

Mapping the Mesa:
Identifying complexities that continue to hinder planning development in
Pajarito Mesa, NM

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EXECUTIVE SUMMARY

Pajarito Mesa is a settlement located near the South Valley of Bernalillo County, NM. It has been sparsely populated since the 1970s, but its population is growing. It exhibits the same characteristics as a *colonia* (defined below) - no piped water, sewage system, or utilities, and unsafe housing conditions - but is too far from the US Mexico Border to be considered a *colonia* by the Department of Housing and Urban Development (HUD), a designation which would entitle the community to support infrastructure development.

This study, which was prepared with assistance from the New Mexico Center for Law and Poverty and the Bernalillo County Planning Department, focuses on understanding the patterns of ownership, dwellings, and informal roads networks on Pajarito Mesa. These patterns will guide the organization of infrastructure development. They will also help demonstrate why Pajarito Mesa should be considered a *colonia* by HUD so that it can qualify for funding to support this development.

KEY TERMINOLOGY

COLONIA: According to Section 916 of The National Affordable Housing Act of 1990, a *colonia* is “(...) any identifiable community in the U.S.-Mexico border regions of Arizona, California, New Mexico, and Texas that is determined to be a colonia on the basis of objective criteria, including lack of a potable water supply, inadequate sewage systems, and a shortage of decent, safe, and sanitary housing. The border region means the area within 150 miles of the U.S.-Mexico border excluding Metropolitan Statistical Areas with populations exceeding one million” (HUD, n.d.).¹

INFORMAL SETTLEMENT: The United Nations Habitat Programme defines informal settlements as: “i) residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally; ii) unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing).” (World Health Organization, 2013).

BACKGROUND

Pajarito Mesa is an approximately 28 sq. mile area located near the South Valley area of Bernalillo County, just south of Albuquerque, NM (Sites SouthWest, LLC, 2001). Prior to the 1930s, what is now known as Pajarito Mesa was the Pajarito Land Grant. In the 1930’s, this land was purchased by the California-based company Norins Realty and subdivided, with the average parcel measuring 10 acres but ranging in size from approximately 2.5 acres to 500 acres (Sites SouthWest, LLC, 2001). The parcels were created by legal descriptions that did not include easements for roads and utilities, and because there was no development planned at the time of their sale, they did not go through a governmental development review process that would have noted this omission. These parcels were sold to buyers across the country, and because they were approved prior to the adoption of a zoning code in Bernalillo County in 1973, they are recognized as legal despite the lack of easements (E. Gradi, personal communication, May 29, 2013). Settlements did not begin to appear on Pajarito Mesa until around 1970 (Akers, 2008), although for many years, dwellings were few and far between. According to the Pajarito Mesa Land Use and Access Study, around 100 families were counted on the mesa via satellite imagery in 1999 (Sites SouthWest, LLC, 2001); today, that number has grown to an estimated 250 (M. Gallegos and E. Gradi, personal communication, February 21, 2013).

Although Pajarito Mesa is farther than 150 miles of the US-Mexico Border, it faces all of the other conditions that define a *colonia*: “lack of a potable water supply, inadequate sewage systems, and a shortage of decent, safe, and sanitary housing”. Broadly speaking, these conditions are typical of all types of informal settlements, and the challenges facing Pajarito Mesa can be framed using the UN’s definition of informal settlements.

¹ A fourth part of the *colonia* definition states that the settlement must have been “in existence as a colonia before the date of the enactment of the Cranston Gonzalez National Affordable Housing Act (Nov. 28, 1990).” According to the document “The Transition from Unincorporated Community to Municipality in the South Valley”, by the Bureau of Business and Economic Research (BBER) at the University of New Mexico, development of this type has occurred on Pajarito Mesa for the past 40 years.

Building Code Violations

“unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing)”

Housing on the mesa is frequently not in compliance with Bernalillo County building codes because the land was originally subdivided with no public right-of-way established between parcels for roads and utilities. Without roads, it is not possible for landowners to access their property without trespassing through other properties, and because of this it is not possible for them to obtain building permits for their dwellings. This lack of legal access has created other issues as well. For one thing, it means that in order to access one’s property, it is usually necessary to trespass through other properties. Additionally, because there is not a formal road network, properties on Pajarito Mesa have no formal address. This is not only an issue for receiving mail, it also prevents emergency service providers from quickly locating emergencies. Finally, because of the informal nature of the settlement, residents of Pajarito Mesa, particularly the mesa top, all live without basic amenities like piped water, sewer, gas, and electricity (M. Gallegos and E. Gradi, personal communication, February 21, 2013).

Real Estate Contracts

“residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally”

Residents of Pajarito Mesa frequently purchase their land under real estate contracts. Real estate contracts are common on the mesa as well as other *colonias* because, since land is unable to be formally developed, it cannot be sold through a traditional mortgage process, and buyers in communities such as Pajarito Mesa would generally not qualify for a traditional mortgage because many buyers are very low income because of Real estate contracts offer much greater protections to the seller than to the buyer: the seller retains title to the land while the buyer is making payments, and default in payment can result in the buyer losing not only the property but all of the money they had previously invested. To compound this issue, sellers frequently make verbal promises that they never intend to honor, and buyers rarely understand the terms of their agreement anyway (New Mexico Center for Law and Poverty, 2010). On the mesa, sellers might not disclose that the property is not legally developable, or may promise that the county will be establishing services within the year. Once the buyer realizes the situation they are in, they may act as seller and establish a contract with another uninformed person. Sometimes the actual landowner has no part in this process; the contracts, which are rarely registered through Bernalillo County, are made without their knowledge (M. Gallegos and E. Gradi, personal communication, February 21, 2013).

Demographics

According to the U.S. Census in 2010, there were 579 people living in Pajarito Mesa CDP, 541 of which identified as Hispanic. The majority of the Hispanic population identified as Mexican (67%) and 33% identified as other Hispanic or Latino. In terms of the age distribution, 35% of the population in Pajarito Mesa was younger than 18 years of age, 5% were 65 years of age or older, and the median age of the total population was 29 years of age. There was a 5- year difference in the median age of women (27 Years of age) and men (32 Years of age). Although the Census has labeled Pajarito Mesa a Census Designated Place (CDP), it did not collect information on the residents on the west half and southern corner of the Mesa (See Figure I) which limits the quantitative analysis possible (discussed further in the methodology section).

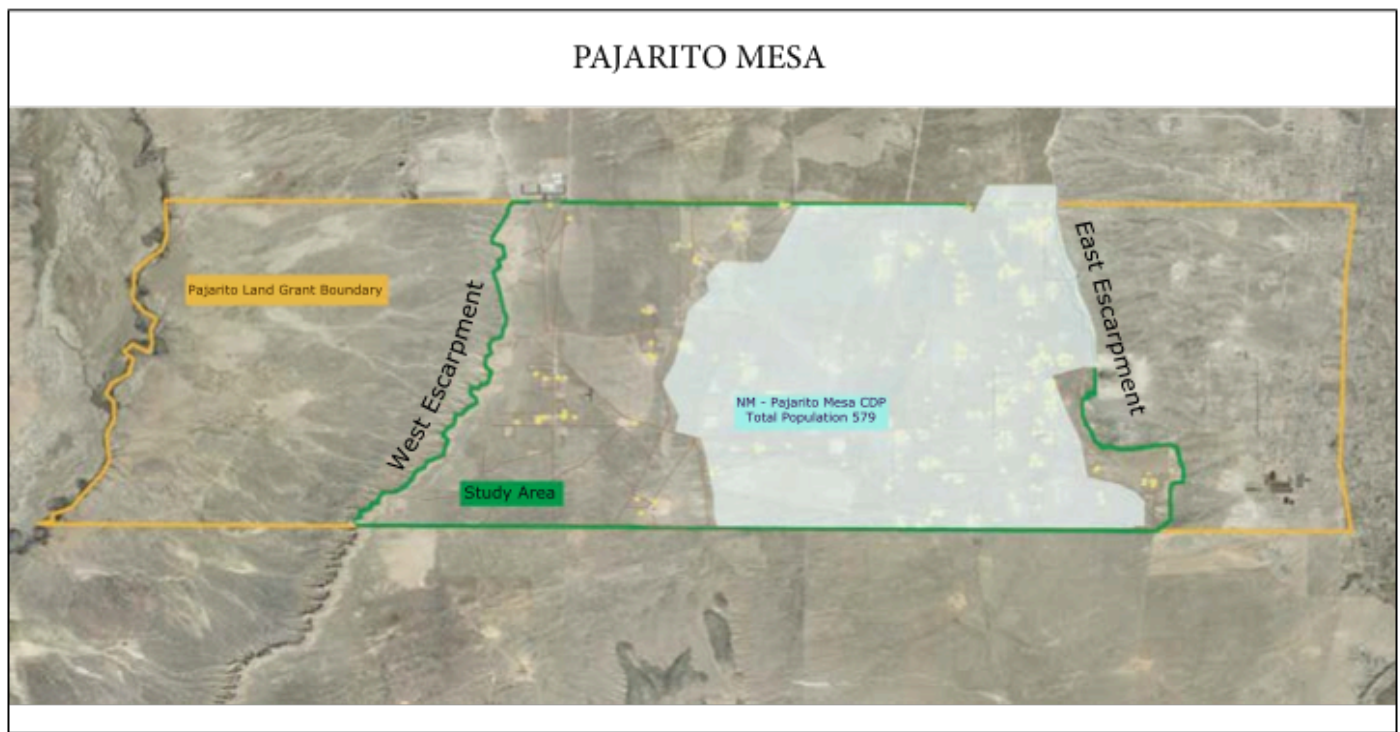


Figure I

PURPOSE OF PAPER

The purpose of this study is threefold: to create maps of settlement patterns on Pajarito Mesa, to use these maps both to demonstrate why Pajarito Mesa should be considered a *colonia* by the department of Housing and Urban Development (HUD) and to plan optimal locations for infrastructure on the mesa based on concentrations of development.

There is much that can be learned about a site based on an understanding of its physical conditions. While maps of conditions like location of dwellings, land ownership information, and road networks in formal developments are commonplace, maps of these same conditions in informal settlements are less common. Therefore, one objective of this study is to create these maps so that they will be accessible to the local agencies, including the New Mexico Center for Law and Poverty and the Bernalillo County Planning Department.

Within this study, the maps will be used for two purposes. First, along with the background research presented, they will be used to demonstrate that Pajarito Mesa should be considered a *colonia* by HUD so that they have access to federal funding available to these areas² (Norman, Donelson, Pfeifer & Lam, 2006). Pajarito Mesa does not currently qualify for this type of funding because its geographical location excludes it from being defined as a *colonia*, but as is noted in the background section and will be demonstrated with the mapping, it experiences all of the other *colonia* characteristics. Currently, the burden of infrastructure development on the mesa lies with Bernalillo County, but the needs are far greater than the budgetary resources available to the county government, and the area would greatly benefit from all funding sources that they would be eligible for if it were designated as a *colonia* (M. Gallegos and E. Gradi, personal communication, February 21, 2013). Second, the maps created will give a general sense of where development on Pajarito Mesa would be most appropriate. For this study, the location of dwellings, the informal road network, and the owners of parcels were all mapped with GIS. By locating areas which have the greatest concentration of dwellings along with the most extensive road network, and ideally with the greatest percentage of New Mexico landowners, hot spots for development can be determined. However, it should be noted that with additional funding, more precise maps could be created that would determine such things as land tenure and vacant versus occupied properties. This additional data would be greatly beneficial to the development process in the long run.

METHODOLOGY

This study draws on three indicators for its analysis; (1) the formal and informal road networks as evident by satellite imagery, (2) the location of housing settlements based on 2012 satellite imagery and (3) parcels and land ownership data based on 2012 county tax data. These indicators coupled with two site visits and interviews with Bernalillo County Planning and Zoning Department and New Mexico Center for Law and Poverty were used to understand the current conditions on mesa.

Research on *colonias* is fairly extensive and GIS mapping has been utilized to track development, monitor settlement patterns, and create suitability maps. GIS mapping is increasingly useful for agencies interested in practicing sustainable

² Today, HUD, the U.S. Department of Agriculture, U.S. Environmental Protection Agency and the North American Development offer independent funding projects specifically for *colonias*, which have allocated hundreds of millions of dollars to improve these communities.

development planning efforts in *colonias* (Norman, Donelson, Pfeifer & Lam, 2006). The clarity of the 2012, 6-inch Mid-Region Council of Governments of New Mexico (MRCOG) satellite imagery allowed us to create our own shapefiles where we documented the informal road networks and the current dwellings which was critical in order to understand the built environment.

Although GIS mapping provides visual context for the built environment, other studies also tend to incorporate U.S. Census data to understand the conditions of a *colonia* (Maantay, 2002). Unfortunately, census data does not fully reflect the living conditions on the mesa because the Pajarito Mesa CDP does not encompass the entire mesa top (U.S. Census Bureau, 2010). Instead, this analysis relied heavily on 2012 tax data from the Bernalillo County Assessor's office, which provided valuable insight on the characteristics of current Pajarito Mesa landowners.

Because one objective of this study is to identify areas that are best suited for infrastructure development, we believe that development on either escarpment is not a viable option at this time. Development on these areas will contribute to adverse environmental impacts such as erosion and flooding and will be significantly more costly to implement. The West Escarpment near the Rio Puerco is very remote with only a few individuals inhabiting the area. The East Escarpment contains additional dwellings, but developing on an area with a steep incline is challenging and costly thus, it would be better addressed the West Escarpment after basic services are delivered to the top of the mesa, where the majority of residents currently reside.