las cuatro personas que más trabajan fuera del hogar, la distancia, el tiempo, y el tipo de transporte que usan para llegar a su lugar de empleo.

Edad	Distancia	Tiempo	Tipo de Transporte Maneja Coche Solo En Bus Maneja con Otros A pie/por bicicleta Otro (<i>especifique</i>)
Persona 1: _____	_____ millas (viaje sencillo)	___ horas ___ minutos (viaje sencillo)	
Persona 2: _____	_____ millas (viaje sencillo)	___ horas ___ minutos (viaje sencillo)	
Persona 3: _____	_____ millas (viaje sencillo)	___ horas ___ minutos (viaje sencillo)	
Persona 4: _____	_____ millas (viaje sencillo)	___ horas ___ minutos (viaje sencillo)	

K.5 ¿Algún miembro de su hogar usa el transporte público?

☐ ₍₁₎ Sí → ¿Qué tipo de transporte público usan? _____

☐ ₍₂₎ No

K.6 ¿Le es difícil (para Ud. o cualquier miembro del hogar) viajar al trabajo, a la escuela, o a otro lugar?

☐ ₍₁₎ Sí ☐ ₍₂₎ No Si No, pase a **la pregunta L.1**

K.7 ¿Por qué le es difícil viajar? _____

SECCIÓN L: PRÉSTAMOS

NOTE: Esta sección es solamente para los DUEÑOS de la propiedad. Si Ud. no es dueño de la propiedad, pase a la **SECCIÓN M** y empiece con la **Pregunta M.1**

L.1 Desde que recibió su título de propiedad, ha recibido un préstamo financiero de algún banco u otra organización para hacer mejoras a su vivienda o para nueva construcción en su solar (no incluir préstamos de parientes/amistades sino sólo de fuentes financieras oficiales).

☐ ⁽¹⁾ Sí ☐ ⁽²⁾ No Si No, pase a la **Pregunta L.7**

L.2 ¿En total, cuál es el valor de TODOS los préstamos que ha recibido para hacer mejoras a la vivienda o para nueva construcción? \$_____

L.3 ¿Cuándo fueron las últimas cuatro veces que ha recibido préstamos y de qué institución financiera? Especifique el año que recibió el préstamo y el nombre de la casa financiera.

	Año	Nombre de la Institución Financiera	Valor del Préstamo
1	_____	Institución financiera _____	Valor (\$) _____
2	_____	Institución financiera _____	Valor (\$) _____
3	_____	Institución financiera _____	Valor (\$) _____
4	_____	Institución financiera _____	Valor (\$) _____

L.4 ¿Sabe Ud que puede usar su título de propiedad (como aval / garantía) para solicitar un préstamo?

☐ ⁽¹⁾ Sí ☐ ⁽²⁾ No Si No, pase a la **Pregunta L.7**

L.5 ¿Ud ha utilizado su título para pedir un préstamo?

☐ ⁽¹⁾ Sí ☐ ⁽²⁾ No Si No, pase a la **Pregunta L.7**

L.6 ¿Si Ud ha utilizado su título para pedir un préstamo, en qué usó el préstamo?

<input type="checkbox"/> ⁽¹⁾ Mejoras en la vivienda	<input type="checkbox"/> ⁽⁴⁾ Pagar la educación de un niño	<input type="checkbox"/> ⁽⁶⁾ Gastos médicos/dentales
<input type="checkbox"/> ⁽²⁾ Comprar una vivienda nueva	<input type="checkbox"/> ⁽⁵⁾ Pagar la educación de un adulto	<input type="checkbox"/> ⁽⁷⁾ Financiar un negocio
<input type="checkbox"/> ⁽³⁾ Comprar o arreglar un auto	<input type="checkbox"/> ⁽⁸⁸⁾ Otro (Especifique) _____	

L.7 A sabiendas de que puede usar su propiedad como aval (garantía) para solicitar un préstamo, ¿estaría dispuesto a hacerlo en el futuro?

☐₍₁₎ Sí ☐₍₂₎ No → Si No, ¿por qué no? _____

L.8 ¿Usted cree que es muy arriesgado usar su propiedad como aval para un préstamo?? Favor de seleccionar la respuesta que mejor refleja su opinión

☐₍₁₎ Muy arriesgado ☐₍₂₎ Arriesgado ☐₍₃₎ Más o menos arriesgado ☐₍₄₎ Poco arriesgado ☐₍₅₎ Nada de riesgo

SECCIÓN M: ACTIVIDAD CÍVICA

M.1 ¿Se ha registrado para votar?

☐₍₁₎ Sí ☐₍₂₎ No Si No, pase a la **Pregunta M.4**

M.2 Si contestó que Sí, ¿ha seleccionado un partido de preferencia?

☐₍₁₎ Demócrata ☐₍₂₎ Republicano
☐₍₃₎ Independiente ☐₍₄₎ No tiene partido de preferencia
☐₍₈₈₎ Otro (*Especifique*): _____

M.3 ¿Con qué frecuencia ha votado en los últimos 10 años?

☐₍₁₎ Siempre ☐₍₂₎ Casi siempre ☐₍₃₎ A veces ☐₍₄₎ Casi nunca ☐₍₅₎ Nunca

M.4 En los últimos 10 años, ¿Se ha comunicado con líderes comunitarios o políticos (del municipio, del estado, de la nación)?

☐₍₁₎ Sí ☐₍₂₎ No Si No, pase a la **Pregunta N.1**

M.5 ¿Con quién se ha comunicado y sobre qué? Puede marcar más de una respuesta.

¿Con quién?

¿Sobre qué?

<input type="checkbox"/> ₍₁₎ Líderes comunitarios o del municipio	_____
<input type="checkbox"/> ₍₂₎ Líderes del estado	_____
<input type="checkbox"/> ₍₃₎ Líderes de la nación	_____
<input type="checkbox"/> ₍₄₎ Otro (<i>Especifique</i>) _____	_____

M.6 ¿Cómo se comunicó con estos líderes? Puede marcar más de una respuesta.

☐₍₁₎ En persona ☐₍₂₎ Reuniones comunitarias
☐₍₃₎ Por carta ☐₍₄₎ Por teléfono ☐₍₅₎ Por correo electrónico
☐₍₈₈₎ Otro (*Especifique*): _____

M.7 ¿Con qué frecuencia se ha comunicado con estos líderes?

☐₍₁₎ Menos de una vez por año

☐₍₂₎ 1 – 5 veces por año

☐₍₃₎ 6 - 10 veces por año

☐₍₄₎ Más de 10 veces por año

SECCIÓN N: MEJORAS A LA VIVIENDA

N.1 En los últimos 10 años, ¿ha hecho Ud una de las siguientes mejoras? Especifique la mejora y el año que terminó la obra.

- | | |
|--|--|
| <input type="checkbox"/> ⁽¹⁾ Remodelar habitación (año____) | <input type="checkbox"/> ⁽⁴⁾ Reparación de techo (año____) |
| <input type="checkbox"/> ⁽²⁾ Poner/cambiar piso (año____) | <input type="checkbox"/> ⁽⁵⁾ Mejoras al jardín/patio (año____) |
| <input type="checkbox"/> ⁽³⁾ Garage/cochera (año____) | <input type="checkbox"/> ⁽⁶⁾ Comprar unidad adicional (año____) |
| <input type="checkbox"/> ⁽⁸⁸⁾ Otro (<i>Especifique</i>) (año____)_____ | |
| <input type="checkbox"/> ⁽⁷⁾ No se han hecho mejoras significantes <i>Pase a la</i> Pregunta N.4 | |

N.2 ¿Cómo pagó estás mejoras? Puede marcar más de una respuesta

- | | | |
|---|---|--|
| <input type="checkbox"/> ⁽¹⁾ Préstamo oficial | <input type="checkbox"/> ⁽³⁾ Préstamo de un pariente / amigo | <input type="checkbox"/> ⁽⁵⁾ Ahorros / efectivo |
| <input type="checkbox"/> ⁽²⁾ Tarjeta de crédito | <input type="checkbox"/> ⁽⁴⁾ Con crédito del vendedor | <input type="checkbox"/> ⁽⁶⁾ Herencia |
| <input type="checkbox"/> ⁽⁷⁾ Impuesto sobre ingresos (Income tax return) | | |
| <input type="checkbox"/> ⁽⁸⁸⁾ Otro (<i>Especifique</i>)_____ | | |

N.3 En total, ¿en los últimos 10 años cuánto ha gastado en mejoras en la vivienda? \$ _____

N.4 ¿Usted considera que la crisis hipotecaria (mortgage) financiera ha afectado su habilidad de hacer mejoras a su propiedad?

- | | | | | |
|---|---|---|---|---|
| ⁽¹⁾ <input type="checkbox"/> Para nada | ⁽²⁾ <input type="checkbox"/> Un poco | ⁽³⁾ <input type="checkbox"/> Ligeramente | ⁽⁴⁾ <input type="checkbox"/> Mucho | ⁽⁵⁾ <input type="checkbox"/> Muchísimo |
|---|---|---|---|---|

SECCIÓN O: CONDICIONES ACTUALES

0.1 ¿Cuántas habitaciones hay en SU HOGAR (se refiere solamente a su hogar, y no los otros hogares en este solar, si los hay). Especifique el número de cocinas, salas, baños, y dormitorios.

(1) Cocina	0	1	2	3	4	5	6
(2) Sala	0	1	2	3	4	5	6
(3) Baños medios (sin ducha o tina)	0	1	2	3	4	5	6
(4) Baños completos (con ducha o tina)	0	1	2	3	4	5	6
(5) Comedor independiente	0	1	2	3	4	5	6
(6) Cuartos (dormitorios)	0	1	2	3	4	5	6

0.2 ¿Algunas partes de su vivienda están sin terminar?

☐ (1) Sí ☐ (2) No Si No, pase a la **Pregunta 0.4**

0.3 En caso de que sí, favor de indicar el tipo de mejora que queda sin terminar e indique el número de espacios en la vivienda que necesitan estas mejoras.

- | | |
|--|---|
| <input type="checkbox"/> (1) Sin yeso (sheetrock) (# de cuartos____) | <input type="checkbox"/> (5) Sin cañerías/tuberías (# de cuartos____) |
| <input type="checkbox"/> (2) Sin puertas (# de cuartos____) | <input type="checkbox"/> (6) Sin piso adecuado (# de cuartos____) |
| <input type="checkbox"/> (3) No zócalo/rodapie (# de cuartos____) | <input type="checkbox"/> (7) Sin insulación (# de cuartos____) |
| <input type="checkbox"/> (4) Sin cableo eléctrico (# de cuartos____) | |
| <input type="checkbox"/> (88) Otro (Especifique) (# de cuartos____) | _____ |

0.4 ¿Su vivienda tiene algunos problemas que le gustaría resolver?

☐ (1) Sí → En caso de que sí, favor de indicar cuales son los problemas más serios (Hasta cinco y en orden de importancia).

- ☐ (2) No
1. _____
 2. _____
 3. _____
 4. _____
 5. _____

SECCIÓN P: MEJORAS A LA VIVIENDA A FUTURO

P.1 ¿Ud piensa hacer mejoras significantes a su vivienda en los próximos 2 años?

☐ ⁽¹⁾ Sí ☐ ⁽²⁾ No Si No, pase a la **Pregunta P.5**

P.2 ¿Cuál de las siguientes mejoras piensa hacer Ud en los próximos 2 años?

☐ ⁽¹⁾ Remodelar un cuarto ☐ ⁽²⁾ Poner/cambiar piso ☐ ⁽³⁾ Mejoras al jardín/patio
☐ ⁽⁴⁾ Garage/cochera ☐ ⁽⁵⁾ Reparar el techo ☐ ⁽⁶⁾ Comprar unidad adicional
☐ ⁽⁸⁸⁾ Otro (Especifique) _____

P.3 ¿Cómo piensa pagar por estas mejoras a la vivienda?

☐ ⁽¹⁾ Préstamo oficial ☐ ⁽³⁾ Préstamo de un pariente / amigo ☐ ⁽⁵⁾ Ahorros / efectivo
☐ ⁽²⁾ Tarjeta de crédito ☐ ⁽⁴⁾ Con crédito del vendedor ☐ ⁽⁶⁾ Herencia
☐ ⁽⁷⁾ Impuesto sobre ingresos (Income tax)
☐ ⁽⁸⁸⁾ Otro (Especifique) _____

P.4 En total, ¿cuánto piensa gastar en mejoras a la vivienda durante los próximos 2 dos años?
 \$ _____

P.5 ¿Algún miembro de su hogar tiene habilidades y/o experiencia en la industria de la construcción?

☐ ⁽¹⁾ Sí ☐ ⁽²⁾ No Si No, pase a la **Pregunta Q.1**

P.6 Si algunos miembros de su hogar si tienen habilidades o experiencia en construcción, favor de especificar. (Use estos ejemplos cómo guía; puede anotar el número que corresponde a cada habilidad o tambien puede escribir el nombre de la habilidad si no aparece en la lista.)

	Edad	Habilidades que tienen esta persona (puede marcar más de una)	Ejémplos de Habidades en Construcción		
Persona 1			⁽¹⁾ Pintar	⁽⁵⁾ Echar cemento	⁽⁹⁾ Plomería
Persona 2			⁽²⁾ Pisos	⁽⁶⁾ Tabiques/Mortar	⁽¹⁰⁾ HVAC –
Persona 3			⁽³⁾ Cimientos	⁽⁷⁾ Eléctrico	Calefacción, Aire
Persona 4			⁽⁴⁾ Techo	⁽⁸⁾ Carpintería	acondicionado

SECCIÓN Q: VIVIENDA SOSTENIBLE

Las próximas preguntas se tratan de mejoras “verdes” o ecológicas (sostenibles) a la vivienda. Mejoras “verdes” o ecológicas (sostenibles) a la vivienda son cambios a la vivienda o la propiedad que usan los recursos de manera eficiente o no dañan al medioambiente.

Q.1 ¿Cuál de las siguientes frases mejor describe su conocimiento de mejoras “verdes” o ecológicas?

- | | |
|--|---|
| <input type="checkbox"/> ₍₁₎ Nunca he oído de las mejoras “verdes” ecológicas, y sostenibles | <input type="checkbox"/> ₍₃₎ Sé un poco sobre las mejoras “verdes” ecológicas, y sostenibles |
| <input type="checkbox"/> ₍₂₎ He oído de las mejoras “verdes” ecológicas, y sostenibles pero no se qué son | <input type="checkbox"/> ₍₄₎ Sé mucho sobre las mejoras “verdes” ecológicas, y sostenibles |

Q.2 ¿De cuál de las siguientes mejoras “verdes” o métodos sostenibles ha escuchado Ud?

<input type="checkbox"/> ₍₁₎ Captar la lluvia	<input type="checkbox"/> ₍₅₎ Bombilla de bajo consumo	<input type="checkbox"/> ₍₉₎ Uso reducido de servicios
<input type="checkbox"/> ₍₂₎ Panel solar	<input type="checkbox"/> ₍₆₎ Microclima exterior	<input type="checkbox"/> ₍₁₀₎ Reciclar
<input type="checkbox"/> ₍₃₎ Calentador de agua solar	<input type="checkbox"/> ₍₇₎ Mejoras de aislamiento	<input type="checkbox"/> ₍₁₁₎ Lugar donde se amontan desechos para preparar abono
<input type="checkbox"/> ₍₄₎ Diseño solar del edificio	<input type="checkbox"/> ₍₈₎ Aparato electrodoméstico de bajo consumo	
<input type="checkbox"/> ₍₈₈₎ Otro (<i>Especifique</i>) _____		

Q.3 ¿Usa Ud actualmente una de las mejoras “verdes,” ecológicas, y sostenibles mencionadas anteriormente?

- ☐ ₍₁₎ Sí ☐ ₍₂₎ No *Sí No, pase a la **Pregunta R.1***

Q.4 ¿Cuál de las siguientes mejoras “verdes” ecológicas, y sostenibles usa actualmente?

<input type="checkbox"/> ₍₁₎ Captar la lluvia	<input type="checkbox"/> ₍₅₎ Bombilla de bajo consumo	<input type="checkbox"/> ₍₉₎ Uso reducido de servicios
<input type="checkbox"/> ₍₂₎ Panel solar	<input type="checkbox"/> ₍₆₎ Microclima exterior	<input type="checkbox"/> ₍₁₀₎ Reciclar
<input type="checkbox"/> ₍₃₎ Calentador de agua solar	<input type="checkbox"/> ₍₇₎ Mejoras de aislamiento	<input type="checkbox"/> ₍₁₁₎ Lugar donde se amontan desechos para preparar abono
<input type="checkbox"/> ₍₄₎ Diseño solar del edificio	<input type="checkbox"/> ₍₈₎ Aparato electrodoméstico de bajo consumo	
<input type="checkbox"/> ₍₈₈₎ Otro (<i>Especifique</i>) _____		

Q.5 ¿De dónde aprendió de estas mejoras ecológicas (sostenibles)? Puede marcar más de una..

<input type="checkbox"/> ₍₁₎ La familia	<input type="checkbox"/> ₍₃₎ Un vecino	<input type="checkbox"/> ₍₅₎ La iglesia
<input type="checkbox"/> ₍₂₎ La escuela del niño	<input type="checkbox"/> ₍₄₎ Los medios de comunicación (la televisión, la radio, los periodicos)	<input type="checkbox"/> ₍₆₎ Organización comunitaria
<input type="checkbox"/> ₍₈₈₎ Otro (<i>Especifique</i>) _____		

SECCIÓN R: EL CLIMA DENTRO DE LA VIVIENDA

R.1 ¿Tiene un aire acondicionado en su vivienda?

☐ ₍₁₎ Sí ☐ ₍₂₎ No *Si No, pase a la* **Pregunta R.3**

R.2 Si contestó que sí tiene un aire acondicionado, ¿qué tipo de systema de aire tiene?

☐ ₍₁₎ Aire central ☐ ₍₂₎ Acondicionado de la pared o la ventana (¿cuantos? _____)

R.3 ¿Hace demasiado calor dentro de la vivienda durante el verano?

☐ ₍₁₎ Una vez ☐ ₍₂₎ Pocas veces ☐ ₍₃₎ De vez en cuando ☐ ₍₄₎ Muchas Veces ☐ ₍₅₎ Siempre

R.4 Si contestó que “muchas veces” o “siempre” hace calor dentro de la vivienda, que es la causa del calor? _____

R.5 Tiene un sistema de calefacción dentro de la vivienda?

☐ ₍₁₎ Sí ☐ ₍₂₎ No *Si No, pase a la* **Pregunta R.7**

R.6 Si tiene un sistema de calefacción dentro de la vivienda, ¿qué tipo de sistema de caleacción tiene?

☐ ₍₁₎ Calentador central ☐ ₍₂₎ Calentador de leña/carbon ☐ ₍₃₎ Calentador portátil (¿cuantos? ____)

R.7 ¿Hace demasiado frío dentro de la vivienda durante el invierno?

☐ ₍₁₎ Una vez ☐ ₍₂₎ Pocas veces ☐ ₍₃₎ De vez en cuando ☐ ₍₄₎ Muchas Veces ☐ ₍₅₎ Siempre

R.8 Si contestó que “muchas veces” o “siempre” hace frío dentro de la vivienda, que es la causa del frío? _____

SECCIÓN S: CONDICIONES DE LA COLONIA/BARRIO

S.1 En los últimos 10 años, algún vecino colindante (a su izquierda o derecha) ha hecho algunas de las siguientes:

Subdividir su lote/solar	<input type="checkbox"/> ₍₁₎ Sí	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ No sé
Perder su terreno/vivienda por falta de pagos	<input type="checkbox"/> ₍₁₎ Sí	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ No sé
Comprar y ocupar un solar baldío	<input type="checkbox"/> ₍₁₎ Sí	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ No sé
Vender y dejar de vivir en la propiedad	<input type="checkbox"/> ₍₁₎ Sí	<input type="checkbox"/> ₍₂₎ No	<input type="checkbox"/> ₍₉₈₎ No sé

S.2 En su opinion, ¿qué es lo que le gusta de vivir en esta colonia/barrio? Si quiere, puede marcar más de una respuesta

<input type="checkbox"/> ₍₁₎ Vecinos	<input type="checkbox"/> ₍₄₎ Cercanía a la familia	<input type="checkbox"/> ₍₇₎ Más amplio/ambiente rural
<input type="checkbox"/> ₍₂₎ Bajo costo, económico	<input type="checkbox"/> ₍₅₎ Seguridad	
<input type="checkbox"/> ₍₃₎ Buena inversión	<input type="checkbox"/> ₍₆₎ La vivienda se puede construir poco a poco	
<input type="checkbox"/> ₍₈₈₎ Otro (<i>Especifique</i>) _____		

S.3 En su opinión, ¿Qué es lo que no le gusta de vivir en esta colonia/barrio? Puede marcar más de una respuesta.

<input type="checkbox"/> ₍₁₎ Vecinos	<input type="checkbox"/> ₍₃₎ Falta de servicios	<input type="checkbox"/> ₍₅₎ Lejos al trabajo, ciudad
<input type="checkbox"/> ₍₂₎ Mala inversión	<input type="checkbox"/> ₍₄₎ No es seguro	
<input type="checkbox"/> ₍₈₈₎ Otro (<i>Especifique</i>) _____		

SECCIÓN T: VENTAS DE LA PROPIEDAD

T.1 ¿Sabe Ud a cuánto se está vendiendo solares baldíos (o sea, no ocupados) del mismo tamaño al suyo en esta colonia/barrio?

☐ ₍₁₎ Sí → ¿Cuánto aproximadamente? \$ _____ ☐ ₍₂₎ No

T.2 ¿Cuánto cree que valdría su casa y el solar hoy en día en caso de venderla?

Aproximadamente \$ _____ ☐ ₍₉₈₎ No sé

T.3 Del precio de venta total, ¿cuánto corresponde al solar y cuánto a la construcción física?

Solar/ terreno (con servicios) \$ _____

Construcción física y otras mejoras \$ _____

T.4 ¿Ha pensado mudarse de esta vivienda en los últimos 2 años?

☐ ₍₁₎ Sí ☐ ₍₂₎ No Si No, pase a la **Pregunta T.9**

T.5 Si ha pensado mudarse de aquí, ¿por qué quería mudarse?

☐ ₍₁₎ Quería una casa mejor ☐ ₍₃₎ Por el trabajo ☐ ₍₄₎ Para estar mas cerca a la familia
☐ ₍₂₎ Quería vivir en una colonia/barrio mejor ☐ ₍₅₎ Es demasiado caro aquí
☐ ₍₈₈₎ Otro (*Especifique*) _____

T.6 ¿A dónde quería mudarse?

Estado _____ Ciudad _____ Colonia/Barrio _____

T.7 ¿Qué le impidió mudarse? (¿Por qué no se mudó?)

☐ ₍₁₎ Es demasiado caro ☐ ₍₃₎ Tenemos deudas aquí
☐ ₍₂₎ No hemos encontrado un lugar adecuado ☐ ₍₄₎ Hemos invertido demasiado aquí
☐ ₍₅₎ No hemos podido vender la vivienda
☐ ₍₈₈₎ Otro (*Especifique*) _____

T.8 Si se mudara a una nueva casa, ¿como querría que fuera diferente a su casa actual?

- ☐ ₍₁₎ Cambiar tenencia (rentar o ser dueño) ☐ ₍₃₎ Más servicios
- ☐ ₍₂₎ Más recámaras ☐ ₍₄₎ Mejor colonia/barrio
- ☐ ₍₈₈₎ Otro (*Especifique*) _____

T.9 ¿Ha intentado alguna vez vender su solar o vivienda?

- ☐ ₍₁₎ Sí → ¿Cuándo? (*¿en qué año?*) _____
- ☐ ₍₂₎ No

T.10 En total, ¿por cuántos años intentaba vender su solar o vivienda?

- ☐ ₍₁₎ Menos de un año ☐ ₍₃₎ 3 a 5 años
- ☐ ₍₂₎ 1 a 2 años ☐ ₍₄₎ 6 o más años

T.11 Después de la crisis hipotecaria (mortgage) financiera del 2008, ha llegado alguna persona a vivir a su vivienda por no poder pagar su hipoteca (mortgage)?

- ☐ ₍₁₎ Sí ☐ ₍₂₎ No

SECCIÓN U: INQUILINOS

Esta sección es solamente para inquilinos (los que rentan). Si Ud es dueño de su vivienda, puede pasar a la SECCIÓN V.

U.1 ¿En qué año se mudó a esta vivienda? _____ (año)

U.2 ¿Por qué decidió *rentar* en vez de comprar una vivienda y solar? Puede marcar más de una respuesta.

- ☐ ₍₁₎ Ahorrar dinero ☐ ₍₂₎ No nos lo podemos permitir ☐ ₍₅₎ Es temporal
☐ ₍₈₈₎ Otro (especifique) _____

U.3 ¿En vez de rentar en otro lugar, por qué decidió rentar *aquí en esta colonia*?

- ☐ ₍₁₎ Mi familia vive aquí ☐ ₍₃₎ Cerca al trabajo ☐ ₍₅₎ Me gustaba la vivienda
☐ ₍₂₎ Yo vivía aquí antes ☐ ₍₄₎ Me gustaba la colonia ☐ ₍₆₎ Buen precio
☐ ₍₈₈₎ Otro (especifique) _____

U.4 ¿Cómo se enteró de que había vivienda en renta en esta colonia/barrio?

- ☐ ₍₁₎ Anuncio en el periódico ☐ ₍₅₎ Letrero en la colonia/barrio misma
☐ ₍₂₎ Por casualidad / vista ☐ ₍₆₎ De unos parientes
☐ ₍₃₎ Se corrió la voz ☐ ₍₇₎ En el trabajo
☐ ₍₄₎ De unos vecinos / amigos ☐ ₍₈₈₎ Otro (*Especifique*) _____

U.5 ¿Sabe Ud. si el propietario acepta algún tipo de vale para pagar la renta?

- ☐ ₍₁₎ Sí ☐ ₍₂₎ No ☐ ₍₉₈₎ No sé

U.6 ¿Usa Ud. algún vale para ayudarle a pagar la renta?

- ☐ ₍₁₎ Sí ☐ ₍₂₎ No

U.7 ¿Cuánto paga de renta cada mes (incluyendo el valor de cualquier vale)? \$_____

U.8 ¿Qué tipo de trato hicieron?

☐₍₁₎ Contrato por escrito ☐₍₂₎ Contrato oral

U.9 ¿Qué condiciones le pidieron para alquilarla (*por ejemplo: un mes de depósito, referencias, aval, etc.*)

☐₍₁₎ Un mes de deposito ☐₍₂₎ Referencias ☐₍₂₎ Nada

☐₍₈₈₎ Otro (*Especifique*)_____

SECCIÓN V: CAMBIOS DE VIVIENDA A FUTURO

Esta sección solo es para los que rentan.

V.1 ¿Ha pensado mudarse de aquí?

☐₍₁₎ Sí → ¿Por qué? _____

☐₍₂₎ No

V.2 ¿Tiene planes de comprar una propiedad?

☐₍₁₎ Ya ha comprado

☐₍₂₎ Si lo he pensado → Pase a la **Pregunta V.7**

☐₍₃₎ No

V.3 Si ya ha comprado, ¿Qué compró y cuándo?

☐₍₁₎ Una casa y solar (AÑO _____)

☐₍₂₎ Un solar baldío (AÑO _____)

☐₍₈₈₎ Otro (*Especifique*) _____ (AÑO _____)

V.4 ¿Intentó pedir un préstamo/hipoteca para comprar la vivienda/el solar?

☐₍₁₎ Sí ☐₍₂₎ No → ¿Por qué no? _____

V.5 ¿Cómo pagó el solar y/o la vivienda?

☐₍₁₎ Al contado

☐₍₄₎ Préstamo de una caja popular (credit union)

☐₍₂₎ Préstamo de un pariente/amigo

☐₍₅₎ Préstamo del vendedor (pagos mensuales al vendedor)

☐₍₃₎ Préstamo de un banco

☐₍₆₎ Una hipoteca → ¿Usó el título como garantía?

☐₍₈₈₎ Otro (*Especifique*) _____

☐₍₁₎ Sí

☐₍₂₎ No

V.6 En total, ¿Aproximadamente cuánto gastó para comprar el solar/la vivienda? \$_____

*Si ya ha comprado un solar, pase a la **Pregunta V.11.***

V.7 Si tiene planes de comprar, ¿Qué piensa comprar y cuándo?

- ☐₍₁₎ Una casa y solar (AÑO _____)
- ☐₍₃₎ Un solar baldío y contratar a alguien a construirla (AÑO _____)
- ☐₍₂₎ Un solar baldío y construirla yo mismo (AÑO _____)
- ☐₍₈₈₎ Otro (*Especifique*)_____ (AÑO _____)

V.8 ¿Cómo piensa pagar el solar y/o la vivienda?

- ☐₍₁₎ Al contado ☐₍₄₎ Préstamo de una caja popular (credit union)
- ☐₍₂₎ Préstamo de un pariente/amigo ☐₍₅₎ Préstamo del vendedor (pagos mensuales al vendedor)
- ☐₍₃₎ Préstamo de un banco ☐₍₆₎ Una hipoteca
- ☐₍₈₈₎ Otro (*Especifique*)_____

V.9 En total, ¿Aproximadamente cuánto piensa gastar para comprar el solar/la vivienda?
\$_____

V.10 Actualmente, ¿está Ud. ahorrando para comprar la vivienda/el solar?

- ☐₍₁₎ Sí → ¿Cómo? ☐₍₁₎ Cuenta de ahorros ☐₍₈₈₎ Otro (*Especifique*)
- ☐₍₂₎ No

V.11 ¿Sabe Ud. la calidad de su crédito?

- ☐₍₁₎ Sí
- ☐₍₂₎ No

APPENDIX C: SURVEYOR INSTRUCTIONS

Mail Survey Instructions

- **Site Identification**
 - Use the map to find the block and lots you will be delivering to
 - Select the surveys you will need
 - Choose the best place to begin delivering the surveys (usually a corner lot, end of street, or a yellow/orange lot)
- **Survey delivery**
 - **Introduction:** *Good morning. Buenos días. (Gauge language of preference.) My name is _____. I am working for the University of Texas at Austin.*
 - **Pitch:** *I am conducting surveys for the university about housing in this colonia. Our project has the full support of Colonias Unidas and the CRG (Community Resource Group, also known as the "Receivership"). Today we are returning to the colonias to make an evaluation and analysis of the changes and improvements that residents have made to their houses in the last 10 years. This will help us to evaluate the impact of housing policies on urbanization and housing improvement. We hope that you are willing to participate in this survey designed by the same researchers at the University of Texas at Austin. Are you the head of the household?(If no, please ask to speak with the head of the household. If the head of household is not home, you may continue with the rest of the instructions but remind the person that the survey must be filled out by the head of the household. If the head of household is home, restate the introduction and pitch).Would you be interested in participating?*
 - **Instructions:** *All of the information you provide will be kept completely confidential. None of the information will ever be connected with you, your family, or your address/home. We will only use the information to make general recommendations for the colonia as a whole. The survey takes approximately 20 minutes to complete. Please keep in mind that your participation is entirely voluntary. If at any point you prefer not to answer a question, you may simply write PNA for "Prefer Not to Answer."*
 - **Remove letter from envelope and give the letter to the participant.** *This letter explains the purpose of the survey in more detail. We have the full support of the CRG and Colonias Unidas, but you may contact them or the directors of the survey if you have any questions or concerns. Contact information is provided in this letter.*
 - **Give the envelope to the participant.** *This envelope contains the survey and a prepaid envelope that will allow you to mail back the survey for free. It is important that we receive the survey as soon as possible. If at all possible, we would greatly appreciate if you would complete the survey and mail it back in the next day or two. Additionally, if you finish the survey in the next 30 minutes you may turn the survey in to one of our workers who will be walking the streets in the colonia.*
- **Survey Status Record**

Condition	Symbol
○ Home accepted	On Map: 0
○ Home declined	On Envelope: Declined
○ Combined lot	On Map: Box around combined lots
	On Envelope: Combined with lot ____
○ Vacant/unoccupied	On Map: V
	On Envelope: Vacant
○ Not home	On Envelope: Description, Date and NH
○ Yard/house not accessible	On Envelope: Description, Date and NA (specify why: beware of dog, locked gate/fence, etc.)
○ Lot not found	On Envelope: Not found

Core Survey Instructions

- **Site Identification**
 - Use the map to find the block and lots you will be delivering to
 - Select the yellow and orange surveys you will need and put them in order
 - Use surveys with photos on back (yellow lots) to identify the correct lots on the street
- **Survey delivery**
 - **Introduction:** *Good morning. Buenos días. (Gauge language of preference.) My name is _____. I am working for the University of Texas at Austin.*
 - **Pitch:** *I am conducting surveys for the university about housing in this colonia. Our project has the full support of Colonias Unidas and the CRG (Community Resource Group). We would really appreciate your participation, and are happy to compensate you for your time with a \$15 gift card to HEB. Are you the head of the household? (If no, please ask to speak with the head of the household—does not need to be the owner of the house/lot. Restate the introduction and pitch). Would you be interested in participating?*
 - **Explanation:** *Ten years ago the CRG (also known locally as the “Receivership”) intervened in various colonias in Starr County in order to provide property titles to more than 1200 families. At that time, the CRG contracted us—researchers from the University of Texas at Austin—to complete a study and evaluation of this intervention. Today we are returning to the colonias to make a new evaluation and analysis of the changes and improvements that residents have made to their houses in the last 10 years. This will help us to evaluate the impact of housing policies on urbanization and housing improvement. We hope that you are willing to participate in this survey designed by the same researchers at the University of Texas at Austin. All of the information you provide will be kept completely confidential. None of the information will ever be connected with you, your family, or your address/home. We will only use the information to make general recommendations for the colonia as a whole. The survey takes approximately 20 minutes to complete. If you prefer, we could complete the survey right now, or I could leave it with you to fill out and could collect it later. Either way, once I collect the survey I will provide you with the \$15 HEB gift card. Provide the participant with the letter of presentation. This letter describes the survey in greater detail and also provides you with contact information in case you have further questions.*
 - **Instructions:**
 - **Administered:** *Please keep in mind that your participation is entirely voluntary. If it at any point you prefer not to answer a question, you may simply say “I prefer not to answer” or may end the survey at any time. Also, if you have any questions please feel free to ask. We’re now going to begin the survey.*
 - Read each question as it appears on the survey
 - Follow all instructions, including skips
 - Do not provide answer prompts for questions K.60 and K.61 on page 10 (these questions are both highlighted in grey)
 - Be sure to complete Section R as well
 - **Dropped off/collected:** *Please keep in mind that your participation is entirely voluntary. If it at any point you prefer not to answer a question, you may simply write PNA (PNC) “Prefer Not to Answer” (“Prefiero No Contestar”) or you may end the survey at any time.*

- **Remove Interview Checklist (check that CBL code is present and if image is absent or difficult to verify, please write a permanent reference point on the interview checklist next to the top photo—e.g. blue shutters, white fence, etc.**
 - **Deliver survey and record pickup time/date on Survey Collection Log**
 - **Return on specified time/date**
- **Conclusion: If dropped off/collected, please quickly review the survey to make sure that all sections (especially Section R) is complete**
 - *Do you have any questions or concerns? If you would prefer to speak with someone not directly related to the survey, you may also contact Colonias Unidas, whose contact information is on the letter we have provided you.*
 - **Distribute gift card and collect signature on Gift Card Log**
 - **Complete Interview checklist (if necessary, attach checklist to survey with paperclip)**
- **Survey Status Record**

Condition	Symbol
• Resident home, survey completed	On Map: O On Survey: Completed
• Resident home, declined	On Map: X On Survey: Declined
• Combined lot	On Map: Box around combined lots On Top of Survey: Combined with lot (specify number)
• Not home	On Top of Survey: Description, Date and NH
• Vacant	On Top of Survey: Vacant On Map: V
• Yard/house not accessible	On Top of Survey: Description, Date and NA (specify why: beware of dog, locked gate/fence, etc.)

APPENDIX D: LETTERS OF PRESENTATION

UT Letterhead

**To the Head of Household
In the Colonias of Rio Grande City and
Starr County, Texas.**

June 15, 2011

Dear Head of Household,

Ten years ago the CRG (also known locally as the “Receivership”) intervened in various colonias in Starr County in order to provide property titles to more than 1200 families. At that time, the CRG contracted us—researchers from the University of Texas at Austin—to complete a study and evaluation of this intervention. Today we are returning to the colonias to make a new evaluation and analysis ***of the changes and improvements that residents have made to their houses in the last 10 years.*** This will help us to evaluate the impact of housing policies on urbanization and housing improvement.

We hope that you are willing to participate in this survey designed by the same researchers at the University of Texas at Austin. Just as in the last study, “Colonias Unidas” (Mrs. Blanca Juarez and Mrs. Priscilla Martinez) and the CRG (Aidé Villarreal) are fully aware of and in support of our efforts. Your household/lot was chosen randomly and your participation is completely voluntary. All of the information you provide will be treated with complete confidentiality and will be read **only by the university researchers.** The information will be used to create general statistical analyses of the housing market conditions in the colonias of Starr County and will never be connected with you or your family in particular.

We estimate that the questionnaire will only take between 20-25 minutes to complete, and we ask that it be filled out by one of the heads of the household (whether male or female). You may skip any question that you prefer not to answer, but please indicate that you have done so by writing the letters PNA for “Prefer Not to Answer”. We have included a pre-paid envelope that you may use to return the survey free of charge. Please mail the survey so that it **arrives in our hands by the the end of June**—in more or less two weeks. However, it would be most helpful if you could complete the survey within the next 24-48 hours and we would appreciate if you dedicated the time to do so as soon as is convenient. At the end of the questionnaire please indicate your address and, if you would be so kind, your phone number and email in case we have a question or would like to respond to one of your comments.

Thank you very much for your participation. If you have any doubts or concerns, please contact the directors of the survey (Dr. Peter Ward and Mr. Noah Durst) whose names and contact information

are included at the bottom of the cover letter. You may also contact Aidé Villarreal, Priscilla Martinez (956-487-0964), and Colonias Unidas (956-487-0964) for more information.

Sincerely,

Dr. Peter M. Ward

Mr. Noah Durst

UT Letterhead

To the Head of Household
In the Colonias of Rio Grande City and
Starr County, Texas.

June 15, 2011

Dear Head of Household,

Ten years ago the CRG (also known locally as the “Receivership”) intervened in various colonias in Starr County in order to provide property titles to more than 1200 families. At that time, the CRG contracted us—researchers from the University of Texas at Austin—to complete a study and evaluation of this intervention. Today we are returning to the colonias to make a new evaluation and analysis *of the changes and improvements that residents have made to their houses in the last 10 years*. This will help us to evaluate the impact of housing policies on the urbanization and housing improvement.

Given that you (or your house/lot) were one of the original 250 participants included in the previous study, we hope that you will be willing to participate in this survey which has been designed by the same researchers from the University of Texas at Austin, and will update the information that we currently have in our database. We estimate that the survey will take only 20-25 minutes of your time, and as a means of showing our appreciation for your time we will be happy to provide you with a **\$15** prepaid gift card that you may use in any HEB.

Just as in the last study, “Colonias Unidas” (Mrs. Blanca Juarez and Mrs. Priscilla Martinez) and the CRG (Aidé Villarreal) are fully aware of and in support of our efforts. Your household/lot was on this list of households/lots that we met with in 2002. All of the information you provide will be treated with complete confidentiality and will be read **only by the university researchers**. The information will be used to create general statistical analyses of the housing market conditions in the colonias of Starr County and will never be connected with you or your family in particular. You may skip any question that you prefer not to answer, but please indicate that you have done so by writing the letters PNA for “Prefer Not to Answer”.

Thank you very much for your participation. If you have any doubts or concerns, please contact the directors of the survey (Dr. Peter Ward and Mr. Noah Durst) whose names and contact information are included at the bottom of the cover letter. You may also contact Aidé Villarreal, Priscilla Martinez (956-487-0964), and Colonias Unidas (956-487-0964) for more information.

If you are willing to participate, please indicate when would be a good time for us to return to

collect the questionnaire and to provide you with the HEB gift card. At the end of the survey, please provide your address and, if would be so kind, your telephone number and email address so that we may contact you in case we have clarification questions or would like to respond to one of your comments.

Sincerely,

Dr. Peter M. Ward

Mr. Noah Durst

UT Letterhead

**Al Jefe del Hogar
Colonias de Rio Grande City
y Starr County, Texas.**

15 de junio de 2011

Estimado Jefe(a) del Hogar,

Hace 10 años el CRG (que aquí se conoce como el “Receivership”) hizo una intervención en varias colonias en Starr County para entregar títulos de propiedad a más de 1200 familias. En ese entonces el CRG contrató a nosotros mismos – investigadores de la Universidad de Texas en Austin -- para hacer un estudio y evaluación de tal intervención. Hoy estamos regresando a la colonia para hacer una nueva evaluación e análisis ***de los cambios y del mejoramiento de las casas que los propios vecinos han logrado durante los últimos 10 años.*** Esto nos ayudara evaluar el impacto de las políticas habitacionales en promover y estimular la urbanización y el mejoramiento de vivienda.

Esperemos que Ud. sea dispuesto a participar en esta encuesta que ha sido diseñada por los mismos investigadores de la Universidad de Texas en Austin. Como en el caso del estudio anterior, este encuesta es con el pleno conocimiento y apoyo del la organización “Colonias Unidas” (Sra. Blanca Juárez), y del CRG (Aidé Villarreal). Su hogar/lote fue escogido al azar, y quisiera asegurarle que su participación en esta encuesta es totalmente voluntaria. La información que usted nos proporcione será tratada como totalmente confidencial y será leído por los **investigadores universitarios exclusivamente**. La información será utilizada para generar cuadros estadísticos sobre las condiciones del mercado de vivienda en colonias en Starr County y jamás será vinculada con usted o con su familia en particular.

Estimamos que el cuestionario solo le tomará entre 20-25 minutos de su tiempo en llenar, y les pedimos que sea completada por un adulto de preferencia cualquier de los jefes de familia (sea hombre o mujer). Usted puede saltarse cualquier pregunta que prefiera no contestar, pero por favor indique (escribiendo las letras NDC = “no deseo contestar”). Le hemos incluido un sobre de correo pre-pagado para que usted pueda entregar la encuesta sin costo. Por favor de enviarlo a la universidad **para llegar en nuestros manos antes del fines de junio** -- o sea en dos semanas. Pero les pensamos que será más conveniente de completarla dentro de los próximos 24 -48 horas y les rogamos apartar unos minutos para llenarla cuanto antes. Al final del cuestionario por favor indicar su dirección, y si nos permite su teléfono/correo electrónico en el caso de que necesitamos aclarar alguna respuesta o responder a algún comentario suyo.

Muchísimo le agradecemos de antemano su participación. Si tiene alguna duda o queja, por favor

diríjanse al director del estudio (el Dr. Peter Ward o Mr. Noah Durst) cuyos nombres y datos aparecen en su copia de la carta que acompaña este cuestionario. También puede acudir a Aidé Villarreal, a Priscilla Martinez (956-487-0964) y a Colonias Unidas (956-487-0964) para más información.

Muy Atentamente

Dr. Peter M. Ward

Mr. Noah Durst

UT Letterhead

Al Jefe del Hogar

Colonias de Rio Grande City, y Starr County, Texas.

1 de junio de 2011

Estimado Jefe(a) del Hogar,

Hace 10 años el CRG (que aquí se conoce como el "Receivership") hizo una intervención en varias colonias en Starr County para entregar títulos de propiedad a más de 1200 familias. En ese entonces el CRG contrató a nosotros mismos – investigadores de la Universidad de Texas en Austin -- para hacer un estudio y evaluación de tal intervención. Hoy estamos regresando a la colonia para hacer una nueva evaluación e análisis ***de los cambios y del mejoramiento de las casas que los propios vecinos han logrado durante los últimos 10 años***. Esto nos ayudara evaluar el impacto de las políticas habitacionales en promover y estimular la urbanización y el mejoramiento de vivienda.

Dado que Ustedes (o su casa/lote) fueron uno de los 250 casas incluido en la encuesta anterior, esperamos que estarán dispuestos a participar en esta encuesta que ha sido diseñada por los mismos investigadores de la Universidad de Texas en Austin, y que actualizará la información que ya tenemos en nuestros archivos. Estimamos que esta encuesta sólo le tomará entre 20-25 minutos de su tiempo, y como un agradecimiento de su tiempo cuando recogemos el cuestionario le podemos obsequiar una tarjeta pre-pagada de **\$15** que podrá usar en cualquier HEB.

Como fue en el caso del estudio anterior, este encuesta es con el pleno conocimiento y apoyo de la organización "Colonias Unidas" (Sra. Blanca Juárez), y del CRG (Aidé Villarreal). Su hogar/lote fue de la lista de los hogares con quien nos encontrábamos en 2002. Hoy, como entonces, su participación en la encuesta es voluntaria y la información que nos proporcione será tratada como confidencial y será revisado únicamente por los **investigadores universitarios**. La información será utilizada para generar cuadros estadísticos sobre las condiciones del mercado de vivienda en colonias en Starr County y jamás será vinculada con usted o con su familia en particular. Usted puede saltarse cualquier pregunta que prefiera no contestar, pero por favor indique (escribiendo las letras NDC = "no deseo contestar").

De antemano les agradecemos muchísimo su participación. Si tiene alguna duda o queja, por favor diríjase al director del estudio (Dr Peter Ward o al Sr. Noah Durst) cuyos nombres y datos aparecen abajo en esta carta de presentación. También puede acudir a Aidé Villarreal y a "Colonias Unidas" para mayor información.

Si está dispuesto participar, por favor de indicar a qué hora pudiéramos regresar a recoger el cuestionario y darle la tarjeta de Wal-Mart. Al final del cuestionario por favor indicar su dirección, y si nos permite su teléfono/correo electrónico en el caso de que necesitamos aclarar alguna respuesta o responder a algún comentario suyo.

Muchísimo le agradecemos de antemano su participación. Si tiene alguna duda o queja, por favor diríjanse al director del estudio (el Dr. Peter Ward o Mr. Noah Durst) cuyos nombres y datos aparecen en su copia de la carta que acompaña este cuestionario. También puede acudir a Aidé Villarreal, a Priscilla Martinez (956-487-0964) y a Colonias Unidas (956-487-0964) para más información.

Muy Atentamente,

Dr. Peter M. Ward

Mr. Noah Durst