



Colonias Investment Areas: Working Toward a Better Understanding of Colonia Communities for Mortgage Access and Finance

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Housing Assistance Council



The Housing Assistance Council

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1025 Vermont Avenue, NW
Suite 606
Washington, DC 20005

202-842-8600

ruralhome.org

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Resources

[2020 Colonias Investment Areas Data File](#)

[Colonias Visualization Tool and Map](#)

[Executive Summary](#)



Colonias Investment Areas

Abstract

In the United States, the term “colonias” has been applied generally to unincorporated communities along the U.S.-Mexico border in California, Arizona, New Mexico, and Texas that are characterized by high poverty rates and substandard living conditions. In practical terms, colonias are defined primarily by what they lack — potable drinking water, water and wastewater systems, paved streets, and standard mortgage financing.

To address the poverty and lack of infrastructure present in communities along the border and to target funding to these areas, several federal agencies and policymakers have developed geography-based definitions of colonias over time. These governmental definitions vary, and the criteria of what exactly constitutes a colonia continue to be challenging.

The Housing Assistance Council developed the concept of “Colonias Investment Areas” to improve comprehensive understanding and definition of colonias for the purpose of home mortgage finance. The ultimate goal of this research was to create a usable and programmatic definition of colonias so that mortgage and finance resources may be more efficiently directed to these often overlooked and long-struggling communities.

Colonias Investment Areas

Executive Summary

The Housing Assistance Council developed the concept of “Colonias Investment Areas” to better inform a comprehensive understanding and definition of colonias specifically related to the provision of home mortgage finance in this region. The goal of this research is to develop a comprehensive, usable, and uniform definition of colonias to inform the targeting of mortgage and finance resources so they can be more efficiently directed to these often overlooked and long-struggling communities.

- **Colonias are not monolithic.** Despite being categorized together, colonias vary extensively within the border region, from small clusters of homes located near agricultural employment opportunities to established communities in and near urban centers. Most importantly, this study reinforces important structural differences on how colonias were originally defined and comprised in each of the four border states of Texas, New Mexico, Arizona, and California. An important element of the Colonias Investment Area development included analysis and attention at the individual state level.
- **Colonias Investment Areas were constructed through a data-driven process that focused on unique elements of these communities.** The approach to develop Colonias Investment Areas and determine which census tracts contain colonias involved six basic processes, including: 1) Identification of publicly recognized colonias; 2) Geolocating colonias for mapping and geospatial analysis; 3) Aggregation of an individual colonia into Colonias Investment Areas; 4) Compilation of state-level data into a comprehensive and enhanced database; 5) Exploration of social, economic, housing, and mortgage finance characteristics for Colonias Investment Areas; and 6) Expert and stakeholder feedback on the concept of Colonias Investment Areas.
- **Census tracts are the building blocks for Colonias Investment Areas.** The Colonias Investment Areas concept primarily relies on the U.S. Census Bureau’s census tract designation as its geographic unit of analysis. While there are pros and cons with any unit of geography, the research relies on census tracts because sub-county units of geography are often more precise and uniform indicators of rurality than counties. In addition, tracts align with already established Duty to Serve criteria as a unit of measurement, and the use of tracts allows for market analysis as well as future assessment of mortgage lending activity.



- **There are 446 distinct Colonias Investment Areas.** The identified Colonias Investment Areas comprise approximately 6 percent of the U.S.-Mexico border region’s census tracts. Overall, Colonias Investment Areas contain approximately 2.5 million people across four states.
- **Colonias Investment Areas are in rural and urban communities.** Approximately half of Colonias Investment Areas are in rural census tracts,^{*} yet a substantial number of Colonias Investment Areas are in what would be considered suburban or even urban tracts — especially in Texas.
- **Rural Colonias Investment Areas have the greatest needs.** While economic, housing, and mortgage access deficits are generally present in any colonia regardless of location, these conditions are consistently more acute in rural Colonias Investment Areas, especially in elements of current mortgage activity and investment.
- **Colonias Investment Areas are most common in Texas.** Texas is home to 61 percent of all Colonias Investment Areas. While 33 different counties in Texas have at least one colonia, these communities are largely concentrated in a few areas — notably the lower Rio Grande Valley. Still, each of the four border states contain a substantial number of Colonias Investment Areas. The relatively broad coverage of these communities, despite different demographic and housing characteristics, indicates that colonias are not solely in Texas.
- **Colonias Investment Areas are some of the most impoverished markets in the nation.** Incomes are low across the border region. Wages are depressed as a result of the proximity to low-wage workers in border areas of Mexico. The U.S. poverty rate is an estimated 15 percent, while the aggregate Colonias Investment Area poverty rate is nearly twice that national rate at 27 percent. The research findings overwhelmingly indicate that Colonias Investment Areas experience some of the greatest challenges and needs in the region, as well as the nation, and are therefore appropriately targeted as an indicator of an underserved market.
- **Housing conditions play a central role in the recognition and designation of colonias.** In many colonias, the substandard conditions are largely the result of an old, deteriorating housing stock, while the newer colonias contain homes lacking basic infrastructure. Households living in Colonias Investment Areas are primarily homeowners.
- **Nonconventional financing dynamics lead to an asymmetric financing system in Colonias Investment Areas.** Many border residents use informal or nonconventional financing mechanisms to obtain homeownership. This is an indication of the gap in traditional financing available to low-income and immigrant populations. In some cases, there may be few conventional financial institutions in remote rural areas. Another likely contributor is the large immigrant population, which may be unfamiliar with services offered by banks or who are simply unsure of such arrangements.
- **There is a dearth of mortgage lending activity in Colonias Investment Areas.** Colonias Investment Areas have substantially lower rates of conventional mortgage lending compared to nearly any market in the border region or nationwide. To make lending activity comparisons, the analysis explored lending activity as the number of loan originations per thousand owner-occupied homes. The amount of lending in Colonias Investment Areas — using owner-occupied units to standardize the measure — is half the rate of the larger U.S.-Mexico border region. Loan activity is nearly three times lower in rural Colonias Investment Areas compared to the larger border region, according to Home Mortgage Disclosure Act (HMDA) data.

^{*} Rural by the Federal Housing Finance Authority (FHFA) definition for Duty to Serve program:
www.fhfa.gov/DataTools/Downloads/Pages/Duty-to-Serve-Data.aspx.



- **Manufactured home lending is highly prevalent in Colonias Investment Areas.** Manufactured homes are an important part of housing in both the border region as a whole and Colonias Investment Areas in particular. A review of HMDA data finds that loans involving manufactured homes represent a relatively large share of lending in rural areas in general and are even more prevalent in Colonias Investment Areas. Approximately 15 percent of all home loan originations in rural Colonias Investment Areas involved a manufactured home, which is more than twice the percentage for rural areas in general.
- **High-cost lending is common in Colonias Investment Areas.** For each border state, high-cost (or high interest rate) lending was more common in Colonias Investment Areas than in non-Colonias Investment Areas. These levels of high interest rate lending are yet another indicator of extreme deficiency in access to conventional mortgage finance. It is important to note that, per HAC's analysis of HMDA data, while homeownership is generally high in these markets, a portion of these households may have home or land financing elements that charge high fees or include usury terms and fees.
- **Colonias Investment Areas originate fewer conventional loans and rely more on government-backed mortgage resources.** Colonias Investment Areas have a much smaller share of conventional loans. In the U.S. and larger border region, about three-quarters of originations were conventional loans, but for Colonias Investment Areas, it was slightly more than 50 percent. The difference was made up by higher shares of FHA-, VA-, and USDA-guaranteed loans.
- **Colonias Investment Areas are intended to inform and enhance access to conventional mortgage finance in colonias communities and the border region.** While no geographic designation is perfect, extensive research, analysis, testing, and stakeholder feedback reinforce the concept and elements of Colonias Investment Areas as a reliable mechanism to inform and provide more targeted and efficient delivery of home mortgage resources and finance access to long-overlooked border colonia communities.



Background on Colonias

In the United States, the term “colonias” has been applied generally to unincorporated communities located in California, Arizona, New Mexico, and Texas along the U.S.-Mexico border that are characterized by high poverty rates and substandard living conditions. In practical terms, colonias are defined primarily by what they lack, such as potable drinking water, water and wastewater systems, paved streets, and conventional mortgage financing.

Despite being categorized together, colonias vary extensively within the border region, from small clusters of homes located near agricultural employment opportunities to established communities whose residents commute to nearby urban centers.¹ Colonias have varied histories. Some emerged in the last 50 years, but others have been in existence since the 19th century. The unmet need for affordable housing was a key factor driving the demand for homes in colonia developments in both recent and historic colonias.² Various other factors led colonia development within each border state. The increased visibility of colonias in Texas, however, tends to guide common perceptions and even government policy based on the situations of colonias found there.³

Colonias largely resulted from lax land regulations, particularly over the last few decades.⁴ For much of the 20th century, county governments lacked the power to regulate the subdivision of land that lies outside the jurisdiction of city governments. Without these controls in place, landowners were able to subdivide and sell their property through a range of methods without the necessary infrastructure.⁵

Also impacting the proliferation of colonias, particularly in Texas, was the contract for deed system. Through a contract for deed, the buyer makes payments directly to the developer while the land title remains with the developer until the amount is paid in full. These arrangements often involve high interest rates, and many are not recorded with the county clerk.⁶ If even one payment is missed, the developer may foreclose on a property and the buyer loses his or her entire investment.⁷

A variety of settlements have been designated colonias in Arizona, California, and New Mexico, including those on Native American lands, in old mining towns, and in retirement communities. Colonias in Arizona, California, and New Mexico are generally older than those found in Texas.⁸ In Arizona, “wildcat” subdivisions emerged in the 1950s and differ in several ways from patterns for Texas’ colonias. Many New Mexico colonias have been in existence since the mid-1800s, and all California colonias were developed prior to 1929, when subdivision laws went into effect in that state.⁹ Additionally, New Mexico’s historic settlements are experiencing new fringe growth in the form of illegal subdivisions similar to those created in Texas under contract for deed arrangements.¹⁰

Defining “Colonias” – Previous and Existing Efforts

Beginning in the late 1980s and early 1990s, federal and local governments sought to address the problems associated with existing unregulated and substandard developments and stop the creation of additional ones. Local and state governments acted to improve the living conditions in these settlements by designating communities as colonias, making them eligible for certain types of federal assistance. In some cases, these identification efforts included state governments and federal agencies mapping colonia locations and linking various data sources together to better manage assistance efforts.

Much of the work identifying colonias communities was initiated by federal government agencies and state governments.¹¹ When federal government funds started being dedicated to addressing living conditions in border colonias (Cranston-Gonzalez National Affordable Housing Act of 1990), government entities worked to better understand where colonias communities were located and the type and level of need required to help them. Researchers also credit the debate over passage of the North American Free Trade Agreement (NAFTA) in the early 1990s with putting a national spotlight on the border colonias region and, as a result, stimulating efforts to improve living conditions in the colonias that led to increased government involvement.¹² Prior to the late 1980s, the issue of identifying border colonias received little to no attention.



Cranston-Gonzalez National Affordable Housing Act definition of colonias

The Cranston-Gonzalez National Affordable Housing Act, one of the most recent large-scale pieces of affordable housing legislation, also served as a primary benchmark for defining colonias in the United States. Under the Act, colonias are defined:

“[A]s an identifiable community that (A) is in the State of Arizona, California, New Mexico, or Texas; (B) is in the area of the United States within 150 miles of the U.S.-Mexico border (not including any standard MSA with a population exceeding 1 million), or is in the United States-Mexico border region (the applicable criterion depends on the particular housing program); (C) is determined to be a colonia on the basis of objective criteria, including lack of potable water supply, lack of adequate sewage systems, and lack of decent, safe, and sanitary housing; and (D) was in existence as a colonia before November 28, 1990.”

With this seminal entry into the issue of housing in colonias, the federal law and its corresponding language have been used as underpinning (or replicated) for many definitions and classifications regarding the U.S. Mexico border and colonias communities in research, policy, and governmental programs and efforts.



*US-Mexico Border Region defined as area within 150 miles of US-Mexico Border. This is similar to HUD's CDBG Colonia Set-Aside definition: <https://www.hudexchange.info/cdbg-colonias/colonias-history/>
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community Housing Assistance Council (HAC) generated map.



U.S. Department of Housing and Urban Development (HUD) list of designated colonias

While there is no agreed upon definition of colonias, different states and agencies have their own definitions.¹³ HUD's approach (which relies on the Cranston-Gonzalez Act language) is the most often cited:

“Colonias are rural communities [outside of metropolitan area of 1 million people or more] and neighborhoods located within 150 miles of the U.S.-Mexican border that lack adequate sewer, water, and/or housing. These areas also typically lack other basic services like electricity, garbage service, water drainage, schools, and community facilities.”¹⁴

The “border colonias region” then refers to the area within 150 miles of the border, excluding the large metropolitan areas. This geographic distinction is important given that research suggests similar types of development may occur in other areas, but they would not be considered colonias.¹⁵

A key component of these policymaker efforts are requirements that local governments identify communities as colonias to be eligible to receive certain federal funding. Specifically, HUD requires the four U.S.-Mexico border states use 10 percent of their Community Development Block Grant (CDBG) monies on border colonias. HUD makes publicly available a list of designated colonias for Arizona, California, and New Mexico.¹⁶ The HUD colonia list for Texas redirects the user to the Texas Secretary of State webpage link for their information. These lists represent all recognized colonias that fit within the HUD definition.

There are a few important considerations regarding HUD-designated colonias listings. The state lists may not always precisely capture colonias. For example, the city of Douglas, Arizona, is listed as a colonia in its entirety, but a U.S. Geological Survey (USGS) effort at mapping colonias in this town identifies specific neighborhoods, not the entire community.¹⁷ The state lists, particularly when they refer to unincorporated areas, are not easily identified. For example, one unincorporated California colonia is listed as simply “Subdivision.” While incorporated colonias might be relatively easy to link to census geographies (census tracts, block groups, etc.), additional work would be needed to identify and link the unincorporated areas with census geographies.

Stemming from the Consolidated Farm and Rural Development Act, USDA's Rural Utility Service defines colonias as:

“Any identifiable community designated in writing by the State or county in which it is located; determined to be a colonia on the basis of objective criteria, including lack of potable water supply, lack of adequate sewage systems, and lack of decent, safe, and sanitary housing, inadequate roads and drainage; and existed and was generally recognized as a colonia before October 1, 1989.”



Why reinvestigate colonias definitions now?

The border colonias region has traditionally been overlooked not only in terms of investment, but also in research and discourse. Like several other predominantly rural regions of the nation, the border colonias can be considered forgotten America. Among the financial policies developed in response to the Great Recession, Congress enacted legislation in 2008 that established a “Duty to Serve” requirement. The Housing and Economic Recovery Act of 2008 mandates that Fannie Mae and Freddie Mac have a “Duty to Serve” three traditionally underserved markets of: rural housing, manufactured housing, and affordable housing preservation. Fannie Mae and Freddie Mac are tasked with increasing liquidity and investment capital in these markets. The final Duty to Serve rule¹⁸ promulgated by the Federal Housing Finance Agency (FHFA) provides guidance on how to define rural areas and high-needs rural regions in order to increase government-sponsored enterprise (GSE — Fannie Mae and Freddie Mac) Duty to Serve-eligible activities. Throughout this report, tables and figures relying on the term “rural” shall be using the definition of “rural area” as defined in the final Duty to Serve rule:

Section 1282.1 of the final rule defines “rural area” as: (1) A census tract outside of a metropolitan statistical area (MSA) as designated by the Office of Management and Budget (OMB); or (2) a census tract in an MSA but outside of the MSA’s Urbanized Areas as designated by the U.S. Department of Agriculture’s (USDA) Rural-Urban Commuting Area (RUCA) Code #1,¹⁹ and outside of tracts with a housing density of more than 64 housing units per square mile in USDA’s RUCA Code #2.²⁰

For some of the high-needs rural regions and populations identified in the regulation, including Middle Appalachia, the Lower Mississippi Delta, Native American lands, farmworkers, and persistent poverty areas, FHFA provided relatively detailed definitions for targeting and assessment under the rule. Guidance for the colonias definition, on the other hand, did not include detailed lists of colonia communities.

After considering the comments and the varying definitions of “colonia,” FHFA determined that broadening the proposed definition of “colonia” could encourage Enterprise support for colonias, as defined by federal, state, tribal, or local programs. Therefore, FHFA set forth Section 1282.1 of the final Duty to Serve rule defining a “colonia” as:

“[A]n identifiable community that meets the definition of a colonia under a federal, state, tribal, or local program.”

In its 2016 Duty to Serve Final Rule,²¹ FHFA specifically discusses the limitations with some of the more common colonia-focused government program definitions that are not operationalized similarly. As such, one definition or approach might include a community as a colonia, while another definition would not. FHFA noted it would be unable to provide a data file that lists all census tracts that are eligible under the final rule’s definition of “colonia,” as it did for the other high-needs rural regions. To address the data challenges that exist in specifically identifying the census tracts that contain colonias, FHFA encouraged the Enterprises to collect and share granular data with researchers, lenders, and housing providers regarding GSE purchases of loans that are made under any HUD or USDA programs that serve a colonia, are eligible for Duty to Serve credit under this Regulatory Activity (provided they are located in a “rural area” as defined in the final rule), and are for very low-, low-, or moderate-income households as defined under the Duty to Serve rule. This study uses these FHFA Final Rule comments to guide our efforts at identifying Colonias Investment Areas. The Colonias Investment Areas definition is not the definition of colonias that FHFA is currently using to determine eligibility for GSE Duty to Serve credit, which also requires a colonia to be in a rural area as defined in the DTS regulation.



Identifying and Classifying Colonias Investment Areas

The approach to developing Colonias Investment Areas and determining which census tracts contain colonias involved six basic processes:

1. Identification: Create a universal list of officially recognized colonias from existing lists of colonias established by federal, state, tribal, or local governments.
2. Location: Geolocate the recognized colonias records on a map.
3. Aggregation: Identify census tracts containing recognized colonia(s).
4. Compilation: Consolidate disparate data into one uniform Colonias Investment Area database.
5. Exploration: Preliminary analyses to better understand basic social, economic, housing, and mortgage finance elements of the constructed Colonias Investment Areas and compare them to larger regional and national dynamics.
6. Feedback: Expert and stakeholder feedback on the concept of Colonias Investment Areas.

1. Identifying individual colonias

FHFA's Final Duty to Serve Rule notes that a colonia needs to meet "the definition of a colonia under a federal, state, tribal, or local program."²² Using a similar approach, this research only considers as colonia(s) communities those that a federal, state, or local government has identified as a colonia (researchers did not identify tribally designated colonias programs as part of its substantial industry engagement and qualitative research). Classification as a colonia by a government entity often indicates the community qualifies for a program or resource specifically targeting colonias. Throughout this report, the term "recognized colonia" refers to these government-identified colonia. Table 1 below enumerates the various colonia communities identified by federal, state, or local governments. For the most current updates, revisions, and information about this source data, refer to the source websites listed below. For this research, HAC utilized the most current data available as of 2018.

There is no universal list of recognized colonias. The research created a separate list for each U.S.-Mexico border state by compiling disparate federal, state, and local government lists of colonias. As an example, creating the Arizona list required a consolidation of information on recognized colonias from HUD, USDA-EPA, Arizona Department of Housing, Cochise County, Graham County, and Pima County.²³ The process of identifying colonias involved collecting and categorizing all unique cases of communities identified by multiple resources, with no preference made for one resource over another. Through this process, the study identified 2,459 unique colonias records in the four states along the U.S.-Mexico border.²⁴



Table 1. Resources identifying colonia communities

HUD CDBG Colonia Set Aside Qualifying Communities*	Arizona, California and New Mexico	https://www.hudexchange.info/programs/cdbg-colonias/
Imperial County Community and Economic Development Agency	California	http://www.imperialcountyced.com/colonias/
Office of Attorney General of Texas	Texas	https://www.texasattorneygeneral.gov/divisions/colonias
Pima County (AZ) Information Technology Department - GIS	Arizona	http://webcms.pima.gov/government/geographic_information_systems/
University of New Mexico, Bureau of Business & Economic Research	New Mexico	http://bber.unm.edu/colonias
USDA-EPA. 2015. U.S.-Mexico Border Needs Assessment & Support Project: Phase II Assessment Report	Arizona, California, New Mexico and Texas	https://rcap.org/wp-content/uploads/2016/03/RCAP_Colonias-Phase-II-Assessment-Report_FINAL_web.pdf
USGS CHIPs Project***	Texas	https://pubs.usgs.gov/fs/2008/3079/

*Original HUD websites where each state list of colonias was found are no longer active. This is a general url with program information. An old version of the colonia list can be found here:<https://www.hudexchange.info/resource/2388/colonia-list/>

***The original web-mapping portal is not available. The website refers to additional documentation for program



2. Geographically locating colonias communities

In many cases, the information used to compile the list of recognized colonias also included their geographic location data. Location data frequently came in the form of GIS “shape files.” The shape files included two major classifications of data: 1) Point data — A geographic reference that does not include boundaries, but rather centroid point or “dot” location; and 2) Polygon data — Boundary information in the geographic presentation. Maps 2A and 2B provide visual examples of the difference between point and polygon formats.²⁵

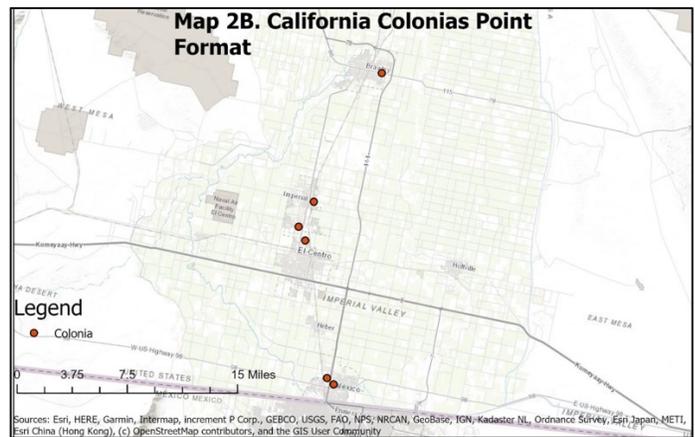
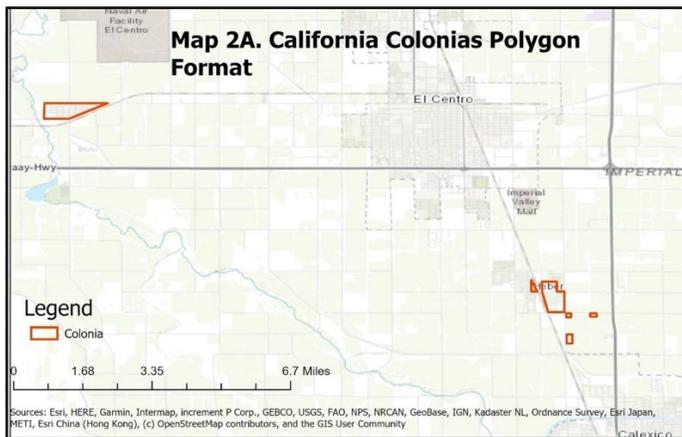


Table 2. Identified colonias by method located

	New Mexico ¹	Arizona	California	Texas
Total colonias	145	114	34	2,166
Colonias located	142	100	32	2,166
Colonia points	24	66	23	0
Colonia polygons	118	34	9	2,166

¹ Source: HAC Tabulations of public colonia data.

University of New Mexico Bureau of Business and Economic Research. The research identified census blocks that contain colonias: bber.unm.edu/nm-colonia-maps.

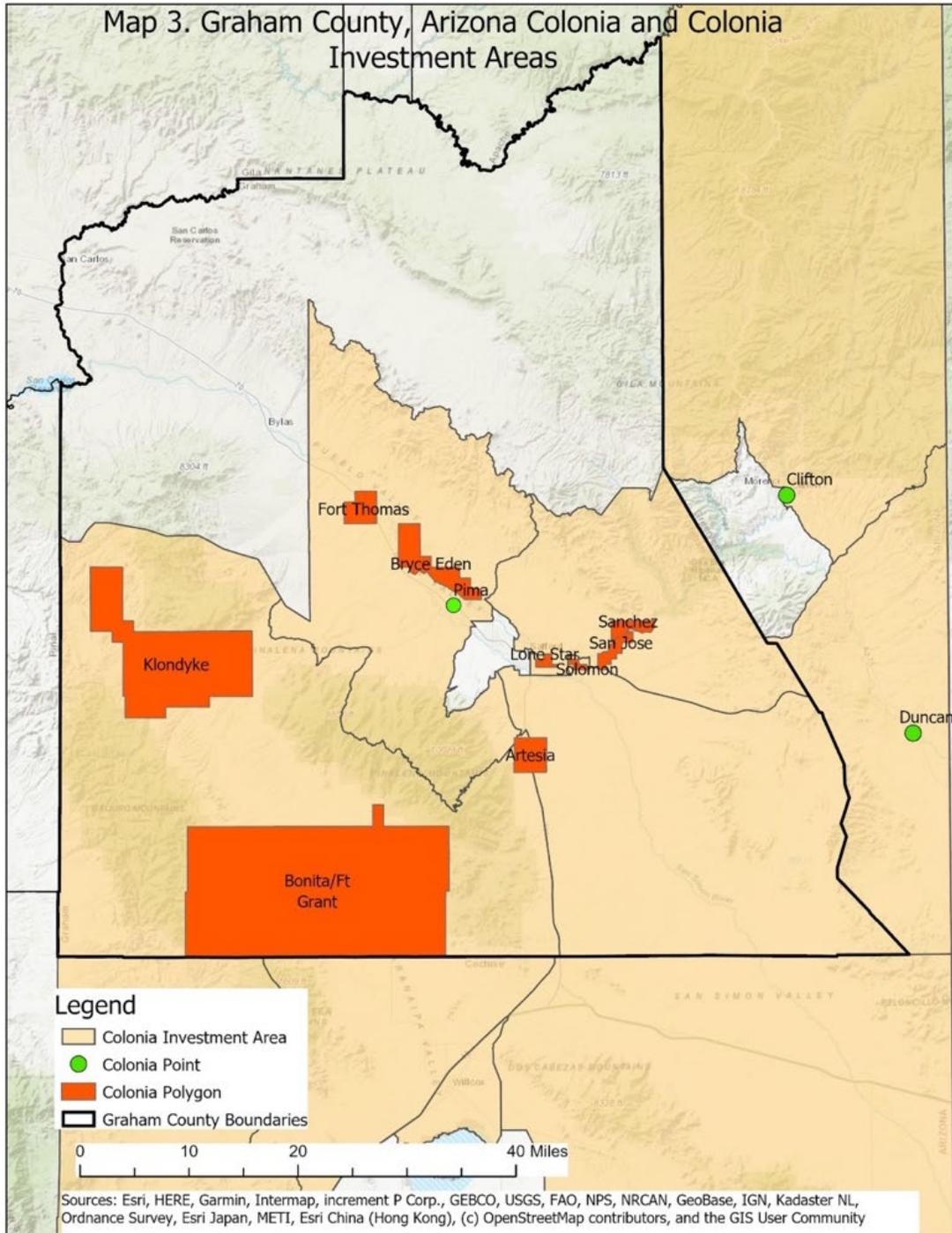
Individual colonia communities were then linked to their census blocks. Census blocks are the lowest level of standard census geography for which the Census Bureau collects and tabulates census information. If 5 percent or more of a census block’s land area contained a colonia, it was classified as a colonia census block.²⁶ If a colonia was represented by a point, the census block containing the point was identified as a colonia census block.²⁷ A final visual inspection checked and confirmed the results and identified any errors or misclassifications. **

** In general, this study’s approach has similarities to the one taken by a 2010 University of New Mexico Bureau of Business and Economic Research (UNMBBER) study, which involved identifying New Mexico census blocks containing colonias. The UNMBBER study used visual inspection of maps/imagery to identify colonia census blocks. The UNMBBER effort, however, did not go beyond identifying census blocks.



3. Aggregation into Colonias Investment Areas

Census blocks nest within census tracts, making it possible to aggregate the individual colonias to the census tract level. Aggregating these data resulted in a count of colonia census blocks for each census tract. Finally, the study classified all census tracts containing at least one colonia census block as “Colonias Investment Areas.” Map 3 provides an example of this process for Graham County, Arizona. Table 3 below provides a tabulation of the resulting Colonias Investment Areas by state.



Source: HAC Tabulations of public colonia data.



Census tracts as a basis for Colonias Investment Areas

The Colonias Investment Areas concept primarily relies on the U.S. Census Bureau’s census tract designation as the geographic unit of analysis. Census tracts are small, relatively permanent statistical subdivisions of a county or equivalent entity. Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. A census tract usually covers a contiguous area; however, the spatial size of census tracts varies widely, depending on the density of settlement.

While there are pros and cons with any unit of geography, the research ultimately sided with the use of census tracts for several reasons:

A right-sized sub-county option. *The county is a commonly used unit of geography from which to classify rural or other areas outside of MSAs. In many rural areas, the county is often identified within political, social, and economic contexts. However, county-based designations are not the optimum criteria on which to base a rural definition. Large counties — particularly in the western United States, where colonias are located — may dilute or mask rural populations given their geographic size and influence. Narrowing the analysis to counties that contain a colonia is extremely imprecise given that 12 counties with recognized colonias have a land area larger than the state of Connecticut. Sub-county units of geography, such as census tracts, are often more precise and uniform indicators of rurality than counties. However, census tracts are also not so small that they are too limiting in the way that other geographies, such as place-level data or census blocks, are.*

Consistent with Duty to Serve geography. *Census tracts align with most of FHFA’s Duty to Serve geographies and use of tracts under the rural and other underserved markets. Additionally, the colonias section of the Rule explicitly mentions census tracts in providing guidance “to address the data challenges that exist in specifically identifying the census tracts that contain ‘colonias.’”*

Targeting and assessment. *Census tracts are the smallest geography for which mortgage loan data is publicly available (Home Mortgage Disclosure Act — HMDA). Using census tracts provides the ability to more adequately understand mortgage markets as well as assess progress and activity.*



4. Compilation

As a final step in creating the database, Colonias Investment Areas (census tracts) from each state were compiled together and normalized to provide a consistent database of all Colonias Investment Areas across the four border states.

5. Exploration

An additional element of constructing Colonias Investment Areas involved a preliminary and descriptive analysis and comparison of geographic, demographic, housing, and mortgage finance characteristics of these areas. The analysis (presented in more detail in Section 3) generally compares social, economic, housing, and mortgage finance characteristics of these markets, including Colonias Investment Areas and non-Colonias Investment Areas in border states and within 150 miles of the U.S.-Mexico border.

6. Stakeholder and expert input

To provide context for the geographic methods and analyses and qualitative information for Colonias Investment Areas, the research convened several outreach engagements and discussions with stakeholders and experts on colonias communities. Additionally, experts from academic, policy, and practitioner communities were sent drafts of the Colonias Investment Area report and concept to review and comment upon. Results from the multifaceted review are highlighted in the “Stakeholder and Expert Input” section of this report on page 46.



The Geography of Colonias Investment Areas

Geography and spatial analysis are at the core of Colonias Investment Areas. First and foremost, the concept defines geographic areas that contain actual colonia communities and can benefit from meaningful mortgage investment and access to home finance resources. The following section details basic geographic elements and components of Colonias Investment Areas along with specific considerations, such as underlying spatial metrics, geographical differences by region and state, and residential patterns within Colonias Investment Areas.

The U.S.-Mexico border region that contains colonias is vast and expansive

When defined as the land area within 150 miles of the U.S.-Mexico border, the border region covers more than 254,420 square miles, which is larger than the area of New England and the Mid-Atlantic states combined.²⁸ The U.S.-Mexico border region includes parts of 109 counties and five major urban areas, Phoenix, Los Angeles, Riverside, San Diego, and San Antonio and contains more than 33 million people.

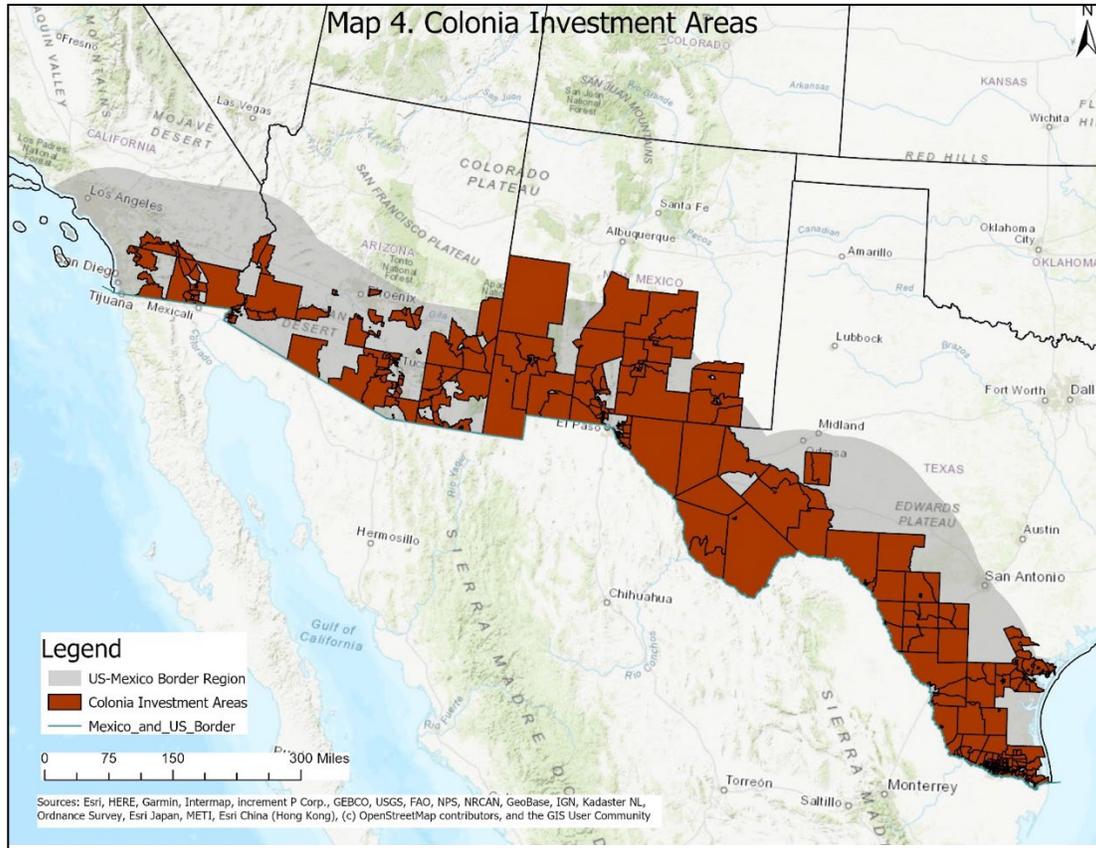
Colonias Investment Areas – A more focused approach

More than 90 percent of the census tracts in the border region are considered urban, with many in large cities such as Los Angeles, Phoenix, and San Diego, where there are no colonias.²⁹ The research identified 446 distinct Colonias Investment Areas, which represent approximately six percent of the U.S.-Mexico border region’s census tracts — See Table 3. As a reminder, a Colonias Investment Area represents a census tract where at least one colonia is located.

Table 3. Colonias Investment Area measures

Border states	Census tracts				Population			
	Total		Rural		Total		Rural	
	U.S.-Mexico border region	Colonias Investment Areas						
Arizona	1,377	94	138	54	6,052,597	396,551	510,885	201,739
California	4,311	23	125	16	20,574,134	138,750	361,016	82,534
New Mexico	107	58	72	41	471,080	273,249	278,570	166,738
Texas	1,205	271	267	102	6,095,514	1,652,150	1,074,066	453,289
Total	7,000	446	602	213	33,193,325	2,460,700	2,224,537	904,300

Source: HAC tabulations of publicly available colonia data.



Considering only the border region’s rural census tracts, approximately one-third are Colonias Investment Areas. This finding varies by state. For example, over half of New Mexico’s rural border tracts are Colonias Investment Areas. Many rural Colonias Investment Areas are large (in land area) and, together, they contain slightly more than half of the U.S.-Mexico border region’s land area. The relatively sparse population in many of these areas, in turn, explains why Colonias Investment Areas contain just 7 percent of the U.S.-Mexico border region’s total population — yet Colonias Investment Areas still contain approximately 2.5 million people.

Colonias Investment Areas are most common in Texas

Texas is home to 61 percent of all Colonias Investment Areas. While 33 different counties in Texas have at least one colonia, these communities are largely concentrated in a few areas, notably the Lower Rio Grande Valley. For example, Hidalgo County, TX, (Map 5) is home to approximately 41 percent of all of Texas’ recognized colonias (over 900) and more than three times the colonia communities found in Arizona, California, and New Mexico combined. This level of concentration, along with the fact that colonias have a relatively small land size in Texas compared to other border states, results in a much higher average number of colonias per Texas Colonias Investment Area. The average number of colonias per Colonias Investment Area in Texas is 8.4, compared to just 1.5, 1.4, and 2.9 for Arizona, California, and New Mexico, respectively.

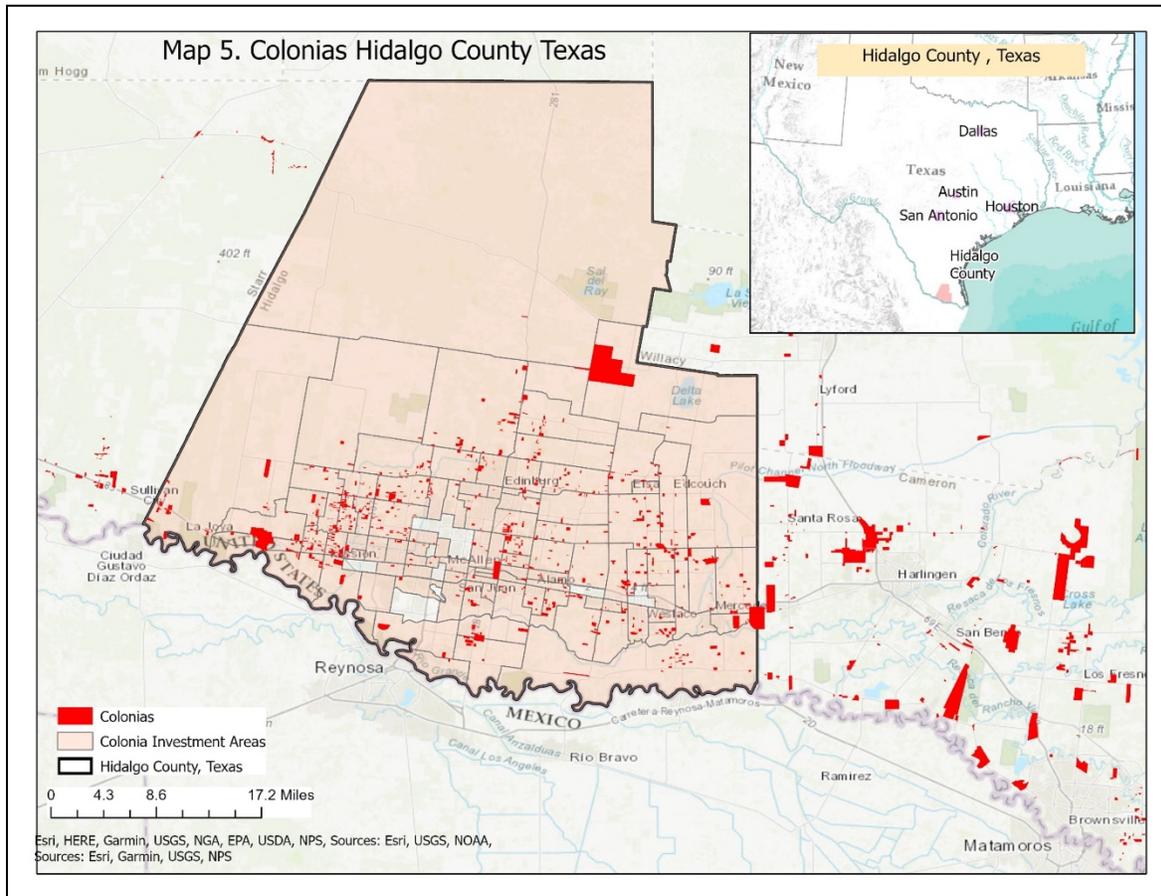
However, there is no standardization across states or public entities for determining colonia communities. For example, colonias in Texas tend to be an identified street or block, whereas in other states, like California, an entire town might be defined as a colonia. This could indicate that a relatively small area in Texas might have multiple colonia, where another state might consider it one large community.



Colonias are not just a Texas phenomenon

Each of the four border states contain a substantial number of Colonias Investment Areas. Even California, with less than one percent of all recognized colonias, is home to 23 Colonias Investment Areas. The relatively broad coverage of these communities, despite different demographic and housing characteristics, indicates that colonias are not just in Texas.

Most of the census tracts in the border region of New Mexico are classified as Colonias Investment Areas, largely reflecting the rurality of the area. Two-thirds of the census tracts in the New Mexico border region are rural. New Mexico's border region is unique in that it does not contain a major metropolitan area.



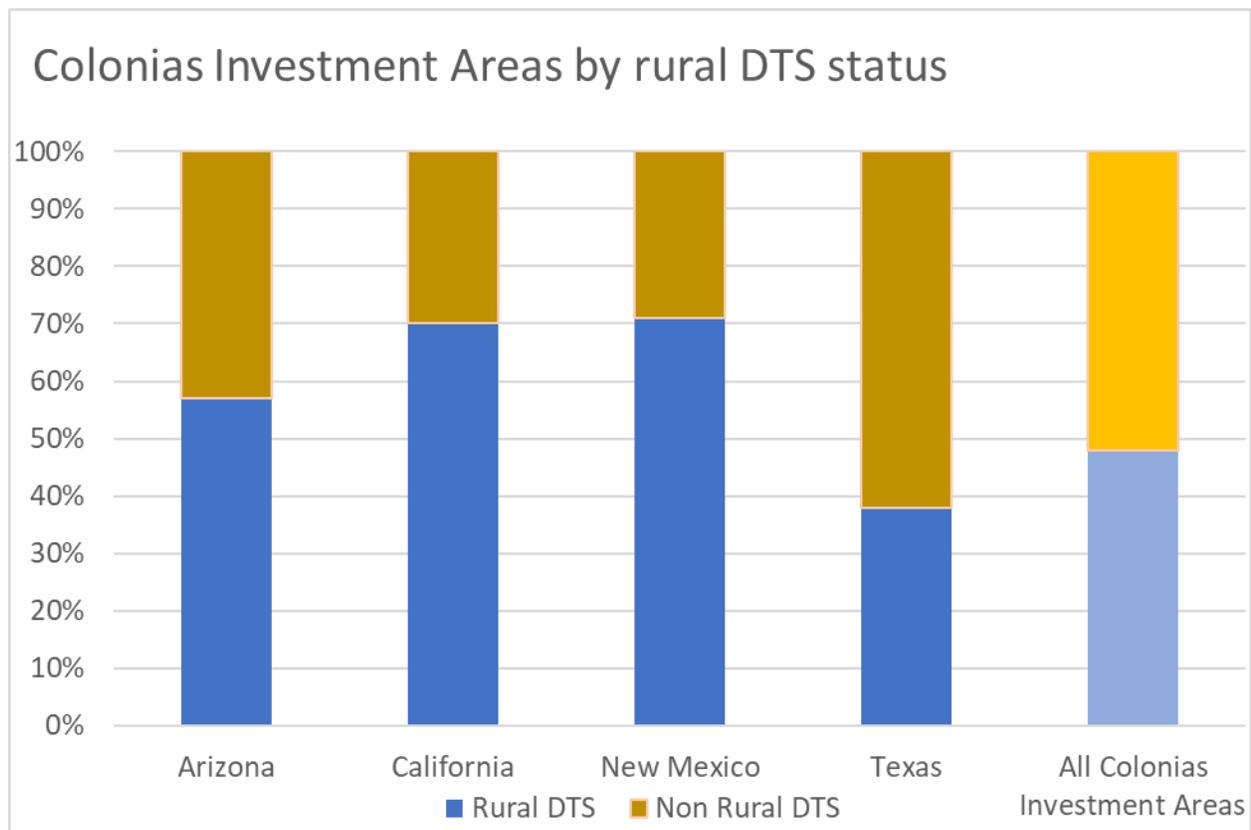


Development patterns

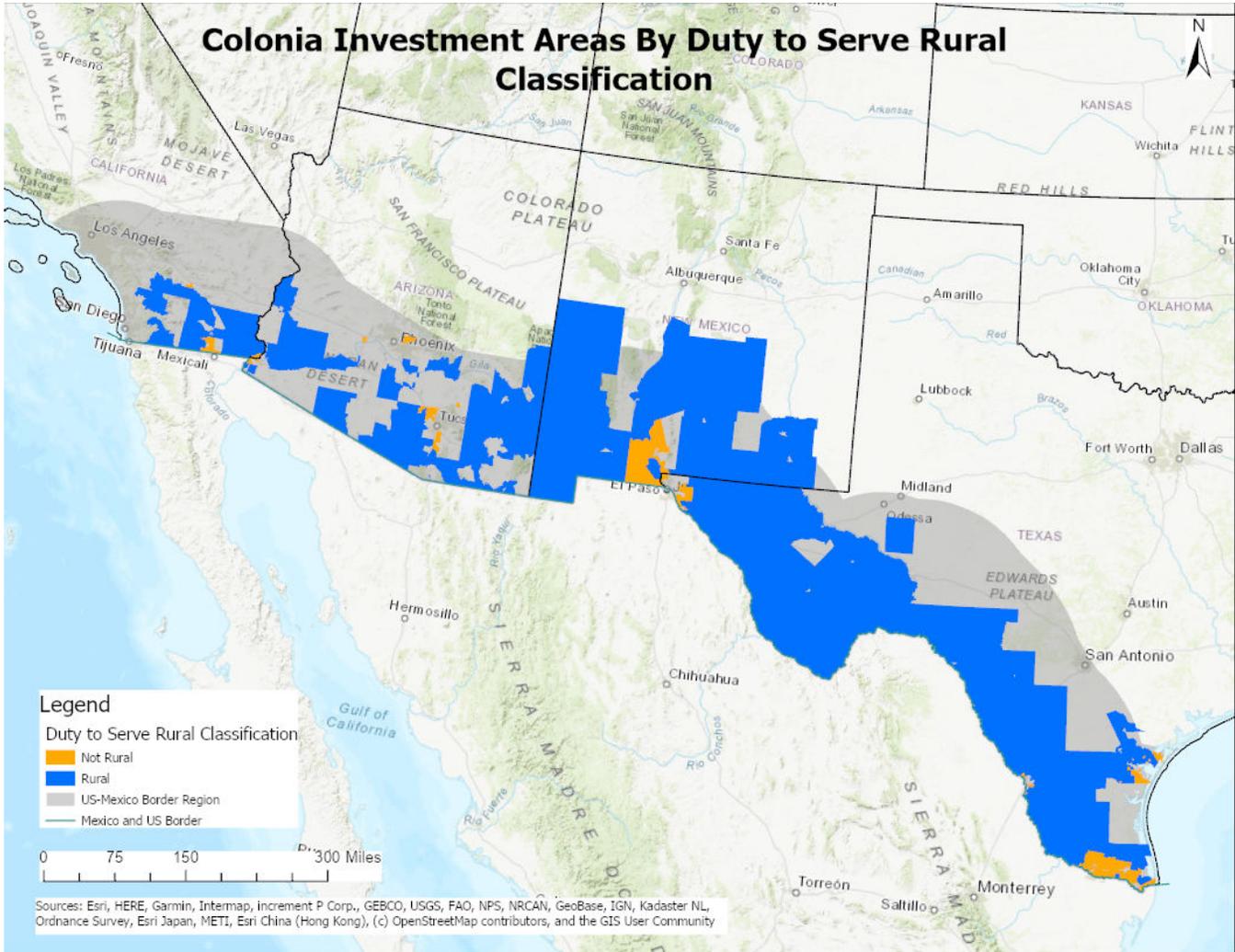
Colonias are most often associated with rural or ex-urban fringe areas, where the subdivision/development and sale of unincorporated land that lacks access to basic infrastructure (roads, water, sewer, etc.) is most likely to occur. Overall, 48 percent of Colonias Investment Areas are classified as “rural” census tracts as defined by FHFA’s Duty to Serve criteria. The overall rurality patterns vary by state, however, and 70 percent of California and New Mexico’s Colonias Investment Areas and 57 percent of Arizona’s Colonias Investment Areas are “rural” as defined by FHFA’s Duty to Serve definition.

Texas bucks the pattern

A review of Texas’ development patterns explains why less than half of all Colonias Investment Areas are rural. The vast majority of colonias communities are in Texas, and some areas in South Texas have experienced dramatic urbanization since the 1960s. For example, Hidalgo County’s population in 1970 was 181,535, which more than quadrupled to 865,939 by 2018. The original rural/ex-urban fringe areas where many colonias developments originated are now considered urban. If Hidalgo County Colonias Investment Areas were not included, most Texas Colonias Investment Areas (57 percent) as well as a majority of all Colonias Investment Areas (60 percent) would be considered rural.



Source: HAC tabulations of publicly available colonia data.





People and Economies of Colonias Investment Areas

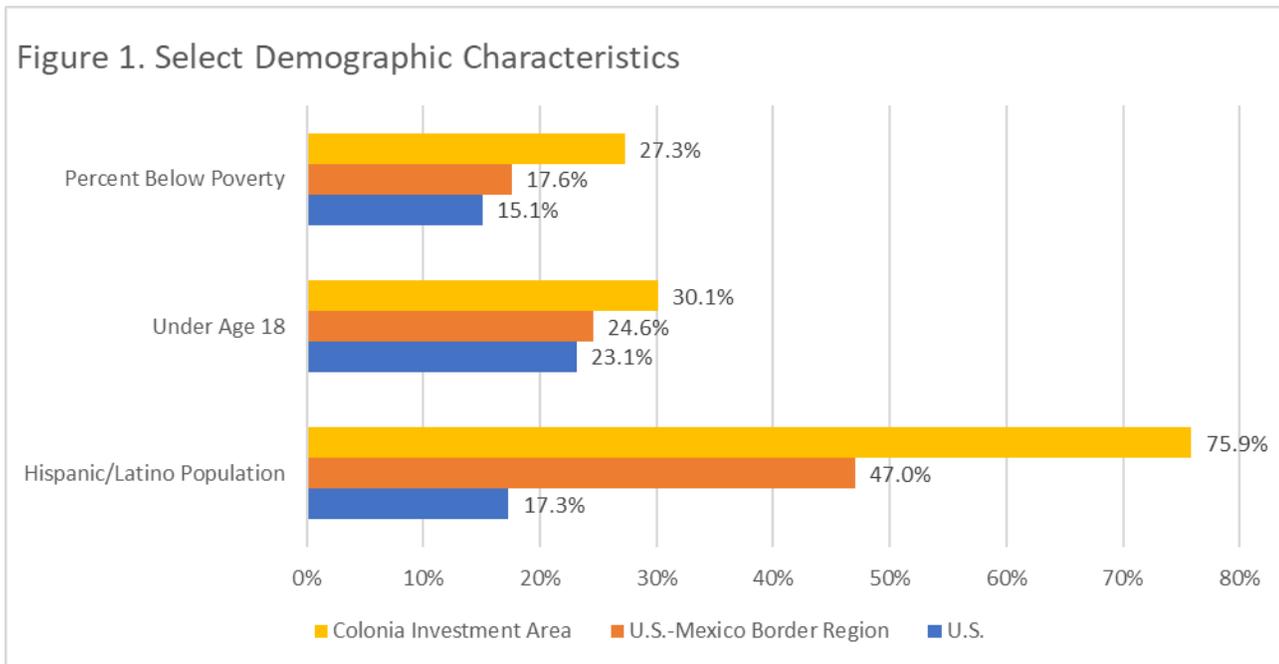
To better understand and help test the concept of Colonias Investment Areas in practice, a preliminary and descriptive analysis of key characteristics was conducted for these areas. The analysis generally compares selected social, economic, housing, and mortgage finance characteristics of markets (Colonias Investment Areas and non-Colonias Investment Areas) in border states and within 150 miles of the U.S.-Mexico border. The Census Bureau’s American Community Survey (ACS) 2012 – 2016 data were used for demographic and housing characteristics and HMDA 2015 – 2017 data provided information on mortgage lending markets.

Overall, there are approximately 2.5 million people who live in Colonias Investment Areas. Of these, over 70 percent of the Colonias Investment Area population also live in Duty to Serve classified persistent poverty counties.³⁰

Table 4. Population comparison of Colonias Investment Areas and Duty to Serve high-needs regions

Regions	Overall		Rural	
	Total	Persistent poverty counties	Total	Persistent poverty counties
Lower Mississippi Delta	9,881,159	3,029,989	5,253,513	2,202,423
Middle Appalachia	9,110,076	1,513,134	5,356,666	1,284,342
Colonias Investment Areas	2,460,700	1,773,973	904,300	462,860

Source: HAC tabulations of publicly available colonia data.



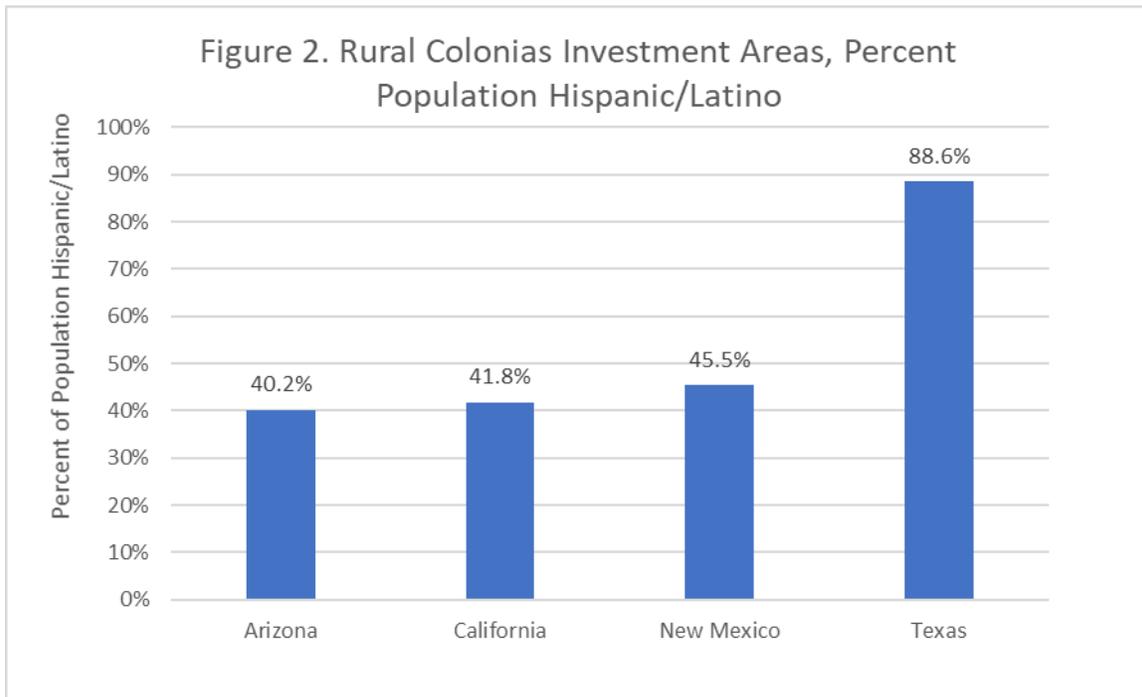
Source: HAC tabulations of the U.S. Census Bureau’s 2013 – 2017 American Community Survey.



Colonias Investment Areas have relatively larger Hispanic/Latino populations

Hispanics/Latinos comprise more than three-quarters of the population in Colonias Investment Areas, which is considerably higher than their 47 percent share of the population for the remainder of the U.S.-Mexico border region. This largely aligns with perceptions and depictions of colonias being largely Hispanic/Latino communities.³¹

But aggregate numbers may obscure variation in race and ethnicity across and within Colonias Investment Areas in the border states. Hispanics/Latinos constitute a high of 88 percent of the population in Texas Colonias Investment Areas and a low of 39 percent of the population in Arizona Colonias Investment Areas. At the Colonias Investment Area level (census tract), there are even more pronounced differences. For example, the Hispanic/Latino population is less than 50 percent in more than half of Arizona, California, and New Mexico's rural Colonias Investment Areas. This indicates that for more than half of the rural Colonias Investment Areas in three of the four border region states, Hispanic/Latinos are not a majority of the population.



Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.

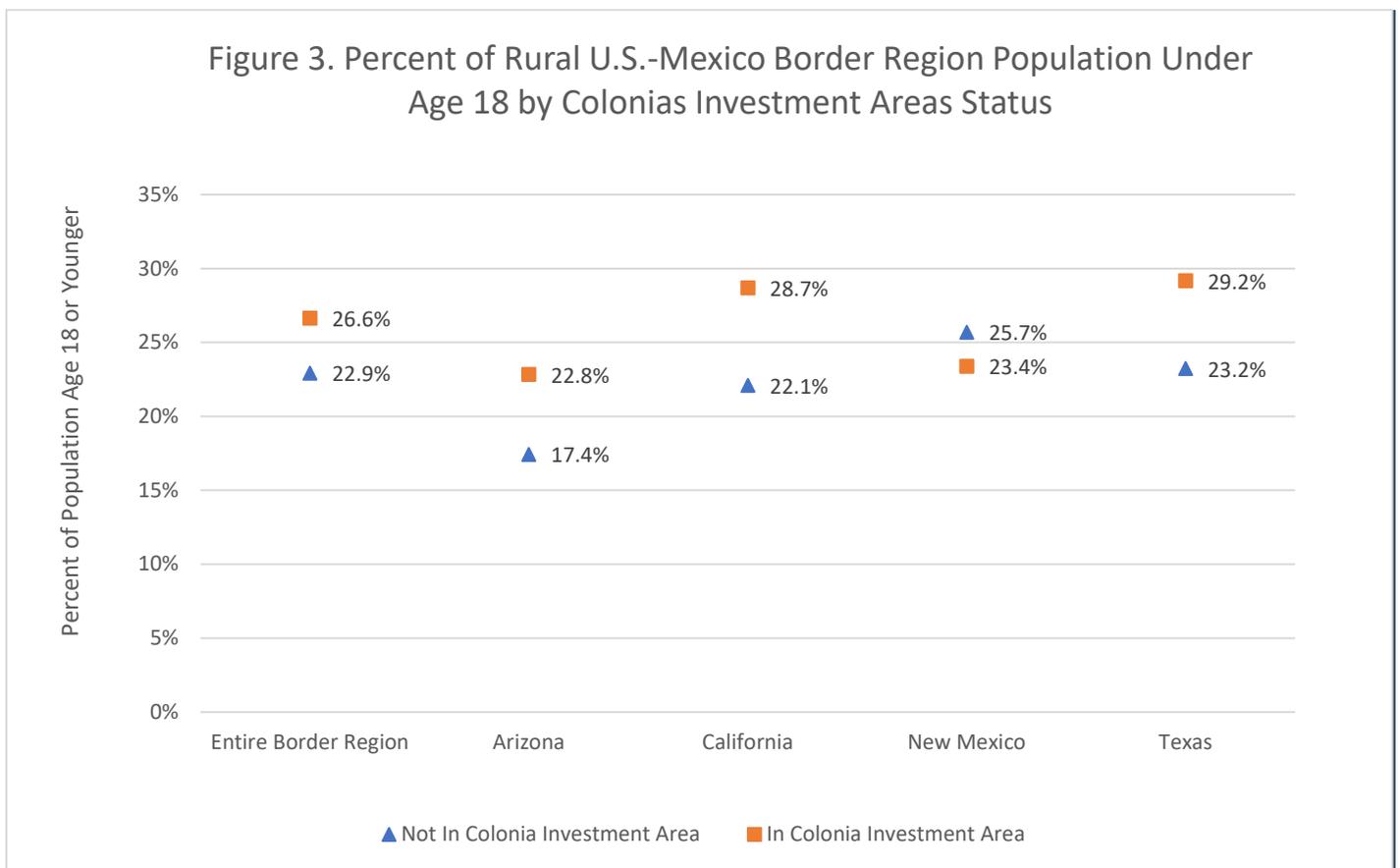
It is also important to note that several colonias are on Native American lands. As a result, six Colonias Investment Areas have a majority Native American population. Four of the majority Native population Colonias Investment Areas are in Arizona, as well as one in California and one in New Mexico. This again reinforces that colonias and their surrounding markets are not monolithic, as researchers have noted.³²



Colonias Investment Areas skew younger

Colonias Investment Areas, in aggregate, are home to a relatively young population. While approximately 23 percent of the population in the U.S. is age 18 and younger, 30 percent of the Colonias Investment Area population is 18 years old or younger. Again, these 18 and under rates vary from state to state, with a high of 32 percent for Texas Colonias Investment Areas and a low of 25 percent for Arizona Colonias Investment Areas.

Colonias Investment Area populations also stand out as being younger when making comparisons within the border region. When looking at only the rural parts of the U.S.-Mexico border region by state, a significant share of the Colonias Investment Area population in California, Texas, and Arizona is age 18 and younger. The differences in the percentage of the population that is 18 and younger between rural Colonias Investment Areas and the rural border region, which were four percentage points or more, suggest they are meaningful. New Mexico is the one state where Colonias Investment Areas skew older. Previous research notes that some colonias have primarily older residents.³³



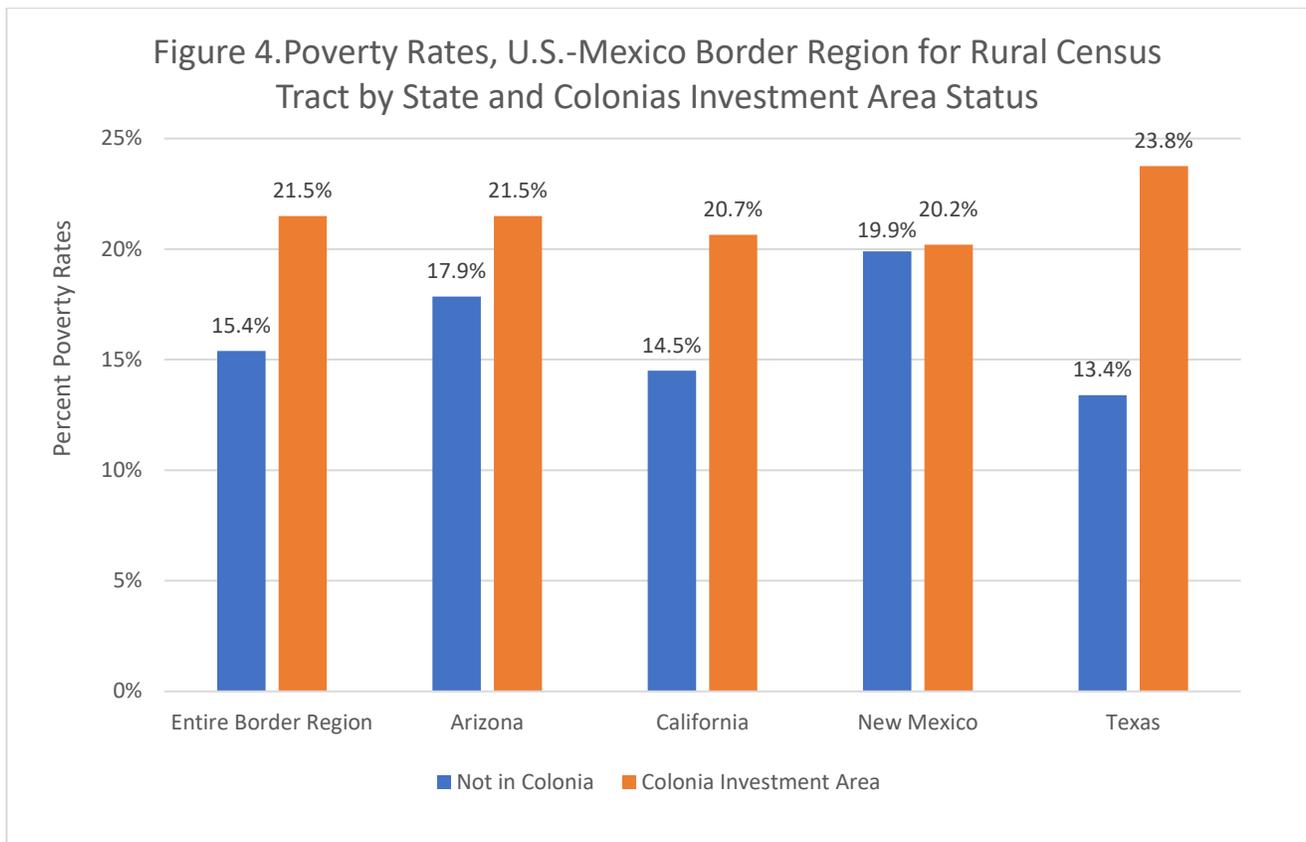
Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.



Colonias Investment Areas are some of the most impoverished markets in the nation

High rates of poverty, a defining factor of colonia developments, are visible throughout the region. The U.S. poverty rate is an estimated 15 percent, while the aggregate Colonias Investment Area poverty rate is nearly twice the national level at 27 percent. The poverty rate for Colonias Investment Areas in California and New Mexico exceeded 20 percent and reached 19 percent in Arizona. Texas' Colonias Investment Area poverty rate is exceedingly high at 30 percent. Poverty in many of these markets is a chronic condition. Sixty-three percent of all Colonias Investment Areas were also in persistent poverty counties.

The magnitude of the poverty rates is clear when comparing the rural portions of the U.S.-Mexico border region — see Figure 4. A majority of rural Colonias Investment Areas (census tracts) exceed 20 percent poverty rates in every state. In contrast, poverty rates in most rural U.S.-Mexico border region census tracts without colonias were below 20 percent.

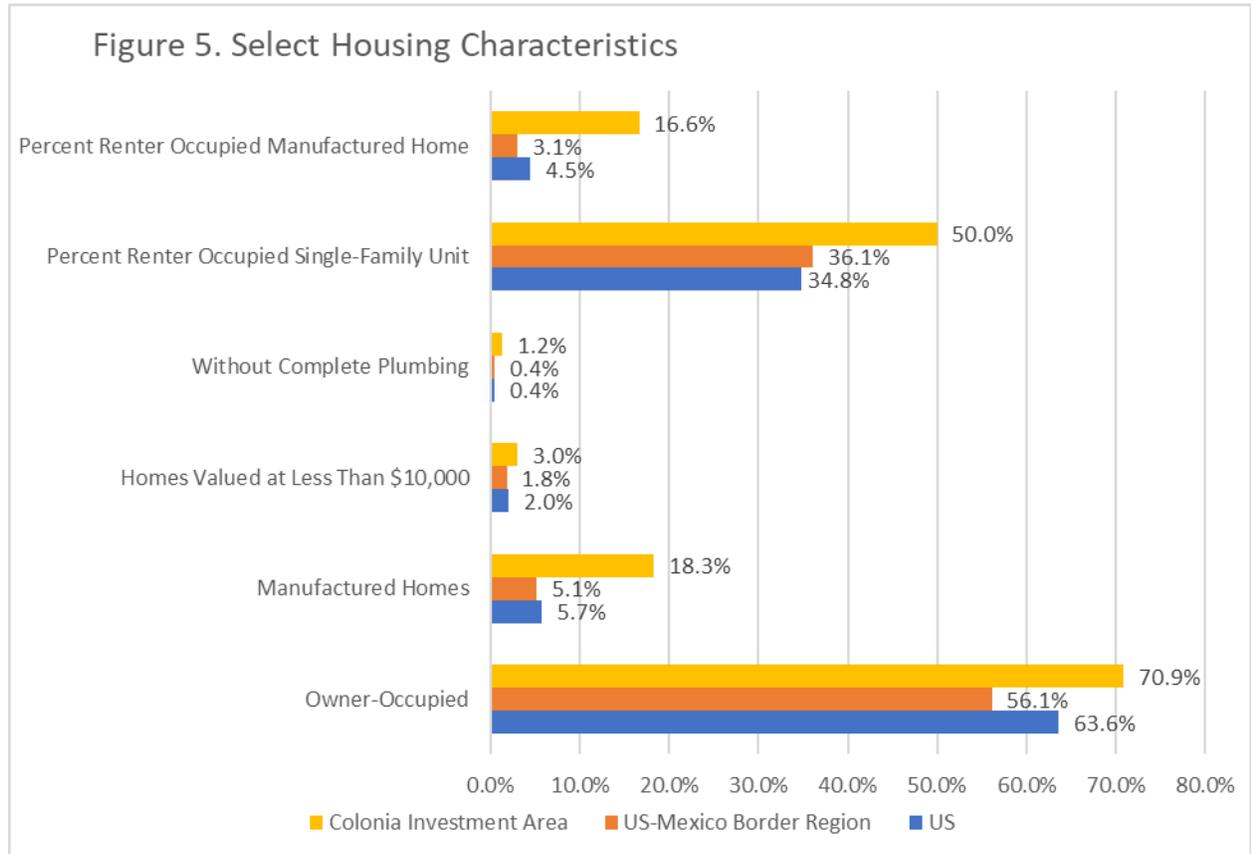


Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.



Housing characteristics and patterns in Colonias Investment Areas

Poor housing conditions play a central role in the recognition and designation of colonias, where the housing stock includes conventional stick-built houses, manufactured homes, and adobe structures.³⁴ In older colonias, the substandard conditions are largely the result of an old, deteriorating housing stock, while the newer colonias contain units that are not up to code.³⁵

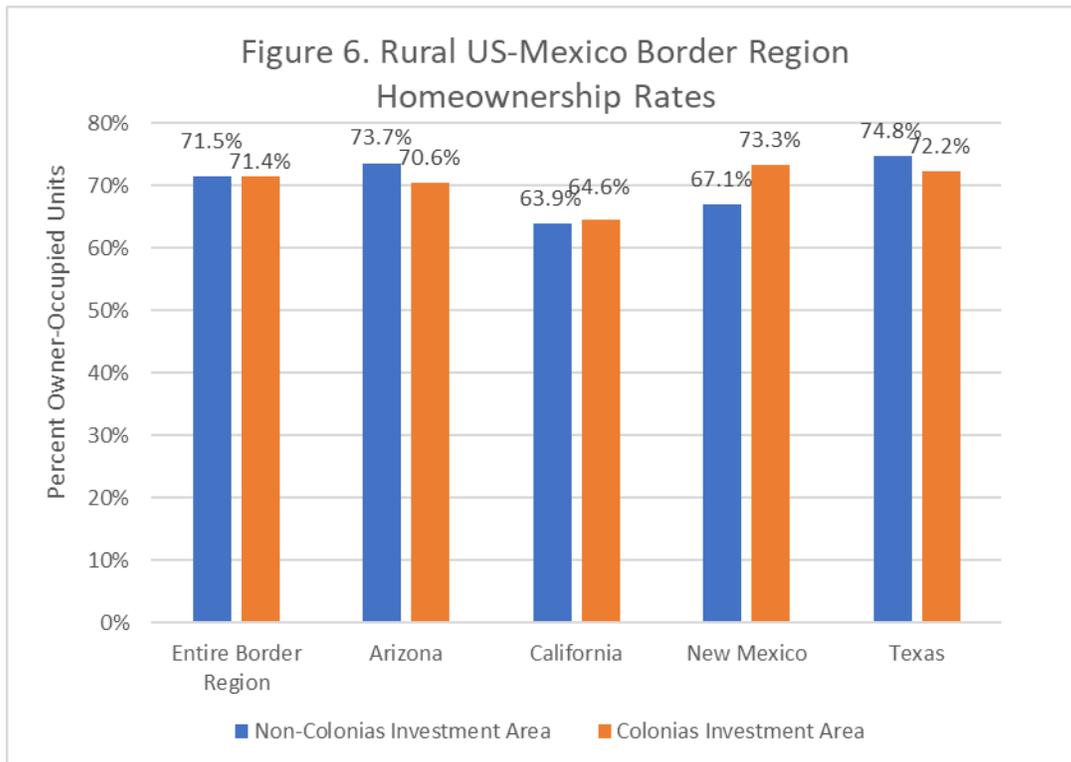




Homeownership is predominant in Colonias Investment Areas

Households living in Colonias Investment Areas are primarily homeowners. It is important to note that while homeownership is generally high in colonias, a portion of these households may have home or land financing elements that charge high fees or include usury terms and fees.³⁶ An initial review of the aggregate data in the Colonias Investment Areas indicate higher homeownership rates in Colonias Investment Areas than in the remainder of the U.S.-Mexico border region for each of the four border region states. Rural homeownership rates are essentially the same with one exception, regardless of whether a census tract contains colonias.

New Mexico stands out because the homeownership rates are consistently higher in Colonias Investment Areas than non-Colonias Investment Areas in the U.S.-Mexico border region.



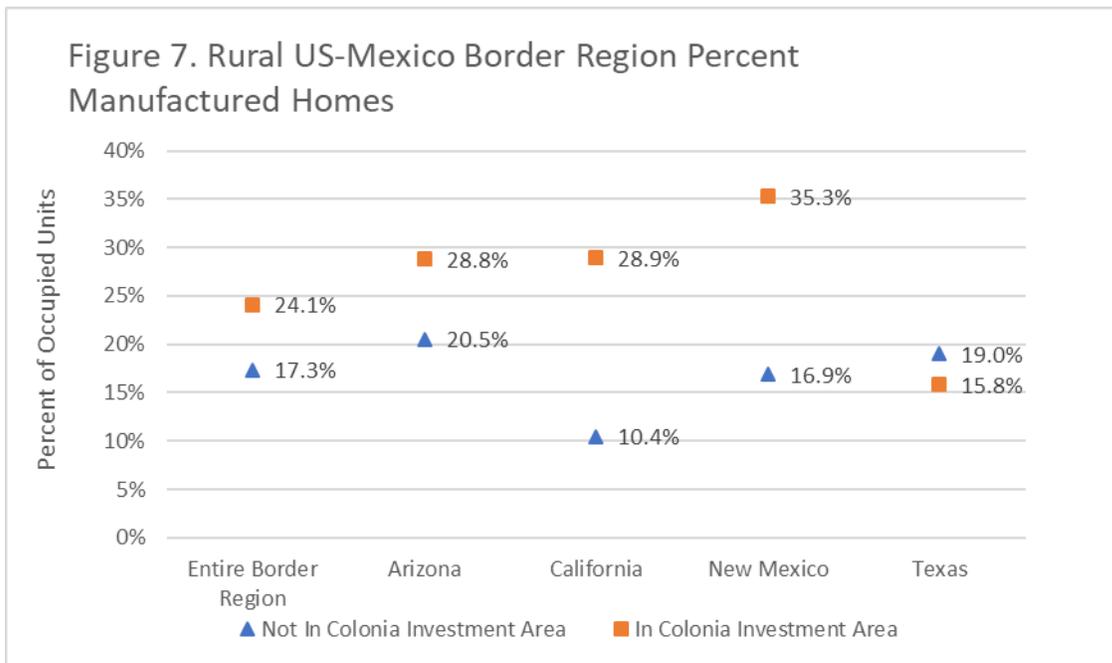
Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.



Manufactured homes are popular in Colonias Investment Areas

Manufactured housing is an important housing option in many rural communities and is particularly prevalent in Colonias Investment Areas. In total, manufactured homes make up 18 percent of all occupied homes in Colonias Investment Areas, compared to 4.2 percent for all other areas in the U.S.-Mexico border region. In the case of New Mexico, manufactured homes represent 32 percent of all occupied units in Colonias Investment Areas, which was much higher than the 14 percent for the remainder of the New Mexico border region.

The composition of housing structure type is not the same across Colonias Investment Areas in all four states. Manufactured homes are more prevalent in Arizona, California, and New Mexico Colonias Investment Areas than in Texas. In California's rural border region, 29 percent of all occupied units in Colonias Investment Areas are manufactured homes, compared to 10 percent for the remainder of the rural area. In the rural border region of Texas, 16 percent of all occupied units in Colonias Investment Areas are manufactured homes, compared to 19 percent for the remainder of the rural area. Research notes that such differences exist in colonias with manufactured housing being more prevalent in certain states such as California.³⁷ New Mexico also stands out as having the second highest percentage of occupied units that are manufactured homes in the nation, trailing only South Carolina.

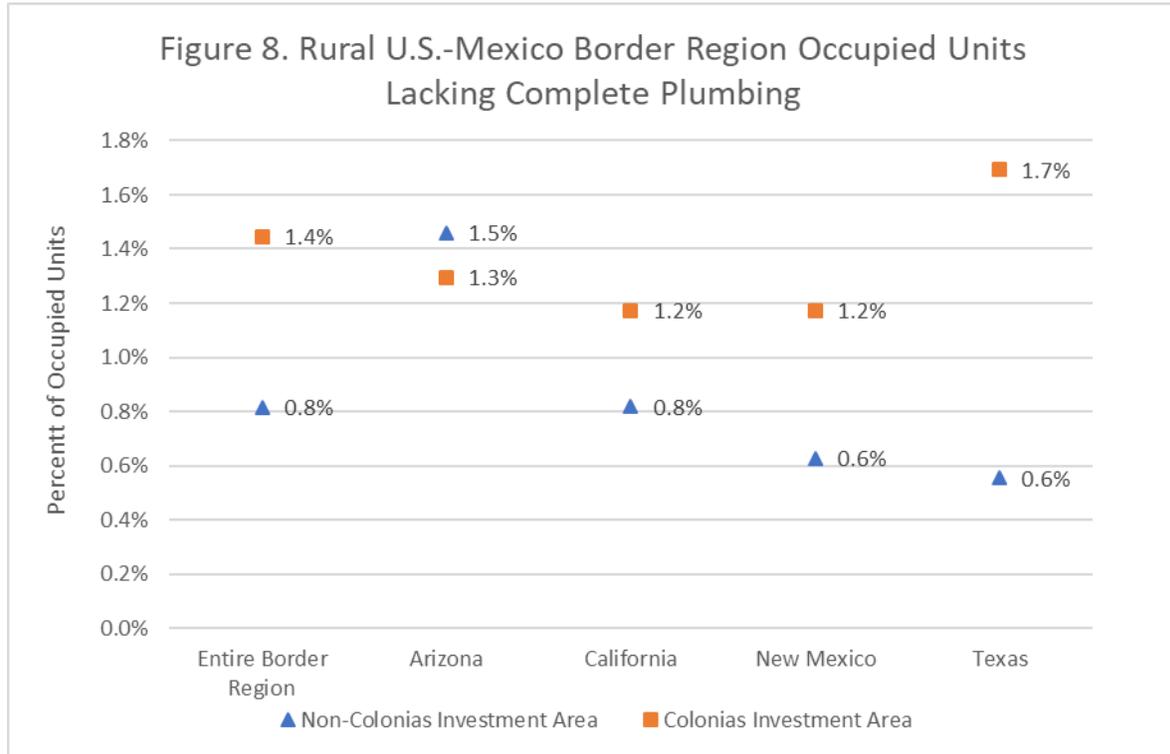


Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.



Substandard plumbing is a visible reminder of colonias needs

A defining element of colonias communities is the absence or insufficiency of plumbing. The percentage of units lacking complete plumbing is high for Colonias Investment Areas — 1.2 percent for Colonias Investment Areas compared to 0.4 percent for non-Colonias Investment Areas nationally, which points to elevated levels of substandard housing. In whole numbers, an estimated 9,160 occupied units lack complete plumbing. The differences are relatively consistent for all four border states.

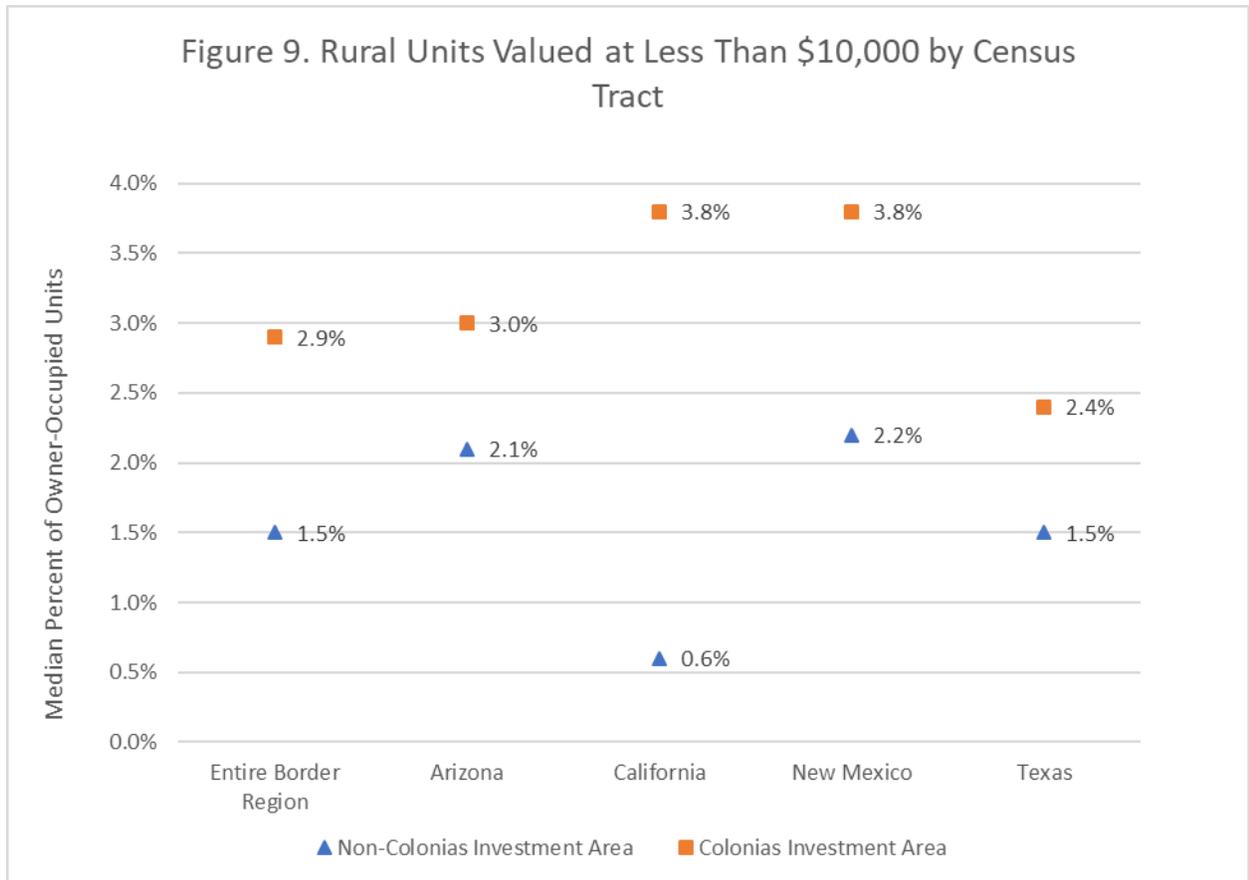


Source: HAC tabulations of the U.S. Census Bureau’s 2013 – 2017 American Community Survey.



Colonias Investment Areas have low-value homes

A proxy measure for lower quality housing is extremely low home value. A relatively large share of owner-occupied units (3 percent) in Colonias Investment Areas are valued at less than \$10,000. The difference exists for all border region states and can clearly be seen when looking only at rural areas. In California's portion of the U.S.-Mexico border region, the rate of homes valued at less than \$10,000 is 0.6 percent for rural areas in non-Colonias Investment Areas and 3.8 percent for rural areas in Colonias Investment Areas. It is important to note that the states with the highest share of homes valued at less than \$10,000 also had a high share of manufactured homes.



Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.



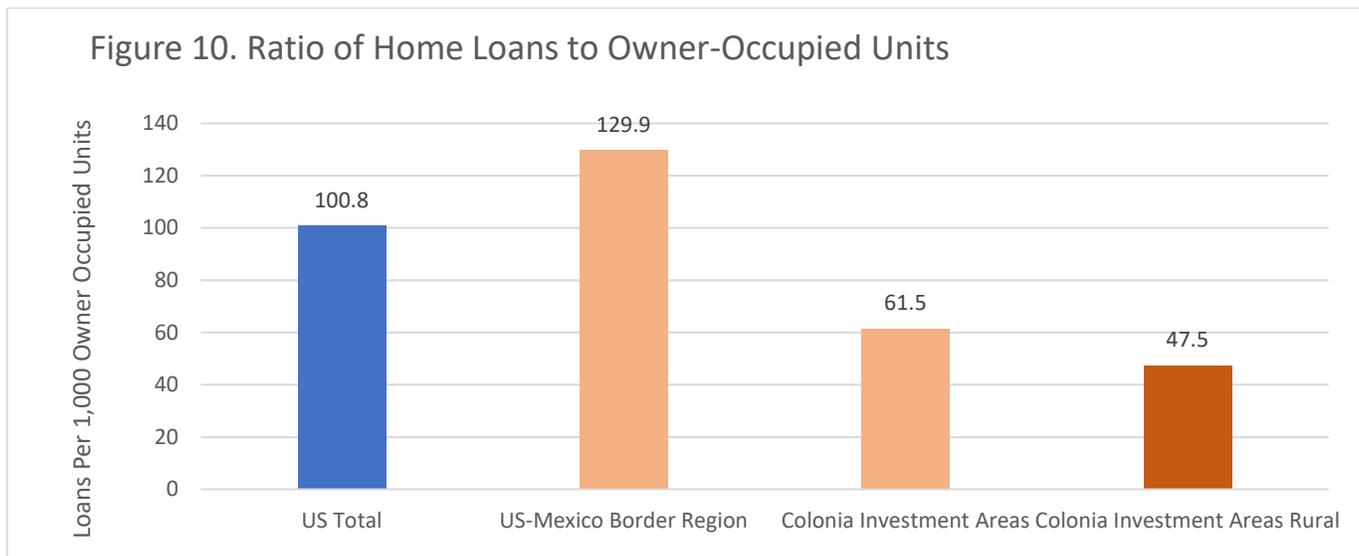
Mortgage Lending and Finance Access in Colonias Investment Areas

The use of informal or non-conventional financing mechanisms to obtain homeownership is an indication of the gap in traditional financing available to low-income and immigrant populations. In some cases, this may be due to a dearth of financial institutions in remote rural areas. Another likely contributor is the large immigrant population, which may be unfamiliar with the services offered by banks or who are simply unsure of such arrangements.

Dearth of colonia mortgage lending activity

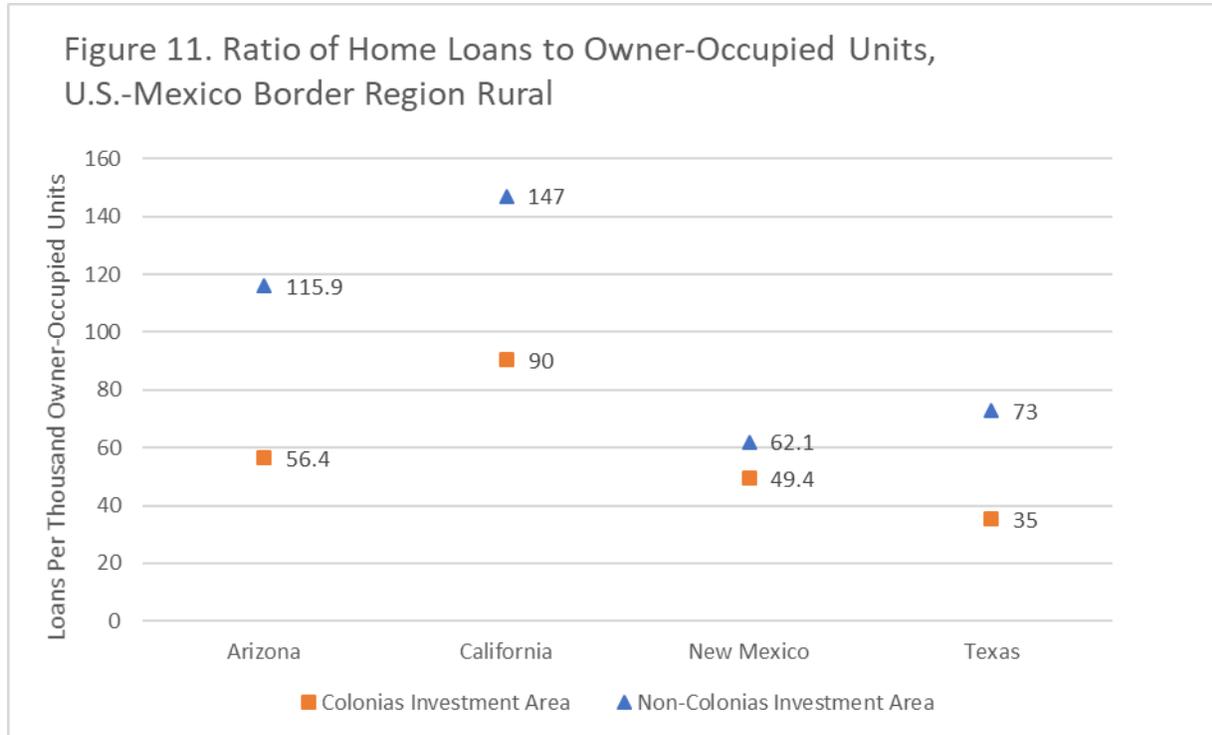
Colonias Investment Areas have substantially lower rates of mortgage lending compared to nearly any market nationally. To make lending comparisons, the analysis explored lending activity as the number of loan originations per thousand owner-occupied homes. The originations total represents the annual average number of Home Mortgage Disclosure Act (HMDA) reported loans (home purchase, refinance, and home improvement) originated for the 2015 – 2017 period. An average of three years of lending activity was incorporated to minimize fluctuations and volatility.³⁸

The analysis of HMDA data finds an extremely low volume of mortgage lending in Colonias Investment Areas. The U.S.-Mexico border region at large has a relatively high volume of lending, but this includes fast-growing urban and suburban areas associated with major cities, like San Diego and Phoenix. Analyses indicate a dearth in lending activity in Colonias Investment Areas and is most pronounced in rural Colonias Investment Areas. The amount of lending, using owner-occupied units to standardize the measure, is more than twice as large for the U.S.-Mexico border region as a whole than for Colonias Investment Areas and nearly three times as large as the amount of lending that occurs in rural Colonias Investment Areas.



Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey and FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.

A closer look at the data reveals that the limited volume of lending in Colonias Investment Areas is particularly noticeable even when looking at rural communities. Using the Texas U.S.-Mexico border region as an example, there were 35 loans per thousand owner-occupied units in rural Colonias Investment Areas, compared to 73 loans per thousand for rural areas not in Colonias Investment Areas. This difference exists for all four border region states. The findings reinforce recent research that indicates that there is limited conventional lending activity in colonias.³⁹ Past research noted that lower-income colonia residents lack access to the formal credit markets, which is predominately the loan activity that HMDA data captures.⁴⁰



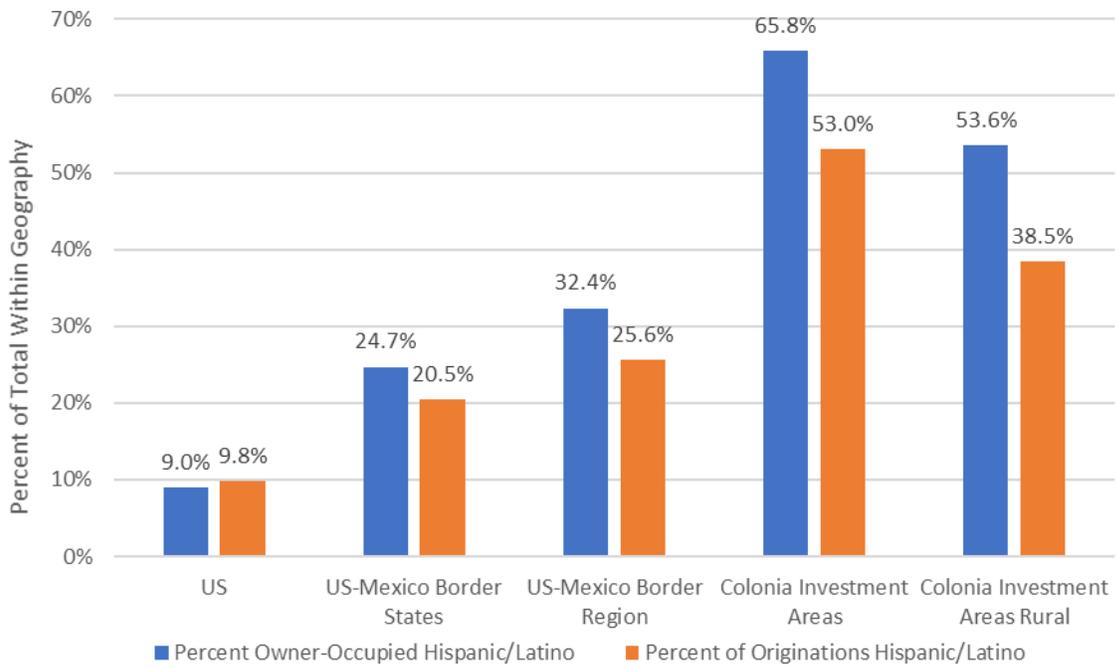
Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey and FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.

Hispanics/Latinos make up a large share of the population in many colonias, particularly Texas. As such, they are an important part of the mortgage lending market. Research indicates that Hispanics/Latinos, along with other minority groups, often receive less lending activity than white non-Hispanics.⁴¹ A review of loan originations for activity between 2015 and 2017 finds that Hispanic/Latino borrowers in Colonias Investment Areas receive a disproportionately low share of loans when compared to their share of owner-occupied units. Hispanic/Latino households owned 66 percent of the owner-occupied housing stock in Colonias Investment Areas, but they received only 53 percent of home loans annually. The difference between share of occupied housing stock and home loans increases incrementally between the nation, the border region at large, and Colonias Investment Areas.

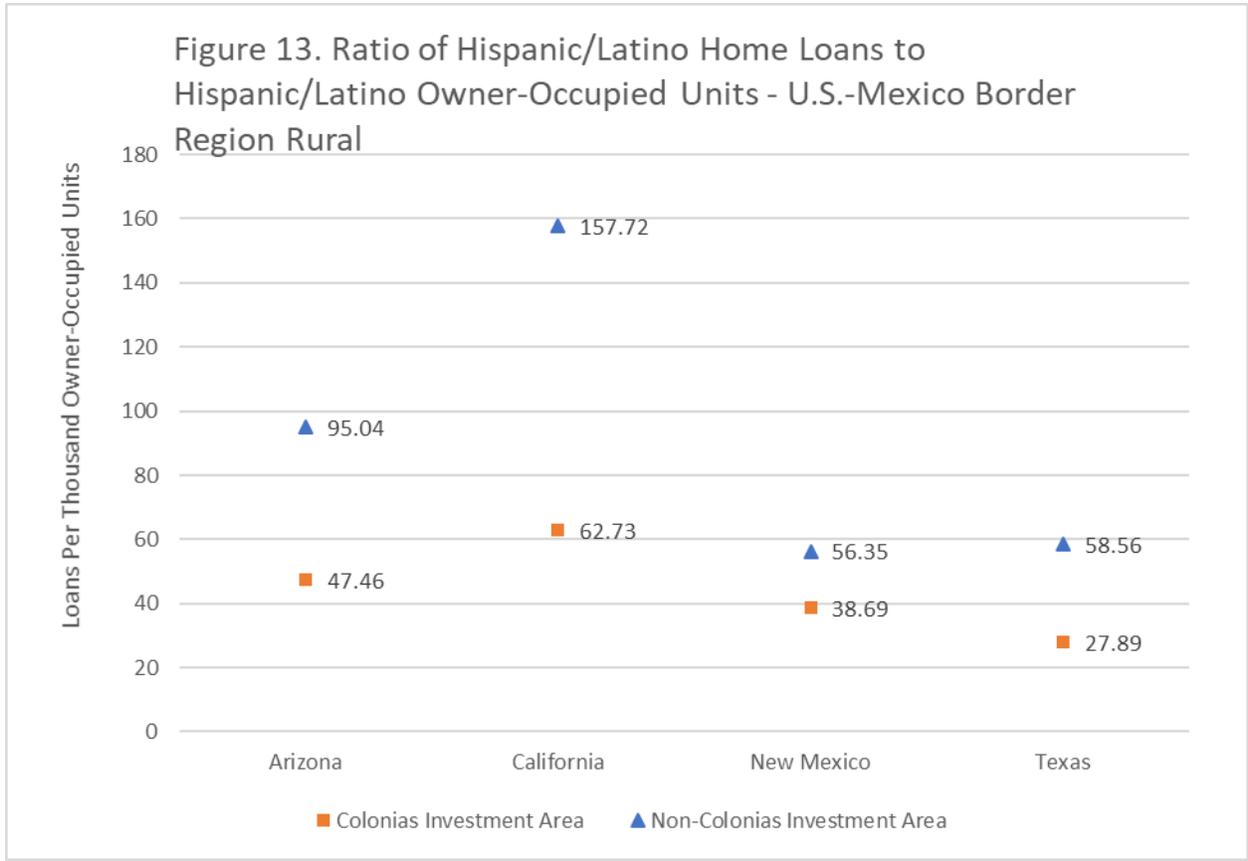
A ratio of loans to owner-occupied homes for Hispanics/Latinos in the specific rural portion of the U.S.-Mexico border region indicates much lower Colonias Investment Area activity. This finding gives support to the Colonias Investment Areas as accurately identifying colonias communities. The ratios for Hispanics/Latinos are lower than the ratios for all activity in Colonias Investment Areas as a whole and indicate that home lending for Hispanics/Latinos is below levels consistent with demographic patterns.



Figure 12. Hispanic/Latino Share of Owner-Occupied Housing Units and Total Home Lending



Source: HAC tabulations of the U.S. Census Bureau's 2013 - 2017 American Community Survey and FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.



Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey and FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.



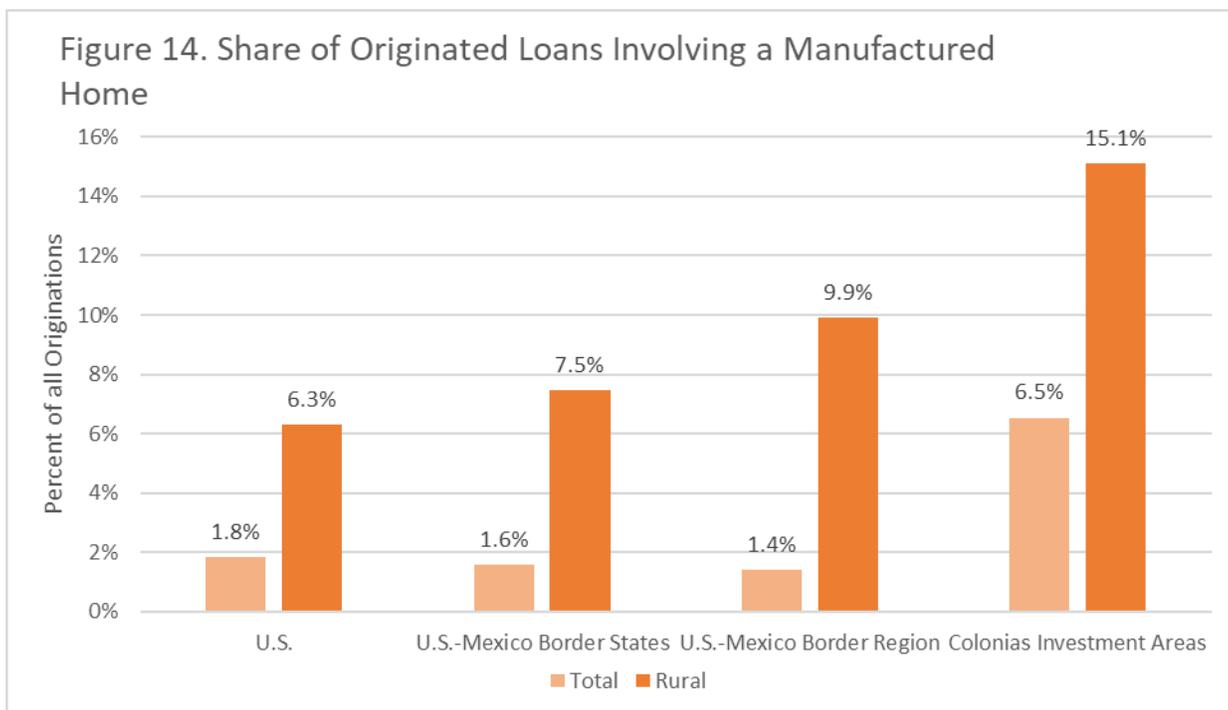
Manufactured home lending

Manufactured homes are an important component of housing markets in both the border region as a whole and Colonias Investment Areas. A review of HMDA data seen in the following table and figure finds that loans involving manufactured homes represent a relatively large share of lending in rural areas in general and are even more prevalent in Colonias Investment Areas. Approximately 15 percent of all originations in rural Colonias Investment Areas involved a manufactured home, which is more than twice the percentage for rural areas nationally (6.3 percent). Loans involving a manufactured home made up a larger share of lending in Colonias Investment Areas than they did for the U.S.-Mexico border region.

Manufactured home Applications

Geography	Total applications	Applications where loans were not secured by property and land, just property (proxy for chattel)		Total originations	Originations where loans were not secured by property and land, just property (proxy for chattel)	
		Number	Percent		Number	Percent
U.S.	443,722	193,652	43.6%	173,625	52,067	30.0%
U.S.-Mexico border region	41,028	21,217	51.7%	15,055	5,666	37.6%
U.S.-Mexico border region — Colonias Investment Areas	7,249	3,472	47.9%	2,725	930	34.1%

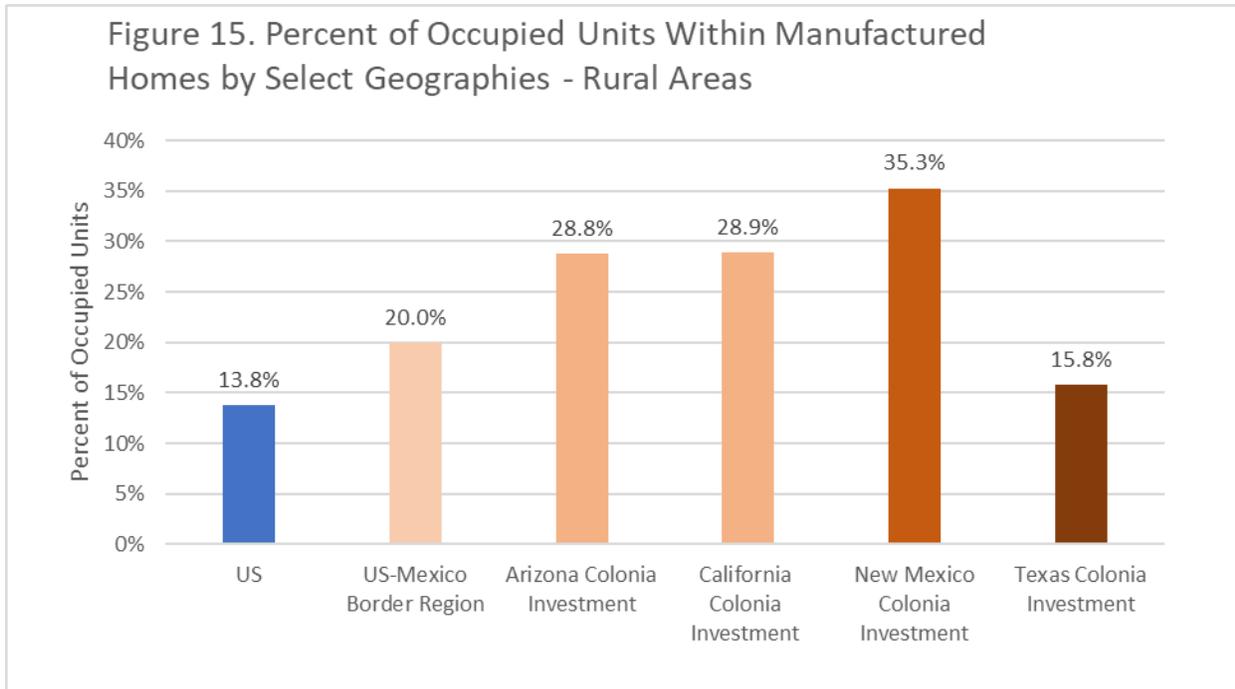
Source: HAC tabulations of the FFIEC's 2019 Home Mortgage Disclosure Act (HMDA) data.



Source: HAC tabulations of the FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.



The share of mortgage loans that involved manufactured homes is a direct reflection of the prevalence of this housing in the Colonias Investment Areas.

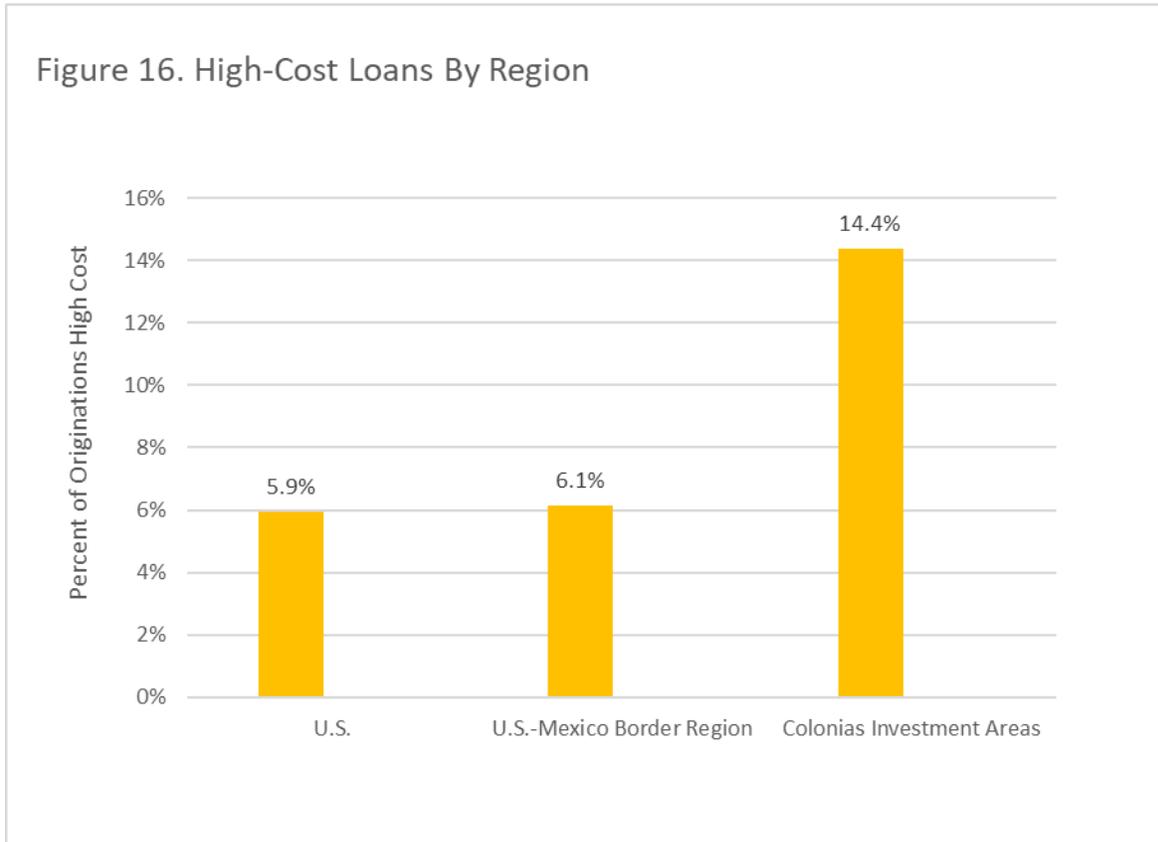


Source: HAC tabulations of the U.S. Census Bureau's 2013 – 2017 American Community Survey.



High-cost lending

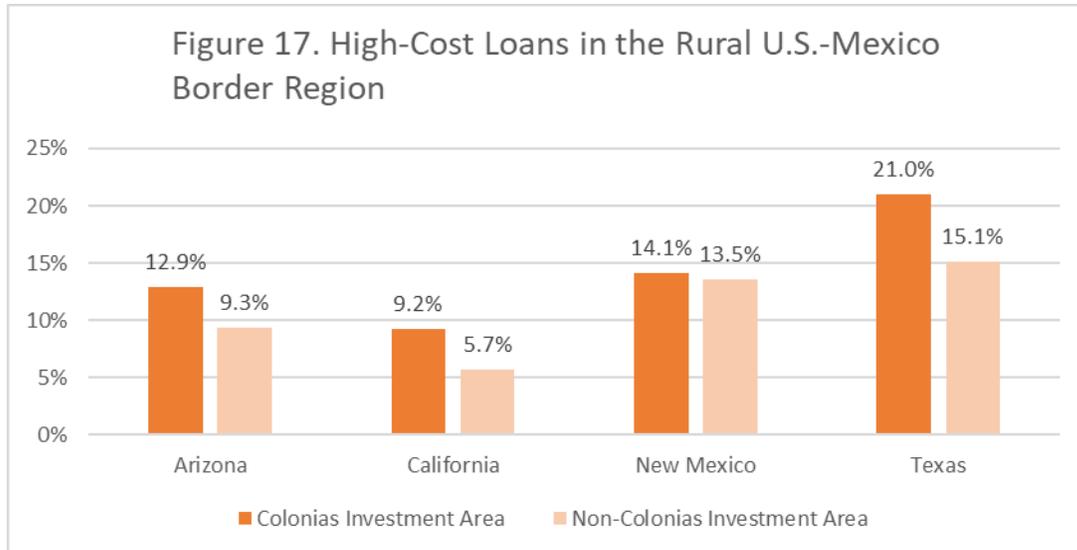
High-cost loans signal mortgage loans where the interest rate charged exceeds that of the interest rate that would be charged on a similar loan to a qualified borrower. When the difference meets a certain threshold (1.5 percentage points for first lien loans), it is classified as high-cost.⁴² High-cost lending is particularly prevalent in the manufactured housing marketplace, where many loans are secured by personal property, commonly referred to as chattel loans. High-cost loans are more common in Colonias Investment Areas than both the nation as a whole and the U.S.-Mexico border region.



Source: HAC tabulations of the FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.



For each border state, high-cost lending was more common in rural Colonias Investment Areas than in rural non-Colonias Investment Areas. Texas had the biggest differences in high-cost lending when comparing activity in and out of rural Colonias Investment Areas, but the overall share of manufactured home loans was small. This again indicated that high-cost lending is not only an issue with manufactured homes.

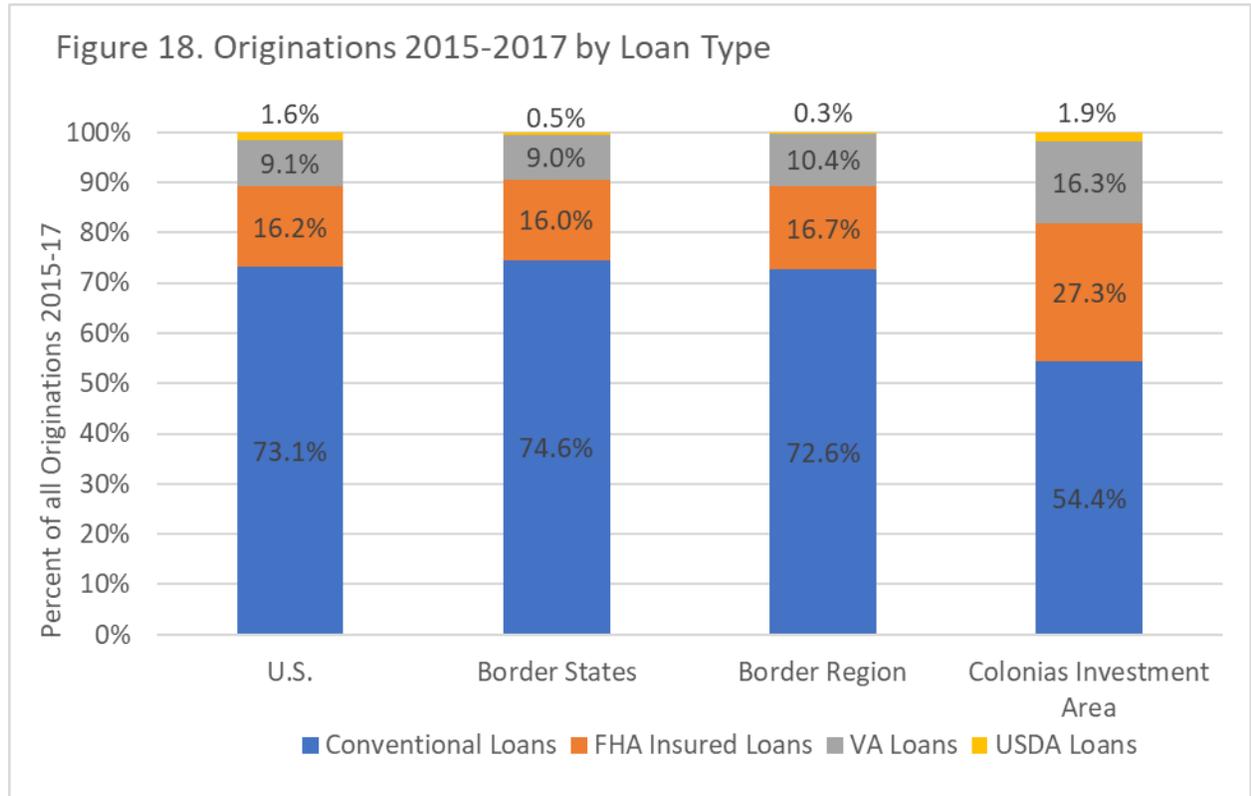


Source: HAC tabulations of the FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.



Loan types

Colonias Investment Areas receive fewer conventional loans and rely more on government-backed mortgage resources (loans through FHA, VA, and USDA). A simple distribution of loans between 2015 and 2017 indicates that Colonias Investment Areas have a much smaller share of conventional loans. For the U.S. or for the border region, about three-quarters of originations were conventional, but for Colonias Investment Areas it was slightly more than 50 percent. The difference was made up by higher shares of FHA, VA, and USDA-guaranteed loans.



Source: HAC tabulations of the FFIEC's 2015 – 2017 Home Mortgage Disclosure Act (HMDA) data.

The larger share of government-backed lending reflects the overall dearth of activity, not a higher rate of government-backed lending, particularly in rural Colonias Investment Areas. A review of ratios of loans to owner-occupied units, by loan type, indicates that Colonias Investment Areas have less than half the volume of conventional lending that occurs in the U.S.-Mexico border region and about the same level of FHA lending — Table 5. This lack of conventional lending makes the share of FHA loans high. A further comparison of loans to owner-occupied units for rural and non-rural Colonias Investment Areas highlight how limited rural activity is.

Table 5. Ratio of annual average loans to owner-occupied units in thousands

Loan type	U.S. – total	Border region	Colonias Investment Area	Colonias Investment Area not rural	Colonias Investment Area rural
Conventional	73.7	94.3	33.5	37.3	27.7
FHA	16.3	21.7	16.8	21.0	10.4
VA	9.2	13.5	10.0	11.4	7.9
USDA	1.6	0.4	1.2	1.0	1.5
Total	100.8	129.9	61.5	70.7	47.5

Source: HAC tabulations of the FFIEC's 2017 Home Mortgage Disclosure Act (HMDA) data.



Expert and Stakeholder Feedback

There is a vibrant and robust community of practitioners, experts, and other stakeholders with vast expertise in the border region and colonias communities. To provide context for the geographic methods and analyses and additional information about quantitative elements of Colonias Investment Areas, the research convened four outreach engagements, including:

- *Rural Housing: High Needs Regions and Vulnerable Populations* — 2019 MAFO National Farmworker Conference and Convention on May 7, 2019, in San Antonio, TX.
- Colonias Investment Areas — New Mexico webinar on July 17, 2019.
- Colonias Investment Areas — Arizona webinar on August 7, 2019.
- Colonias Investment Areas — Texas webinar on September 26, 2019.

Over 61 participants at these sessions represented a spectrum of local and regional community-based nonprofit organizations, local government agencies, academics and universities, the New Mexico Mortgage Finance Authority, the Texas Department of Housing and Community Affairs, the USDA, and more. The sessions solicited feedback on the Colonias Investment Area approach and its efficacy. This research incorporated participant questions and thoughts where relevant.

Participant organizations in the stakeholder sessions included:

AYUDA, Inc.	Housing Works
New Mexico Mortgage Finance Authority	Project Bravo
Tierra del Sol Housing Corporation	Proyecto Azteca
U.S. Department of Agriculture	South Texas Collaborative for Housing Development
White Sands Habitat for Humanity	South Texas Development Council
Chicanos Por La Causa	Texas Department of Housing and Community Affairs
Pima County, Arizona	MAFO, Inc.
Dona Ana County, New Mexico	California Rural Legal Assistance, Inc.
El Paso Community Action Program, Project BRAVO	

Additionally, experts from academic, policy, and practitioner communities were sent drafts of the final Colonias Investment Areas report and concept to review and comment upon. The reviewers were asked to respond to key elements of the scale, methods, and approach and findings of the Colonias Investment Areas concept and research.

The external peer review included feedback from 13 policy and subject matter experts on colonias, representing a range of sectors, including community-based development organizations and nonprofits, universities and academics, and regional, state, and local government officials from the border colonias region.

The expert reviewers provided thoughtful, informed comments, and the results were largely positive regarding the concept of Colonias Investment Areas. Both collectively and on each of the review questions, the respondents expressed support and offered further recommendations for the scope, methodology, and significance of the research.

The majority of reviewers agreed that the criteria and methodology adequately informed the construction of Colonias Investment Areas. Similar support was noted on the social, economic, housing, and mortgage finance characteristics that this report used to define Colonias Investment Areas. There was a majority agreement that these were sufficient criteria for forming the definition.

Commenters offered several recommendations for improving the construct and methodology. A representative from a border-region university argued that the Colonias Investment Area definition may be too narrow and advised toward including newer, “model subdivision” colonias or “colonias-like” neighborhoods that share similar infrastructure and housing needs but may not be included in the construct. Other respondents warned about the reliability of state and federal colonias data, arguing that



current counts of colonias are outdated. It must be noted that reliance on state and federal data is the best existing colonia community data available.

When asked about the geographic unit of measure, the vast majority of reviewers thought that census tracts are an appropriate unit of geography from which to base the Colonias Investment Areas construct. Of the reviewers who disagreed, one took issue with the reliability of census data, referencing recent findings that 2019 census data undercounted 17,000 colonia homes. It must be noted that while the researchers agree of a likelihood of Census Bureau survey undercounts in these communities, this undercount issue is only marginally related to the construct of census geographies.

When asked to comment on residential patterns of Colonias Investment Areas, the majority of reviewers agreed that suburban and urban tracts that meet the criteria for Colonias Investment Areas should be included in the concept. Among these respondents were representatives of colonia organizations who brought up colonias near El Paso, Pima County in New Mexico, and the Lower Rio Grande Region that are considered urban neighborhoods but share many of the same infrastructure and housing challenges as rural colonias.

A smaller number of reviewers disagreed on the inclusion of suburban and urban colonias in the concept. The argument against inclusion often noted that urban colonias often have greater access to infrastructure and services than rural colonias and that rural colonias should be the focus of Colonias Investment Areas. Such focus would ensure that home mortgage financing goes to the areas with the greatest need. Another respondent suggested a compromise: suburban and urban colonias that meet the criteria are included in Colonias Investment Areas, but their applications for mortgage financing are given less weight than those of rural colonia.

Most of the reviewers agreed that “the construct and supporting research achieve the goal of better informing potential mortgage access and delivery in Colonias Investment areas.” Several of the reviewers commented on the utility and the significance of the report as a much-needed guide for allocating mortgage assistance to high-needs border regions, specifically the colonias.

Finally, reviewers suggested further consideration on a range of topics, including loan product options and terms for Colonias Investment Areas, the impact of modern land sale practices in the border region, how home pricing and inspections would work for the large number of colonia homes built by the homeowner, and the drainage and flood insurance protocols for the large number of colonia homes located in floodplains.



Updating Colonias Investment Areas

Despite being categorized generally, colonias communities vary extensively, and change is constant.⁴³ Colonias have varied histories. Some emerged in the last 50 years, but others have been in existence since the 19th century. Various factors contributed to colonia development, and a range of considerations continue to influence these developments and their classification as publicly recognized colonias under various federal, state, tribal, and local programs. While all scenarios cannot be accounted for, below are a few general actions or occurrences that could impact classification of colonias and should be monitored and considered.

Development of new colonias

Various interdictions and efforts have slowed the number of colonias settlements over the last few years — at least the formal designation of colonias. An extremely large geographic expanse in the border region combined with dynamic economies resulting in new growth and development could lead to additional colonias.

Community loses colonia designation

While generally considered a positive development — if the designation removal is based on improvement in infrastructure and quality, etc. — the reduction in colonias designated communities is likely to be a more prevalent occurrence in the coming decades. This report does not seek to identify or define colonias as determined by federal, state, tribal, or local governments — only to identify census tracts that contain colonias. Colonias designations are made at the discretion of the governmental body that administers a program, resource, or research endeavor targeting colonias. Colonias source data (see Table 1 above) is updated at varying intervals at the discretion of the respective government. For instance, data from the University of New Mexico Bureau of Business and Economic Research, was last updated in 2012. Data from the Arizona Department of Housing was last updated in 2018. Data from the USGS CHIPs Project was last updated in 2008. The colonias database from the Office of Attorney General of Texas indicates that the data is in a constant state of revision. HAC developed the Colonias Investment Areas based on the most recently available data as of 2018.

Colonia community encounters a technical change

The most common example of an occurrence in this category is a change to a colonia's boundaries or if the colonia merges/splits geographically. For example, the decennial Census will invariably impact underlying census tract geographies because new census tracts will be developed when the population of a permanent statistical subdivision within a county grows beyond 4,000 residents — a tract split. A tract merge could also occur when the population of a subdivision falls below 1,200. Both situations will occur across the country as a result of the decennial Census. Intercensal changes related to annexation or simply geographic classification are also a possibility in the technical realm. For instance, in 2013 the Census Bureau made technical corrections to seven tract records in Pima County, Arizona (FIPS county code 019), and a tract boundary and numbering in Los Angeles County was corrected. These changes affected the 2020 census tract designations going forward. Additionally, some municipalities in Imperial County, California, annexed adjacent colonia communities over a period of years.

With these circumstances, a periodic review of the primary Colonias Investment Area database is necessary from time to time. Updating all or a segment of the Colonias Investment Areas using GIS mapping software is possible. The time to complete the analysis depends on the scope of the update (one state versus all four states; which colonias data sources are being consumed). A determination of the frequency of updates should consider the likelihood and impact of inaccurate source data and the nature of Colonias Investment Areas stakeholders and usage.

HAC suggests a thorough review and update of the database every two or three years. HAC further suggests interim modification if information is ascertained on significant development or change (e.g., a new database is developed by a public entity, a major study is released, or decennial Census results are released), or if a targeted usage of Colonias Investment Areas is planned for which program stakeholders require more current information (e.g., a new investment initiative).



Discussion and Considerations

The border colonias region is often considered part of forgotten America, where struggling communities and their residents are often far from view of the mainstream economy and policy structures. But this region is home to more than 2.5 million people in countless communities across 250,000 square miles of our southern border. These communities and their residents need investment.

To help inform strategies and policies that could extend greater mortgage investment to the colonias border region, the Housing Assistance Council developed the concept of “Colonias Investment Areas.” The goal of this research was to develop a comprehensive, usable, and uniform definition of colonias to inform the targeting of mortgage and finance resources so that assistance can be more efficiently directed to these communities. The recent launch of the “Duty to Serve” efforts as a part of the 2008 Housing and Economic Recovery Act also provides additional impetus and resources for investment. At the same time, a clearly delineated and defined definition of colonias communities may help inform general colonias resource efforts as well.

HAC undertook a detailed six-part process to identify 446 Colonias Investment Areas in the states of Texas, New Mexico, Arizona, and California. While no geographic definition is perfect and all have pros and cons, the Colonias Investment Area concept is an advancement in the often-understudied realm of the Border-Colonias region. Some specific advantages of this colonias area typology include the use of census tracts as a base geography. More granular and precise than counties, census tracts are also richer in content and standardization than smaller or less defined units of geography. Colonias Investment Areas represent a pragmatic middle ground between some expansive definitions — created decades ago — that may dilute needs and resource allocation, and small undefinable settlements without consistent or meaningful parameters.

Colonias Investment Areas are consistent with the aforementioned Duty to Serve geography, as well. The census tract basis of these investment areas aligns with most of FHFA’s Duty to Serve geographies under the rural and other underserved markets. FHFA regulations explicitly mention census tracts in providing guidance “to address the data challenges that exist in specifically identifying the *census tracts* that contain ‘colonias.’”

In addition to being identified in FHFA’s 2016 Final Rule, there are also non-technical issues that influence and advantage the use of Colonias Investment Areas. Standard mortgage investment generally has restrictions on purchasing loans that involve properties on parcels that lack basic infrastructure (water, sewer, etc.), which may exclude many colonias communities. As such, Colonias Investment Areas delineation and data could inform and complement Duty to Serve efforts that will likely occur in areas in the vicinity of colonias that a census tract geography will include, but a smaller geography may not.

Additionally, Colonias Investment Areas allow for targeting and assessment of resources and activities. Colonias Investment Areas were designed to help facilitate and advance mortgage lending and financial access in the border colonias region. Census tracts are the smallest geography for which mortgage loan data is publicly available from which to assess market conditions. Using census tracts provides the ability to more adequately understand mortgage markets as well as to assess progress and activity. Relying on lower levels of geography generally precludes any meaningful analyses for both planning and needs as well as assessment and impact.

It is important to remember that the Colonias Investment Area concept was developed for the primary purpose of informing mortgage investment. While this concept has practical applications on a wide array of social, economic, and housing issues and resources, the provision and planning for other commodities, such as basic infrastructure (water and wastewater systems) or health and education, may benefit from other definitions or geographic constructs to inform the delivery of those resources.

To help measure and test the geographic concept, the research also incorporated an analysis of fundamental social, economic, housing, and mortgage finance characteristics of these identified markets in relation to the larger region and nation. The preliminary research findings overwhelmingly indicate that Colonias Investment Areas experience some of the greatest challenges and needs in the region, as well as the nation, and are therefore appropriately targeted as an indicator of an underserved market.

The analysis also revealed that Colonias Investment Areas are not just a rural phenomenon. Slightly more than half of Colonias Investment Areas are in suburban or even urban communities — especially in Texas. At the same time, rural Colonias Investment Areas have the greatest needs. While economic, housing, and mortgage access deficits are generally present in any colonia regardless of location, these conditions are consistently more acute in rural Colonias Investment Areas.



Ultimately, Colonias Investment Areas are intended to inform and enhance access to mortgage finance in colonias communities and the border region. While no geographic designation is perfect, extensive research, analysis, testing, and stakeholder feedback reinforce the concept and elements of Colonias Investment Areas as a reliable mechanism to inform and provide more targeted and efficient delivery of home mortgage resources and finance access to long overlooked border colonia communities.

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- ¹⁸ The Federal Register Notice with the FHFA’s Duty to Serve Final Rule, as of October 11, 2019, can be found here: federalregister.gov/documents/2016/12/29/2016-30284/enterprise-duty-to-serve-underserved-markets.
- ¹⁹ RUCA Code #1 is a tract that is in an urbanized area within a metropolitan area (a town with over 50,000 people).
- ²⁰ RUCA Code #2 describes a tract where 30 percent or more of the population commutes to a town with 50,000 people or more.
- ²¹ The Federal Register Notice with the FHFA’s Duty to Serve Final Rule, as of October 11, 2019, can be found here: federalregister.gov/documents/2016/12/29/2016-30284/enterprise-duty-to-serve-underserved-markets.



²² Quote from p. 135 of FHFA's Duty to Serve Final Rule (version they have on their website not Federal Registry Notice copy, so page numbers are different). As of October 10, 2019, found here:

www.fhfa.gov/SupervisionRegulation/Rules/RuleDocuments/2016%20Duty%20to%20Serve%20Final%20Rule_For%20Web.pdf.

²³ See Appendix Table 1 for the specifics about these resources and the others used to compile the state lists of identified colonias.

²⁴ USDA-EPA 2015 study; information included 50 communities for which the source listed RCAP staff, not a government agency. This meant the case was identified by the people completing the USDA-EPA study but had not been recognized by a government entity. These cases were not included in this analysis. These were the only cases not included.

²⁵ The University of New Mexico Bureau of Business and Economic Research (UNMBBER) already identified the underlying census blocks for 118 of New Mexico's colonias.

²⁶ The 5 percent colonia threshold is to ensure that colonia-census block overlap is real and not the result of digitization errors. Digitization errors refer to slight inaccuracies that can occur when community boundaries are drawn that could result in overlap between geographies (colonias and census blocks) when one does not actually exist. The threshold is meant to remove such cases.

²⁷ Only the census block containing the colonia point file are classified as such. We have no way to estimate if other census blocks are involved with the colonia.

²⁸ New England includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. Middle Atlantic includes New York, Pennsylvania, New Jersey, Delaware, Maryland, Washington, D.C., Virginia, and West Virginia. Land area (square miles) data accessed October 10, 2019, from the following URL: censusreporter.org/profiles/04000US51-virginia.

²⁹ There are few colonias in counties with a major city, like Maricopa County, Arizona, which is home to Phoenix, but this is rare.

³⁰ Persistent Poverty as defined by the FHFA's Duty to Serve regulation means a county experienced a poverty rate of 20 percent or higher for three consecutive decades (2010, 2000, and 1990)

³¹ The following story is an example of the type of newspaper story that often appears on colonia and focuses on Texas: Maria Esquinca and Andrea Jaramillo, "Colonias on the border struggle with decades-old water issues," *The Texas Tribune* (August 22, 2017), texastribune.org/2017/08/22/colonias-border-struggle-decades-old-water-issues. In addition, Mukhija and Monkkonen discuss how most colonias are in Texas and how it shapes federal policy in Mukhija and Monkkonen, "Federal Colonias Policy in California."

³² Mukhija and Monkkonen, "Federal Colonias Policy in California." Ward and Peters, "Self-Help Housing."

³³ Mukhija and Monkkonen, "Federal Colonias Policy in California." Ward and Peters, "Self-Help Housing."

³⁴ Núñez-Mchiri, "Political Ecology," p. 76.

³⁵ Mona Koerner, "Colonias in New Mexico: Rethinking Policy Approaches to Substandard Housing Problems," *Urban Issues Colloquium: Constructing Urban Space* (2002), p. 15.

³⁶ Olmedo Carlos and Peter M. Ward, "Model Subdivisions: The New Face of Developer Lot Sales for Low-Income Colonia-Type Housing in Texas," *Land Use Policy*, vol. 52 (2016), pp. 181 – 194.

³⁷ Mukhija and Monkkonen, "Federal Colonias Policy in California."

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³⁹ Noah J. Durst and Peter M. Ward, "Colonia Housing Conditions in Model Subdivisions: A Déjà Vu for Policy Makers," *Housing Policy Debate* (2015), pp. 1 – 18. The following report describes how colonia residents get financing and why they cannot access the formal system: New Mexico Center on Law and Poverty, *Legal Issues in New Mexico's Colonia Communities, A Report* (2010), p. 4, accessed October 10, 2019, nmpovertylaw.org/wp-content/uploads/2015/04/Report-Legal-Issues-in-NM-Colonias-FINAL-DRAFT-2010-7-2.pdf.

⁴⁰ Durst and Ward, "Colonia Housing Conditions."

⁴¹ The research on disparities in lending is large. We just refer to two recent examples: Robert Bartlett, Adair Morse, Richard Stanton, and Nancy Wallace, "Consumer-Lending Discrimination in the FinTech Era," NBER Working Paper No. 25943 (2019), accessed October 15, 2019, faculty.haas.berkeley.edu/morse/research/papers/discrim.pdf. Christopher Niedt and Marc Silver, "An Uneven Road to Recovery: Place, Race, and Mortgage Lending on Long Island," Hofstra University, National Center for Suburban Studies (2014), accessed October 15, 2019, hofstra.edu/pdf/academics/css/ncss-report-uneven-road.pdf.

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⁴³ Núñez-Mchiri, "Political Ecology," p. 70.