

The effects of voluntary exclusion: Gated communities in Chihuahua, Mexico

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Statement of authenticity of material

This thesis contains no material which has been accepted for the award of any other degree or diploma in any institution and to the best of my knowledge and belief, the research contains no material previously published or written by another person, except where due reference has been made in the text of the thesis.

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Berlin, 1st of February 2017

Abstract

The proliferation of gated communities and their impacts have been studied in many cities mainly in the United States. This exclusionary neighborhood model appeared in the Mexican city of Chihuahua 30 years ago as a privative lifestyle for the richest but has gained strength in the last 15 years, apparently due to a search of urban security in the form of a safe neighborhood to live in. It has been found before that these residential subdivisions play an important role in the way cities are developing. In the case of Chihuahua, more than one fifth of the neighborhoods are gated communities. As a strong component of the present city landscape, gated communities are believed to influence urban life. However, no research focusing on their spread in the city had been conducted before.

The present thesis addresses gated communities in Chihuahua as the main topic. This study is divided into two parts, taking into consideration the assumption that the physical characteristics of the city are a result of the society that inhabits it, and these inhabitants are in return influenced by the urban shape. Hence, the first part focuses on the urban dimension of gated communities; their scale and distribution, reasoning behind them, characteristics, and main impacts. The second one is a socio-spatial analysis of three neighborhoods to identify the main motivations of citizens in Chihuahua to move to a gated community as lifestyle and security, and how the physical form of a neighborhood impacts its residents' **perceptions and experiences**.

Key words: gated communities, voluntary exclusion, safe neighborhood, urban security, lifestyle, Mexico.

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List of abbreviations

CPTED	Crime Prevention through Environmental Design
E/S	Environmental Security
DDUM	Dirección de Desarrollo Urbano Municipal (municipal urban development direction)
IMPLAN	Instituto Municipal de Planeación (municipal institute of planning)
INEGI	Instituto Nacional de Estadística y Geografía (national institute of statistics and geography)
PDU	Plan de Desarrollo Urbano (urban development plan)
PSMUS	Plan Sectorial de Movilidad Urbana Sustentable (sector plan of sustainable urban mobility)

1 Introduction

1.1 Background

Gated communities appeared in the Mexican city of Chihuahua thirty years ago but have proliferated only in the last fifteen. The model of gated communities has been mainly planned for high-income families since its emergence until present day. The citizens that have the economic capacity to pay for it, choose to exclude themselves and differentiate from the rest of the society, enjoying the privacy they offer. Both lots and common spaces are contained by walls and fences, and the access is controlled at all times by a security guard to ensure that no “outsiders” can get in.

Citizens seem to have strong motivations to live in a gated community. The increased desirability of this exclusionary model has apparently caused its extension to other income groups. Looking into the new settlements offered by developers, gated communities seem to be the only option for the richest, a possibility for the middle-income citizens, and even in some cases an alternative for the lower classes. On the one hand, developers advertise with their gated communities a certain “lifestyle”, composed by key concepts such as privacy, green areas and a good location. On the other, they stress that gated communities offer security to their residents.

Security is a major concern for the city inhabitants since the violence levels increased in 2007 (México Evalúa, 2010). From that year, not only the tendency to develop new gated communities gained strength but also residents from open neighborhoods started to close their streets, as a physical measure to create a safer environment. The first response of the municipality was to oppose to the closings and remove the newly installed gates, since it was believed they complicated urban mobility and were privatizing public space. However, the community insisted to close the streets and the authorities eventually developed a process to regulate it. Today, this process still exists, and even when the violence levels have perceivably decreased, it is still possible to apply for the authorization to close a street.

The creation of physical barriers in Chihuahua works in two directions. On one side, a top-down approach where developers continue to construct and promote new enclaved settlements, with permission and support of the authorities from their conception. On the contrary, a community-driven movement of closing former open streets that started from the bottom and the municipality eventually approved. The outcome of both: a city of walls.

1.2 Problem statement

In order to steer the city development, the municipality through the municipal urban development direction (Dirección de Desarrollo Urbano Municipal, DDUM), relies on different plans and regulations, such as the urban development plan (Plan de Desarrollo Urbano, PDU), the building regulations and technical standards (Reglamento de Construcciones y Normas Técnicas para el Municipio de Chihuahua), and the regulations for sustainable urban development (Reglamento de Desarrollo Urbano Sostenible del Municipio de Chihuahua). Yet, even though gated communities have become the most popular neighborhood layout in the city, there are no regulations addressing them in particular. In fact, they are not even mentioned. The scale of the proliferation of gated communities might not be understood yet, since there are no records or mappings measuring its extension.

According to the 2006 sector plan of sustainable urban mobility of Chihuahua (Plan Sectorial de Movilidad Urbana Sustentable, PSMUS), the city size was growing at a higher rate than its population (Instituto Municipal de Planeación, 2006). This tendency has continued. UN Habitat reported that, as for 2014, Chihuahua was the second least dense city in the country and the third with the higher number of cars per inhabitant (ONU HABITAT, 2015). Despite not having concise numbers of their extension, it is evident that gated communities have been the preferred neighborhood model for many years, and as such, their proliferation could be related to the current sprawl and high motorization rates, among other impacts. For instance, the planned gated communities are typically placed one next to the other one at the urban periphery, as individual entities that do not interact with each other nor with the rest of the city. Public transportation often does not reach the city outskirts, and services are provided in nodes, rarely located at a walkable distance. In addition, former open neighborhoods that turned into gated communities closed the access to their streets, therefore traffic must concentrate on less roads.

The proliferation of gated communities is a phenomenon that has been studied in many cities around the world. Researchers have focused on analyzing the reasoning behind them, their characteristics and impacts in relation to their specific location and its conditions. It is important to understand that cities develop in a certain way as a result of the society that inhabits it, and in return these inhabitants are influenced by the urban shape. I believe gated communities are dominating the urban landscape of Chihuahua, and their presence effects not only residents but citizens in general. In order to understand this relationship between the built space and society, it is then necessary to study the case of gated communities in Chihuahua.

“First we shape our cities, then our cities shape us” (Dalsgaard, 2013).

1.3 Research objectives

All objectives are focused on the case study of the city of Chihuahua and are listed as follows:

- To document the extension and location of gated communities.
- To describe the main motivations of citizens to move to a gated community.
- To identify the different types of gated communities, based on their characteristics.
- To analyze the main impacts of gated communities at an urban and neighborhood scale.
- To define the linkages between the spatial characteristics of gated communities to their **residents' lifestyle and to their resident's security perceptions and experiences.**

1.4 Research questions

1.4.1 General questions

- Which are the main motivations of citizens from Chihuahua to move to a gated community? (why are gating communities proliferating?... the reasons behind the physical shape)
- Which are the main impacts of gated communities at an urban scale? (the consequences of the physical shape)

1.4.2 Specific questions

- What kind of lifestyle are gated communities promoting?
- Are gated communities perceived and experienced by their residents as a safer place to live in comparison to open neighborhoods?

1.5 Significance of study

- Give an understanding of the current neighbourhood layout tendency in Chihuahua to the main actors involved in its development, in order to reduce negative impacts and maximize positive aspects.
- Serve as a starting point for further research, focusing on more specific aspects of gated communities in Chihuahua or other cities with similar conditions in developing countries.
- Provide a reference to other studies looking into the connection between the physical space and society, in regard to lifestyle and security.
- Open up a discussion of the proliferation of gated communities in Chihuahua, mostly at an educational and institutional level.

1.6 Scope and limitations

The time given to elaborate this thesis was from August to December 2016. Within that period and with the purpose of obtaining mainly qualitative data, field research was carried on for three weeks in Chihuahua in October 2016.

Overall, I believe that social and urban research could be extensive, take up years and still not be enough to describe a phenomenon since societies and cities are constantly evolving. The aim of this study is to describe the current situation of gated communities in Chihuahua.

In order to do so, the present research is divided into two parts. The first one, is a documentation of the proliferation of gated communities, main causes and consequences at an urban scale. The second part is a socio-spatial analysis of three neighborhoods. These examples are believed to be representative, due to their characteristics in common with the majority of gated communities in the city. Still, the results are based on the interviews done to residents from these specific locations, and so, they may reflect specific points of view related to their neighborhood only. The intention is to provide a first insight into the possible linkages between spatial and social aspects, in regard **to the reasoning behind gated communities' proliferation.**

2 Literature review, concepts and theories

2.1 State of the art: gated communities and complex socio-spatial context

2.1.1 “Voluntary” exclusion

Social exclusion is commonly used as a second name for “poverty”. In this case, the term is meant to refer to the lower income groups and the conditions under which they are prevented from taking part in certain urban dynamics. Nevertheless, under some conditions high incomes can seek to exclude themselves. This is a voluntary act, performed by minority groups whose wealth give them the power to construct barriers in order to deny access to fellow city inhabitants (Barry, 2002, p.16). There are ways, such as discrimination or higher housing values, through which neighborhoods have always excluded possible new residents. Gates add another layer of exclusion which can be seen. They also exclude casual pedestrians and even residents from the closest neighborhood (Blakely and Snyder, 1999, p.153).

Barry points out two thresholds of social exclusion (Barry, 2002, p.17). Each threshold is identified by an excluded group: the lower threshold includes people who are left outside general institutions participation and the upper threshold includes those who voluntarily separate themselves from general institutions (figure 2.1). The people that regularly take part in general institutions are placed in between. Each extreme is a reflection of the other. Neither participate with general institutions whether voluntarily or involuntarily. Hence, the voluntarily excluded on the upper side of the threshold might not interact with public services, such as public schools, health care or security, because they satisfy those needs in private institutions.



Figure 2.1 Thresholds of social exclusion. Source: elaborated by the author (based on Barry 2002).

Social classes have always tried to distinguish from the lower ones. Taking the case of Bogota as an example, urban insecurity is the main excuse for the development of gated communities. Both the demand and the offer justify the creation of gated communities as an answer for urban insecurity. But middle and upper classes migration to the periphery has other causes like pursuing a certain lifestyle, privacy and tranquility. To ensure a position in the social hierarchy, gated communities are a physical solution. However, whenever a crime occurs in one of these residential subdivisions, a contradiction to their ideology takes place when the residents necessarily look to the police or in other terms, to the city and its institutions (Söhleemann, 2011, p.107, 108). Related to security and taking the United States as an example, Barry explains that residents of gated

communities need little police protection because they have their own security guards (Barry, 2002, p.17). In this scenario, the residents pay for their own safety and the guards are possibly armed. Plá presents an utmost situation of self-protection in the film “La Zona” (Plá, 2007). When a billboard falls over the wall, three teenagers enter the gated community to loot. After breaking into a house, the owner is killed by the thieves. Shortly after, the housekeeper triggers the alarm to alert the residents which results in the death of two of the thieves and a security guard by mistake. The community council decides to hide the events from the police, dispose of the bodies, and search and capture the third thief that hides in La Zona. This example could be too extreme but shows the distrust of citizens towards public institutions, a reality in Mexico.

2.1.2 “The safe neighborhood”

One way or another, “security” appears as a term that has connection to the existence of gated communities. With the purpose of evaluating how safe a gated community is, it is important to describe the characteristics of a “safe neighborhood”.

Defensible space is a concept introduced by Newman in the 70’s. More precisely, it is a method to prevent crime in neighborhoods (Newman, 1972). The theory is founded on physical measures. It presents four main concepts: territoriality, natural surveillance, image, and milieu (table 2.1). Territoriality could be in other words described as a sense of belonging to a place. An individual that feels a space as its own is more concerned about it and is likely to interest in the activities that occur in such area. This concern and attention from residents to a specific area discourages outsiders to enter the neighborhood and commit a crime. According to Newman, territoriality can be obtained by subdivisions, since smaller spaces are more easily appropriated. These subdivisions could be walls or fences or a more passive physical strategy like gardens or signs. The main idea of this physical elements is to define an area and indicate its belonging.

Natural surveillance is based on the idea that the more eyes on an area, the more crime is dissuaded. Talking specifically about cities and not suburbs, Jane Jacobs also refers to the importance of the neighbors having “their eyes on the street” as a quality of safe streets (Jacobs, 1992, p.35). Newman indicates that in order to cause surveillance, common areas, such as parks and playgrounds, should be strategically placed in a visible location from surrounding streets and they should have proper lighting. Here, the concept of territoriality is involved. The observers would be more likely to act if they feel certain responsibility towards the place. It is important to clarify that the theory of defensible space focuses on preventing crime through physical measures to create safer neighborhoods. Therefore, it is understood that the natural surveillance concept aims to influence the perception of safety and not the reaction of the neighbors against a criminal act; i.e. the neighborhood is perceivably safer because both residents and potential criminals feel observed.

The concept of image formulates that the neighborhood should look as it has been taken care of. The physical aspects that could interfere in this perception are facades, clean streets and sidewalks, trimmed bushes and mowed lawns. Moreover, image must be complemented with the milieu concept. The neighborhood should additionally be surrounded by other neighborhoods with the same characteristics to achieve a defensible space.

Table 2.1 Concepts of the defensible space theory. Source: elaborated by the author (based on Newman 1972).

	WHAT?	WHY?	HOW?
Territoriality	Sense of belonging	People are more likely to take care of a place they feel as their own	Subdivisions made by walls or fences, or more passive like gardens and signs
Natural surveillance	Eyes on the street	The more eyes on an area, the more crime is dissuaded	Common areas placed in a visible location and proper lighting
Image	“Taken care of” look	The more the neighborhood looks as it is taken care of, the more crime is dissuaded	Good looking facades, clean streets and sidewalks, trimmed bushes and mowed lawns
Milieu	Neighboring same characteristics	The neighborhood should be surrounded by other neighborhoods with the same characteristics to achieve a defensible space	Implement the other three concepts in surrounding neighborhoods

The defensible space concept was developed as a result of public housing analysis. Residential subdivisions for middle and upper class citizens have different social and economic characteristics. In these neighborhoods, the implementation of some physical aspects, suggested by the defensible space theory to create a safer neighborhood, could already be designed for a different reason. For instance, the concept of image might apparently be covered by gated communities designed for high income residents.

The term of crime prevention through environmental design (CPTED) was introduced by Jeffery in 1971 and it has developed to become an international known crime prevention approach. The method is about manipulating the physical environment to reduce crime by influencing social behavior. Comparable to the defensible theory, CPTED also focuses on physical measures to diminish crime opportunities and crime perception, as it is believed the physical environment has **a deep influence on both**. “CPTED, in its narrowest form, can be seen as an extension of defensible space concepts to commercial retail, industrial institutional, and low density residential environments” (Crowe, 2013, p.8). As described by Crowe, CPTED has three overlapping strategies: natural access control, natural surveillance and territorial reinforcement. The first two are design concepts that can be organized, mechanical or natural depending on the tools implemented (figure 2.2). Both concepts are believed to contribute to a sense of territoriality. Care and maintenance are the final step of the CPTED strategies. The idea is similar to the defensible space image concept. It helps to reinforce territoriality and sends a message to possible offenders of the attention residents pay to their neighborhood.

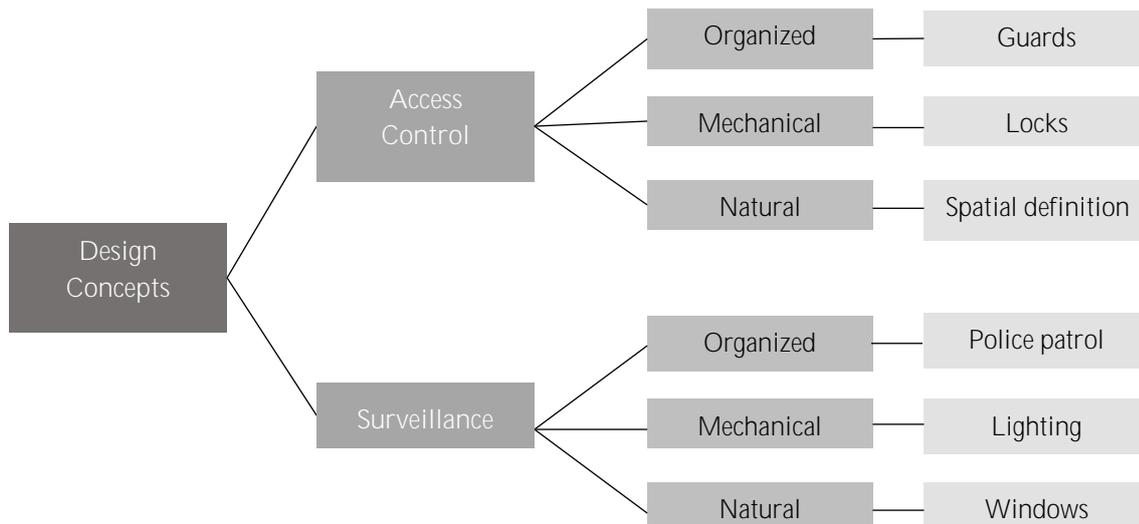


Figure 2.2 Concepts of CPTED. Source: elaborated by the author (based on Crowe 2013).

In 1978, Gardiner pointed out that reducing crime opportunities is a complex task that cannot be solved with a simple solution. Instead, a comprehensive approach considering both social and physical aspects is needed. Otherwise, the overdependence of one tool will signify failure. To deal with such task, he suggested the neighborhood as the unit to work it, since it functions as the interface between the household and the rest of the city and serves as the immediate surrounding where social interaction takes place. If crime is to be dealt with, it must be firstly prevented at a **neighborhood scale**. In “Design for Safe Neighborhoods” Gardiner presents the concept of environmental security (Gardiner, 1978).

Environmental security (E/S) is a model to reduce crime and fear of crime through urban planning and design. It intends to help citizens develop a sense of belonging and earn control of their environment instead of building fortifications. E/S also establishes territoriality as a primary characteristic, but in addition it acknowledges the importance of the human factor. The physical environment can provide a stage that discourages negative behaviors but territoriality is a human characteristic. Unlike the defensible space theory, E/S specifies its intention to prevent “**opportunistic crimes**”. These are crimes against people (forcible rape, aggravated assaults and robbery) and crimes against property (home burglary or auto theft) that occur when an opportunity for the criminal raises. The model suggests that physical aspects could be one of the causes for such opportunities. Overall, the model does not have a readymade solution to make an environment safer. To implement the E/S model, a stage process has to be carried on. In this process, aspects like the targeted area and the crime problems it has are essential to define a program. The plan considers physical, social and policy tools and after its implementation comes the final evaluation and feedback stage (Gardiner, 1978).

Many crime prevention concepts have been developed based on the rationale that the physical environment influences crime incidence. Some of their characteristics and strategies overlap, but others differ. Speaking of common features between the three example methods discussed above, they all include the use of fences and gates to delimitate areas to promote territoriality. Nevertheless, none intends to build a fortification with them. In “Creating Defensible Space”, Newman stresses that in case gates are placed, they would only function to restrict vehicular traffic allowing pedestrians to enter freely (Newman, 1996, p.41). Gardiner states that the primary idea of E/S is to lessen crime opportunities and crime perception “without resorting to the building of fortresses and the resulting deterioration or urban life” (Gardiner, 1978, p.1). Finally, Crowe

explains that access control measures proposed in CPTED are used to “denote transitional zones, not necessarily impenetrable barriers” (Crowe, 2013, p.29). Basically, the physical borders that are erected based on a crime prevention environmental approach do not seek exclusion and in contrast, the walls that are erected for an exclusionary purpose do not have primarily a security purpose. Blakely and Snyder argue that in the gated communities where the developer constructed the walls bordering the neighborhood, even when security matters for residents, the walls were not built with a defensible space outcome in mind but rather to protect a lifestyle or make a status statement (Blakely and Snyder, 1999, p.163). The main focus in those cases is social exclusion. The carefully designed and showy entrances as well as the walls bordering residential subdivisions **denote the residents’ economic status more than a protective intention. Therefore, walls from gated communities could inspire crime instead of discouraging it, since they are hiding something valuable.** Speaking of gated communities in Bogota, Söhlemann argues that due to their physical characteristics, home burglary is more directed to gated communities than to any other neighborhood typology. This happens because the wall creates curiosity of what is behind them, **its only presence stimulates the crime’s interest** (Söhlemann, 2011, p.108).

One of the main differences between crime prevention environmental concepts is the use of the social factor. For instance, while the defensible space focuses only on physical interventions to influence human behavior, approaches like environmental security consider social and policy tools. Still, regardless if as an outcome or as a tool, the three methods suggest social interaction between neighbors and the importance of getting to know each other. While security systems, gates, and walls are a constant reminder of threats and fear, **“a tightly knit community empowers, reassures, and improves the quality of life as it increases security”** (Blakely and Snyder, 1999, p.165).

2.1.3 Gated communities

“Using physical space to create social place” (Blakely and Snyder, 1999, p.1).

Gated communities are housing zones with restricted access (Blakely and Snyder, 1999, p.2). These developments have certain characteristics that differentiate them from other neighborhoods, including multi-units or apartment buildings with doormen or security systems. For instance, gated communities are horizontal. All spaces that could normally be used by all citizens, like streets, sidewalks, parks, playgrounds, and gardens are privatized. Either a wall or a fence borders the perimeter in order to avoid the entrance of nonresidents. A guardhouse is located at a strategic point of the border with separated lanes for visitors and residents. The security guard controls the entrance and exit to visitors and occasionally residents when there is no automatized system for them to access with a code or an electronic card.

The peculiarity of gated communities rests on five characteristics: closure and privatization; security devices and amenities; private government and a code of conduct regulating behavior and housing construction; the social homogeneity of their residents; and their voluntary character – that is, the fact that residents *choose* to live in these developments.

(Roitman, 2013, p.157)

The word community embedded in the name of these developments, according to Blakely and Snyder, comes from the desirable characteristics developers promise from the product they are

offering to potential future residents: safety for themselves and their property, reduced noise and traffic, and the image of children playing in the streets (Blakely and Snyder, 1999, p.29). All these characteristics compose a so called good community. Naturally, residents might have different reasons to live in one of these settlements. Safety and security, privacy or a certain social status. Nevertheless, by living in a gated community they share different tangible and intangible elements; being the territory and facilities the first ones and values and organizations the latest.

2.1.3.1 Causes and effects of gated communities: examples around the world

The phenomenon of gated communities has proliferated globally in the last three decades. For that reason, to look specifically at cases from different countries or cities around the world provides a more comprehensive overview of the main reasoning and impacts behind this exclusionary residential typology.

In Thailand, gated communities have turned into a significant characteristic of the urban layout. They function as a concentration of islands in the periphery where only individuals with an equal socio-economic status level get to live in (Suwannasang, 2015). In a study done to analyze the implications of gated communities in Bangkok, Suwannasang pointed out that the three main reasons for citizens to move to a gated community were: the environment they provide, security within them and their location. Since most of gated communities in Bangkok are located at the outskirts where the service of public transportation is not good, the residents must own a car, thus promoting car dependency and ownership. This aspect increases the expenditure of authorities in terms of infrastructure. On the other hand, the land value in the periphery has increased, therefore, the municipality benefits with higher land taxes (Suwannasang, 2015).

Introducing a case in Argentina, Roitman (2005) noted that some of the reasons citizens had to move into a gated community were urban violence (and fear of crime) and the diffusion developers gave them as a global trend; but most importantly the search for a better lifestyle, prevention of city problems, and social homogeneity, status and exclusivity. Based on her findings on a case study in the city of Mendoza, Roitman concluded the existence of a link between gated communities and urban social segregation. The residents of the gated community felt comfortable due to the security measures provided within the walls but at the same time felt discriminated by people living outside for having such privileges. In return, outsiders felt segregated for not being in position to enjoy the same benefits as living in a gated community is outside their economic capacity. This finding infers that living in a gated community is perceived and experienced as a privilege of the higher income groups in Mendoza.

Many other researchers also found out that social differentiation, a concept which includes both physical and social aspects reflecting into a search of a certain lifestyle, social homogeneity between the residents, class differentiation and/or prestige; was one of the main motivations for gating enclavism in other countries around the globe, such as Israel (Rosen and Razin, 2009), China (Douglass et al., 2012), Canada (Rosen and Grant, 2011), Turkey (Baycan-Levent and Gülümser, 2004), South Africa (Welgemoed, 2009), and Brazil (Caldeira, 2000). Moreover, most of these studies also recognized the search of a safer neighborhood to live in. This motivation could be protection from crime, traffic, or of property values. For instance, Landman and Schönteich pointed out that in South Africa and Brazil, gated communities are a consequence of

the increase of crime rates and fear of crime, and that the residents were subsequently benefited by an increment on the land value of their property (Landman and Schönreich, 2002).

In a summary paper done by Roitman (2010), she categorized the causes and consequences of gated communities suggested by the literature. The factors that influence the increase of gated communities are divided into two groups: structural and subjective. The first group includes the globalization of economy which affects the real estate market. It also affects the state withdrawal from public services, especially public security which increments urban violence and causes the privatization of this service. However, since gated communities are places where citizens choose to live, the subjective causes are very relevant as well. Roitman summarizes them into an increased fear of crime, a search for a better lifestyle, a desire for a sense of community and social homogeneity and the aspiration of a higher social status and distinction. Regarding the impacts of gated communities, she groups them based on the area they influence: spatial, economic, political, and social. Some of the spatial effects are the closure of streets, the segregation of urban space and car dependence; while economic impacts are security fees, and effects in land values and the housing market. These last two can be either positive or negative depending on the perspective. The desirability of gated communities tends to increase the value of the properties contained within. Both the owners and the authorities by charging higher land taxes benefit from it. On the other hand, the value of open neighborhoods decreases and therefore, their residents are economically affected. Furthermore, political impacts are resumed into the involvement of the gated community management and the privatization of public space. Finally, within the social **impacts the most important ones are the perception of the “outside” as dangerous, the tension building between residents and outsiders and the encouragement of social segregation** (table 2.2).

Table 2.2 Causes and consequences of the proliferation of gated communities. Source: elaborated by the author (based on Roitman 2010)

Causes	Structural	Globalization of economy: withdrawal of public services
	Subjective	Increased fear of crime, better lifestyle, desire of a sense of community and social homogeneity, and higher status distinction
Consequences	Spatial	Closure of streets, segregation of urban space and car dependence
	Economic	Land value and taxes increase
	Political	Gated community management and privatization of public space
	Social	“Dangerous outside” perception, tension between insiders and outsiders, and social segregation

The analysis of case studies suggests that the concepts summarized in the last paragraph include the main reasons and impacts of the exclusionary model around the world. For some residents, the search of a lifestyle or social homogeneity seem as the main motivation to live in a gated community while for others the search for a safer place to live has priority. The variation could be found in specific neighborhoods, with many examples in a single city, but overall they are influenced by certain aspects of the location. It has been shown that each region has particular

characteristics that effect the existence of gated communities in a city, and since this study aims to describe the phenomenon in Chihuahua, it is essential to look into gated communities in Mexico.

2.1.3.2 Gated communities in Mexico

As in many other countries, gated communities have become a common aspect of the urban landscape in Mexican cities, regardless of their location or size.

As a conclusion from the analysis of the phenomenon in 2001 in Guadalajara, Cabrales and Canosa summarized three key aspects to study gated communities (Cabrales Barajas and Canosa Zamora, 2001). The first one, are the strategies that developers use to promote gated communities with attractive messages and promises which speak of the desires of the society. Secondly, the state posture. In the case of Guadalajara, the urban development law makes no straight reference to gated communities, but many individual aspects collectively legalize their existence. For example, the creation of local streets that restrict the traffic to nonresidents is contemplated. Finally, the consideration of positive and negative impacts. Even when gated communities might seem as a solution to problems the state does not attend, they complicate mobility as their long walls force longer trajectories.

Other researchers that investigated gated communities in Mexican cities have also stressed both on the role of developers and the state response, and on the impacts; particularly social exclusion, the raise of land values and car dependency. According to Guenet and Milián, the gated urban landscape has incremented in a short period of time in the city of Puebla (Guenet and Milián Ávila, 2015). On one hand, the outer ring of the city is controlled by developers that construct residential subdivisions, and on the other, the municipality has authorized street closings between the city center and the periphery. The researchers pointed out that public transportation services are not sufficient and other mobility modalities are inexistent close to gated communities. **Therefore, residents' only option is to use a private car, which causes traffic congestions.** The problem is that the authorities continue to allow developers construct such residential subdivisions without considering the need of improved connectivity. In its place, the recurrent solution is the widening of main streets and the construction of new under and over passes.

In the west of the country, a study focusing on the city of Colima found that gated communities create a subjective sense of urban insecurity (Mosqueda et al., 2014). Comparing a high income gated community and a high income open neighborhood, it was found that the majority of residents from the gated community, despite not having been crime victims, felt insecure, while most of the non-residents did not. In contrast to inhabitants from open neighborhoods, the residents of gated communities prioritized security in public spaces, more than spatial quality or location. They interpreted closeness, controlled access, and safety devices as essential aspects of a safe space, hence spaces from the open city were perceived as more dangerous.

The analysis made by Enríquez Acosta (2007) is of particular interest for this research, since he focused on Mexican northern cities. He recognises gated communities as the predominant urbanization process in the region. Due to the close and physical relation to cities in the United States a clash of cultures and society occurred, promoting processes of exclusion. With the flourishing of gated communities in cities like Tijuana, Nogales and Ciudad Juárez, the socio-economic polarization is clear: they are an effective alternative to demonstrate exclusivity and

social prestige. Nevertheless, the main justification for these settlements to exist is high urban insecurity and in consequence, increased fear of crime. Through this argument, walls are legitimised. The study revealed that residents felt safe when living within the walls, even though interviews and media proved the existence of violent crime events in gated communities. The walls might not reduce insecurity but do promote a sense of security to residents. On the positive side, Enriquez explains that gated communities incentivize the provision of infrastructure to the periphery (where the lowest sectors in some cases also reside), facilitate commercial activities and represent a node of employment of domestic services. Unfortunately, these developments have strong negative impacts: limitation of mixed land uses, encroachment of public space, and their physical barriers cause social segregation.

2.1.3.3 Types of gated communities

In the past sections, the concepts of voluntary exclusion, the safe neighborhood, and gated communities were introduced along with a review of the main causes and consequences of the global proliferation of this exclusionary model. Before examining the phenomenon in the city this research is focused on, it is important to look into the categorization authors have developed based on the features that represent gated communities.

After analyzing cases from all over the United States, Blakely and Snyder identified that even when all gated communities had in common controlled access systems, they were built for and served to different purposes (Blakely and Snyder, 1999). In order to comprehend their main characteristics better, the authors of “Fortress America” categorized gated communities into three groups: lifestyle communities, prestige communities, and security zones (table 2.3). Each one of the types was subdivided into three more detailed subcategories. Based on their classification, lifestyle communities are developments where the focus are the amenities offered to residents. The use of these facilities is exclusive, therefore they are secured and separated from the rest of the city through the gates. In this case, the controlled access serves primarily as a social statement rather than crime protection. Within this group, retirement communities are the ones that offer amenities and social activity programs to middle and upper class retirees. These communities are often initially inhabited by owners as a second home. The golf and leisure communities are physically similar to retirement communities, offering amenities as golf courses and club houses, but they focus on people of working age instead of retirees. The third subtype is the new town. They are large settlements composed by several thousand units and contain a wide variety of amenities, such as schools, shops and parks that could be located inside the gates or directly outside them.

Prestige communities aim to symbolize distinction. Contrary to lifestyle communities, they do not offer recreational facilities. Prestige communities are “generally simple residential subdivisions” (Blakely and Snyder, 1999, p.75). The gates are meant to give an image, preserve investments and control values. In these developments, the image is a priority. The entrances tend to be ostentatious, and security guards are part of the exclusivity feeling. Their presence is appreciated even more than the quality of the security service they might provide. To live in a private settlement is a status symbol, but protection from strangers and crime are also appreciated. The authors subdivide them based on income levels: enclaves for the rich and famous, top fifth developments and executive developments. The first ones are designed for the exclusion of the richest and the second ones for the rich. Both are usually small settlements and houses are often

custom made. Security guards regularly work as porters. They stand position at the guardhouse, notifying residents from visits, receiving packages and allowing access to service providers. Executive communities are on the other hand planned for the middle class. They represent the aspiration of those with lower incomes than the first two groups. A combination between lifestyle and prestige communities is represented in the movie “La Zona” (the zone) (Plá, 2007). The film portrays a fictional gated community in Mexico City and their residents’ ideology and way of life. The director shows how this settlement makes a status statement: located right next to a slum, it is surrounded by a high wall topped by rotating wire spikes. There are not many reasons for residents to leave “La Zona” and they can remain there even after their death. This gated community not only offers its residents a variety of amenities, such as a golf course and a school, but it even has a cemetery.

The third main group identified by Blakely and Snyder (1999) is “security zone communities”. In this type, contrary to the other two, the walls or fences are erected by the residents and not by developers. In the United States, the newly formed gated communities appear in all income levels. The primary motivation is fear. Fear of crime, outsiders, and/or traffic. In addition, gates also serve to reinforce the feeling of community within the neighborhood. Residents feel they must close their street, even if they do not need to. That means, in this cases the perception does not necessarily match the reality but is reason enough for citizens to do what they can to gain control. City perches represent the closings where people from all income groups take a physical action against threats that surround them. They wish to secure their homes and streets and protect mainly the youngest from speeding cars. In suburb perches, the residents fear the same in form of future threats as their neighborhoods age and become more urban. Barricade perches are neighborhoods that cannot be fully closed for either legal or monetary reasons. Instead, residents barricade the streets to form an improvised cul-de-sac pattern.

Despite “Fortress America” still being one of the most relevant and detailed literature in the topic of gated communities, Grant and Mittelsteadt argue that their classification of types of gated communities leaves out some important aspects (Grant and Mittelsteadt, 2004). They identified that the main characteristics included in the classification by Blakely and Snyder were: functions of enclosure, security aspects, amenities contained within the gated community, and the type of residents. To these, they suggest to add other four: tenure, location, size, and policy context (table 2.4). In their work, Grant and Mittelsteadt realized that from the overall features they described, different combinations can be made when attempting to describe a specific case. Some characteristics might be defining for one case while absent in another, as they answer to various local circumstances.

Table 2.3 Types of gated communities. Source: elaborated by the author (based on Blakely and Snyder 1999)

TYPE	FOCUS	SUBTYPE	SPECIFIC CHARACTERISTICS
Lifestyle	Amenities offered to residents. Their use is exclusive and therefore they are physically separated. Walls are constructed by developers.	Retirement	Amenities offered to middle and upper class retirees. Often a second home initially.
		Golf and leisure	Amenities offered to people of working age.
		New town	Large settlements, composed by several thousand units. Contain a wide variety of amenities that could be located inside or right outside the gates.
Prestige	Symbolize distinction. Give an image, preserve investments and control values. Ostentatious entrances. Walls are constructed by developers.	For the rich and famous	Small settlement. Houses are custom made. Security guards are porters. Planned for the richest.
		Top fifth	Small settlement. Houses are custom made. Security guards are porters. Planned for the rich.
		Executive	Bigger settlement. Planned for the middle-income who aspires to live as the rich.
Security zone	Protection from crime, traffic or outsiders. Walls are constructed by residents.	City perches	Physical protection from urban threats.
		Suburb perches	Physical protection from future urban threats.
		Barricade perches	Not entirely closed, for legal or monetary reasons. Improvised cul-de-sac patterns.

Table 2.4 Characteristics of gated communities. Source: elaborated by the author (based on Grant and Mittelsteadt 2004)

Function of enclosure	Physical	Secure people and property			Create identity for project	
	Economic	Enhance property values			Protect club amenities	
	Social	Give visual or spatial privacy			Control those inside	
	Symbolic	Display status and power			Control those outside	
Security features	Nature of boundary	Wall	Fence	Signs	Vegetation	Geography
	Nature of security	Guards		Cameras	Alarms	Automatized entry
Amenities and facilities	Private roads	Meeting place	Activity center	Recreational facilities	Commercial facilities	
	Institutional facilities	Landscape maintenance		Quality design	Open space	
Type of resident homogeneity	By age	By class	By ethnicity		Shared activity	
Tenure	Principal residence	Secondary residence	Seasonal residence		Public housing	
	Simple ownership	Condominium ownership	Land lease		Rental	
Location	Urban	Suburban	Exurban		Rural	
Size	Cul-de-sac pod	Neighborhood (10-100 units)	Village (100s units and commercial use)		Town Village (1000s units and mix of uses)	
Policy context	Restricts gates	Enables gates	Growing area		Stable or declining area	

2.2 Conceptual framework

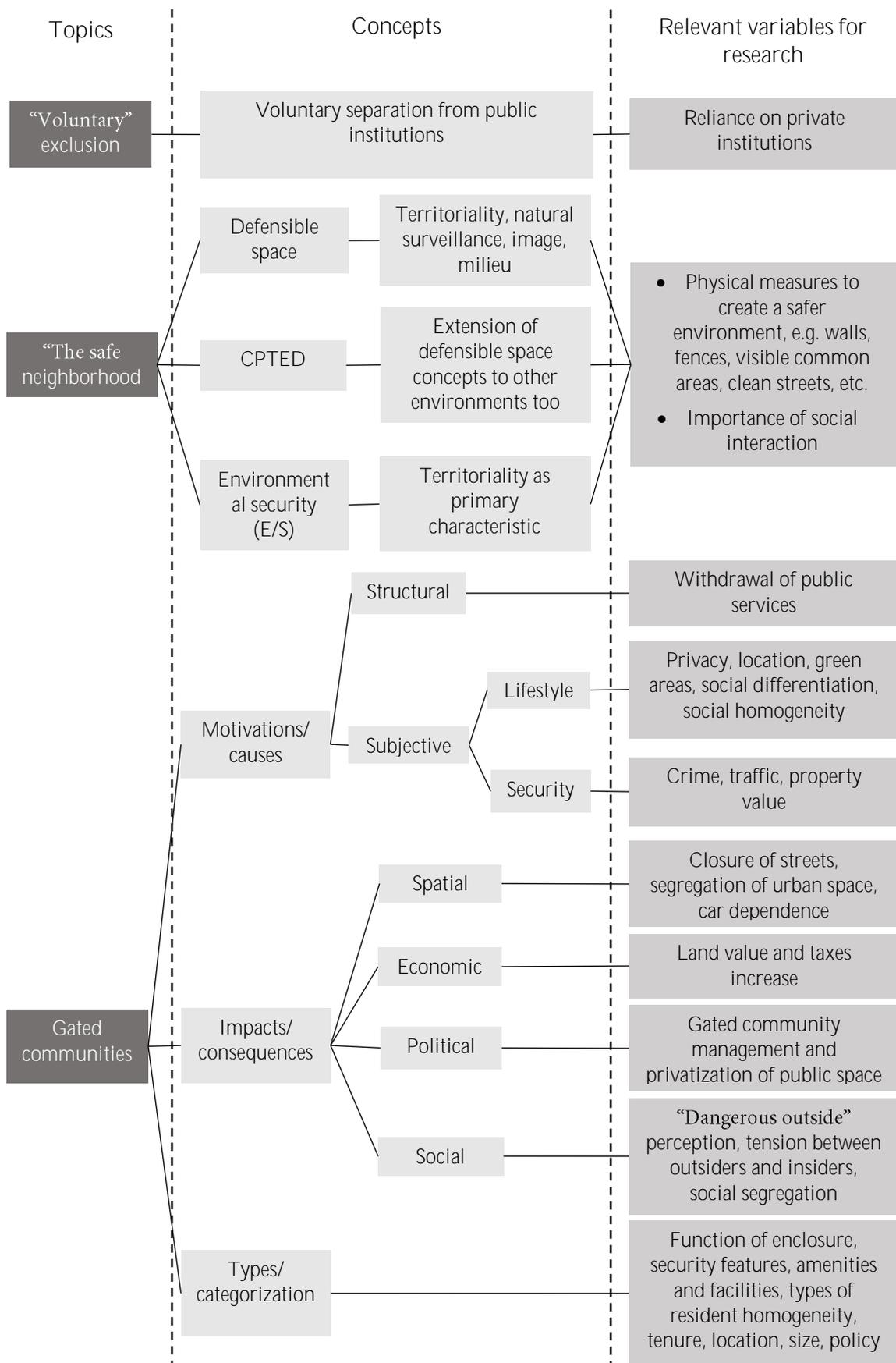


Figure 2.3 Conceptual framework. Source: elaborated by the author

3.1 Operationalization

The relevant variables for research, identified in the conceptual framework, will be analyzed on the case study (table 3.1).

Table 3.1 Operationalization: relevant variables for research and case study application. Source: elaborated by the author.

	Relevant variables for research	Case study application
“Voluntary” exclusion	Reliance on private institutions	To identify the reliance, of residents from gated communities in Chihuahua, on private or public institutions
“The safe neighborhood”	Physical measures to create a safer environment, e.g. walls, fences, visible common areas, clean streets, etc.	To analyze if gated communities comply with the physical characteristics of “the safe neighborhood”
	Importance of social interaction	To describe social interaction between residents, and identify its influence on security perception
Gated communities	Withdrawal of public services	To localize public facilities near gated communities
	Privacy, location, green areas, social differentiation, social homogeneity	To describe main motivations of citizens from Chihuahua to move to a gated community
	Crime, traffic, property value	To describe main motivations of citizens from Chihuahua to move to a gated community
	Closure of streets, segregation of urban space, car dependence	To identify main spatial impacts of gated communities
	Land value and taxes increase	To identify main economic impacts of gated communities
	Gated community management and privatization of public space	To identify main political impacts of gated communities
	“Dangerous outside” perception, tension between outsiders and insiders, social segregation	To identify main social impacts of gated communities
	Function of enclosure, security features, amenities and facilities, types of resident homogeneity, tenure, location, size, policy	To categorize different types of gated communities based on their characteristics

The application will be done in two different scales, urban and neighborhood (table 3.2).

Table 3.2 Operationalization: case study application and applicable scales. Source: elaborated by the author.

	Case study application	Applicable scale
“Voluntary” exclusion	To identify the reliance, of residents from gated communities in Chihuahua, on private or public institutions	Neighborhood
“The safe neighborhood”	To analyze if gated communities comply with the physical characteristics of “the safe neighborhood”	Neighborhood
	To describe social interaction between residents, and identify its influence on security perception	Neighborhood
Gated communities	To localize public facilities near gated communities	Neighborhood
	To describe main motivations of citizens from Chihuahua to move to a gated community	Urban Neighborhood
	To describe main motivations of citizens from Chihuahua to move to a gated community	Urban Neighborhood
	To identify main spatial impacts of gated communities	Urban Neighborhood
	To identify main economic impacts of gated communities	Urban
	To identify main political impacts of gated communities	Urban
	To identify main social impacts of gated communities	Neighborhood
	To categorize different types of gated communities based on their characteristics	Urban

The structure of the research design is based on the applicable scales (figure 3.1).

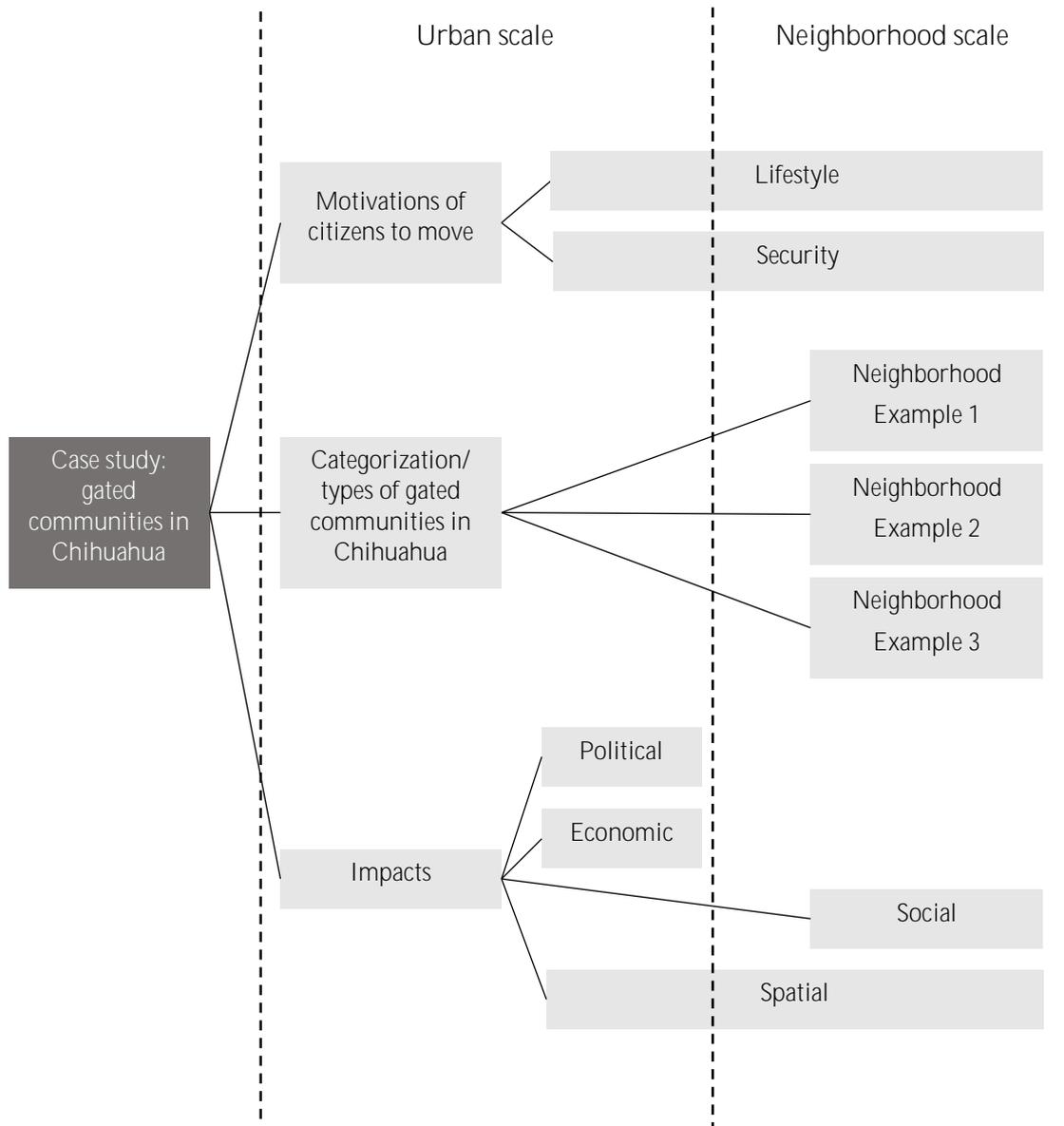


Figure 3.1 Research design. Source: elaborated by the author.

3.2 Strategy

As Harvey (2010) describes, social and spatial processes are deeply interrelated. Physical space is often built with symbolism, which people experience and respond to in different ways. The rationalization behind this research on gated communities, is that their existence and spread is the result of specific social motivations, and in return, their presence impacts the inhabitants in different ways. The main purpose of this research is to study that relationship from both perspectives (the reasoning and the consequences) and at different scales. For that reason, this is considered a socio-spatial research.

As shown in the research design diagram, the strategy is a case study approach. As a whole, gated communities in Chihuahua are considered the case study. However, in order to look in depth into the impacts of the physical form on social aspects, three neighborhoods are selected: Valle del Ángel II, Lomas Altas V, and Quintas del Sol II. The selection rationale is based on their characteristics (Denscombe, 2007, p.39). The three have a similar location, they are all categorized in one of the most expensive homogeneous zones in the city, and were all planned as a neighborhood unit by a developer. On the contrary, their demographic constitution is different and their physical characteristics diverge mainly in one aspect of specific interest for this study. The first neighborhood was conceived as a gated community. The second was designed to be an open neighborhood and its access was later restricted by its residents. The third was planned as, and still is, an open neighborhood. The purpose of examining the three neighborhoods in detail is a discovery led that aims to describe each setting to later on compare them and learn from their similarities and differences in order to provide an overview of the whole (Denscombe, 2007, p.38).

Some of the data this research is based on was collected by the researcher from 2013 to 2015. However, to obtain updated data and qualitative information needed for the study, fieldwork is carried on for three weeks in October 2016. To gather this information, the main actors and their **involvement in gated communities' proliferation** are identified as follows:

- **Gated communities' residents:** People that live inside gated communities.
- **Non-residents:** People that do not live in a gated community, but as citizens might directly or indirectly be affected or influenced by these developments.
- **Security guards:** People in charge of the entry and exit of residents and visitors of gated communities who might have an interesting insight of the social dynamics in the neighborhood.
- **Municipal institute of planning (Instituto Municipal de Planeación, IMPLAN):** Decentralized municipal institution in charge of advising the authority on city planning issues based on technical studies. In addition, this institution works as the linking entity between civil society and the authority.
- **Experts (architects/urban planners):** Actors that are familiar with either social sciences, urbanism or architecture and are able to share valuable knowledge, experiences and opinions on the matter.
- **DDUM:** Municipal authority in charge of city development. In this case, the instance that approves every gated community single project for their construction.
- **Developer:** The construction companies in the city that develop medium and large scale neighborhood projects.
- **Observatorio Ciudadano:** Non-governmental organization that handles crime data.

3.3 Data collection methods

3.3.1 Interviews

This is considered the most important tool to acquire qualitative information concerning insights, opinions, feelings and experiences from different actors during the fieldwork (Denscombe, 2007, p.174). All of the planned interviews are semi structured. Semi-structured interviews are guided in a certain direction in order to address specific issues of interest for the research but also giving flexibility, intending to have a more open discussion where the interviewee feels free to develop his/her thoughts (Denscombe, 2007, p.176).

The objective of interviews with representative people from institutional/organizational actor groups is to obtain relevant information regarding the urban scale of gated communities and their proliferation. This material is expected to serve as a basis to explain the city wide present situation and to introduce the particular selected case examples. The selection of informants is based on a non-probability sampling. The interviewees are chosen based on the position they hold, and therefore the crucial information they have (Denscombe, 2007, p.189).

Concerning the information from citizens, purposive sampling methods are used: quota and snowball sampling. Interviewees will be residents of one of the three case study neighborhoods. In the case of Quintas del Sol II, some people from bordering neighborhoods might as well be interviewed as they are also users of its public space. In addition, representatives of the neighborhood council from each one of the three selected examples will be interviewed, since they play a key role in their community and therefore have a wider insight of its social dynamics. The sample size is not established prior to the fieldwork as already fixed participants could refer to other potential informants (Mack et al., 2005, p.5). To learn about individual perspectives and to capture diverse points of view and experiences, face to face interviews as well as different focus groups are organized with residents from each neighborhood (Mack et al., 2005, p.29, 52).

Actors to interview and main information to collect from them:

- **Gated communities' residents:** Main reasons to live in the particular neighborhood, car dependence, security perception inside and outside gated communities. Factors that influence security perception. Lifestyle, where people regularly go, what they regularly do.
- **Non-residents:** Main reasons to live in the particular neighborhood, car dependence, security perception inside and outside gated communities. Factors that influence security perception. Lifestyle, where people regularly go, what they regularly do.
- **Security guards:** Estimated people getting in and out the gated community, requirements to grant access, activity during the day.
- **IMPLAN:** Structure and duties of planning institute, relationship with DDUM, current plans regarding densification and mobility, urban security plans, mixture of uses, social segregation.
- **Experts (architects / urban planners):** Factors that influence urban security perception and crime prevention, opinion on gated communities and their proliferation, what should be done regarding it, car dependent city.
- **DDUM:** Structure and duties of municipal urban development direction, relationship with IMPLAN, relationship with developers, gated communities' proliferation, approval of street closings.

- Developer: Market demand and offer, reasoning for developing gated communities, characteristics of neighborhoods for different classes (residential vs. low class housing), pros and cons of these developments, relationship with DDUM, process of gated communities' projects.
- Observatorio Ciudadano: Urban security and crime rates, crime prevention, factors that influence urban security perception and crime prevention.

Note after field research: All interviewees were informed, previous to the interview, about the research topic and objectives, the expected length of the interview, and the future use of the information to be provided. In the case of the focus groups, the gate keeper gave a previous introduction to engage potential informants to participate. In addition, permission to record each interview was also requested. All informants verbally consented to participate in the research (Mack et al., 2005, p.10, 11).

3.3.2 Observation

During the field research trip, a participant observation will be conducted to understand the processes of the three selected case examples. For the purpose of not interfering in the neighborhoods' usual dynamics and therefore preserve the naturalness of the settings, covert visits to the neighborhoods are planned. In principle, access to gated communities is possible via a known resident but as for the totality of residents the observer plays the role of a regular visitor (Denscombe, 2007, p.218). In all three cases, the social dynamics in public spaces, the physical characteristics of each setting, and the connectivity with the rest of the city, will be particularly observed. In the case of the two gated communities, observation is also planned in the immediate surroundings. During the visits to the sites, some security guards at the entrances of gated communities will be interviewed. Staying all day at the gate letting people inside and outside, guards are believed to have an overall perception regarding people's lifestyles as well as an opinion on desirability of gated communities.

3.3.3 Documents

Documents are a valuable tool mainly to introduce and describe the phenomenon at an urban scale and to support the spatial analysis. All of the documents considered for the research are of public domain (Denscombe, 2007, p.232).

4 Presentation of data and analysis

4.1 Gated communities in Chihuahua

4.1.1 City context

Located in the north of Mexico, Chihuahua is the biggest state in the country (figure 4.1). Its population of 3.5 million inhabitants is distributed 85% in urban areas and 15% in rural areas, which is a 7% higher urban population than the national average. The largest cities in the state are Ciudad Juárez with 1.4 million inhabitants and with 880,000 inhabitants the city this study is focused on: Chihuahua, the capital of the state (the population does not consider the metropolitan area)(INEGI, 2015).



Figure 4.1 Location of the state of Chihuahua in Mexico. Source: elaborated by the author.

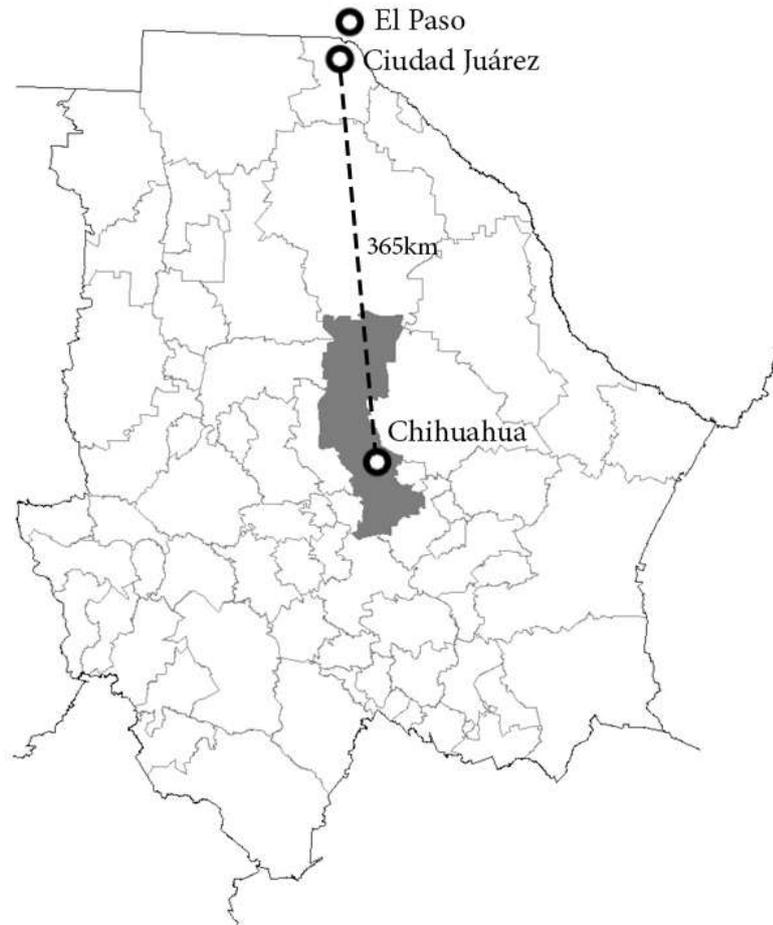


Figure 4.2 Location of the city of Chihuahua. Source: elaborated by the author.

Chihuahua is located only 365kms away from Ciudad Juárez, which borders with the American city of El Paso (figure 4.2). The tertiary sector and the exportation manufacturing industry are the base of Chihuahua's economy (Municipio de Chihuahua, 2009). The traditional economic activities of cities in the north of Mexico is intensely linked to the North American culture. Altogether, they look up to become a more developed and prosperous region (Enríquez Acosta, 2007, p.2). Particularly in cultural, social and territorial aspects, Chihuahua has a close relationship with the United States; and as many other Mexican northern cities, Chihuahua has attempted to adapt a "global urbanism" based on sprawling and the creation of gated communities (Chávez, 2015, p.22,24).

The first gated communities in Chihuahua were developed in the early 80s. This new typology was introduced by developers to the city and it offered a certain lifestyle: citizens had the opportunity to live in a private place with people they could identify as similar to them. Up until this day, this remains one of the two main motivations for citizens to move into a gated community. Additionally, security has become the second motivation and it has gained strength particularly since 2007, when Chihuahua became the most dangerous state in the country (México Evalúa, 2010).

4.1.2 The scale and distribution of gated communities

According to the 2016 cadaster value table there are 1092 neighborhoods in Chihuahua, but this cipher is believed to be inaccurate (Gobierno del Estado Libre y Soberano de Chihuahua, 2015). It is common for developers to give their residential subdivisions the same name and differentiate them only by consecutive numbering. Most of these have the same cadastral land value too. For instance, there are three individual gated communities named La Cantera I, La Cantera II, and La Cantera III. These three are considered as one in the cadaster value table. On the other hand, Bosques de San Francisco and its four subdivisions appear separately, even though in reality they are all contained within the same walls. The reason from cadaster to group such neighborhoods is unknown, it might be the shared name or value or even that those single settlements were all planned in the same year as parts of a bigger development. For the purpose of this study, physically separated neighborhoods are considered individually. Therefore, it is estimated that the city is composed by approximately 1200 neighborhoods.

From the total amount of neighborhoods in the city, some are known by citizens as “colonia” (neighborhood), while others are referred to as “fraccionamiento” (residential subdivision). In Chihuahua there is a difference in perception between the two. As stated in the construction regulations and technical norms for Chihuahua municipality (Reglamento de Construcciones y Normas Técnicas para el Municipio de Chihuahua), a subdivision is a land that was segmented into lots so that their property could be individually transferred. This subdivision requires a layout, urbanization and the trace and construction of streets and public spaces, and could be developed for industrial, commercial or housing use. In a strict way, the authority recognizes all neighborhoods in the city as residential subdivisions but they are not all called nor perceived by citizens as such. Residential subdivisions are often recognized by citizens as those settlements that were planned and constructed by a developer in the last one or two decades. During an interview, Óscar Chávez stated that the difference between the two concepts lies as well on a social connotation. **“Colonias” or “barrios” are places for which people have a sense of belonging.** This feeling could be founded in the social interactions related to the place, as well as the long time the family has inhabited it. For example, neighborhoods like Zarco or San Felipe were planned as residential subdivisions but nowadays are known by citizens as “colonias” (Chávez, 10.11.2016). In this document, gated communities are also referred as neighborhoods depending on the context of the paragraph and for the purpose of making the writing more dynamic. Nevertheless, **it is important to clarify the naming distinction between “colonias” and “fraccionamientos” since gated communities are known as “fraccionamientos cerrados” (gated residential subdivisions) and not “colonias cerradas” (gated neighborhoods).**

According to data from DDUM, the municipality approved the development of 343 new settlements from 2002- 2016 (Annex 1). For every single new neighborhood approved, the municipality keeps record of several of its aspects in order to contribute to the reports and statistics (Valdez, 11.10.2016)(Annex 7). This information includes: the location of the neighborhood, its total area, number of lots and total area donated for green areas and public facilities. Nevertheless, there is no formal record describing if they are either public housing or residential neighborhoods nor if they are gated communities, because this is not specific information that needs to be included in the reports. Therefore, it was necessary to ask to the municipality for this specific information regarding as many developments as possible (information available, but not processed into the record files), and to look for each neighborhood

individually in real estate companies and developers webpages. It was found that from the 343 new developments, 231 had controlled access and were planned mostly for middle and high income classes and a few were public housing. Furthermore, 92 were open neighborhoods for middle income and public housing. For the rest 20 it could not be identified whether they were closed or not, nor for which income group they were planned (figure 4.3). Looking into the solid numbers, approximately one third of the total amount of current neighborhoods in the city appeared in the last 14 years and 67% were gated communities.

As part of this analysis and to have a more comprehensible understanding of the scale, it is relevant to understand the different proportion of neighborhoods from each type. The average size of the high and middle income developments is 109 and 266 lots respectively, while public housing neighborhoods have an average of 532 units. Moreover, it can be perceived from the ciphers how socially (and physically) segregated the city has grown. Only one of the open neighborhoods that emerged in the last 14 years was planned for high income residents (figure 4.4); whereas from the 231 gated communities, 86 were planned for middle income and 14 for social housing (figure 4.5). Gated communities represent a desirable option for citizens in Chihuahua to live in. In the beginning they were only planned for high income families, but in the past years and due to their demand, developers have introduced them also in social housing projects (figure 4.6). As stated by the director of one of the most important developer companies in the city, nowadays it is hard to sell a house if it is not inside a gated community. People from the lower classes also aspire to the lifestyle and security they offer and that is why gated communities for social housing have appeared in the last years (Bautista, 13.10.2016)(Annex 4).

Despite some examples of gated communities in social housing, the vast majority are middle and high income housing subdivisions (figure 4.7 and 4.8). There are many reasons why living in a gated community is more expensive for the residents. The first and more obvious one is that they are the current most desirable residential subdivision option. This has a high impact on the real estate market, lots and houses from gated communities are sold at higher prices than their open neighborhood comparable subjects. For instance, the sales department from a developer company is having trouble selling the last middle income houses because they are located in an open neighborhood, while the same house model has no trouble being sold inside a gated community project even if it is much more expensive (Bautista, 13.10.2016)(Annex 4). A real estate agent declared that in her experience, it currently is very difficult to sell a property to a middle or high income future resident if it is not located inside a gated community, and in consequence, houses from high income open neighborhoods developed before the gated communities era are often left alone, rented or turned into an office or a shop (Lady 2, 10.10.2016)(Annex 11).

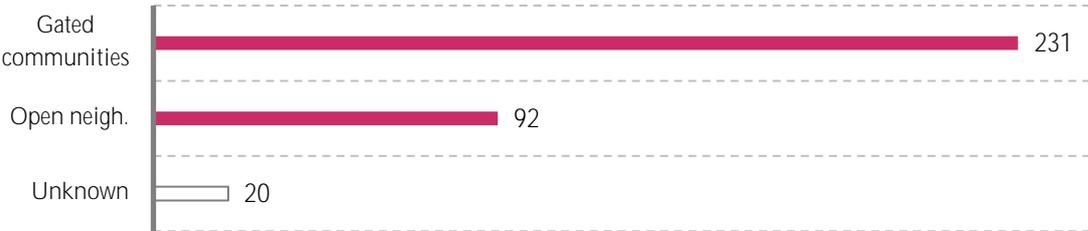


Figure 4.3 New settlements approved by DDUM 2002-2016, categorized by type. Source: elaborated by the author (based on data from DDUM).

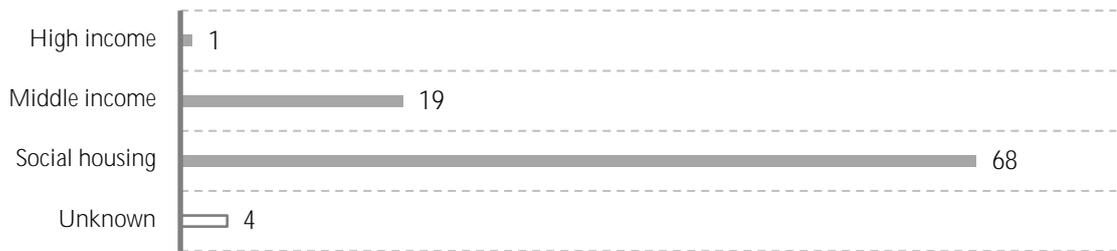


Figure 4.4 Open neighborhoods 2002-2016, categorized by income group. Source: elaborated by the author (based on data from DDUM)



Figure 4.5 Gated communities 2002-2016, categorized by income group. Source: elaborated by the author (based on data from DDUM).

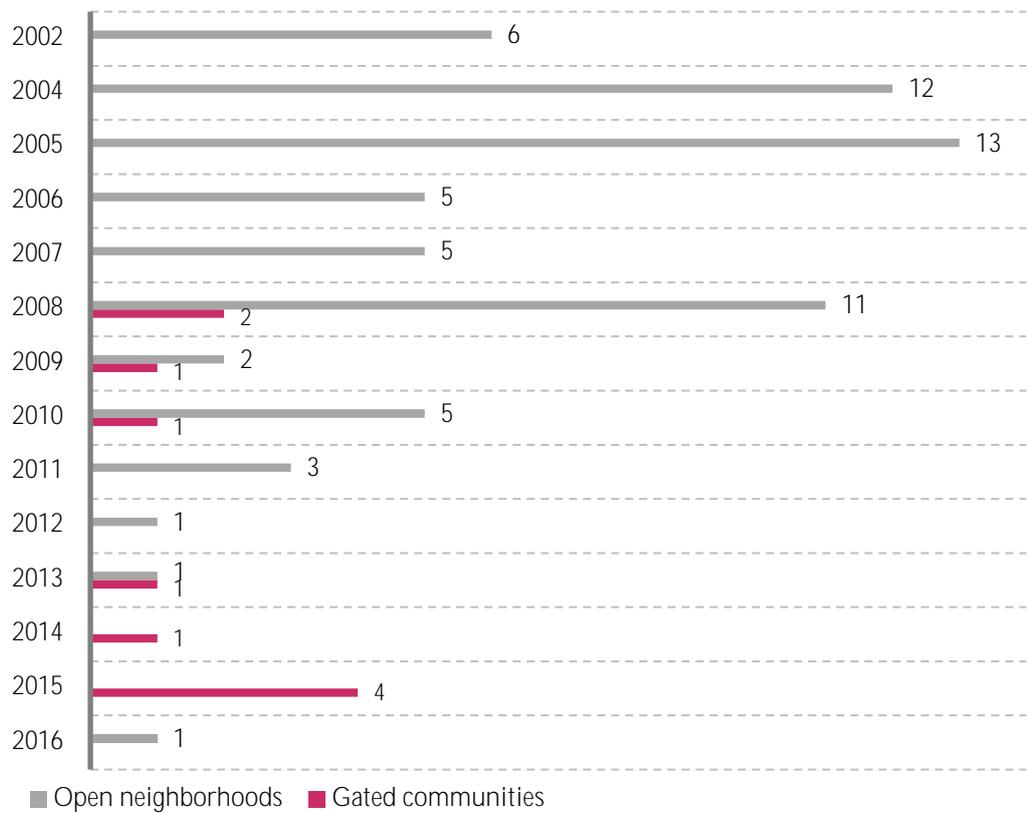


Figure 4.6 Social housing neighborhoods 2002-2016, categorized by type. Source: elaborated by the author (based on data from DDUM).

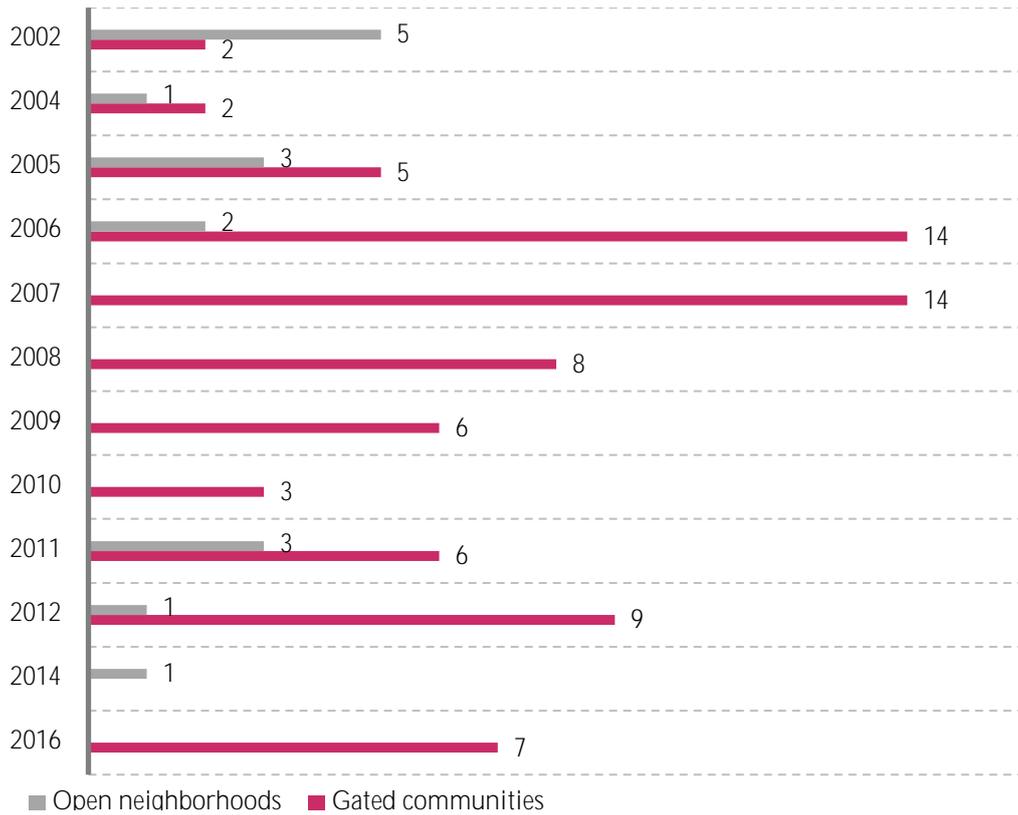


Figure 4.7 Middle income neighborhoods 2002-2016, categorized by type. Source: elaborated by the author (based on data from DDUM).

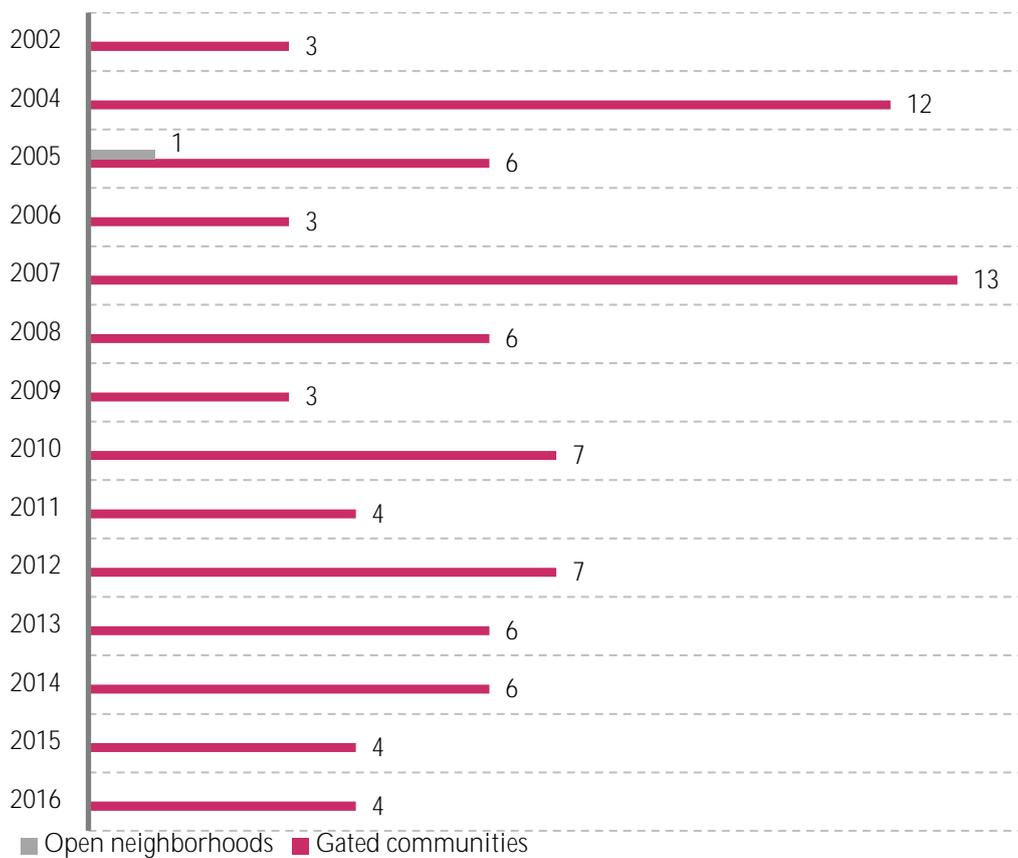


Figure 4.8 high income neighborhoods 2002-2016, categorized by type. Source: elaborated by the author (based on data from DDUM).

4.1.3 Motivations

4.1.3.1 Lifestyle

It was introduced before that one of the two main motivations for citizens in Chihuahua to live in a gated community is the lifestyle they promote. At a first thought, the term “lifestyle” seems like a very vague concept, but it refers to certain characteristics that altogether compose an ideal visualization of a neighborhood.

The literature suggests that the main aspects that influence the lifestyle of residents of gated communities are related to the environment they offer and their location (Suwannasang, 2015). These two aspects work at different scales. The common location within the city ensures residents the opportunity of living with people that share the same social status conferred by economic capacity. Furthermore, gated communities are typically placed one next to each other in the suburbs, conforming a group of individual housing islands that do not physically interact; and for every group a commercial node is placed at a strategic point. Finally, the particular aspects at a neighborhood level regarding the lifestyle of gated communities found in the literature are exclusive amenities inside or right outside the gated community (green areas, playgrounds, club houses, etc.) (Blakely and Snyder, 1999; Grant and Mittelsteadt, 2004; Roitman, 2010; Söhlemann, 2011).

In Chihuahua, the promise of a better lifestyle is widely used by many developers as a marketing strategy for their gated communities. Looking at the webpages of the largest developers in the city (Grupo Valles, CTU, Grupo RUBA, BRASA and Grupo YVASA), many aspects in common regarding this strategy were found. Starting with the location, they offer the peacefulness of living in an exclusive development at the suburbs that at the same time is well connected to the city thanks to its proximity to main avenues (figure 4.9). For instance, Rinconadas del Valle V is advertised by CTU Residencial as a development that is located only a few minutes away from the main arteries of the city, and Grupo YVASA publicizes Verona Residencial by saying that it has an excellent location with fast access to any point in the city. It is relevant to mention that none of the descriptions from gated communities found in their developers’ webpage included any reference to public transportation access, nor to pedestrian or cycling infrastructure connecting the neighborhood with the rest of the city.



Figure 4.9 Location as a marketing strategy of developers. Source: author, October 2016.

Concerning the environment aspect they refer mostly to large parks and green areas and a private atmosphere. A rather small size is apparently other appealing aspect of a gated community. The main characteristics of Cerrada Cataluña described by Brasa include it being a gated community with less than 60 houses and wide parks and green areas, and Vistas del Pedregal from grupo Valles offer “abundant” green spaces and parks centrally distributed in two big areas and only 24 residential lots. In respect to the promised lifestyle, during an interview a developer mentioned that people wish to live in an attractive residential subdivision with beautiful scenography, and parks and green areas where their children can play. Regarding the desirable small size of gated communities, he said that it has been proven by practice that small residential subdivisions work better. In a gated community of more than 100 residents, it is harder to organize the neighbors committee and it is also more difficult for people to meet each other. Another reason is that by regulation it is not allowed to have only one access for a big number of lots, and residents do not wish to have more access points as it diminishes exclusivity and their security perception (Bautista, 13.10.2016)(Annex 4).

The messages developers send to attract possible residents of gated communities are intended for a specific user: young families. Even when this residential subdivisions can be inhabited by anyone with the economic capacity to buy a lot or a house inside them, several aspects from their publicity suggest that the main target are young couples and their children. For example, descriptions often mention the presence of parks and playgrounds or the proximity to schools. It is common for young couples in Chihuahua to buy their own house or a lot to construct it in, as a lifetime investment. For example, Grupo YVASA invites citizens to “discover their future home in Vilago Residencial” and describe themselves as a company that believes the most important aspect of life is family, and that is the reason why their designs aim to encourage “the harmony your family deserves” (YVASA, n.d). Overall, the message is very clear in the images of developers’ marketing

campaigns: smiling young couples, children enjoying green areas and playgrounds or even a baby playing peacefully with his dog (figure 4.10).

The motivation of a better lifestyle promised in gated communities, and its specific aspects concerning location, environment and a family life, is well exemplified in the description of Pedregal del Alba, a gated community to be constructed in 2017 by Grupo Valles:

Vivir cerca de todo lo que necesitas, junto a los que más quieres, en un espacio con grandes áreas verdes y de recreación, es un privilegio que sólo encontrarás en Pedregal del Alba. Su inigualable ubicación, con accesos a las avenidas más importantes de la ciudad, te permitirá disfrutar de una vida de primer nivel. (To live close to everything you need, with the people you love the most, in a space with large green and recreational areas, is a privilege that you will only find in Pedregal del Alba. Its incomparable location, with access to the most important avenues in the city, will allow you to enjoy a first class life).

(Grupo Valles, n.d)



Figure 4.10 "Family life" as a marketing strategy of developers. Source: author, October 2016.

4.1.3.2 Security

The desire of a safer place to live is the second cause for gated communities to increase. According to the literature, this security could be either of the property and its value or of people, against traffic and/or crime (Blakely and Snyder, 1999). The review of case studies around the world has shown that in many cases the failure of the state to provide security to its citizens leads to an increment in crime rates, and with it comes an increased fear of crime. As a result, inhabitants take physical measures to protect themselves and residential enclaves multiply (Caldeira, 2000; Enríquez Acosta, 2007; Low, 2004; Quintal and Thompson, 2007).

As discussed in the last section, citizens from Chihuahua are offered a particular lifestyle when living in a gated community: they have the opportunity to enjoy the exclusivity its walls offer, the private use of its green areas and parks, or even the company of people from the same economic status. Nevertheless, despite the model has existed in the city for 30 years, it has gained popularity to the point of becoming the only option for high income families in the past 14 and even an option for public housing developments in the last 8. The reason is very simple: people want to feel safe. A survey conducted by the citizen institute of insecurity studies (Instituto Ciudadano de Estudios sobre la Inseguridad, ICESI) in 2009, revealed that 8 out of 10 inhabitants felt insecure in the city (México Evalúa, 2010). This results positioned Chihuahua, for the first time since the survey was made in the country, in the first place of most dangerous perceived cities according to its citizens. In some other cities, the perception of crime is often influenced by the media and does not match the crime incidence. In the case of Chihuahua the fear of crime was well founded in the reality. Based on data from 2009, Chihuahua was the only state in **the country that ranked “muy alta” (very high) on the 2010 violence and citizen insecurity index** (México Evalúa, 2010). The index considers 6 aspects of analysis: crime incidence and victimization, violent crimes, organized crime, imprudent violence, and crime perception. In most statistics from the crime incidence and victimization analysis Chihuahua appeared above the national average and regarding imprudent violence it appeared only in 18th position, out of the 32 states the country has (considering Mexico City as a state too). But Chihuahua appeared in the first places of many statistics from the violent crimes and organized crime aspects. It was the seventh state with more reported robbery with violence and rape, and the first in kidnappings: 204, almost the double of the most populated state in the country. Nonetheless, the most shocking cipher is the one of intentional homicides. From 2007, the tendency incremented exponentially (figure 4.11) and in 2009 Chihuahua accounted for 74.4 homicides per 100,000 inhabitants. If the state was a country, it would have been the most violent in the world in that year (figure 4.12).

Besides from lifestyle characteristics, security is the other aspect developers use to describe their residential subdivisions in order to attract possible buyers. Looking into the webpages of the same developers, reviewed in the last section, it was found that, just as location and environment characteristics, they all refer to the security aspects of their residential subdivisions in one way or another. While Grupo YVASA and CTU only mention that their residential subdivisions are “closed”, Grupo RUBA describes Castilla Reliz as a place that offers “the serenity of living in a safer place” (Ruba Residencial, n.d). Furthermore, Brasa and Grupo Valles specify the presence of the bordering wall, security guardhouse with 24hr controlled access and surveillance systems.

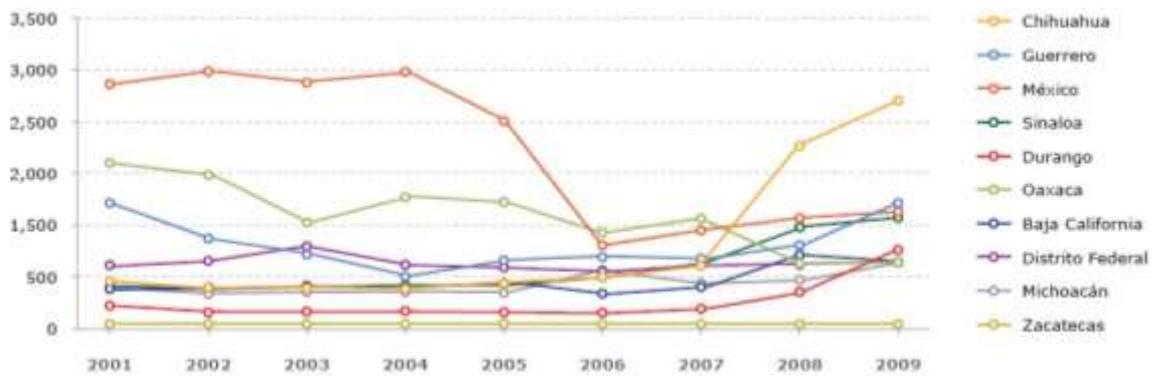


Figure 4.11 National homicides tendency. Source: *Índice de Inseguridad Ciudadana y Violencia, México Evalúa, 2010.*



Figure 4.12 Homicide rates, comparison between Mexican states and countries, 2009. Source: *Índice de Inseguridad Ciudadana y Violencia, México Evalúa, 2010.*

But living in a gated community is no longer a privilege that only developers get to offer with one of their residential subdivisions. Since the violence levels augmented, bottom up initiatives to close streets emerged in different neighborhoods. Residents from different neighborhoods wanted to feel safe and organized to install gates and fences, denying the access to their streets. As Blakely and Snyder (1999) identified, in these cases the walls are different from the ones of gated communities constructed by developers; their presence is not something offered as a privilege but rather a demand from citizens. According to the director of the DDUM, who held the same position 6 years ago, the street closings were not permitted by the municipality when the initiative started, and the direction even had to arrange the removal of gates and fences. But the demand grew to a point where a procedure to legalize street closings was developed. Back in 2010, citizens from different economic positions were being directly or indirectly affected by crime; they were either victims, or knew someone who was it and were afraid of becoming a victim too. As a result, **the state government issued an ordinance: the civil code was modified and the “game rules” for a street to be eligible to be closed were established** (Soto, 07.10.2016)(Annex 5).

With data from the DDUM, it was found that until 2012, 246 streets from 66 different open neighborhoods had applied to the municipality for the permission to close (De La Garza et al., 2015)(Annex 13). The data to update the cipher unfortunately could not be obtained, but different interviewees from DDUM stated during the field research that the authorizations for new street

closings have decreased. According to Vargas, most of the recent applications to close a street are denied because people are nowadays trying to protect themselves mainly from traffic and not from crime, and the municipality considers it no reason enough to agree a closing. This is strictly related to the high motorization rate the city has, and to counteract its effects, a street closing is not mandatory; instead, other tools could be implemented (Vargas, 04.10.2016)(Annex 3). Moreover, Valdez declared that even though the tendency of closing streets is not as strong as it used to be, it influenced the market demand and the offer in consequence. It caused that today, the only offer for high income and most middle income residential subdivisions are gated communities. He also mentioned that, in his opinion, even when no new street closings occur, the ones that were closed during that period will remain that way. People now like to live inside a gated community, and the municipality will not remove that privilege since the civil code was modified and it is now a legal act. Anyhow, the intention behind gated communities as an urban measure to attend problems of security has proven to have no big influence on high-impact crimes. Residents might have in a way avoided strange cars and people wandering on their streets, but whoever is determined to commit a high-impact crime, will do it without considering physical circumstances (Valdez, 11.10.2016)(Annex 7).

Observatorio Ciudadano (citizen observatory) is a civil association that works recording and measuring crime, and presenting through an annual atlas. It started working formally in 2012, but the initiative to create such association emerged in 2008 when the violence levels in Chihuahua increased. The atlas is based on information obtained from different sources: the office of prosecution, insurance companies, media, hospital records, neighbors committees, the forensic sciences institute, etc. It focuses on measuring and mapping six different high-impact crimes: homicide, extortion, kidnapping, robbery to pedestrians, home burglary, and robbery to **businesses. These are not the only ones identified in Chihuahua's criminal laws but are the ones** commonly used for statistical purposes. During an interview, the director of the association declared that intentional homicides is a violent event related to organized crime and not to a specific geographic location, i.e. they occur indistinct of the zone. Regarding gated communities, she clarified that Observatorio Ciudadano has no specific record of their crime statistics since the statistics are georeferenced taking the 62 municipal security quadrants. Nevertheless, it has been found that neighborhoods in the periphery, regardless if they are gated communities or not, are particularly vulnerable to crime because they are separated from other uses than housing. Residents leave to work or school leaving the house unoccupied during the day, making it an easy target for crime. She also mentioned that it is hard for the authorities to work against crime if it is not denounced, which happens very often in the case of home burglary (if it was done without violence). When trying to obtain information from gated communities, neighbors committee are usually hard to work with because they do not rely on the authority (Varela, 06.10.2016)(Annex 6).

4.1.4 Characteristics

Taking the literature review as a base, gated communities in Chihuahua are classified into three different types: the gated communities for the elite, the planned gated community, and the previously open gated communities. Overall, they resemble the main three categories and their particular characteristics described by Blakely and Snyder (1999) but the additional aspects considered by Grant and Mittelsteadt (2004), tenure, location, size and policy context are also considered.

4.1.4.1 *The gated communities for the elite*

This group is the less represented in the city, composed by only two gated communities (figure 4.13). Still, their characteristics vary greatly from those of the other two groups. As commonly called by citizens , **“El Campestre” and “El Sanfra” are two different residential subdivisions** located in the west of the city and separated only by 3.5 kms. Both settlements include a club house and a very special private amenity that cannot be found in any other location in Chihuahua, a golf course. Besides these recreational amenities, there are no other facilities from different uses offered inside neither gated community, like schools or shops.

Club Campestre is a gated community where households are distributed around the golf course, which is the main attraction. Additionally, the club house offers other recreational activities like swimming, tennis, and horse riding. According to information found on its website, the club was founded in 1956 (Campestre Chihuahua, n.d). It probably was one of the first settlements to make a status statement by having private recreational amenities (Soto, 07.10.2016)(Annex 5). Residencial San Francisco I, II, III, IV, V and VI, were developed 10 years ago. Despite the number of subdivisions, Residencial San Francisco is physically one large gated community surrounded by fences and stone walls. As in Club Campestre, a club house offers a variety of recreational activities and the households are distributed around the golf course (figure 4.14).

Beside from the amenities they offer, Club Campestre and Residencial San Francisco share particular characteristics that differentiate them from the majority of gated communities in the city and altogether make them unique (table 4.1). To start with, according to data from the national housing inventory (Inventario Nacional de Viviendas) elaborated by the national institute of statistics and geography (Instituto Nacional de Estadística y Geografía, INEGI) in 2012, Club Campestre is composed of 221 households and Residencial San Francisco of 323 (INEGI, 2012). Gated communities in the city regularly have an average of 80-100 lots (Bautista, 13.10.2016)(Annex 4). In addition, they occupy an area of 102 and 62 hectares respectively and their density of 5-12 households per hectare is only lowered by areas marked as rural housing (1-4 households per hectare)(Municipio de Chihuahua, 2009). Furthermore, both are categorized in the homogeneous zone 80, which has the third highest cadastral housing land value in the city (Gobierno del Estado Libre y Soberano de Chihuahua, 2015). Finally, both lifestyle communities have a condominium regime. This is a very special characteristic considering that only approximately 5% of subdivisions in the city have such regime (including industrial and commercial subdivisions)(Valdez, 11.10.2016)(Annex 7).

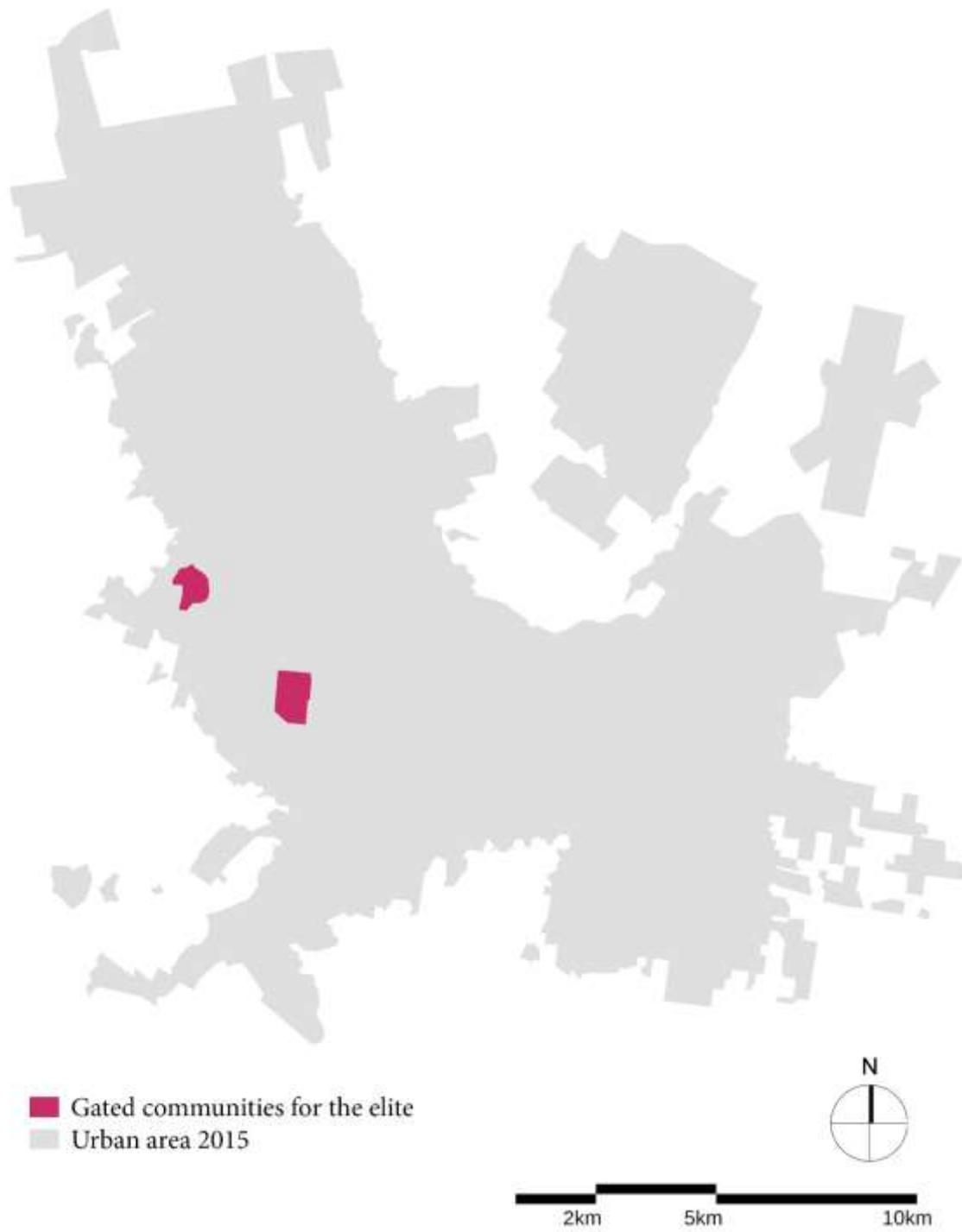


Figure 4.13 Location of the gated communities for the elite. Source: elaborated by the author.



Figure 4.14 Distribution of houses around the golf course. Source: Horacio González, January 2017.

Table 4.1 Characteristics of the gated communities for the elite. Source: elaborated by the author.

The gated communities for the elite	
Function of enclosure	Protect club amenities, exclusivity, privacy, display status and power
Security features	More than one access point. Each one is composed by more than two lanes, differentiating visitors from residents. A security guard stands position in the guardhouse 24/7 and asks for personal information to visitors. Walls and fences border all the perimeter.
Amenities and facilities	Private roads, landscape maintenance of common areas. Golf course and club house exclusive for residents and members.
Type of resident homogeneity	Homogeneity by class, two of the most expensive residential subdivisions in the city.
Tenure	Principal residence. Between the 5% of total subdivisions in the city with condominium ownership
Location	Both were planned in the suburbs, but since Club Campestre was developed many years ago, it has been absorbed by the city development and its location has transformed to urban.
Size	Hundreds of units distributed in a large area. Lowest density in the city
Policy context	Enables gates

4.1.4.2 The planned gated communities

Most gated communities in Chihuahua belong to this group. All residential enclaves that were planned as such by a developer are included (with the exception of the gated communities for the elite). Based on data provided by DDUM and with support of google maps (gated communities are not available for street view) it was possible to identify the planned gated communities in the city map (figure 4.15). From a general perspective, they all share many distinctive aspects. Nevertheless, a subdivision for each income group addressing the specific differences is considered (table 4.2).

The lifestyle offered by the gated communities of this group focus on exclusivity. The privilege of enjoying private green areas with playgrounds where children can play safely, the tranquility of keeping stranger cars and people enter the residential subdivision, and the possibility to enjoy a “family” life. Also, located in a strategic place away from urban problems like traffic and at the same time well connected to the main avenues of the city. Regardless of the income level, each class makes an “exclusivity” statement to the outsiders. The search of a safer place to live is an important aspect of these developments, particularly since the violence levels increased.

The aspects that illustrate the examples from this group were all observed and identified during the field research. To start with, lifestyle and security gated communities include the typical walls and/or fences bordering the entire residential subdivision. In most cases, there is only one access to the neighborhood which tends to be ostentatious (depending on the income level it can be more or less flashy). They come in different shapes and use a variety of materials but overall they all stand out. A sign, with a particular shape or logo next to the entrance indicates the name of the gated community (figure 4.16).

The guard house is located right in the center of the access, where a security guard must be present 24/7 to watch over the security cameras and control the exit and entrance of visitors and in some cases residents too. Typically, there is one lane to exit the gated community and two lanes to enter.



Figure 4.15 Entrance of a planned gated community. Source: author, October 2016.

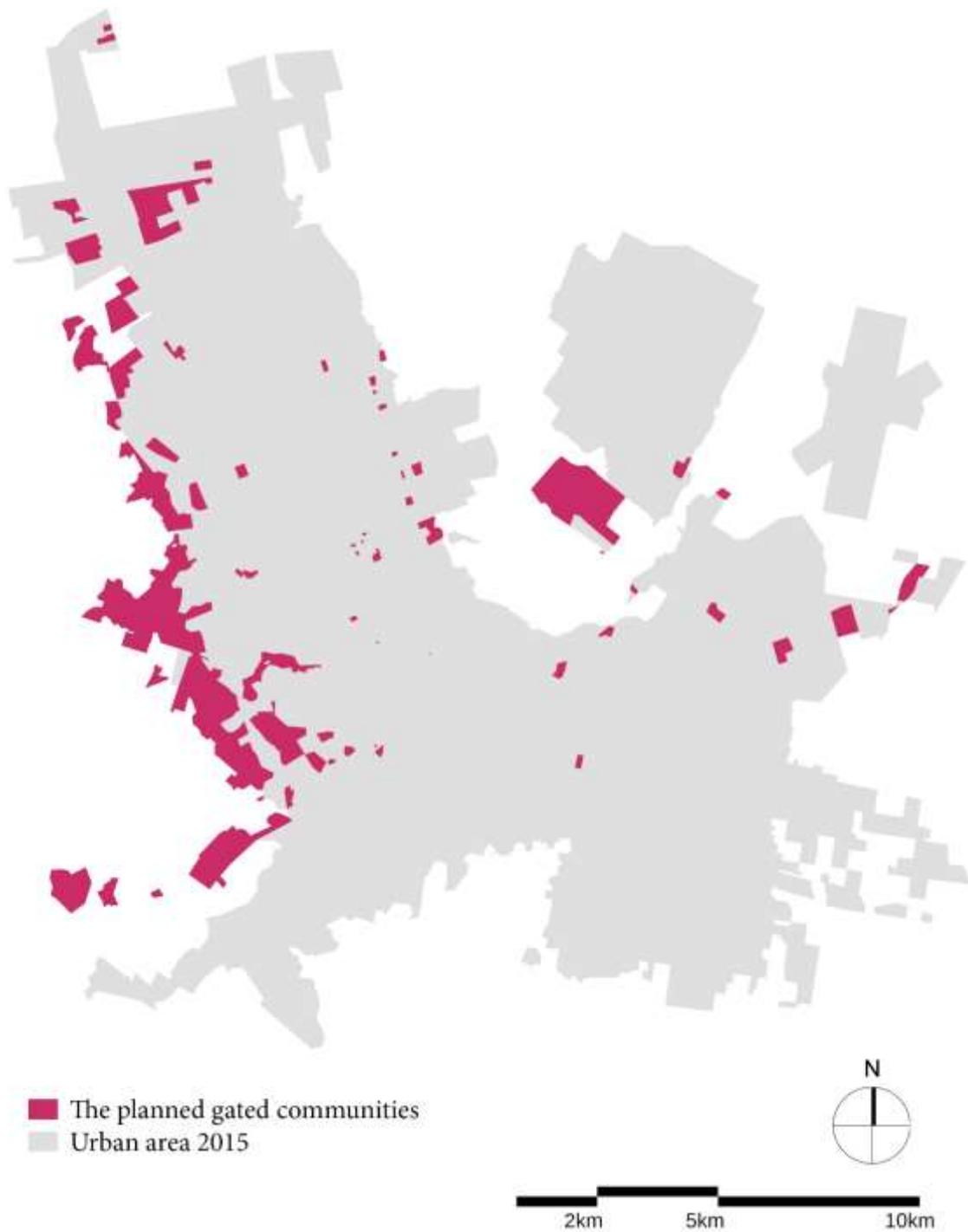


Figure 4.16 Location of the planned gated communities. Source: elaborated by the author.

One of them is for the visitors, who will have to clarify to the security guard the purpose of their visit and identify themselves by providing an ID. The other lane is for exclusive use of the residents, who in some cases have a remote control or a code to automatically open the gates but if not, the security guard has to identify them too and open the gates. With a very few exceptions, a special access for pedestrians is not considered and therefore, people that want to enter or exit the gated community by foot must do so by using the car lanes. Furthermore, other signs regarding the admission dynamics, announcements for residents and possible buyers, and traffic limits are also often placed in the entrance, and in the case of the later also inside the gated community. Green areas and playgrounds, which are very often taken care of, are located in the center of the neighborhood. The layout of the streets responds a “cul de sac” type of pattern, with dead end streets or streets circling the central green areas, to which all lots have its front to and while their back faces the wall bordering the outside (figure 4.17).

At a more urban scale, it was observed that these gated communities function like single islands that are placed next to each other, and for every grouping of residential subdivisions a commercial node is strategically located. These agglomerations of gated communities and other uses concentrated in nodes are similar to what Blakely and Snyder identified as “New Towns” (Blakely and Snyder, 1999). For example, the gated communities developed by CTU in a particular area in the west of the city are as a larger group known as “Valle Escondido”. Each gated community is physically divided to the others by walls and have its own specific name. Some even share a name and are differentiated by a number, such as Albaterra I, Albaterra II, and Albaterra III, or Caminos del Valle I, Caminos del Valle II, Caminos del Valle III, and Caminos del Valle IV. None of the gated communities of Valle Escondido includes other use than housing within their walls. However, a shopping plaza, developed also by CTU, is strategically located in the roundabout to which the access streets of all gated communities convey.



Figure 4.17 Typical layout of the planned gated communities. Source: <http://grupovalles.com/residencial/>

Regarding the tenure and policy context, almost all gated communities from this group are under a private regime. The only gated communities from this type that are contained within the 5% of subdivisions with a condominium regime are the ones from Grupo Valles (Valdez, 11.10.2016)(Annex 7).

There are specific characteristics of gated communities from this group that vary depending on the income group they were planned for. To start with, the size of the lots and the houses, and their image. In the case of gated communities for high income groups, houses tend to have around 250m² distributed in two levels and in most cases were designed specifically for each resident by an architect. In many middle income gated communities, houses have around 150-200m² also distributed into two levels and the developer offers a variety of three or four set designs to choose from. Finally, the houses of public housing gated communities are in comparison really small, between 38 to 70m² depending on the design model, which have already been efficiently constructed and distributed by the developer. Moreover, the size of the residential subdivision varies depending on the income group as they offer more or less exclusivity. As discussed before, while gated communities for high and middle income have an average of 109 and 266 residential lots respectively, the average size of a social housing neighborhood tends to be much bigger in order for it to be easier to plan and construct so that it can be profitable for the developer. According to information provided by DDUM, Vistas del Norte II and Quinta Arboleda are examples of this remaining aspect of typical open social housing neighborhoods in social housing gated communities, since once finished they will contain 2,546 and 767 housing lots respectively. On the other hand, some other already constructed examples of social housing gated communities like Veredas del Sur in all its six subdivisions, show an intention to adopt the typical small size from high and middle income gated communities. Finally, the location is another big difference between gated communities planned for different income groups. Even when developers include the typical physical characteristics of gated communities into their social housing projects (the bordering wall, a sign with the name of the neighborhood, restricted access controlled by gates, a guard house, street layout and central green areas, etc.), the location is not the same. Most gated communities are placed on the outer extension of the city, but analyzing the cadastral land values it was found that the ones planned for each income group had a specific location. Social housing gated communities are dispersed in the south, east, and north of the city while middle income gated communities are partially dispersed with some cases in the east and north of the city, but most on the west. However, all of their high income counterparts are in the west.

Table 4.2 Characteristics of the planned gated communities. Source: elaborated by the author.

The planned gated communities			
	High income	Middle income	Low Income
Function of enclosure	Exclusivity; family life, private enjoyment of green areas, tranquility of keeping unknown people outside, protection of residents against crime and traffic, and property value		
Security features	One access point, composed in most cases by one exit lane and two access lanes, differentiating visitors from residents. A security guard stands position in the guardhouse 24/7 and asks for personal information to visitors. Walls and fences border all the perimeter		
Amenities and facilities	Private roads, landscape maintenance of common areas, central green areas containing playgrounds		
Type of resident homogeneity	Homogeneity by class, depending on the income group. Also, homogeneity by age is also considered, since they are marketed by developers specifically for your families		
Tenure	Principal residents. Besides from the ones developed by Grupo Valles, all gated communities from this group are under a private property regime		
Location	Grouped in the west	Partially dispersed. Some examples in the east and north and most grouped in the west.	Dispersed in the south, east and north
Size	Average of 109 lots	Average of 266 lots	Some examples have hundreds of lots as a typical social housing open neighborhood and some imitate the scale of middle and high income subdivisions
Policy context	Enables gates, even though the tenure does not contemplate the private ownership of common areas		

4.1.4.3 *The previously open gated communities*

The gated communities from this group are the ones that emerged as an initiative of their residents. The gating occurred as a bottom up approach where neighbors organized and took the decision to close their open streets. Based on the list of street closings from 2012 (De La Garza et al., 2015) and with support of google maps (closed streets are not available for street view) it was possible to identify in the city map the previously open gated communities (figure 4.18).

The movement of street closings started as a consequence of the increase of violence in the city. At that time, street closings had no precedents, despite the fact that developers had been constructing gated communities for many years with the approval of the municipality. The first response of the authorities was to oppose to the closings, but eventually the municipal code was adjusted in order to authorize them (Vargas, 04.10.2016)(Annex 3).

As presented in a document by the municipality of Chihuahua 2013-2016, the requirements to apply for a street closing at the legal department are the following:

1. An application form signed by the neighbors committee. The committee must be properly constituted before the direction of citizen attention of the municipality.
 - a. Attach the corresponding certificate.
2. Attach the directory of neighbors who would be contained in the perimeter.
 - a. The owner must be clarified
 - b. Address and phone number
 - c. Number of properties that agree and number of properties that disagree to the closing
3. Letter of conformity of the majority of neighbors (2/3 parts)
4. Architectonic project for construction
5. Attach the regulation of the guardhouse operation and surveillance services, signed by the neighbors or a representative per family
6. Once required the previous, the documentation will be revised by the municipality and in case it proceeds, the payment must be done (Income law of the municipality of Chihuahua 2015, in accordance to the correspondent to the rate of the subsection X point 6, by occupation of the public road, 1000 minimum wage or 10 minimum wage per lot, for the closing authorization.

In summary, a neighbors committee must be created, at least 66% of the neighbors must agree to the closing and an amount must be paid to the municipality.

It was found that the majority of this newly made gated communities are located in the west of the city, where the high income and most of middle income gated communities are also found. It is believed that the existence and agglomeration of planned gated communities in this area of the city, could influence open neighborhoods and motivate their residents to aspire to a similar level of security by taking physical measures and closing their streets too. Furthermore, despite being **open, these neighborhoods share the “desirable” location in the west, and therefore the land value is higher than other open neighborhoods in a different location.** It has to be pointed out that closing a street for security reasons, implies also a status statement since it is a privilege which low income citizens cannot afford. According to data from the ministry of labor and social welfare (Secretaría del Trabajo y Previsión Social), by November 2016, 32% of the occupied population in the state of Chihuahua earns two minimum wages or less (STPS, 2016).

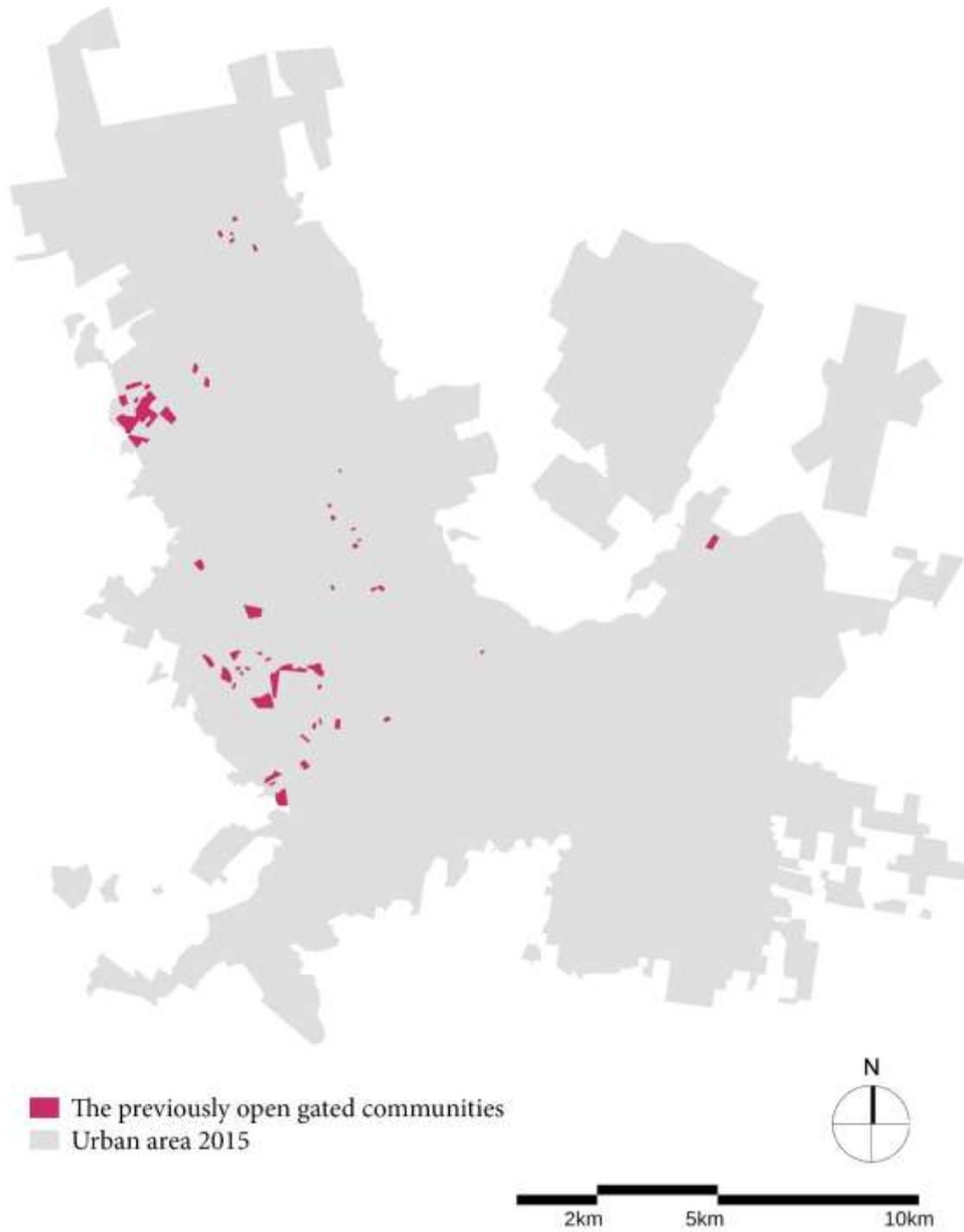


Figure 4.18 Location of the previously open gated communities. Source: elaborated by the author.

Proportionally, the ten minimum wages per lot or the contribution to the 1000 minimum wages that must be paid to the municipality for the closure permission is a big amount to pay. According to Secretaría de Hacienda y Crédito Público, the current minimum wage, valid from January 2016, equals 73.04 Mexican pesos per day, approximately 3.65 euros (SAT, 2016). But the payment to the municipality for the permission to close is not the only expense for the residents of the new gated community. Interviewees from the municipality declared that since the permission to close a street implies the private enjoyment of public space, the neighbors from the closed street are obliged to clean and maintain the common areas contained within (Vargas, 04.10.2016)(Annex 3). Finally, the residents also have to pay for the gates installation, the construction of the guardhouse and installation of the surveillance system, plus a regular fee to hire the security guards.

Regarding the physical aspects, the street subject to closure must not be primary in order for it not to interfere with the regular mobility of citizens through the city. Streets that used to be open and were closed, commonly have a sign placed at the newly installed fence, specifying that it is now a private street and there is no access. Looking at the urban patterns of the previously open gated communities, it was found that in most cases they already had a cul-de-sac pattern and it was only needed to install a gate to turn it into a private street. However, in some neighborhoods like “El Campanario”, the pattern was orthogonal without dead ends, so in that case fences had to be installed at the end of each street (figure 4.19). Regarding the fences that turn an open urban layout into a cul-de-sac pattern, all interviewees from the municipality mentioned that in case of an emergency they are required to have a way to open, so that an emergency vehicle (ambulance, firefighter truck, etc) can enter if necessary. According to the requirements, all new closings must construct a guardhouse and hire security guards to stand position there 24/7 for the same purpose. Though, some previously open gated communities were found to only have an automatized access (figure 4.20).

There is no specific mention in the street closing requirements regarding allowed sizes. Additionally, it was observed that there is also no average or common size to them. Most closings are of only one street, but some include more, being 11 the highest amount. Regarding the number of households enclosed, the smallest one contains only four while the largest 250 (De La Garza et al., 2015)(Annex 13).



Figure 4.19 Fences installed in streets from El Campanario. Source: Horacio González, January 2017.



Figure 4.20 Automatized entrance in a previously open gated community. Source: Horacio González, January 2017.

Table 4.3 Characteristics of the previously open gated communities. Source: elaborated by the author.

The previously open gated communities	
Function of enclosure	Tranquility of keeping unknown people outside, protection of residents against crime and traffic
Security features	Installed fences in the streets to impede access. Created cul-de-sac urban patterns. In most cases, a security guard stands position in the guardhouse 24/7 and asks for personal information to visitors. Some cases have an automatized access only
Amenities and facilities	Private roads. Former open public spaces are enjoyed privately
Type of resident homogeneity	Homogeneity by class; closing a street is expensive and residents must have the economic capacity to pay for it. Homogeneity by belief regarding threats perception; at least 66% of the residents must agree to the closing
Tenure	Principal residence
Location	Most are located in the west, with few dispersed exceptions
Size	Variable. From 1 to 11 closed streets, and from 4 to 250 households contained within the perimeter
Policy context	Enables gates. The municipal code was modified to allow temporary closings

4.1.5 Urban scale impacts

In the following section, the urban scale impacts of gated communities are discussed. Taking the categorization made by Roitman (2010) as a reference, the impacts are divided based on the area they influence: spatial, economic, and political.

4.1.5.1 Spatial impacts

4.1.5.1.1 Sprawl

According to the 2006 diagnostic inform of PSMUS, there is an imbalance between the tendency of city expansion and the tendency of population growth, which reflects on a density decrease. In other words, the city is growing at a higher pace than its population, generating a sprawling urban model (figure 4.21)(table 4.4).

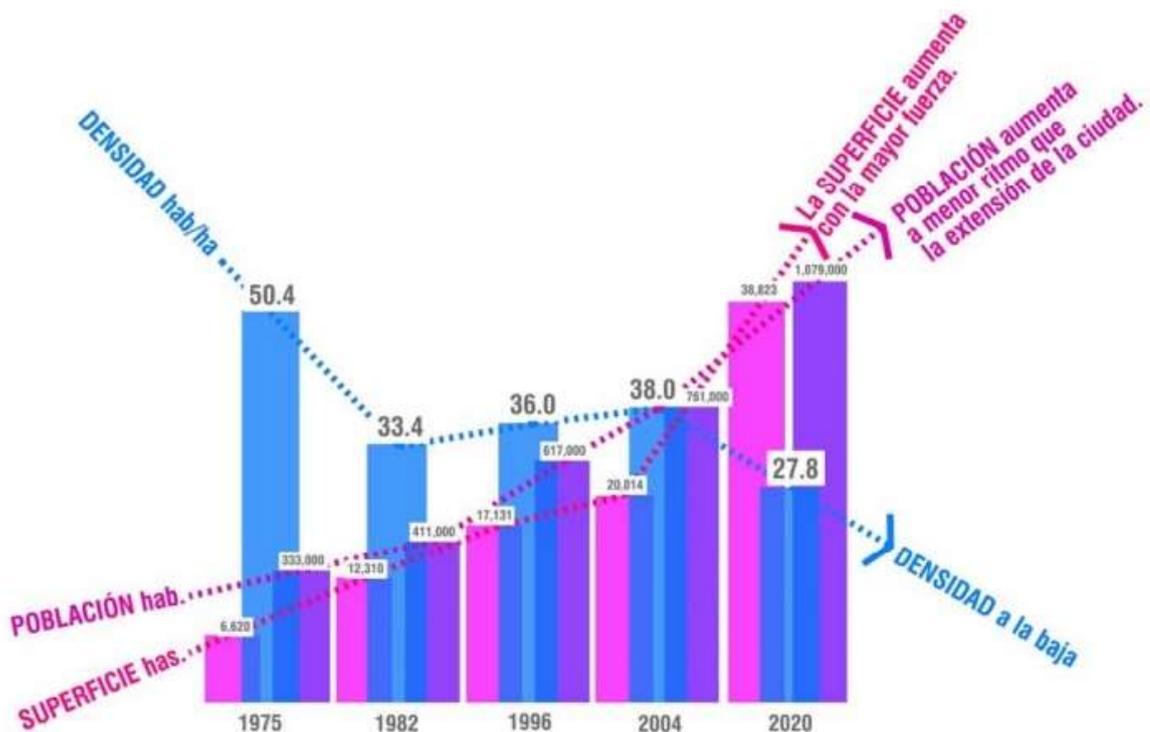


Figure 4.21 Historical comparison between city area, population and density. Source: PSMUS, Instituto Municipal de Planeación, 2006.

Table 4.4 Comparative table of population density over the years. Source: elaborated by the author (based on data from census by INEGI, Instituto Municipal de Planeación 2006, and <http://www.implanchihuahua.gob.mx/Geom%C3%A1tica/>).

Year	Population	Year	City area (Ha)	Population density (in/ha)
1765	4,652	1750	45.00	103.38
1803	11,600	No data		
1823	9,250	No data		
1860	14,000	1860	131.00	106.87
1887	22,000	No data		
1900	47,914	No data		
1910	39,706	No data		
1921	48,932	No data		
1930	61,526	No data		
1940	78,850	No data		
1950	112,455	No data		
1960	186,089	No data		
1970	277,099	No data		
1975	333,770	1975	6,620.00	50.42
1980	406,830	No data		
1982	411,713	1982	12,310.00	33.45
1990	530,783	No data		
1995	627,662	1996	17,131.00	36.64
2000	671,790	No data		
2005	758,791	2005	21,920.89	34.61
2010	819,543	2010	24,034.26	34.10
2015	878,062	2015	26,175.94	33.54

Analyzing specifically the ciphers from the last 20 years, the density has continued to decrease, at a slower pace but in the same direction. In order to counteract this tendency, Rodríguez mentioned that the new municipal administration (which started labors in October 2016) has the intention of implementing policies to re densify the city (Rodríguez, 04.10.2016)(Annex 2). Furthermore, the director of IMPLAN described “bono urbano”, an urban policy that is being driven to promote higher densities. The policy of reducing taxes is an attempt to incentive development in the downtown and the three sub downtowns, located in the north, southwest, and south of the city (Rodríguez, 04.10.2016)(Annex 2).

By putting together the map of all different types of gated communities in the city, it can be seen that they occupy a considerable percentage the total urban area (figure 4.22). It is also clear, that most of these residential subdivisions are located on the outer ring of the city which has only been developed in the past two decades (figure 4.23).

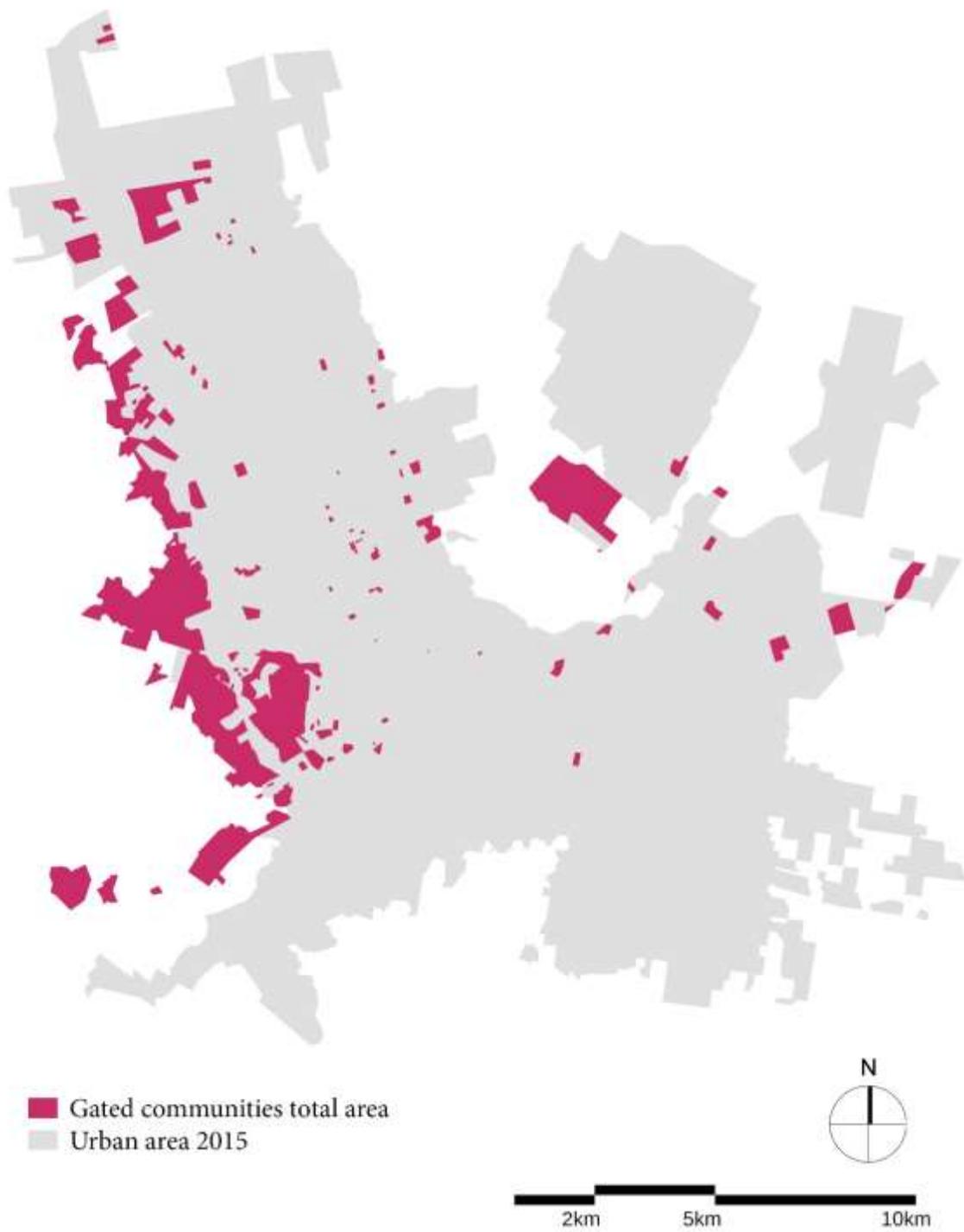


Figure 4.22 Area occupied by gated communities. Source: elaborated by the author.

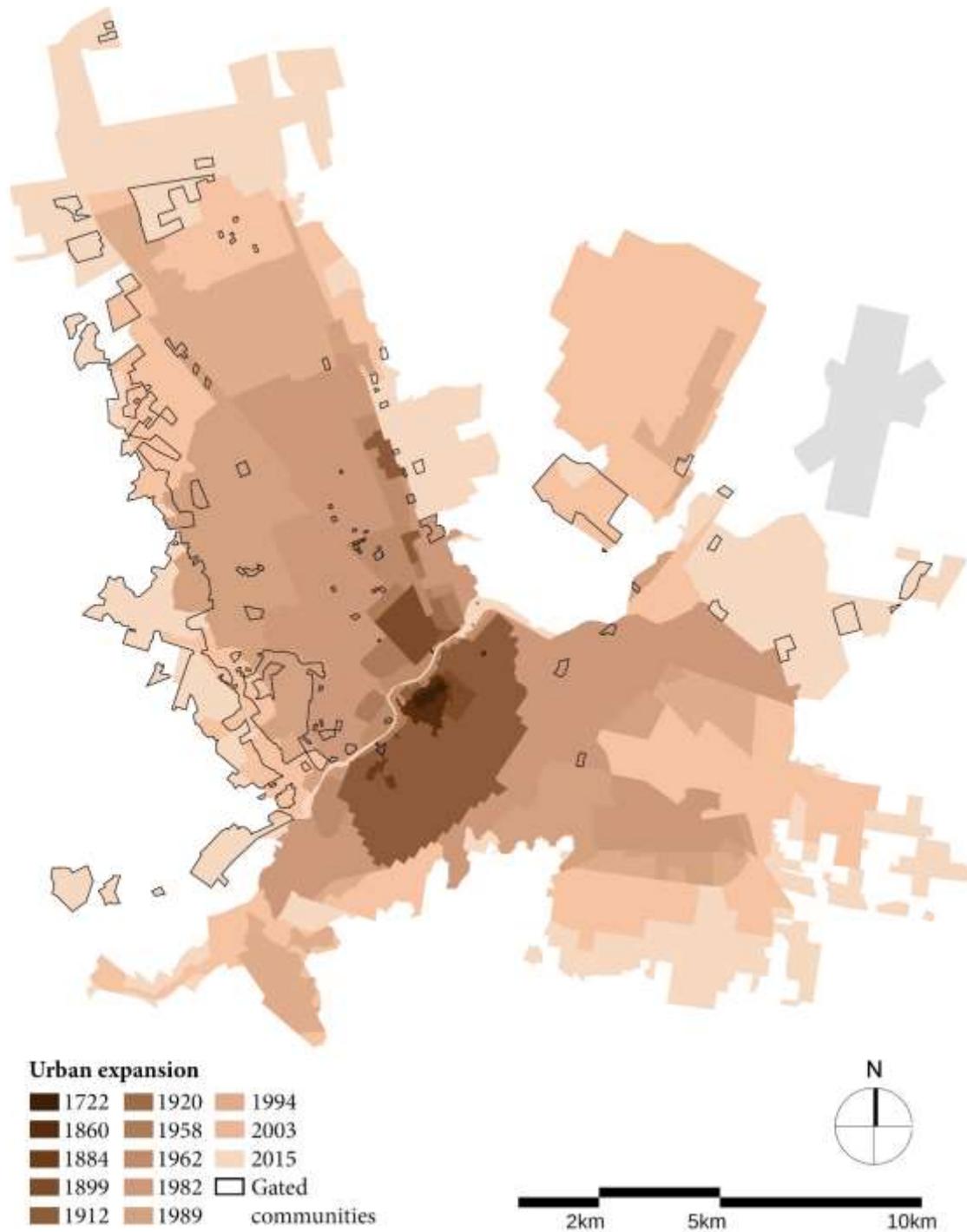


Figure 4.23 Urban expansion and area occupied by gated communities. Source: elaborated by the author.

During an interview, a developer declared that gated communities and new settlements in general (open neighborhoods for public housing too) are being developed at the outskirts of the city because land is cheaper, and the tax reduction incentives are not attractive enough for the project to still be profitable. In addition, some other developer companies have long owned big areas of land that are now turning into gated communities in the west of the city (Bautista, 13.10.2016)(Annex 4). As a result, new roads have to be built to reach the new gated communities constructed at the limits of the city. And the once natural scenery has become a landscape of walls (figure 4.24).



Figure 4.24 New gated community in the urban periphery. Source: author, October 2016.

4.1.5.1.2 *Pulverization of “public” space*

Over the years, the distribution and scale of public spaces of residential areas has changed. In the decade of the 60s, the figure of the big green area in the middle of the neighborhoods transformed into a series of smaller areas, each one equipped with facilities of different uses: educational, religious, recreational, and commercial. That conception of the distribution of green spaces proposed by developers almost 60 years ago, has not changed much besides from the fact that many have become private spaces (Chávez, 2015, p.56, 57).

The proliferation of gated communities in the last years have changed the way public spaces of residential neighborhoods are developed. They are no longer an element of the urban landscape as they are hidden behind walls and their enjoyment is exclusive for the residents. But the conversion of status from public to private is not the only aspect that has been influenced by gated communities, their scale has also changed.

Whenever a developer constructs a new residential subdivision, a percentage of the total area has to be destined for public use of the community. According to the regulations of sustainable urban development of the municipality (Reglamento de Desarrollo Urbano Sostenible para el Municipio de Chihuahua), this is called a “donation” and varies from 11% to 12% of the total area of the settlement, with densities below 80 households per hectare (Municipio de Chihuahua, 2013). **From that donation, 4.5% has to be destined to “green areas” and the rest to public facilities.** Gated communities of high and middle income groups (not considering for social housing since their scale varies and there are currently only 14 examples in the city) are desirably small, and so is the donation since it is proportional to the total area (figure 4.25). Additionally, living in front of a green area is seen by buyers as a positive characteristic of any lot, and in consequence developers split them into many smaller spaces to cover as many lots as possible. Often, the largest green area in the park will only be big enough to have a playground and some benches, while the rest are so small that fulfill an ornamental use only.

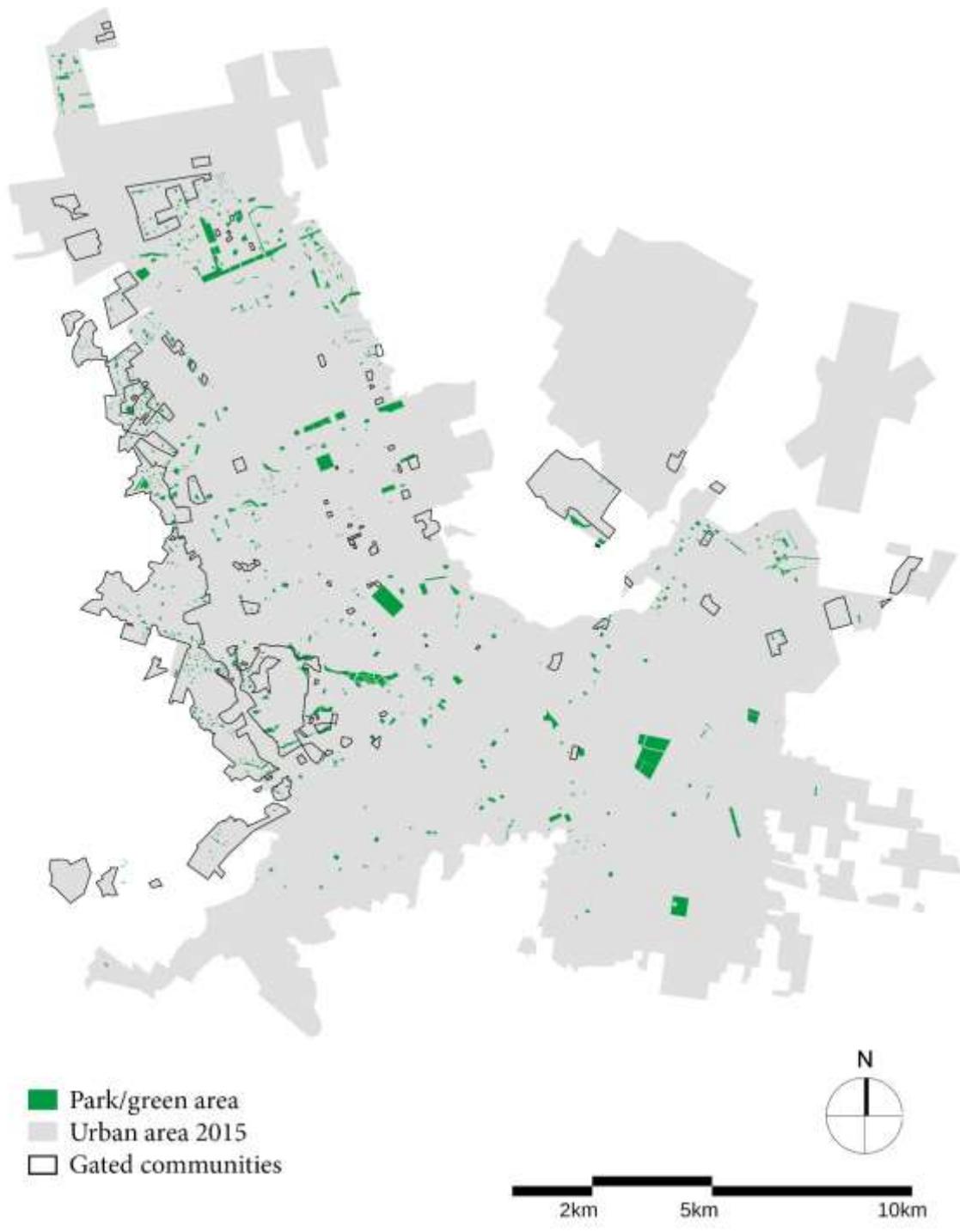


Figure 4.25 Pulverization of public space. Source: elaborated by the author.

4.1.5.1.3 Car dependence

Chihuahua is a highly car-dependent city. This is a situation that has been promoted by many different factors, including the lifestyle and commodity, and the lack of infrastructure for other transportation means.

In the national report of urban mobility in Mexico of 2014-2015, Chihuahua appeared as the third city with the highest number of cars per inhabitant with 0.31, only behind two other northern cities: Tijuana with 0.33 and Mexicali with 0.41 (ONU HABITAT, 2015). It could be argued that one reason behind the high number of cars in the three northern cities is their urban structure favoring its use adopted from cities from the neighboring country. In the case of Chihuahua, its low density is another important factor to consider. Chihuahua is the second least dense city out of 30 metropolitan zones with more than 500,000 inhabitants Mexico has. The lower the density, the longer the distances, particularly at the outskirts of the city.

As many other researchers found out (Cabrales Barajas and Canosa Zamora, 2001; Guenet and Milián Ávila, 2015; Roitman, 2010; Suwannasang, 2015) the typical location of gated communities in the outer ring of the city promotes the extensive use of the car. The area of Valle Escondido developed by CTU and some of the gated communities from Grupo Valles are a good example. To start with, these gated communities are placed one next to each other, producing long distances where the only thing that can be found is a wall and a guardhouse every dozens of meters. Vegetation with an exclusively ornamental purpose and a sidewalk that zigzags for no other reason than the aesthetic of framing the bushes, follow the length of the wall (figure 4.26). Chihuahua has a desertic climate, with temperatures over 40 degrees in the summer, and along the walls and its sidewalks nor shading areas or benches are placed.

During the visits to this site, it was observed that while access points of gated communities had constant movement of vehicles entering and exiting the residential subdivisions and arriving to the commercial nodes, the very few people that walk in these areas are the construction workers and cleaning ladies that do not have another option. One woman, covering herself from the sun with an umbrella, said that she had to walk one kilometer from the closest bus stop to the gated community where she works and back, and spend two hours to get home. This evidences two aspects from the public transportation system. The network does not cover these gated communities and the service is not efficient.

Finally, it is also relevant to consider the aspirational aspect of owning a car. In Chihuahua it is very common for young adults to wish to buy a car for themselves once they work and have the money to do so. **The expression “congratulations on your first car!” is common to hear in this context.** And obviously, the ones with the higher chances of owning one or more vehicles are the inhabitants with higher incomes. Based on numbers from the 2000 census, the neighborhoods with a higher number of families with a private car were located in the west of the city, being some of them: Campestre Residencial, Hacienda Santa Fe, Quintas del Sol, San Francisco Country Club and Residencial Cumbres III (Instituto Municipal de Planeación, 2006). All of these neighborhoods had back then a density of 0.9-1 cars per household. According to the cadastral land value tables of 2016, these are still some of the most expensive neighborhoods in the city, and are now accompanied in the west by groupings of high income gated communities. It is therefore believed that the density of cars in gated communities is high compared to other locations in the city. To support this argument, one can analyze again the area of Valle Escondido. For all gated communities in this zone there is only one access: Avenida La Canteras. This street is the main

connection with the rest of the city, and since gated communities have increased in this area, traffic congestions occur at different peak hours of the day. To solve the problem, the municipality, with technical advice from the municipal institute of planning, changed the circulation and removed the lights in July 2016 (El Tiempo, 2016). Nevertheless, the change was not well adopted by citizens and the new municipal administration changed it back to its previous status and reinstalled the lights in November (El Heraldo de Chihuahua, 2016). According to the media, there are plans to construct overpasses in this intersection, in order to reduce the traffic congestions that it presents (El Diario de Chihuahua, 2016). This solution shows how the authorities attempt to solve a complex problem that has its roots on bad planning, with a simple solution like widening roads and building new overpasses.



Figure 4.26 Vegetation and sidewalk next to the bordering wall of a gated community. Source: author, October 2016.

4.1.5.2 *Economic impacts*

4.1.5.2.1 *Land value increase*

The increased land value of the periphery influenced by gated communities is another common impact found in other cases (Blakely and Snyder, 1999; Landman and Schönteich, 2002; Roitman, 2010; Suwannasang, 2015). Speaking of the case of Chihuahua, different actors agreed that despite similar conditions of connectivity, the west periphery has the highest value. According to the opinion of a representative of the municipality and an urbanism professor, the value is determined on speculation. Since gated communities are the most desirable housing model, they are sold at higher prices. Plus, if they are located in the west of the city, their price is even higher (Valdez, 11.10.2016)(Annex 7). Furthermore, a developer stated that in the company experience, the land at the outskirts is sold at a higher price if it is located in the west and that is why the high income gated communities are agglomerated there (Bautista, 13.10.2016)(Annex 4).

The cadastral law of the state of Chihuahua (*Ley de Catastro del Estado de Chihuahua*) describes homogeneous zones of value (*zonas homogéneas de valor*) as areas with similar characteristics, such as infrastructure, services, topography and any other element that has an impact on the value (Congreso del Estado, 1995). The cadastral value tables assign a value to each homogeneous zone in order to determine the corresponding land tax of each lot in the city. By law, these tables must reflect the market value. Taking the information contained in the cadastral value tables of 2016 regarding the value of each neighborhood in the city and pairing it up with the city map, it can be seen that the most expensive location is, as it has been discussed, the west (Gobierno del Estado Libre y Soberano de Chihuahua, 2015). Moreover, the area of the gated communities covers the majority of the most expensive neighborhoods in the city (figure 4.27).

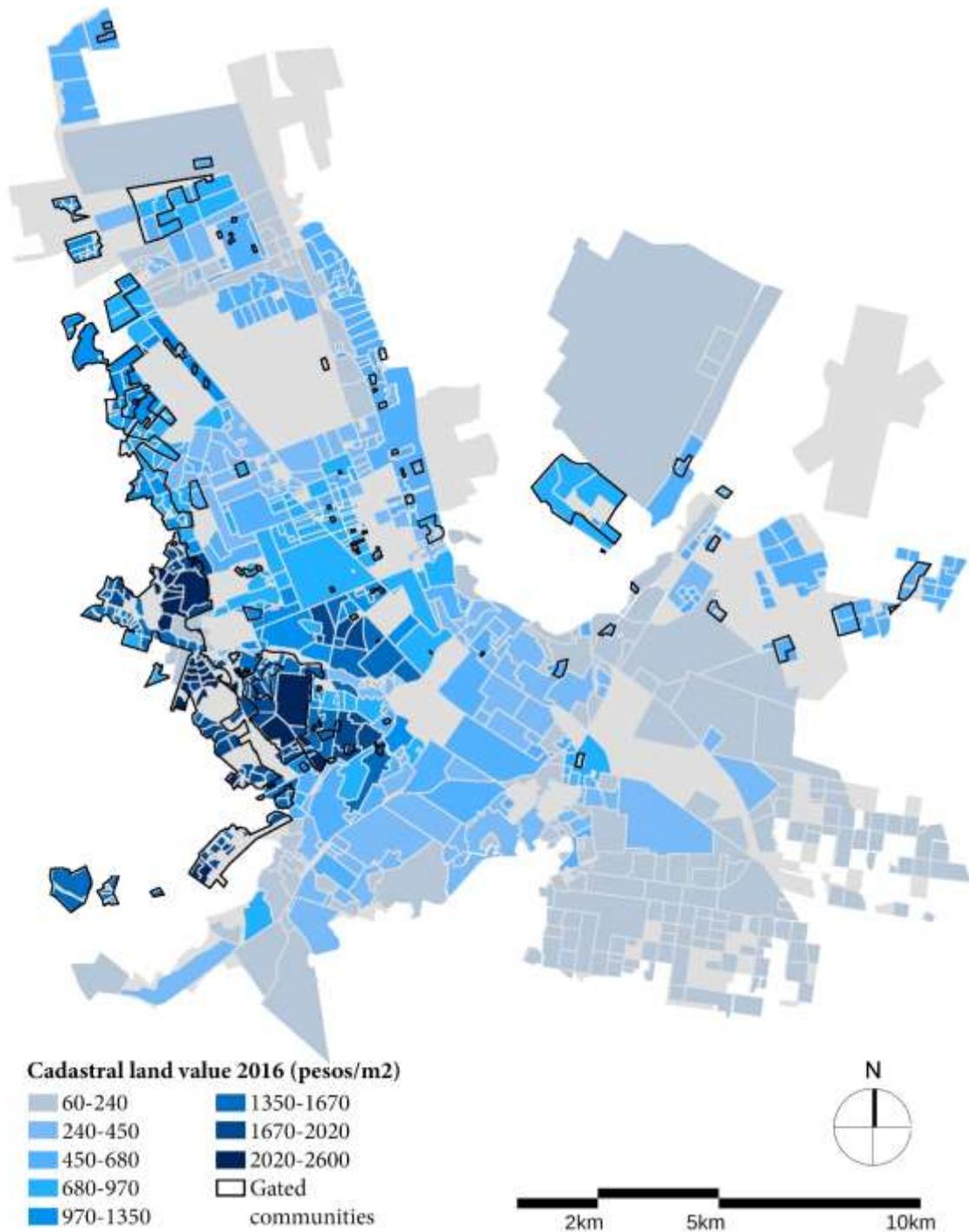


Figure 4.27 Cadastral land value per neighborhood and area occupied by gated communities. Source: elaborated by the author.

4.1.5.3 Political impacts

4.1.5.3.1 Illegal situation

“Gated communities are an illegal figure, that over the years the habit has turned into legal” (Soto, 07.10.2016)(Annex 5).

In Chihuahua, the law contemplates only two types of land tenure: private property and condominium regimen. The first one, refers to the legal form under which one has exclusive rights for the piece of land that owns. The condominium property regimen is a more complex figure. It is the type of tenure under which the owner has the exclusive right of enjoyment of its own land, and in addition has a shared ownership of the common rights established in the condominium regulations and the deed of ownership. In the case of horizontal condominiums, these common spaces include not only gardens and parks, but also streets and sidewalks (Congreso del Estado, Unidad Técnica y de Investigación Legislativa de Chihuahua, 1974).

About the total amount of residential subdivisions under condominium regime, all interviewees from DDUM stated that it is very low. From all subdivisions in the city (including not only residential, but industrial and commercial as well) only 5% have a condominium regime. That means, that the vast majority of gated communities are illegal since they are restricting the access to a common space to which they do not have ownership, therefore it is public. However, the construction of gated communities is approved by the municipality regardless of their non-exclusive tenure type because the figure has existed for many years and has become normal.

Furthermore, since common spaces from most gated communities are legally public, their maintenance is a responsibility of the municipality. The municipality must pay for the infrastructure, the repaving of streets if necessary, waste collection, among other services. In summary, the taxes of all citizens contribute to the maintenance of public spaces of private use. Nevertheless, it is a well-known fact that the residents of gated communities pay fees in part to maintain the green areas contained within the walls.

Moreover, when neighbors from open streets started to close them for security purposes, the municipality eventually modified one article of the municipal code to allow the closings:

Artículo 108. Los bienes de dominio público, son inalienables e imprescriptibles y no podrán ser objeto de gravamen de ninguna clase, ni reportar derecho real alguno. Los derechos de tránsito, vistas, luces y otros semejantes se regirán por las leyes y reglamentos administrativos y los permisos o concesiones que otorgue la autoridad municipal sobre esta clase de bienes tendrán siempre el carácter de revocables (Article 108. The public property goods, are inalienable and imprescriptible and cannot be taxed whatsoever, nor constitute real property rights. Transit rights, views, lights, and similar shall be governed by administrative laws and regulations and permits or concessions granted by the municipal authority over this kind of goods will always have the character of revocable).

(Congreso del Estado, Secretaría de Servicios Jurídico Legislativos, 1995)

Originally, the article only explained that no right of ownership of public spaces could be claimed. The modification specifies that permits can be granted by the municipality, although they are revocable. This means, that even though an authorization to privatize a street is given by the municipality, it is not permanent. In theory, the permit could be removed and the neighbors would have to remove the gates and open their streets.

Lastly, there is another significant issue regarding the legality of gated communities. A common operation when a non-resident wants to enter into the gated community, is for the security guard to ask for an ID and write down the license plate. In none of the gated communities visited during the field research, the security guard specified the use of that information before requiring it. Also, none of the security guards interviewed mentioned that such clarification was part of their duties. To ask for personal information without clarification of its future use contradicts what is established on the federal law of protection of personal data in possession of private entities (Cámara de Diputados del Honorable Congreso de la Unión, 2010).

4.2 Analysis of the case at neighborhood scale

4.2.1 Case examples selected

In the present section, the spatial and social characteristics of three neighborhoods in Chihuahua will be analysed. The main purpose is to identify the linkages between the physical space and the people that inhabits it.

As discussed in the theory and in the specific case of Chihuahua, lifestyle and security are the global motivations for citizens to live in a gated community. Taking that as a premise, both spatial and social characteristics are categorized in relation to the two main motivations (table 4.5).

The selected neighborhoods are: Valle del Ángel II, Lomas Altas V and Quintas del Sol II (figure 4.28). Valle del Ángel II and Lomas Altas V are representatives of the two types of gated communities with most examples in the city: the planned gated communities and the previously open gated communities. In turn, Quintas del Sol II is not a gated community, but shares other characteristics like the location, the promotion done by a developer, and the economic status of its residents. The objective is to describe each case and afterwards compare them to identify similarities and differences, and determine how much do the physical characteristics of gated communities impact their residents' perception and experiences regarding security and the kind of lifestyle they promote.

Table 4.5 Categorization of spatial and social characteristics to analyze with case examples. Source: elaborated by the author.

	SECURITY	LIFESTYLE
SPATIAL	<p>Physical measures to create a safer environment:</p> <ul style="list-style-type: none"> • Territoriality. Subdivisions made by walls or fences, or more passive like gardens and signs • Natural surveillance. Common areas placed in visible location • Image. Good looking facades, clean streets, trimmed bushes and mowed lawns • Milieu. Located next to other "safe neighborhoods" 	<ul style="list-style-type: none"> • Segregation of urban space. Mixture of uses. Connectivity with public facilities/services (health, education, recreation, community center) • Car dependence. Public transport provision, pedestrian connectivity • Size and distribution of green areas
SOCIAL	<ul style="list-style-type: none"> • Security perception, from crime, traffic or property value • Importance of social interaction 	<ul style="list-style-type: none"> • Segregation of urban space. Where to go for basic necessities • Reliance on institutions (public or private) • Transportation modes (car dependence)



Figure 4.28 Location of case examples selected. Source: elaborated by the author.

4.2.2 Valle del Ángel II: the planned gated community

Conceived from the beginning as a gated community, Valle del Ángel II was developed in 1999 by CTU (Corporación Técnica de Urbanismo). The lots were sold empty by the developer, giving the opportunity to the residents to construct their houses. The neighborhood shares location with the majority of gated communities for middle-high income residents: the west. In summary, Valle del Ángel II represents a typical planned gated community in Chihuahua due to its physical characteristics: the size, the location, the layout, the bordering wall, the centralized green areas, etc. In order to understand the association between the distinctive physical characteristics of the **majority of gated communities in the city and its residents' lifestyle and perception of security**, Valle del Ángel II was chosen as an example (figure 4.29). To obtain qualitative information, a one hour unstructured interview to a neighbor was made in October 5th 2016, and three other residents were interviewed during a focus group in October 13th 2016 (Annex 8 and 9).



Figure 4.29 Isometric view of Valle del Ángel II. Source: elaborated by the author.

4.2.2.1 Lifestyle

Despite being developed 17 years ago, only 80 out of the 102 lots are occupied. The reason is that the purchase of the lots is often seen as an investment, and is common that they remain empty for several reasons (Chávez, 2015, p.192). The price of the lots in Valle del Ángel II has a high market value, and the neighborhood is considered in the cadastral value tables within the homogeneous zone 75 (from a total of 82 homogeneous zones ordered by value, being the cadastral homogeneous zone 1 the less expensive and the 82 the most expensive)(Gobierno del Estado Libre y Soberano de Chihuahua, 2015). Each square meter has a cadastral land value of 2,020 pesos, the eighth highest on the city.

According to the ciphers from INEGI (2012), in 2010 Valle del Ángel II was inhabited by 238 people. From the total of residents, 45% were adults between 30 and 59 years old, while 32% were children between 0-14 years old and 17% teenagers and young adults from 15 to 29 years old. This indicates that the residential subdivision is occupied mostly by young families with little children, and secondly by families with teenager and/or young adult sons. In respect to the demographical composition of the area, one of the interviewed residents mentioned that most of the families with older sons live in the east side of the neighborhood, as those were the first houses to be constructed. Additionally, she declared that the west side of the neighborhood has been overall constructed more recently, and therefore more children live in that area (Lady 1, 13.10.2016). This statement supports the argument that developers focus on young families when promoting their neighborhoods, using an image of a desirable and harmonious family life; and that young families are in fact the most likely buyers.

Several aspects related to the desirable lifestyle of gated communities promoted by developers in Chihuahua can be found in Valle del Ángel II. To start with, the majority of lots are distributed to face one of the three green areas/parks. Two of them, seem to have an exclusive ornamental function, not only because of their rather small area comparable to the size of three residential lots, but also because of the lack of urban furniture (figure 4.30). The other green central area is larger, but it is placed on a slope, which does not facilitate social interaction. In contrast to the two others, this area includes some benches and a playground (figure 4.31). According to the interviewees, when looking for a gated community to move into, the good condition of the green areas of Valle del Ángel II and their scenery, influenced positively their decision (Lady 2 and Lady 3, 13.10.2006). However, the use of the common areas is exclusive of the young children, as they do not represent an attractive spot for teenagers or adults.

Moreover, the residents described the location as a positive aspect of their neighborhood, which they referred to as **“central” in relation to its proximity to everything they could possibly need** (Lady 1, Lady 2, and Lady 3, 13.10.2016). Looking into its geographical location, Valle del Ángel II is clearly placed on the outer ring of the city, right next to one of its main peripheral avenues: Periférico De La Juventud. This fast lane is provided with businesses and other services along its extension, which borders the city almost entirely on the west, running from north to south. The quick access to this road is perceived by its residents as an advantage and a fast connection to the rest of the city, but this connectivity is only achieved by car. On the west side of Periférico De La Juventud, and without considering the lots facing to it, land use is almost exclusively residential (figure 4.32). Therefore, to get to their everyday destinations, the residents have to take Periférico De La Juventud.



Figure 4.30 Ornamental green area in Valle del Ángel II. Source: author, October 2016.



Figure 4.31 Playground in central green area in Valle del Ángel II. Source: author, October 2016.

Despite Valle Del Ángel II is placed right next to the avenue, the entrance is located in Avenida Valle Escondido, a road which does not cross Periférico De La Juventud. Thus, to move to the north or cross to the other side, the residents would have to drive 1.6km to the south just to get to the closest U Turn: Avenida La Cantera. This crossing is well known for its recent problems of traffic congestions, due to the number of gated communities that use it as their main access (figure 4.33).

Furthermore, to make a trip by foot from Valle del Ángel II is nearly impossible due to the distances and the conditions. The closest pedestrian crossing is a bridge 815m away from the neighborhood entrance. A neighbor narrated that he one day left his car in an agency located close to Avenida La Cantera and decided to walk back home (Man 1, 5.10.2016). The trip was very complicated since cars do not consider the presence of pedestrians, especially when leaving the road to get into businesses' parking lots. He also noted that the sidewalks adjacent to Periférico De La Juventud even disappear in some sections (Figure 4.34).

Looking into the public transportation provision, some residents were even unaware whether or not it existed, which speaks of their lack of intention to use it. One resident recalled that the nearest bus stop is 1km away from the neighborhood, and mentioned that the service is not used by residents but rather by their cleaning employees (Lady 3, 13.10.2016). However, it was observed that the closest bus stop is placed in front of Christus Muguerza, the small hospital in the corner of Avenida Valle Escondido and Periférico De La Juventud (figure 4.35).

In summary, the use of the car is a basic necessity of the residents of Valle del Ángel II, but it is apparently no reason for them to feel unsatisfied as their neighborhood is perceived to be well connected. The dependence of residents to the use of car can be measured simply by analyzing the complications at the entrance of the neighborhood. By observing the access point, two main differences from the majority of gated communities in the area were identified: Valle del Ángel II has an exclusive access for pedestrians (figure 4.36), and the car entrance and exit are each composed only by one lane for both residents and visitors (figure 4.37). During the focus group, the neighbors did not even mention the pedestrian access, but one woman mentioned that the one lane car entrance is a major problem, since it could take the residents a long time to get in at peak hours (Lady 2, 13.10.2016). Assuming that each household owns a car, and in an extreme scenario all wanted to get in or out the gated community, how long would the line be and how long would it take for the security guard to verify each one's identity and open the gate? (figure 4.38).

The synthesis map of urban facilities from the urban development plan shows that the only facilities in the west of Periférico De La Juventud contained within a 1km radius of Valle Del Ángel II are a gas station, two private hospitals, and a private school (Municipio de Chihuahua, 2009)(figure 4.39). On one hand, a facility that supplies the necessity of a car dependent area, and on the other hand private facilities, services for the voluntary excluded. The spatial segregation of Valle del Ángel II is an aspect that speaks of its resident's lifestyle. Throughout the interview, the residents were asked about the recreational places they visited and the educational and health facilities they used, as a response, they mentioned exclusive places of high cost and private services (Lady 1, Lady 2, and Lady 3, 13.10.2016). The inhabitants of gated communities are people that choose to separate themselves from public institutions and satisfy their needs in private institutions instead (Barry, 2002, p.17).

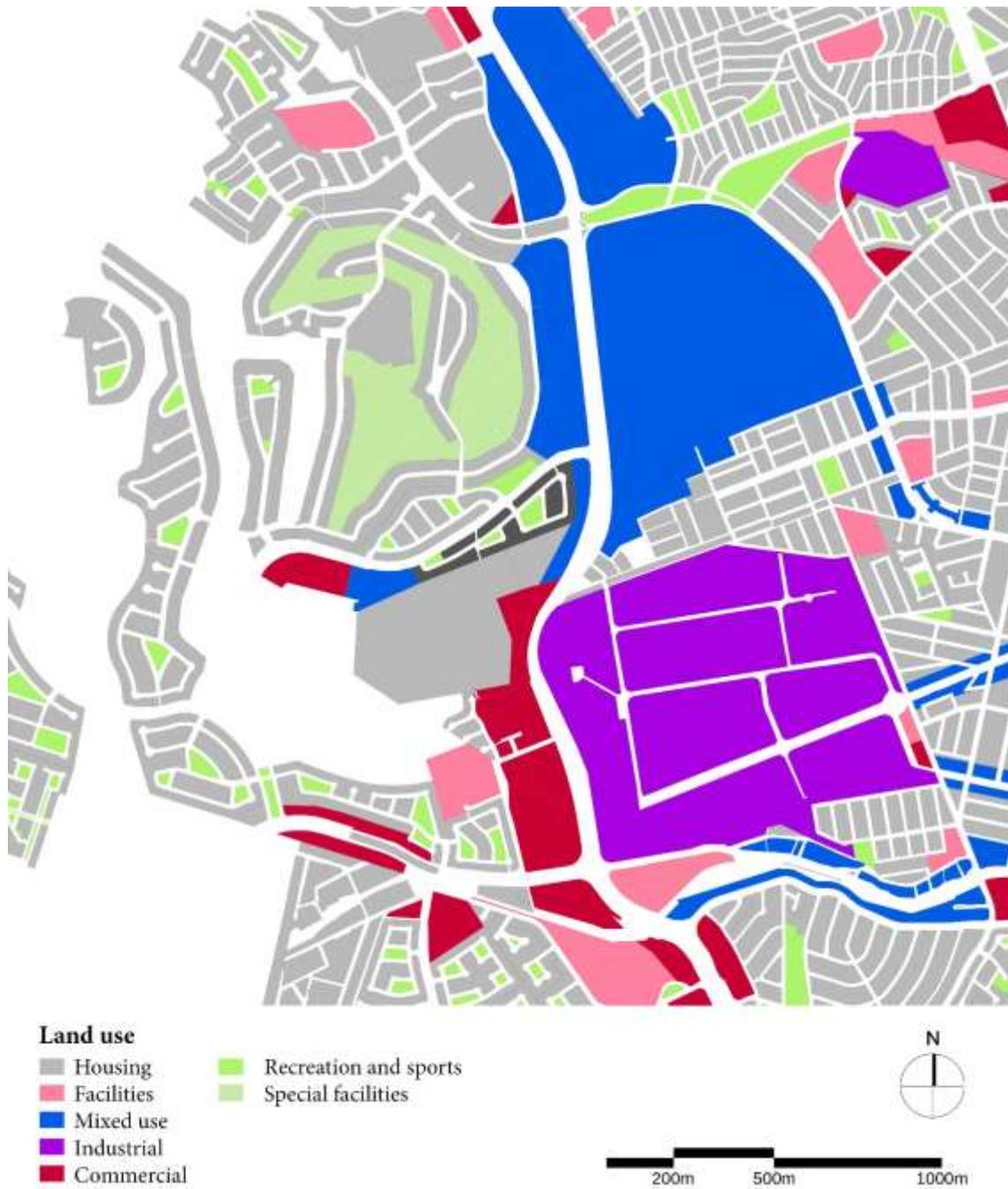


Figure 4.32 Land use in the surroundings of Valle del Ángel II. Source: elaborated by the author (based on PDU, Municipio de Chihuahua, 2009).



Figure 4.33 Car connectivity of Valle del Ángel II. Source: elaborated by the author.



Figure 4.34 Pedestrian connectivity of Valle del Ángel II. Source: elaborated by the author.

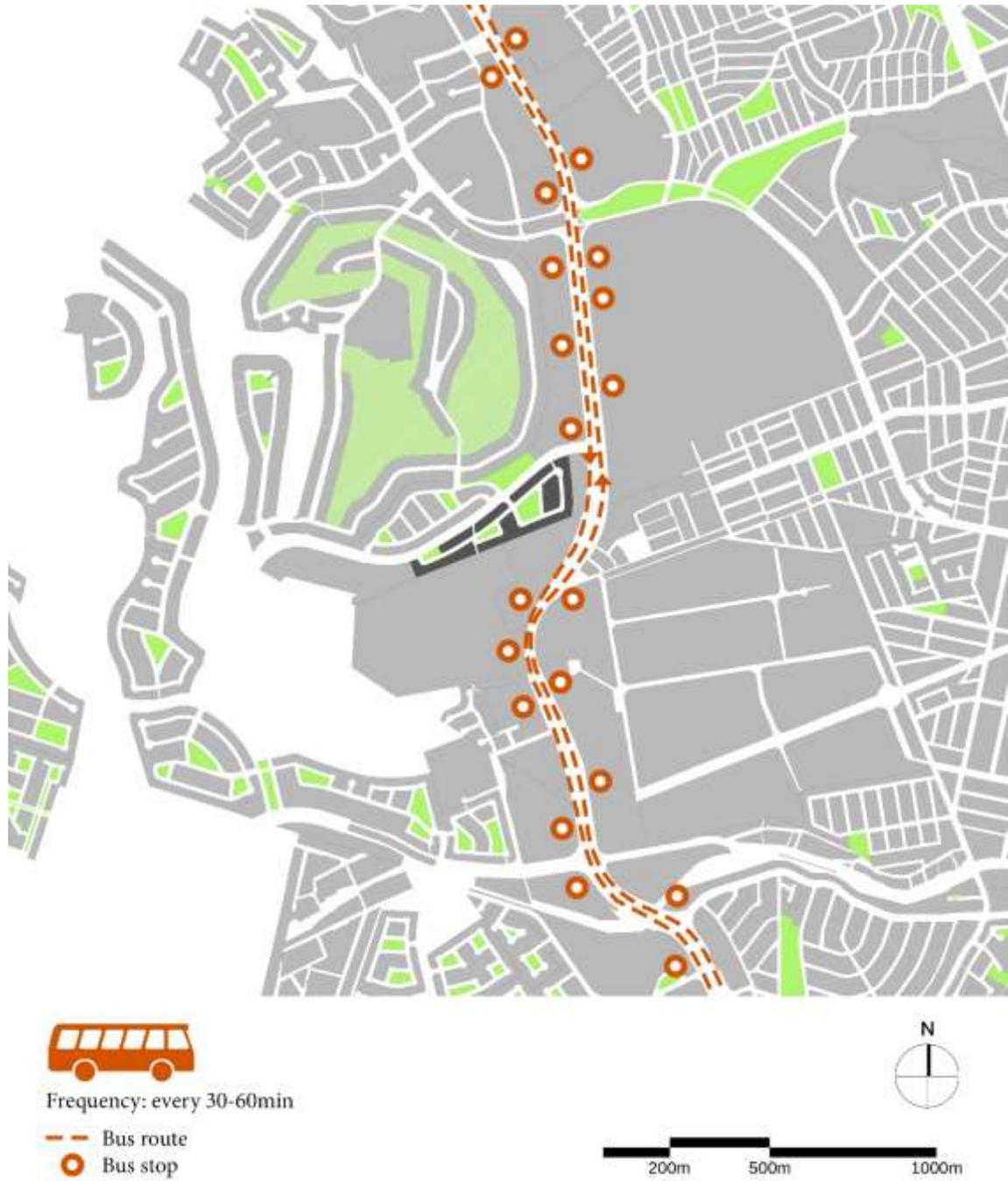


Figure 4.35 Public transport connectivity of Valle del Ángel II. Source: elaborated by the author.



Figure 4.36 Pedestrian access to Valle del Ángel II. Source: author, October 2016.



Figure 4.37 Access lanes of Valle del Ángel II. Source: author, October 2016.

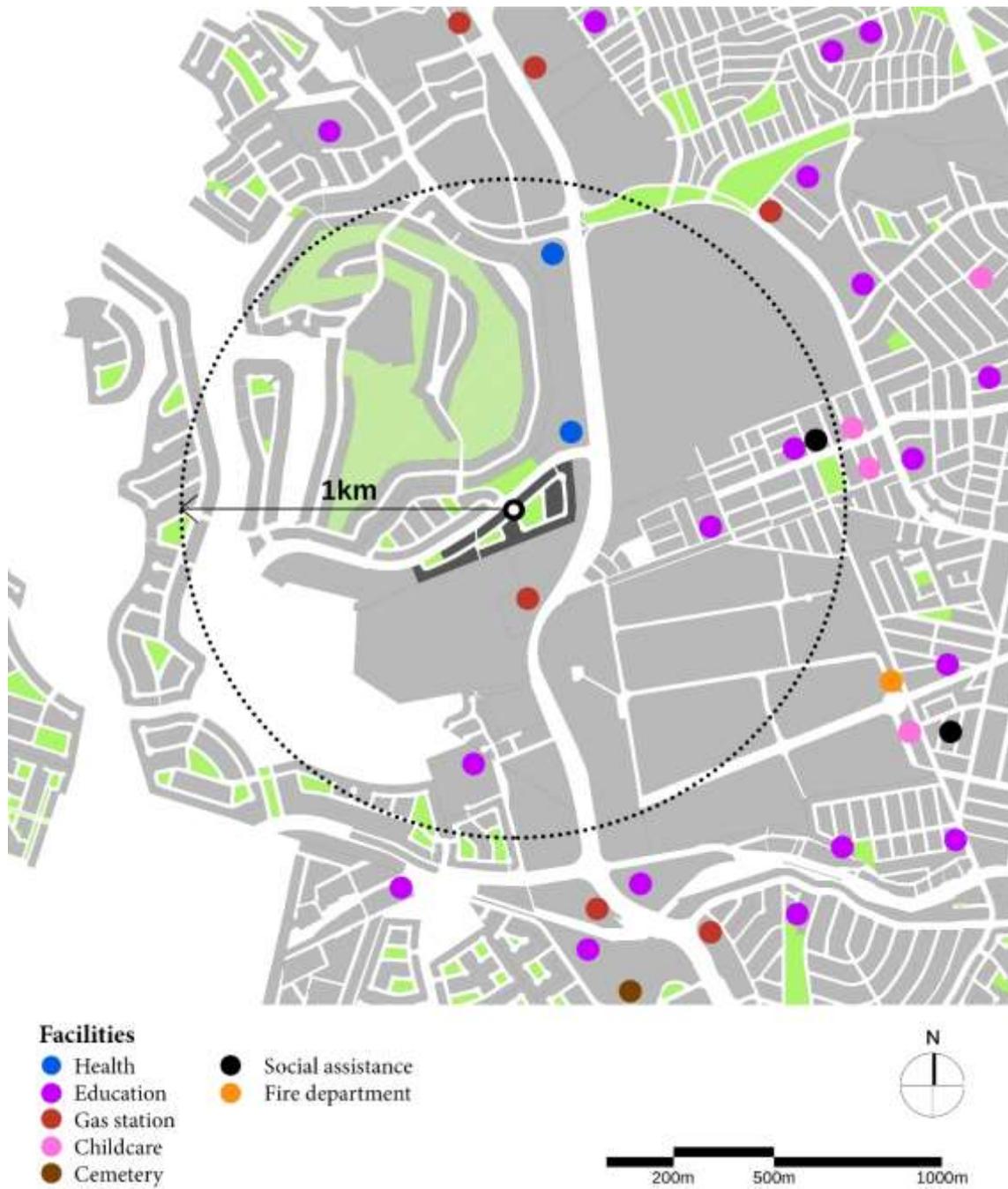


Figure 4.39 Facilities in the surroundings of Valle del Ángel II. Source: elaborated by the author (based on data from PDU, Municipio de Chihuahua, 2009).

4.2.2.2 Security

The physical characteristics of Valle del Ángel II comply with three out of the four aspects of what the reviewed theory describes as a spatially safe neighborhood. The layout of the streets circle around the parks which are surrounded by lots. A wall borders the entire neighborhood, and on the street side, it is accompanied by ornamental bushes (figure 4.40). The main access is controlled by a guardhouse, and a sign with the name of the neighborhood indicates the entrance (figure 4.41). All these aspects contribute to define the limits of the neighborhood, thus promoting a sense of territoriality in its residents.

Secondly, two out of the three green areas are placed in the center of a lots grouping, and the third one is located between eight lots and the street. It is believed that the distribution of the lots facing to the common areas enables natural surveillance in them. Thirdly, the neighborhood gives the image that it is well taken care of. It was observed during the visits that the green areas are in good shape, streets and sidewalks are clean, and facades are in a good condition. However, the neighborhood does not comply with milieu.

At an urban scale, Valle del Ángel II is a part of a large grouping of middle-high income gated communities in the west of the city, but in detail, 50% of the settlement is neighbored by a large empty lot. This means that, the back of most lots is neighbored by an empty space, accessible by anyone, hence making it a vulnerable spot. In fact, a resident mentioned that he would feel safer if the back of his lot was facing the back of other residential lot, instead of an empty area (Man 1, 05.10.2016). This spatial condition made him construct his house against the free 3 meter restriction in the back of the lot, because he felt it was a vulnerability to leave the backyard facing the bordering wall and the empty lot. In addition, he also constructed 2 extra meters to the existing height of the wall, in order to complicate the intrusion of a possible criminal. **If every lot was a person, they would all be looking at each other's faces but no one would watch their back** (figure 4.42).

Moreover, both the statistics and the resident experiences show that gated communities are not exempt from high-impact crimes. Valle del Ángel II is one of the 11 residential subdivisions that integrate the number 22 out of the 62 municipal security quadrants the city has (Observatorio Ciudadano, 2015). The statistics presented in the 2015 wellness and security atlas (Atlas. Bienestar y Seguridad), show that this quadrant has a higher rate than the municipal average on 4 out of the 6 high-impact crimes analyzed: willful homicide, home burglary, vehicle theft and robbery to businesses (figure 4.43). It is important to mention that 0 cases of robbery to pedestrians occurred in 2013 and 2014 in this quadrant, but this is believed to be linked to the low amount of pedestrians in the area more than its particular safety against this crime.



Figure 4.40 Bordering wall accompanied by ornamental bushes, Valle del Ángel II. Source: author, October 2016.



Figure 4.41 Sign with the name "Valle del Ángel". Source: author, October 2016.



Figure 4.42 Surveillance from each house entrance and guardhouse, Valle del Ángel II. Source: elaborated by the author.

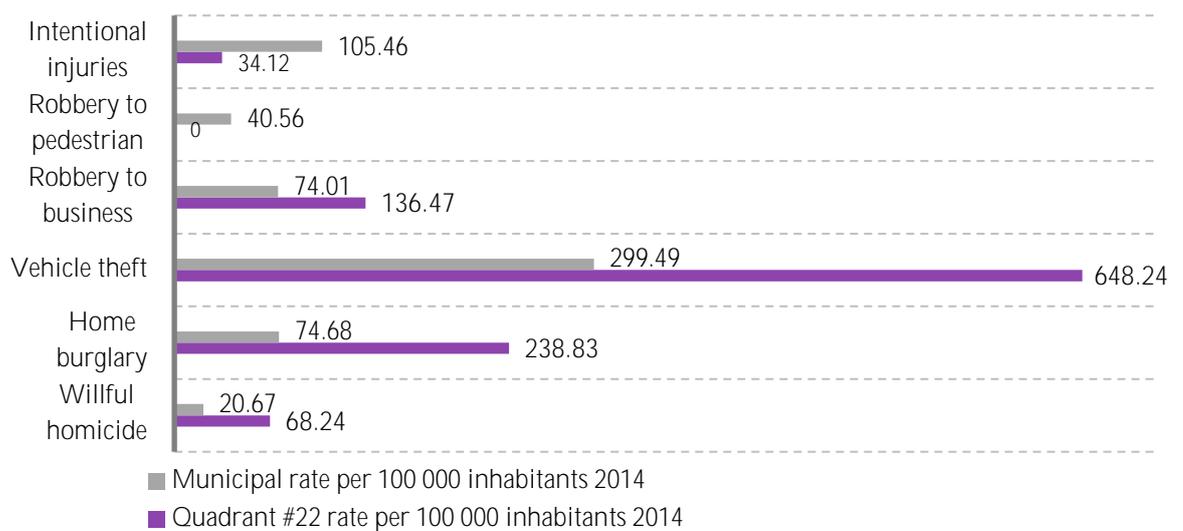


Figure 4.43 High impact crimes per 100 000 inhabitants, comparison between quadrant 22 and municipal rate. Source: elaborated by the author (based on data from Atlas, Observatorio Ciudadano, 2015).

Furthermore, the spatial distribution of high-impact crimes shows that the incidence was higher in 2014 than 2013, and that crimes also occurred inside gated communities, not only in businesses next to Periférico De La Juventud (figure 4.44). However, the mapping shows only 1 case in Valle del Ángel II in 2013, and 2 in 2014. Related to this distribution, the atlas identifies the low density of businesses in the area and the presence of gated communities within the particular crime detonators in the quadrant (Observatorio Ciudadano, 2015). In the focus group, residents agreed with one another that living in a gated community is no guarantee of protection from high-impact crimes (Lady 1, Lady 2, and Lady 3, 13.10.2016). Despite the interviewees' lack of awareness towards any high-impact crime that had occurred in their neighborhood, they knew of many violent cases in other gated communities. They also acknowledged that the area is very insecure. During the violent years, a woman recalled listening to a shooting in the middle of the night, which occurred in a bowling place only 400 meters away from the residential subdivision (Lady 2, 13.10.2016). In addition, two women told stories of how they were passing by in their cars, close to the neighborhood, where a shooting had just occurred and someone was murdered (Lady 1 and Lady 2, 13.10.2016).

But even though residents do not consider the spatial characteristics of the gated community as a special protection from high-impact crimes, they do perceive their residential subdivision and gated communities in general, as safer neighborhoods than the ones with an open layout. The concerns of security of the residents of Valle del Ángel II are more related to the tranquility the controlled access confer by keeping strangers outside. For instance, a woman said that she does not want vendors and strangers knocking constantly on her door (Lady 2, 13.10.2016). Most importantly, neighbors are interested in the security of their children and think they are safer inside the gated community as they are not exposed to strangers, thus possible criminals. Children are then free to play in the streets, something that is rarely seen in the open neighborhoods of the city anymore (Lady 1 and Lady 3, 13.10.2016).

Finally, residents did not prioritize the physical aspects when speaking about what made them feel safe in Valle del Ángel II. Some of the interviewed neighbors narrated that on the side they live in, they all know each other and their children are friends. They feel safe, because they look out for one another. **"I know that if my children are not playing outside, they surely are in the house of one of my neighbors, and that makes me feel calm"**, a woman said (Lady 3, 13.10.2016). It is important to remember that in the end, all environmental aspects of a safe neighborhood presented in the theory aim to produce social interaction and create a community sense. In the case of Valle del Ángel II, even when some neighbors are close to one another, this condition is apparently not extended to the totality of residents. The interviewed residents from the west side of the neighborhood declared that they did not know anyone from the other side (Lady 2, 13.10.2016). A man from the east side stated that he only interacted with his neighbors during the **neighbors'** committee meetings were mainly matters related to the payment of fees were discussed (Man 1, 05.10.2016). All interviewed neighbors remembered that a previous administration organized occasional social events and agreed that this is a good way to meet each other.

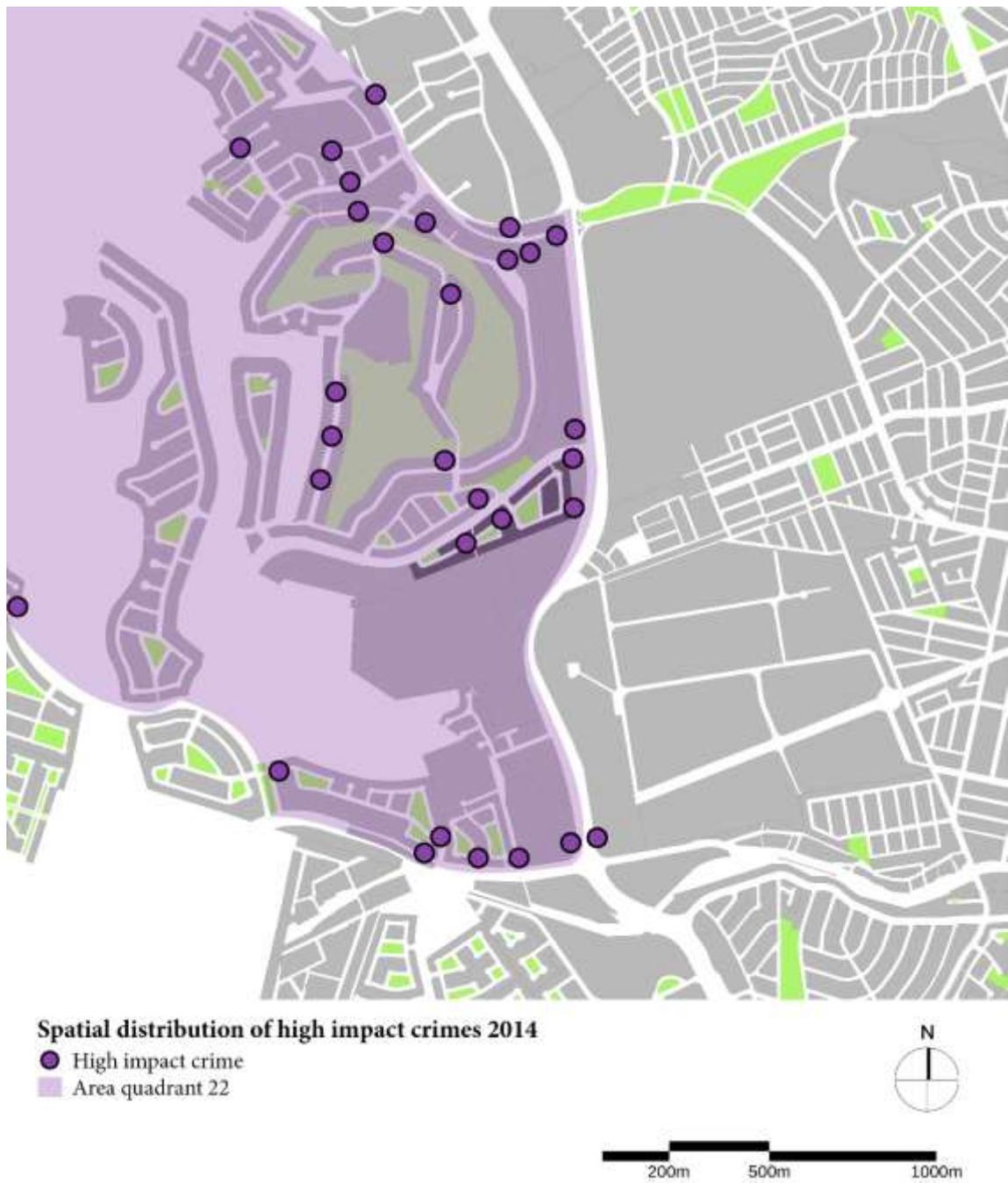


Figure 4.44 Spatial distribution of crime, quadrant 22. Source: elaborated by the author (based on data from Atlas, Observatorio Ciudadano, 2015).

4.2.3 Lomas Altas V: the previously open gated community

Lomas Altas V is a residential subdivision located in the west of the city. Its construction was promoted by Constructora Inmobiliaria Las Americas in 2004. The original project had 102 lots which were distributed in an open neighborhood layout with some dead-end streets facing the sloping ground of the mountain. The lots were sold empty, in order for the coming residents to construct their houses according to their desires. Up to this day, Lomas Altas V is still not fully occupied. Many lots remain empty while others are under construction. However, there is another feature that has dramatically changed the residential subdivision. Since 2011, as a result of a bottom up initiative, the access to Lomas Altas V is restricted to residents and its visitors (figure 4.45). In October 4th 2016, a focus group with residents from Lomas Altas V was organized to understand the lifestyle of its residents, and their security perception and experiences (Annex 10).



Figure 4.45 Isometric view of Lomas Altas V. Source: elaborated by the author.

4.2.3.1 Lifestyle

Lomas Altas V has an occupation of approximately 50% of the lots. The new perimeters contain a total of 80 lots from which only 45 are occupied. Moreover, it belongs to the cadastral homogeneous zone 64 with a land value of 1455 Mexican pesos/m² (Gobierno del Estado Libre y Soberano de Chihuahua, 2015). Since the cadastral homogeneous zones are based on market value by law, Lomas Altas V is considered to be a middle-high income neighborhood.

It is hard to define the exact demographic composition of the residential subdivision since its boundaries were redefined after the closing and most of the households are contained into one large block shared with the upper neighboring settlement. However, taking as a base the ciphers from the mega block, exposed in the household national inventory (INEGI, 2012), it is believed that the neighborhood is occupied mostly by families, either with young children or teenagers/young adults.

One by one, the residents that assisted to the focus group told what made them choose to live in Lomas Altas V and what they liked the most of their neighborhood. Some mentioned that their decision to move to the neighborhood was based on a social scaling up. They used to live in a zone of a lower class and saw moving to the area as a good investment (Man 4, 04.10.2016). However, the majority agreed that the location was their main motivation to live in Lomas Altas V, and what they liked most was how well connected it is to the city (Man 1, Man 2, Man 3, Man 5, and Lady 1, 04.10.2016). Even though Lomas Altas V is not a planned gated community, the aspect of location that its neighbors described resembles **what developers offer within the “lifestyle” of the gated communities they promote**: a residential subdivision that is well connected to the city due to the proximity to its main arteries (figure 4.46). In the case of Lomas Altas V, residents seem to depend on the car for both social and spatial reasons. On the social side, it is important to understand that it is a middle-high income neighborhood and the private vehicle is the most common transportation mode of this class, as it was reviewed in the urban scale impacts. It was observed that most households own one if not two vehicles, and during the visits no pedestrians or bicycle riders were seen getting in or out the residential subdivision. In fact, just one resident declared that he regularly walks in the area but only does so for recreational purposes (Man 2, 04.10.2016). Additionally, when asking the residents where they went to buy everyday groceries, they referred to the 24hour supermarket half a kilometer away and explained it was also a car trip (Man 1 and Man 2, 04.10.2016). However, it is believed that the car dependency of the residents of Lomas Altas V is more strongly motivated by spatial aspects. To start with, the placement of the neighborhood in a hilly area and the extreme weather of Chihuahua, make using the car the most comfortable option.

A resident explained that trips have to be made by car since nothing is located at a walkable distance, and public transportation is not an option since the service is not good (Man 6, 04.10.2016). The public transportation system of Chihuahua is widely known to have problems, particularly since the new BRT system started to operate with only one line in 2013, which gives a good reason why residents of Lomas Altas V do not use it.

Looking into the synthesis map of urban facilities from the urban development plan, it was found that the closest facilities from Lomas Altas V are two schools, located approximately at 500 meters and 1km from the residential subdivision entrance (figure 4.47). From these two schools one is private, supporting the theory that the voluntary excluded separate themselves from public institutions (Barry, 2002, p.17).

In contrast, the neighborhoods located on the other side of Periférico De La Juventud seem to be provided with more facilities. Geographically, their distance from Lomas Altas V is about 300 meters, but in reality the trip would be much longer. To get to the other side of the avenue, a resident would have to go to one of the crossing lights, either at Boulevard Ortiz Mena or Avenida Politécnico. This trip is longer and has to be made by car (figure 4.48). Periférico De La Juventud is a high speed road composed by 8-10 lanes, and for a pedestrian to cross it, is life risky. If a resident of Lomas Altas V wanted to go to a facility on the other side of Periférico De La Juventud by foot, he/she would have to walk 700 meters only to get to the pedestrian crossing (figure 4.49). **The road has no pedestrian signalization and the crossing is a “bridge” that is not adapted for people with disabilities.** In detail, this road appears to be more a barrier than a connector, separating the suburbs from the rest of the city.

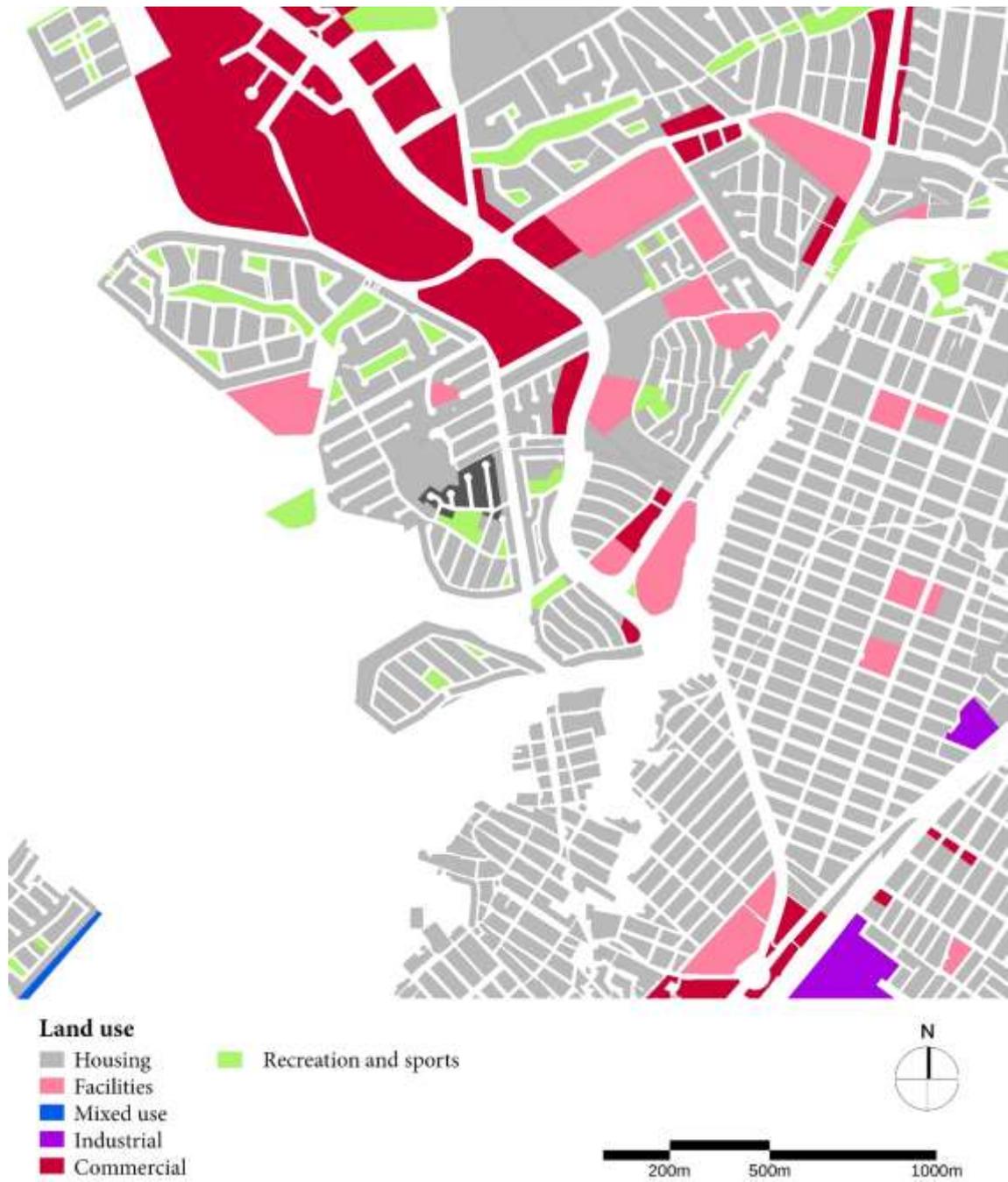


Figure 4.46 Land use in the surroundings of Lomas Altas V. Source: elaborated by the author (based on PDU, Municipio de Chihuahua, 2009).

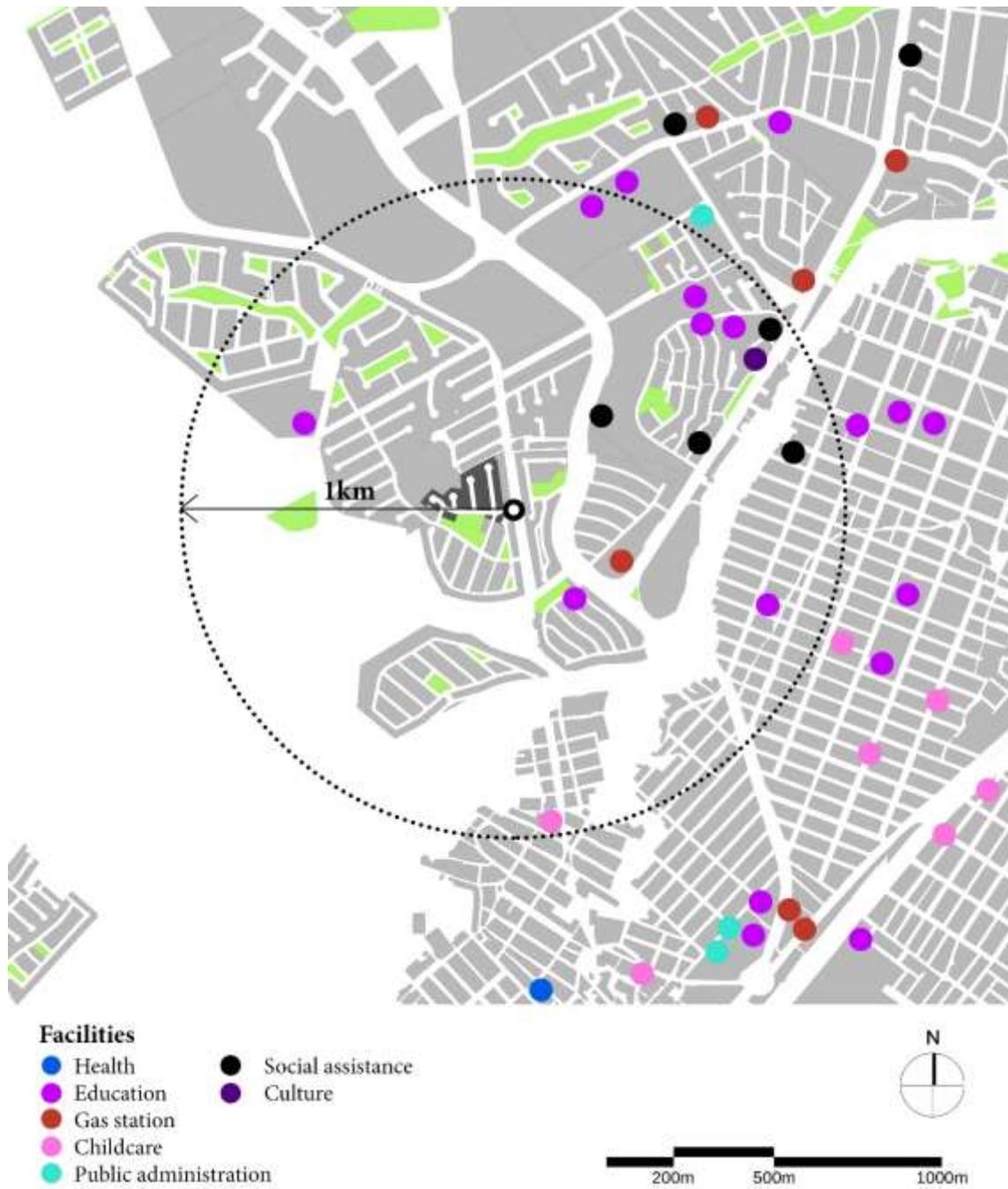


Figure 4.47 Facilities in the surroundings of Lomas Altas V. Source: elaborated by the author (based on data from PDU, Municipio de Chihuahua, 2009).



Figure 4.48 Car connectivity of Lomas Altas V. Source: elaborated by the author.



Figure 4.49 Pedestrian connectivity of Lomas Altas V. Source: elaborated by the author.

4.2.3.2 Security

About 6 years ago, after the levels of violence increased in Chihuahua, the possibility to restrict the access of only one street of Lomas Altas V started to be discussed among 4 neighbors. The idea eventually scaled and became a consented decision of the majority of residents to close all streets. The intention to restrict the access was not based on a particular violent event that took place in the neighborhood, but rather to an incremented insecurity perception that had different reasons depending on each neighbor. During the focus group, one resident mentioned that when he bought the lot back in 2006, the violence levels were still not critical but even then he saw that, since most streets were cul-de-sac, it would be easy to close the access and turn it into a gated community in case it was one day necessary (Man 2, 04.10.2016). He added that one of the main problems the residents had when the neighborhood was open was related to the construction of the houses. In many occasions, different residents were victims of the theft of material during the construction of their house, and the thieves were often the construction workers. Furthermore, the collective fear was motivated by organized crime. A man narrated that he would wake up every night because of listening to shootings that occurred in various locations other than Lomas Altas V, but that due to the topographical conditions of the neighborhood the sound would echo (Man 5, 04.10.2016). "It was an everyday thing to listen to shootings, and one would think, oh someone was just murdered", another resident said (Man 2, 04.10.2016). Finally, residents were concerned about the safety of their children, as they were exposed not only to outsiders and therefore strange people, but also to speeding cars that would enter the neighborhood without noticing the presence of children crossing streets (Man 2, 04.10.2016).

When the decision to close the streets was taken, residents had to follow a process. With their resources, they installed mesh on the back side of all lots that were not occupied yet, and mesh dividing the park from the section, at a different ground level, that was going to be left to the neighboring settlement. They constructed a guardhouse in the center of the accessing street, installed cameras and hired security to control the access 24/7. Furthermore, they applied for the closing permission to the municipality and had to pay the required fees. According to representatives from the neighbors committee, Lomas Altas V is the only residential subdivision in the area with a permit to be closed (Man 2, 04.10.2016). Neighboring previously open gated communities, even though they have gates installed, do not restrict the access to anyone.

But the question here is, is Lomas Altas V a safe neighborhood after the closing? The spatial analysis shows that it complies only partially with the environmental aspects of safety suggested by the theory, and the compliance is not entirely related to the closing. Territoriality is defined by the spatial definition of a certain space, to which residents can develop a sense of belonging. The original layout from Lomas Altas V was composed by four dead end streets, two streets connecting to the neighboring settlement and one access street. Even when the access was not restricted, the disposition of the lots around the dead end streets, the placement of the neighborhood on the slope of the mountain, and even the open access street, defined boundaries. The installation of gates on the two connecting streets (figure 4.50) and the construction of the guardhouse (figure 4.51) only added up to the already defined borders.



Figure 4.50 Gates in a connecting street, Lomas Altas V. Source: author, October 2016.



Figure 4.51 Guardhouse of Lomas Altas V. Source: author, October 2016.

Moreover, natural surveillance is only achieved between lots, the park is located on the lower side of the neighborhood and only a few lots face to it. In addition, some lots are considered to be vulnerable, since they are not observed by many other lots and their back faces an empty space (figure 4.52). This vulnerability is also perceived by the neighbors of this spots (they were in fact the first ones that had the idea of a closing), as they mentioned that sometimes people use the empty space as a look out area of the dam and their presence made them feel uneasy (Man 2 and Man 5, 04.10.2016). The concept of image is also only partially fulfilled. The park is in good condition since it was recently renovated (figure 4.53) and facades are in a good shape; but streets look uncared for, the amount of empty lots and houses in construction give an image of disorder, and the gates of one of the formerly connecting streets are already rusty (figure 4.54). Finally, milieu is not entirely achieved because Lomas Altas V is neighbored by developments with similar characteristics that do not fully comply to environmental aspects of safety for similar reasons.

Along with other 22 neighborhoods, Lomas Altas V is located on the quadrant 40 of the municipal security quadrants (Observatorio Ciudadano, 2015). According to the 2015 Atlas of wellness and security, the quadrant had a higher rate than the city average on four high-impact crimes: home burglary, vehicle theft, robbery to businesses and robbery to pedestrians (figure 4.55). Looking in detail into the spatial distribution of high-impact crimes, none of them was marked exactly in Lomas Altas V in the mappings of 2013 and 2014, but they did occur in neighboring settlements with similar characteristics, like Fuentes del Sol and Lomas Altas IV (Observatorio Ciudadano, 2015)(figure 4.56). This suggests that Lomas Altas V was not excluded from high-impact crimes due to its physical aspects. In fact, a resident narrated that security guards had left them once, because a group of men looking for an individual pointed at them with a gun (Man 2, 04.10.2016).

The spatial characteristics of Lomas Altas V, and specifically its closing, seem to have a strong **impact on their residents' perception of security. About high-impact crimes**, a resident remembered that after the closing, an intentional homicide occurred in one of the 22 houses from Lomas Altas V that due to their location within the neighborhood, could not be included in the **gated area. "They are unfortunately excluded from this security concept that we created", he said** (Man 2, 04.10.2016). Another resident stressed that he feels safer now that the residential subdivision is gated. He is aware that the closure does not guarantee protection from crime since the security guards are not even armed, but the fact that unknown cars can no longer wander in their streets signifies a less psychological burden (Man 5, 04.10.2016). This aspect of keeping unknown people outside the neighborhood is also related to the safety of the children. Neighbors agreed that, because of the closing they feel confident enough to let their children go to the park by themselves and play alone, and that is something they would not allow them to do in a public space in the city.



Figure 4.52 Surveillance from each house entrance and guardhouse, Lomas Altas V. Source: elaborated by the author.

But when asking the neighbors about the most relevant aspect that made them feel safe after the closing, something very interesting was found: it was not related to the physicality of the gates. In order for an open neighborhood to turn into a gated community, neighbors have to come together and the majority must agree on the closing. Furthermore, the municipality asks them to constitute a neighbors committee. In the specific case of Lomas Altas V, the common insecurity feeling made **them come together, and a social network was then created. In words of a resident, “if we had not had the necessity to close, we would only share a greeting but not a relationship. The closing has made us have a team”** (Man 6, 04.10.2016). A resident said that, after the closing, they know each other at least at a 90%, since some houses are for rental and those residents are in constant change (Man 2, 04.10.2016). One man narrated the story of his last vacation, and how he had forgotten to close the garage door when he left his house. Two weeks later, when the family returned and he noticed it was open, he realized he had left it that way and concluded that nothing had happened, because his neighbors would have noticed and informed him (Man 6, 04.10.2016). This confidence of residents from Lomas Altas V that the neighborhood is safe and neighbors watch for one another, was also observed during the visits. Unlike other areas in the city, many garage doors were open and empty, as cars were parked in the street instead.

In summary, the gating condition of Lomas Altas V does not contribute greatly to the environmental aspects of a safe neighborhood discussed in the theory. In addition, it does not seem to prevent high-impact crimes. Nevertheless, according to the neighbors' experience, it has helped reducing the robbery of construction material. Even more than the influence on reality, it is believed that the closing has a high-impact on the residents' perception of security, and the most significant reason is the social network and community feeling that emerged as a consequence.



Figure 4.53 Park in Lomas Altas V. Source: author, October 2016.



Figure 4.54 Rusty gates in a formerly connecting street, Lomas Altas V. Source: author, October 2016.

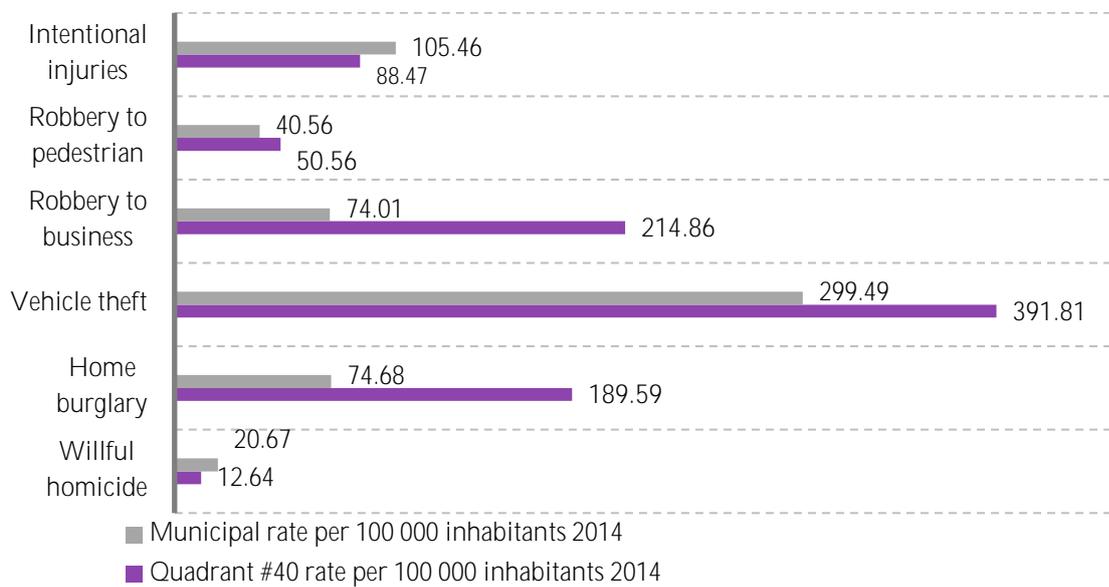


Figure 4.55 High impact crimes per 100 000 inhabitants, comparison between quadrant 40 and municipal rate. Source: elaborated by the author (based on data from Atlas, Observatorio Ciudadano, 2015).

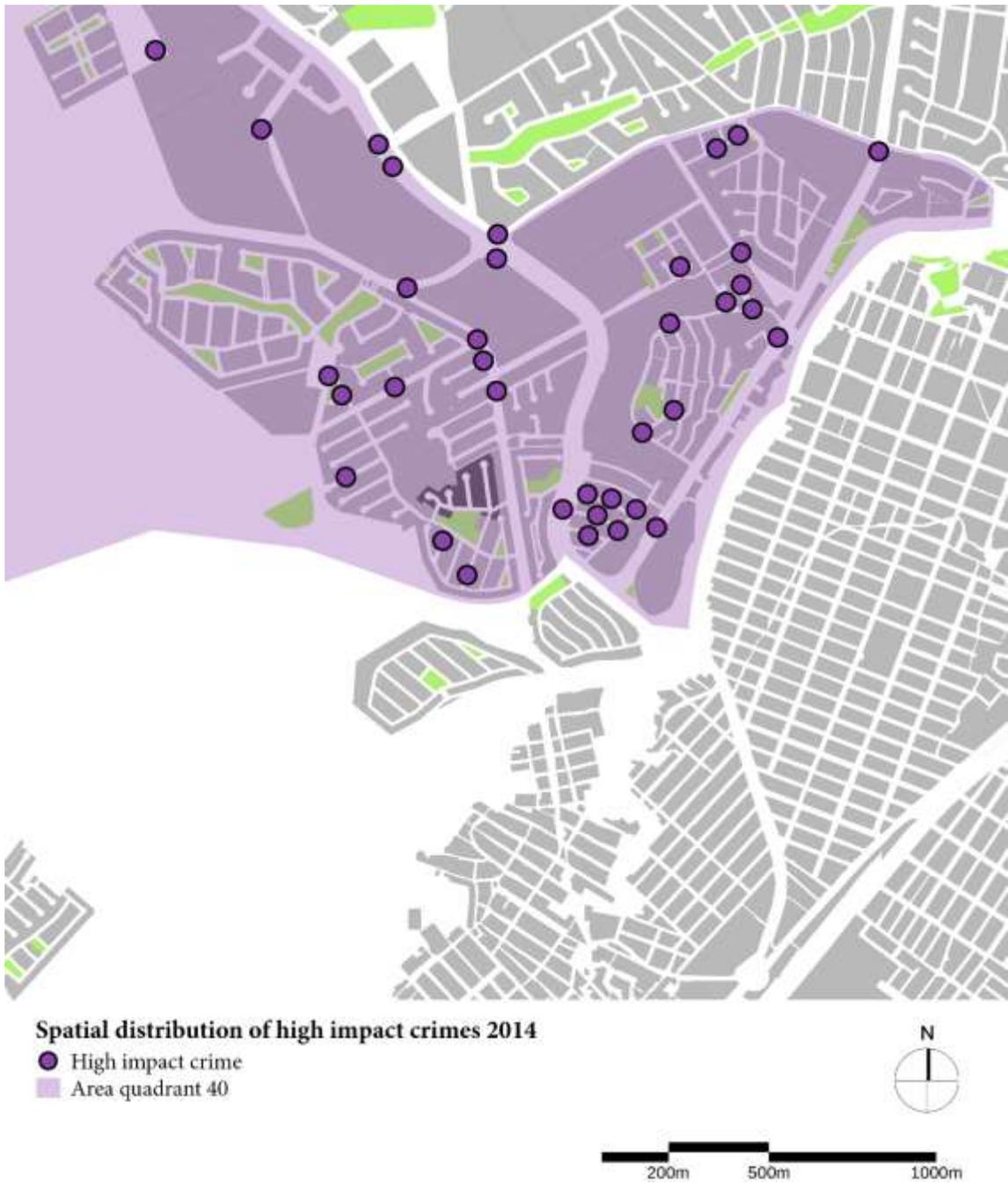


Figure 4.56 Spatial distribution of crime, quadrant 40. Source: elaborated by the author (based on data from Atlas, Observatorio Ciudadano, 2015).

4.2.4 Quintas del Sol II: the open neighborhood

Today, gated communities are the pre-established model for new middle-high income developments, but 35 years ago, the aspirational neighborhood model was different. Quintas del Sol II was developed in 1981 by CTU. The project was placed at the outskirts of the city in a promising location in the west, and empty lots were sold to middle-high income young families to construct their houses; just like gated communities today. However, Quintas del Sol II is not a gated community (figure 4.57). Semi-structured interviews with residents from Oregon Street and park users took place in October 10th 2016, in order to understand differences and similarities between an open neighborhood and gated communities (Annex 11 and 12).



Figure 4.57 Isometric view of Quintas del Sol II. Source: elaborated by the author.

4.2.4.1 Lifestyle

Quintas del Sol II and a typical middle-high income gated community share the location and socioeconomic characteristics. Even though the border of the city outgrew the location of Quintas del Sol II, the neighborhood was planned in the western periphery of its time. A resident remembered that when she moved three decades ago, nothing surrounded the neighborhood but either way it was seen as a desirable location due to the expected development in the area (Lady 3, 10.10.2016). **“It was a new neighborhood”**, another interviewee said (Lady 4, 10.10.2016). Quintas del Sol II has a high market value like the developments in the west of the city. It is categorized in the 15th most expensive homogeneous zone (Gobierno del Estado Libre y Soberano de Chihuahua, 2015). According to the 2016 cadastral land value table, each square meter has a value of 1,685 Mexican pesos.

However, many physical aspects of Quintas del Sol II differ greatly from the ones of an average gated community. To start with, the scale is different. While an average high income gated community contains 109 lots, Quintas del Sol II is composed by approximately 490. The numeration in its name indicates that it is the second part of Quintas del Sol, but in contrast to gated communities that share the name, there are no physical barriers between the two neighborhoods and it is hard to define where one neighborhood ends and the other starts. The green areas or parks have also a different scale. Two water streams cross the neighborhood from west to east, and the developer left them as green areas. **The largest one is known as “Parque Los Tronquitos” and has an extension of 6.3 hectares. It was observed that many people use this place** for different purposes: to walk the dogs, to jog, to use the exercise machines, to take the children to the playground, as a meeting point, etc. A neighbor from Oregon Street mentioned that even free aerobic classes are offered there (Lady 3, 10.10.2016), and another neighbor said that it is a meeting point for Boy Scout groups in the weekends (Lady 1, 10.10.2016). They also related that it is particularly visited early in the morning and around 6pm. And in contrast to the common spaces inside gated communities, Parque Los Tronquitos is public. Its use is not exclusive for residents of Quintas del Sol II, and it can be therefore visited by any citizen. During the interviews to park users, it was noted that at least half of the interviewees were residents from neighboring settlements like Residencial Campestre, Colonia Virreyes or Colonia Guadalupe. In summary, both residents and non-residents of Quintas del Sol II stated that the park was one of the most positive characteristics of the area and they enjoyed it as a recreational spot (Man 1 and Man 2, 10.10.2016). Overall, the scale and different activities in Parque Los Tronquitos allow social interaction (figure 4.58). It was observed that parents chatted while their children were playing together, neighbors stopped to greet each other while walking their dogs, and people gave each other advice on how to use the exercise machines.

Quintas del Sol II was initially inhabited by young families, as the new developments of today typically are. But over the years children grew older and left the house, and the once young neighborhood is currently inhabited by the parents who stayed. During the interviews, different residents referred to its neighborhood as a place of old people (Lady 1, Lady 3, and Lady 4, 10.10.2016). They mentioned that in the 80s, when they moved in, most neighbors had little children and they would all gather and play together in the streets. They grew older together and after three decades, they all know each other well (Lady 1 and Lady 4, 10.10.2016). The similar family constitutions and ages made a way for social interaction, and that community feeling is the main reason why residents from Oregon Street like their neighborhood.



Figure 4.58 Activities in Los Tronquitos, Quintas del Sol II. Source: author, October 2016.



Figure 4.59 Church in Quintas del Sol II. Source: author, October 2016.

The only non-residential use that can be found in Quintas del Sol II, is the church of Santa Maria Reina (figure 4.59). A neighbor declared during the interview that some months ago they started a movement to prohibit any other use than residential (Lady 1, 10.10.2016). Their common feeling is that if businesses open in Quintas del Sol, they will attract the constant visit of outsiders and the increase of strange cars traffic, and with them, their privacy and security would be endangered. In this case, the lack of facilities inside the neighborhood is not only a result of the planning but also a consented decision of its residents (figure 4.60 and 4.61). Still, there are some facilities around the area such as schools and shops, particularly along Boulevard Ortiz Mena in the east and in the neighboring settlements in the north (Municipio de Chihuahua, 2009). When speaking with the residents about which method of transportation they used, some referred walking to the nearest locations like the church, the park, or to a convenience store 250 meters away. However, the majority declared that their trips are done by car, and some even use the car to go to the convenience store, mainly at night (Lady 3, 10.10.2016). In addition, it was observed that the closest bus stop is located in Parque Los Tronquitos in Boulevard Ortiz Mena, 300 meters away from the center of the neighborhood and 400 away from Oregon Street, but no neighbor reported using the public transport. Finally, regarding the use of public institutions, it could not be determined whether or not the residents of Quintas del Sol II rely on private institutions instead. A resident remembered that when he attended La Salle, a private high school, many of his neighbors were attending too (Man 1, 10.10.2016). The high school is only 1km away from Quintas del Sol II, and he said they often walked together back home.



Figure 4.60 Land use in the surroundings of Quintas del Sol II. Source: elaborated by the author (based on data from PDU, Municipio de Chihuahua, 2009).

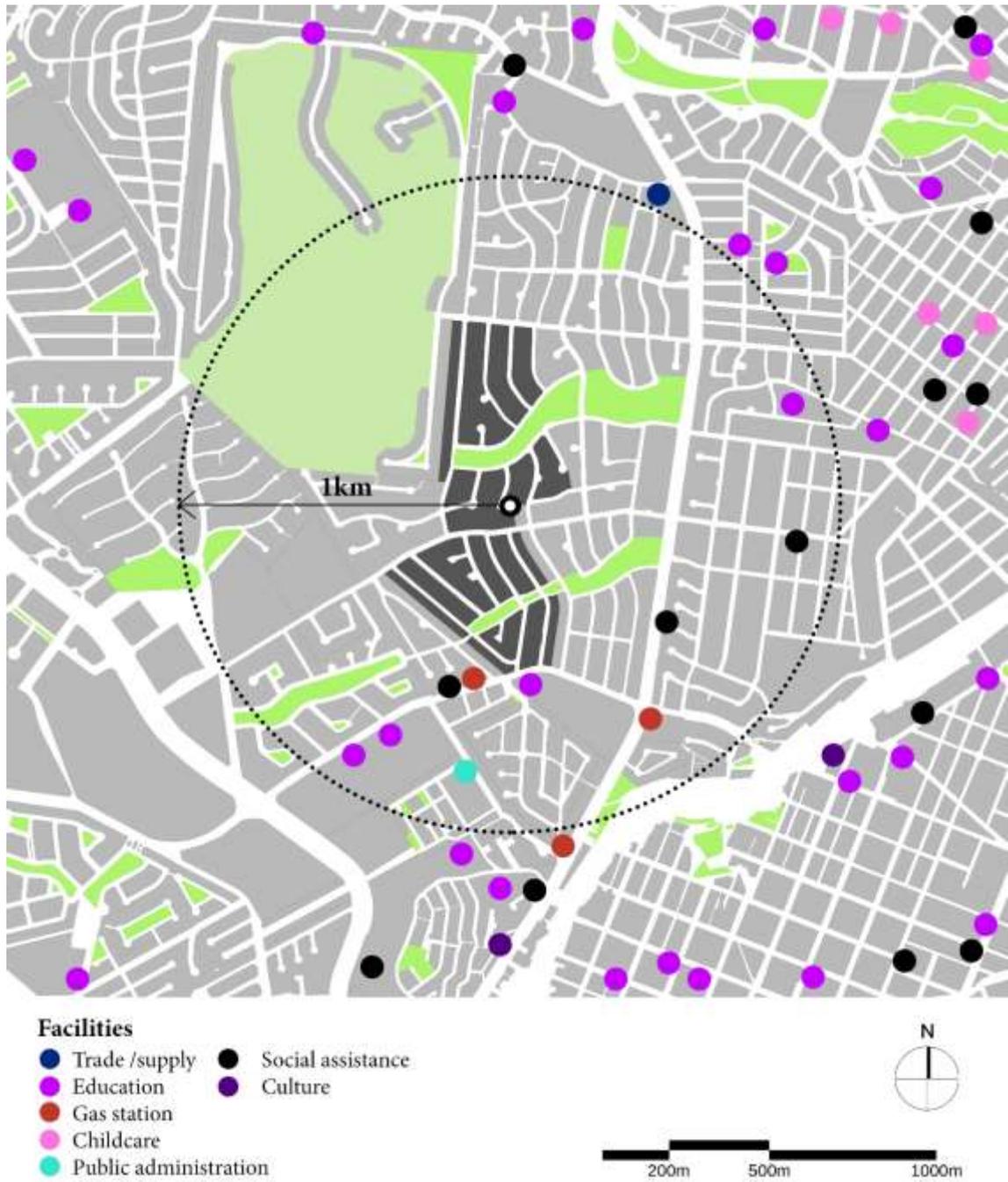


Figure 4.61 Facilities in the surroundings of Quintas del Sol II. Source: elaborated by the author (based on data from PDU, Municipio de Chihuahua, 2009).

4.2.4.2 Security

The configuration of Quintas del Sol II complies partially with the characteristics of the spatially safe neighborhood found in the theory. For instance, the layout of the neighborhood distributes blocks mostly in a grid of open streets that do not define physical boundaries. Moreover, at a larger scale, it was perceived that neighbors define the boundaries of its settlement taking main streets as a reference. When speaking about the neighbors committee they created to avoid the opening of businesses in their neighborhood, a resident mentioned they were considering the area between Camino Al Campestre, Boulevard Ortiz Mena, California and Montana (Lady 1, 10.10.2016). Nevertheless, Camino Al Campestre is the only actual limit of the neighborhood, and the other three either include an area of a neighboring settlement or leave out an area of Quintas del Sol II. This suggests that the actual limits are not physically identifiable. Particularly the limit with Quintas del Sol I is hard to define since it zigzags between streets and even cuts some blocks in half (figure 4.62). However, at a smaller scale some boundaries are defined. Shorter streets have a dead end and provide a singular access to specific blocks. For these lots it could be said that the boundary is defined by the single access street around which they are distributed. In conclusion, the concept of territoriality in relation to the spatial definition of boundaries is only achieved in those particular cul-de-sac streets and in a general perception of the limits of the neighborhood, but not entirely due to the in detail physically undefined limits. In consequence, the concept of milieu is not achieved, since the border with some neighborhoods is not defined, and in addition, Quintas del Sol II is neighbored in the west by a development of a different concept: Club Campestre and its golf course, one of the two gated communities for the elite in the city. Still, it is believed that people do have a sense of belonging to their neighborhood, even when they do not have its physical limits very clear. Firstly, the neighborhood is commonly referred to as a “Colonia” and not as “Fraccionamiento” and, as explained in the scale and distribution of gated communities in the city, this distinction is often related to the social interactions that occur in the place, and the long time families have inhabited it (Chávez, 10.11.2016). All interviewed neighbors moved to Quintas del Sol II in the 80s and were the first residents. It is logical to believe that over the years they have developed an attachment to their neighborhood.

Furthermore, the concepts of image and natural surveillance are apparently the ones with which Quintas del Sol II complies the most. Besides from some untrimmed bushes on the sides of particular streets, the neighborhood seems like it is well taken care of. Streets are clean, facades are in good condition, and front gardens are in good shape. It is also believed that the park was recently renovated and is being regularly maintained. It was observed that playgrounds and exercise machines are in good condition, the paint on the sides of the sidewalks is not damaged, and the lawn is regularly mowed. In addition, the large geometry of most blocks allows natural surveillance between houses (figure 4.63). The park is located in the center of the neighborhood and even though lots are not distributed to face it, many houses from the narrowest part of the blocks do so.

Quintas del Sol II along with more than 20 other neighborhoods integrate the municipal security quadrant number 32 (Observatorio Ciudadano, 2015). Its analysis showed an incidence superior to the municipal average in three high-impact crimes: home burglary, vehicle theft, and robbery to businesses (figure 4.64). Looking into the spatial distribution of high-impact crimes from 2013 and 2014, it is noted that many occurred in Quintas del Sol II (figure 4.65).



Figure 4.62 Neighborhood limits, Quintas del Sol II. Source: elaborated by the author.



Figure 4.63 Surveillance from each house entrance, Quintas del Sol II. Source: elaborated by the author.

More than 10 high-impact crimes were mapped in the neighborhood both in 2013 and 2014. In contrast to other neighborhoods in the area, the number of cases appears to be less in gated communities, like Arcadas, Santa Fe, or Campanario. This suggests that even though gated communities are not excluded from all high-impact crimes, the incidence of some might be lower in these developments.

In summary, all neighbors from Oregon Street have either directly or indirectly had a crime experience, particularly with robbery. One woman narrated that while she was inside her house with her daughter, some men tried to break in to rob as they presumably believed the house was empty (Lady 3, 10.10.2016). Another woman narrated that her husband had parts of his car stolen outside their garage twice, and that one time burglars broke into the house and stole a computer (Lady 1, 10.10.2016). However, despite their crime experiences, all interviewees declared that they feel safe in the neighborhood particularly for one reason: the neighbors. In regard, a woman mentioned that whenever her family leaves for vacation, she asks her neighbors to watch over her house, and that they do the same (Lady 1, 10.10.2016). She also said, that when they see a strange car that has been parked in the street for a long time, they call each other to watch over it. It is important to point out the importance of the community aspect in relation to the security perception. Although all interviews were done separately, still they all referred to the good relationship with their neighbors as the main reason why they feel safe. In response to the increase of violence that occurred some years ago in Chihuahua, neighbors from Quintas del Sol II considered to close their streets as many other neighborhoods in the city were doing. In the end, the closing of the entire neighborhood did not happen and only three streets closed: Carolina del Sur and two cul-de-sac streets, Wyoming and Oklahoma. The residents from Oregon Street also discussed to close it, but in the end the majority did not agree. One woman mentioned that she was against the closing because she thinks it would have complicated mobility. She also mentioned that closing a street might increase the security of the residents, but it proportionally decreases the security of people right outside the gates. **“If something bad happens to someone outside, he/she would just see the gates and nobody to help him/her”, she said** (Lady 1, 10.10.2016). Another neighbor mentioned they saw pros and cons to the closing, but in the end they did not want to increase the walls in the city and create more insecurity (Lady 3, 10.10.2016). And lastly, another woman could not remember whether or not she opposed to the closing back then, but stated that she would not like to close the street now because it would look like a prison, and she would not feel free (Lady 4, 10.10.2016).

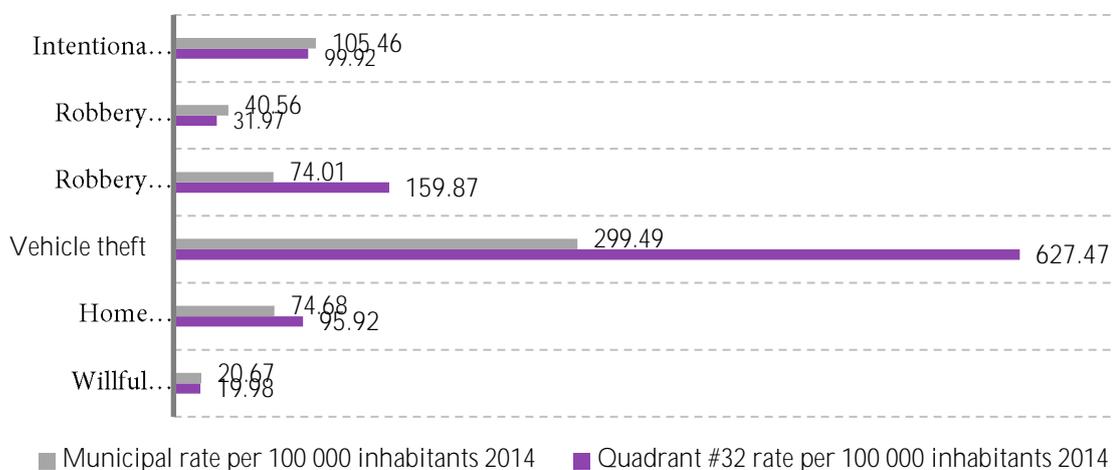


Figure 4.64 High impact crimes per 100 000 inhabitants, comparison between quadrant 32 and municipal rate. Source: elaborated by the author (based on data from Atlas, Observatorio Ciudadano, 2015).



Spatial distribution of high impact crimes 2014

- High impact crime
- Area quadrant 32



Figure 4.65 Spatial distribution of crime, quadrant 32. Source: elaborated by the author (based on data from Atlas, Observatorio Ciudadano, 2015).

5 Conclusions and recommendations

5.1 General research questions

Which are the main motivations of citizens from Chihuahua to move to a gated community? (Why are gating communities proliferating?... the reasons behind the physical shape)

Despite the fact that most gated communities are developed for high income groups, they are currently also planned for middle income groups and in some cases even as social housing. A real estate agent mentioned that nowadays it is really difficult to sell a property to middle-high income buyers if it is not inside a gated community. The director of one of the largest developer companies in the city supported this statement. Developers are constructing gated communities, because that is the current most desirable neighborhood model.

Looking into the case study, it was found that the main motivations citizens have to move to a gated community are related to lifestyle or security, concepts that are also linked to the theory and the study of the proliferation of gated communities in other cities.

By analyzing what developers offer to possible buyers with their gated communities, it was found that the lifestyle aspects were mainly related to location, small size and green areas, and a family life. **Speaking of the first, gated communities are developed in the urban periphery but the “good” location is associated to their proximity to important avenues. Hence, their connectivity. The small size seems to be intended to reinforce the sense of privacy, a private neighborhood where residents can enjoy green places too. And even when the “family life” is a less clear message than the other aspects, images portraying young couples and happy children are common in the developers’ market strategy.**

Gated communities emerged in Chihuahua in the 80’s. **From that moment and until before the violence levels increased 20 years later, the city was not perceived as a particular “unsafe” place.** During that time, citizens might have only had a lifestyle motivation to live in a gated community. Eventually, security turned into the second major reason, not only for inhabitants to move to a planned gated community, but to turn their open neighborhood into one too.

Besides lifestyle, security is the other characteristic developers offer with their gated communities. And this security is directly related to their distinctive conditions: a bordering wall, controlled access and a surveillance system. From 2007 the violence levels increased, and so did the insecurity perception of the citizens. It is understandable that from that point gated communities became more popular, as a physical measure to create a safer environment. Which is why citizens from open neighborhoods started to close their streets. However, there is yet no study focusing on the implementation of walls and gates in relation to crime reduction in Chihuahua, and therefore the question of whether these measures are effective for such purpose or not, is still open.

Which are the main impacts of gated communities at an urban scale? (The consequences of the physical shape)

As found in the theory, the main impacts of the development of gated communities were categorized into the particular areas they effect and could be analyzed: spatial, economic, and political. Based on the initial assumption that the physical space of the city and the society that inhabits it are variables that affect one another, it is noted that the impacts are not only interrelated but are also linked to the causes why gated communities proliferate.

The spatial impacts are subdivided into sprawl, car dependence, and pulverization of “public” space. Regarding the political and economic impacts, these are the illegal situation and the land value increase. All of these impacts, but one, are found in the theory. The pulverization of public space is the one impact in Chihuahua from which there was no reference found in the reviewed literature.

Chihuahua is already one of the least dense cities in the country. The city continues to expand at a higher rate than its population grows. Gated communities are currently 1/5 of the total amount of neighborhoods, and they are mainly located in the outer ring: an area that has developed in the last decades. But not only these developments contribute to urban sprawl, they also promote car dependence. Since gated communities are placed at the city outskirts, distances increase and the use of the private car becomes a necessity. Linking back to the location offered within the lifestyle characteristics of a gated community, the “good” location gated communities are advertised to have is translated into their connection with main city avenues; in other words, a car connection. In fact, no reference of any other transportation mode was found in gated communities’ advertisements. To support this, while cars constantly entered and exited gated communities, only a few pedestrians were observed walking in their surroundings. Most of them were construction workers or cleaning service.

Also related to the lifestyle aspects, the desirable small size of gated communities has a spatial impact. The municipality asks for the developer to designate a percentage of at least 4.5% to green areas. As a result, the green areas contained within gated communities are proportional to their total size. Common spaces inside gated communities’ end up as small areas that at most have a playground and a few benches. And since the city is developing to a great extent into gated communities, it is only obvious to assume that its “public” space is getting smaller, divided into little pieces. Quotation marks are used in “public”, since these spaces are located inside gated communities. Their use is exclusive to residents, so one would assume that they are private and not public spaces. This situation is related to the political impact. The vast majority of gated communities in the city do not have a condominium regime. This means that besides from the lots, common spaces are legally public. Hence, public space is not only being pulverized by gated communities but also privatized.

The municipality continues to authorize the development of gated communities, even if the majority are an illegal figure. The reason is that over the years, the model has not only been accepted but turned into the most desirable one. And this desirability signifies an economic profit. Houses are sold at higher prices if they are inside a gated community, because people are willing to pay the price for such privilege. The land value increases. Developers make a good business by purchasing land in the periphery at a low cost, and then selling it as gated communities. Lastly, the municipality has the opportunity to charge higher land taxes, since these are calculated based on market value.

5.2 Specific research questions

What kind of lifestyle are gated communities promoting?

The location of gated communities, their green spaces and the family life are, as seen before, aspects related to the lifestyle motivation of citizens to move to a gated community. At an urban scale, it was found that the “good” location translated into car connectivity, hence car dependence. This finding is supported in the spatial analysis of the two gated communities and relates to the voluntary exclusion theory. In both Valle del Angel II and Lomas Altas V, only a very few facilities were placed within a 1km ratio and they were private. This suggests that to get to a destination, residents will most likely have to make a long trip. The closest and most important avenue to both settlements is Periférico De la Juventud. Looking into detail into the mobility options of both gated communities, this avenue appears to be more a barrier than a connector. For instance, the residents of Valle del Ángel II must necessarily drive 1,5km just to connect to the rest of the city. Thinking about cyclists or pedestrians, the possibilities are limited. In large sections sidewalks on the sides are missing and pedestrian bridge crossings are located approximately every 3 kms. Lastly, the public transport system is well known for its inefficiency. Nevertheless, to depend on the car for every trip does not seem to be a problem for the residents. Interviewees from both gated communities mentioned either that the location was one of the reasons why they chose to live in their particular neighborhood, or one of the aspects they liked the most about living there since everything is really close.

In comparison with the open neighborhood, its residents also declared that they use the car for basically every trip, even in some cases to locations at walkable distance. Spatially, Quintas del Sol II is not as segregated as the gated communities as the city outgrew it and it is no longer located in the periphery. However, citizens are currently fighting to impede that other land use than residential can emerge in their neighborhood. In conclusion, even when car dependence is supported by the spatial segregation of gated communities, it is believed to be also related to the cultural perception of the private car. In Chihuahua, to use a private car is seen as a privilege and therefore, it is the most common transportation mode of high income groups.

Moreover, common spaces are intended for the youngest in gated communities. This was observed during the fieldwork and supported by the residents, who mentioned that the park is mostly used by the children. In contrast to the gated communities, Quintas del Sol II has a public space that is really public, which has a larger scale that fosters different activities, and where residents from neighboring settlements have the opportunity to meet. Based on observations, the green areas in gated communities seem lonely and ornamental, while the public space from Quintas del Sol II had people doing different activities like running, exercising or walking the dog. For these reasons, it is believed that the physical characteristics of the public space in the analyzed open neighborhood promote social interaction more than the ones from the gated communities.

Are gated communities perceived and experienced by their residents as a safer place to live in comparison to open neighborhoods?

As the literature suggested, the concept of security in relation to gated communities considers different aspects. Concerning protection against crime, the quadrants of the two analyzed gated communities presented a higher rate than the municipal average on four high-impact crimes, while the open neighborhood had higher rates on three high-impact crimes. Taking aside robbery to businesses (since none of the neighborhoods analyzed have other use than residential within their limits), the three neighborhoods had higher rates than the municipal average on home burglary and vehicle theft. The quadrant of Valle del Ángel II is composed entirely by gated communities, while the quadrants of Lomas Altas V and Quintas del Sol II are also composed by open neighborhoods. This suggests, that these two crimes occur in both types of neighborhoods. However, it is believed that vehicle theft would most likely occur in an open neighborhood or in commercial areas than in a gated community, due to the spatial characteristics of the later that impede free transit of vehicles. Looking into the spatial distribution of high-impact crimes of 2014 in the three locations, it was noted that while the gated communities had one and zero events, the open neighborhood had 10. Yet, the scale of the three neighborhoods is different. While the gated communities have 80 and 45 occupied lots respectively, the open neighborhood is composed by 490, from which the majority are occupied.

Based on crime statistics, it seems that gated communities are not excluded from high-impact crimes. Their residents seem to acknowledge it. Interviewees from Valle del Ángel II declared that they were aware that living in a gated community was no protection from high-impact crimes, and residents from Lomas Altas V mentioned that the closing is no guarantee of crime protection. Nevertheless, when comparing the open city to the gated community, it was found that residents perceive their neighborhood as a safer place. This perception is founded on the protection of children from outsiders and traffic. Residents from both closed neighborhoods made reference to how their children are allowed to play in common spaces inside the gated community because they are safe within its borders. In comparison, this aspect could not be noted in Quintas del Sol II since the interviewees from this neighborhood have been living there since its development 30 years ago, therefore, they are no longer the young families that arrived.

Finally, it is important to mention that most of the interviewed residents, from the three neighborhoods, declared they felt safe in their neighborhood. What is most relevant, is that they do so for the same reason: the social relationship with their neighbors. In other words, residents from the three neighborhoods mentioned that they feel safe because they know their neighbors and they watch for one another. **Linking back to the theory of “the safe neighborhood”, social interaction is considered a key factor to achieve a safe environment, and the suggested physical characteristics aim to promote it.** The spatial analysis of the three neighborhoods showed that none of them comply entirely with the spatial aspects of “**the safe neighborhood**”, but still social interaction is caused by other factors. In the case of the gated communities, it is related only indirectly to the closing condition. In Valle del Ángel II, the interviewed residents said they were close because they happened to live on the same side of the residential subdivision and their children were the same age, and so they played together. In Lomas Altas V, the story is different. Residents did not know each other until they had to create a committee to legalize the street closing. Once they met, they developed a social relationship.

In comparison with the open neighborhood, residents from Quintas del Sol II also developed a friendship because when they moved, the social composition of the neighborhood was homogeneous, and so their children grew up together.

In conclusion, the residents from gated communities do perceive their neighborhood as safer when comparing it with open neighborhoods, mainly due to the protection it offers to their children. However, beyond the physical characteristics of the gated community, the social relationship with their neighbors came out as the main reason to feel safe. This same aspect is the reason why the residents from the open neighborhood also feel safe. This finding suggests that a perceivable safer neighborhood, is one where the neighbors know and care for each other.

5.3 Recommendations

The following recommendations are based on what was found in the case study in relation to the theory, and addressed to different actors involved in the proliferation of gated communities in Chihuahua. Since this study focused on documenting and generally describing the case study, deeper analysis on each aspect in relation to gated communities is advised. This analysis could consider not only further qualitative information, but also quantitative data in order to statistically support the findings.

1. To include specific regulations regarding the development of gated communities in order to ensure certain parameters that counteract the negative effects of their proliferation, like multi modal mobility, mixture of uses, dimension and accessibility of public spaces, and public facilities provision. Currently, none of the regulations regarding urban development consider gated communities even when it is the most constructed model in the city. **In fact, the term “fraccionamiento cerrado” (gated community) does not even appear in any regulations.**
2. To incentivize for gated communities to be developed under a condominium regime instead of a private property regime. Currently, the common spaces inside the vast majority of gated communities remain legally public, which means the municipality must maintain and manage those areas. In practice, the residents are the ones that, through the committee, care for the maintenance of green areas, but still other services are covered by the municipality, such as waste collection and street lighting. For instance, the municipality could reduce land taxes in gated communities under a condominium regime in order to motivate developers and owners, and in return, it would stop paying for the maintenance of private spaces.
3. To consider traffic regulations and measures in open neighborhoods to reduce the insecurity perception related to traffic. For example, speed limit reduction, and physical **measures like bumps or planters reducing the access' width in neighborhood areas.**
4. To promote city re densification by incentivizing developers to construct in empty urban spaces rather than in the urban periphery. Currently, developers construct in the periphery because the land is cheaper and once developed into a gated community, the price rises exponentially due to their desirability. This signifies a cost to the city that must ensure connectivity and provide services.
5. To reconsider the typical layout and size of gated communities, in order for the physical characteristics to promote social interaction. Common spaces inside gated communities tend to be too small to foster other uses than a playground for little children, and in many cases end up being exclusively ornamental.
6. To **promote the organization of social events by neighbors' committees in gated communities**, in order for residents to meet one another and interact.
7. To improve the infrastructure for pedestrians and cyclists, as well as the public transport service and provision in the gated communities surroundings, in order to motivate residents to reduce car use.
8. To develop and implement awareness raising campaigns focusing on the negative impacts of gated communities.

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Annex 1. New developments approved by DDUM, 2002-2016

Neighborhood name	Developer	Total lots	Location	Gated	Income level	Year
Acequias de Tabalaopa II	YVASA	434	E	?	Social housing	2006
Aires del Sur III	Construcciones Toguma	58	SW	No	Social housing	2011
Albaterra	Valle Escondido del Norte	143	NW	Yes	High	2012
Albaterra II	CTU	145	W	Yes	High	?
Almeria	?	9	SW	No	?	2015
América Latina	?	26	?	Yes	?	2015
Andalucía	Brasa	150	W	Yes	High	2008
Ankara	?	126	SW	Yes	?	2016
Arroyos II	DURISA	176	SE	No	Medium	2002
Atenas II	IVI	109	SE	No	Social housing	2002
Atenas III	IVI	85	W	No	Social housing	2002
Atenas IV	IVI	1622	E	No	Social housing	2002
Atenas V	IVI	64	NW	No	Social housing	2002
Bahías 3626	Velege Corporativo	5	NW	Yes	High	2010
Bosque Real	Valle Escondido del Norte	27	W	?	?	2007
Bosques de San Francisco etapa II-A	CTU	15	W	Yes	High	2015
Bosques de San Francisco IV	CTU	87	NW	Yes	High	2007
Bosques del Rejón	Plusvalía Rejiomontana	77	W	Yes	High	2010
Bosques del Valle	Valle Escondido del Norte	133	W	Yes	High	2007
Bosques del Valle II	Valle Escondido del Norte	131	W	Yes	High	2012
Bosques del Valle III	Valle Escondido del Norte	161	W	Yes	High	2013
Brisas del León I	HSBC México	158	E	Yes	?	2010
Caminos del Valle	CTU	229	NW	Yes	Medium	2011
Caminos del Valle II	CTU	137	W	Yes	High	2012
Caminos del Valle III	CTU	252	W	Yes	High	2013
Caminos del Valle IV	CTU	216	W	Yes	High	2015
Campestre Bellavista	Luis Raúl Martínez	64	N	Yes	High	2004
Campo Bello IV	CONDAK PULTE	195	NE	No	Medium	2002
Campo Bello VI	Novourba	64	NW	No	Medium	2004

Cantera del Pedregal	Grupo Valles	123	W	Yes	High	?
Cañada Sierra Bonita	Jesus Carrillo	2069	N	?	?	2009
Cañón del Cimarrón	CTU	109	W	Yes	High	?
Castello Residencial	DGA	59	SW	Yes	High	2010
Castilla Reliz	?	115	W	Yes	High	2014
Cataluña III	?	4	SW	Yes	High	2016
Cenit	CTU	60	NW	Yes	High	2012
Cerrada Baena	Brasa	55	SW	Yes	High	?
Cerrada Baena II	Brasa	62	SW	Yes	High	2007
Cerrada Baleares	Brasa	119	SW	Yes	High	2011
Cerrada Castilla	Brasa	89	SW	Yes	High	?
Cerrada Cataluña	Brasa	60	SW	Yes	High	?
Cerrada de Cumbres	Gerardo López	13	NE	Yes	High	2005
Cerrada del Cimarrón	CTU	26	W	Yes	High	?
Cerrada Navarra	Brasa	146	SW	Yes	High	2007
Cerrada Rioja	Brasa	114	SW	Yes	High	?
Cerrada Vista Real	Brasa	97	W	Yes	High	2004
Cerradas del Parque	Grupo Ruba	?	N	Yes	Social housing	?
Chihuahua III	Raymundo Prado	11	N	No	Medium	2006
Chihuahua siglo XXI	Desarrollo inmobiliario habitacional	303	SE	No	Social housing	2002
Cima de la Cantera	Grupo Valles	141	W	Yes	High	?
Colinas del León	Grupo Ruba	159	E	Yes	Medium	2007
Colonial Santa Fe	Omar Arguelles	63	N	?	?	2006
Condominio Lienzo Charro	PROCCOSA	131	W	No	Medium	2002
Condominio Misiones de San Felipe	?	7	C	Yes	?	2016
Condominio Ochoa	?	3	SE	Yes	?	2016
Condominio San José	?	7	E	Yes	?	2015
Constituyentes	Casas Abita	?	N	No	Medium	?
Cordilleras	Materiales industriales Chihuahua	16	N	Yes	High	2002
Cordilleras III	Materiales industriales Chihuahua	16	N	Yes	High	2004
Cumbres de Robinson II	?	258	E	No	?	2014
Cumbres de San Francisco	Hogares, comercio e industria	109	SW	Yes	High	2005
Cumbres de San Francisco II	Hogares, comercio e industria	26	SW	Yes	High	2005

Diamante Reliz	DRISA	241	W	Yes	High	2004
Encordada del León	Ingeniería y Obras SA de CV	10	E	?	?	2006
Encordada del Valle	CTU	233	NW	Yes	High	2012
Escondida los Nogales	?	55	NE	No	?	2013
Fco. Villa II	Planeación inmobiliaria de Chihuahua	310	N	No	Medium	2002
Fuentes del Valle	Grupo Valles	62	W	Yes	High	2008
Granjas diversión	LV inmobiliaria	35	N	?	?	2009
Grutas del Sacramento	JIDASA	32	NE	Yes	Medium	2010
Hacienda Camila	Brasa	191	W	Yes	High	2009
Hacienda Carlota	Brasa	254	W	Yes	High	2007
Hacienda del Moro	MYKONOS	76	N	Yes	High	2009
Hacienda Isabella	Brasa	246	SW	Yes	High	2007
Hacienda Loreto	Casa Atlas	119	SW	Yes	?	2014
Hacienda Sophia	Brasa	126	SW	Yes	Medium	2012
Hacienda Victoria	?	111	SW	Yes	?	2014
Haciendas del Rejón I	Magdalena Garza	59	NW	Yes	High	2010
Haciendas del Rejón II	Leonel Quezada	29	NW	Yes	High	2010
Jardines de la Mancha	Inmuebles GOSTE	29	N	Yes	Medium	2005
Jardines de Oriente	Grupo Ruba	3330	E	No	Social housing	2005
Jardines de Oriente IX	Tramet Constructores	262	E	No	Social housing	2007
Jardines de Oriente VIII	Tramet Constructores	181	SE	No	Social housing	2007
Jardines de Oriente X	Tramet Constructores	263	E	No	Social housing	2007
Jardines de San Agustín	Grupo Ruba	1,558	SE	Yes	?	2015
Jardines del Sacramento II	IVI	57	NE	No	Medium	2011
La Cantera I	Grupo Valles	85	W	Yes	High	2004
La Cantera II	Grupo Valles	85	W	Yes	High	2004
La Cantera III	Grupo Valles	100	W	Yes	High	2005
La Cantera IV	Grupo Valles	100	W	Yes	High	2005
La Cantera V	Grupo Valles	143	W	Yes	High	2006
La Cantera V	Grupo Valles	212	W	Yes	High	?
La Escondida	Promotora Residencial La escondida	95	W	Yes	Medium	2007
La Galera IV	Sucesión Elías Muller	109	SE	No	Social housing	2004
La Galera V	Sucesión Elías Muller	303	SE	No	Social housing	2004

La Ribereña	?	135	N	Yes	?	2015
Las Aldabas	Alta Homes Norte	697	N	Yes	Medium	2011
Las Aldabas II	Alta Homes Norte	238	N	Yes	Medium	2012
Las Lunas Residencial	SADASI	402	N	Yes	?	2016
Las Palmas	CTU	?	N	Yes	Medium	?
Las Palmas II	CTU	?	N	Yes	Medium	?
Las Palmas IV	CTU Hogar	?	N	Yes	Medium	?
Las Palmas V	CTU Hogar	70	N	Yes	Medium	?
Las Pampas I	Grupo Casas Grandes	89	E	Yes	Social housing	2008
Las Sendas	Brasa	?	SW	Yes	High	?
Lomas Altas V	Ctra. Inmobiliaria Las Américas	102	W	Yes	High	2004
Lomas de Juan Pablo	Parcel 142	31	SW	?	?	2012
Lomas de San Charbel	Grupo Valles	112	W	Yes	High	2014
Lomas del Pedregal	Grupo Valles	94	NW	Yes	High	2010
Lomas del Rejón	Grupo Roma	66	W	Yes	High	2007
Lomas del Valle I	Grupo Valles	?	W	Yes	High	?
Lomas del Valle II	Grupo Valles	159	W	Yes	High	?
Lomas Universidad	Casas Abita	?	NW	No	Medium	?
Lomas Universidad IV	Chihuahua futuro	127	NW	Yes	High	2004
Lomas Universidad V	CTU	154	N	No	Medium	2006
Los Arcos	IVI	1415	N	No	Medium	2011
Los Arroyos IV	DURISA	630	N	No	Social housing	2004
Los Encinos II	Planeación inmobiliaria de Chihuahua	59	NW	Yes	Medium	2002
Los Encinos Oriente I	?	283	SE	Yes	Medium	2016
Los Naranjos	PROCCOSA	171	SE	No	Social housing	2004
Los Naranjos II	PROCCOSA	191	E	No	Social housing	2005
Los Naranjos III	PROCCOSA	196	NW	No	Social housing	2006
Los Naranjos IV	PROCCOSA	145	E	No	Social housing	2006
Los Naranjos V	HC Construcción	133	SE	No	Social housing	2007
Los Naranjos VI	PROCCOSA	165	SE	No	Social housing	2008
Los Olivos	Pulte México División Norte	260	N	No	Social housing	2004
Los Olivos II	Pulte México División Norte	310	N	No	Social housing	2004
Los Olivos III	Pulte México División Norte	223	N	No	Social housing	2005
Los Olivos IV	Pulte México División Norte	202	N	Yes	Medium	2005
Los Potreros II	IVI	178	NE	No	Social housing	2004
Manantiales	Plaza Habitacional	62	N	Yes	Medium	2006

Mineral II	IVI	714	N	No	Social housing	2011
Mineral III	IVI	127	NW	No	Social housing	2002
Misión del Bosque	CTU	182	W	Yes	High	?
Misión del Valle	Valle Escondido del Norte	210	W	Yes	High	2005
Misión del Valle II	Valle Escondido del Norte	177	NW	Yes	High	2006
Mitla	Blanca Schmidt	3	N	?	?	2009
Molino de Agua	?	1,044	N	Yes	Medium	2016
Molino de Viento	?	342	N	Yes	?	2014
Mondello Residencial	?	33	SW	Yes	High	2015
Monte Verde Cerradas	Grupo Ruba	?	SW	Yes	Medium	?
Monte Verde I	Grupo Ruba	1787	SW	Yes	Medium	2012
Monte Verde II	Grupo Ruba	743	SW	Yes	Medium	2011
Monticello	?	354	W	Yes	?	2015
Nuevo Chihuahua VI	Grupo Tres Estrellas	33	NW	Yes	Medium	2011
Palma Real I	CTU Hogar	80	N	Yes	Medium	2006
Palma Real II	CTU Hogar	56	N	Yes	Medium	?
Palma Real III	CTU Hogar	42	N	Yes	Medium	2007
Palma Real IV	CTU Hogar	150	N	Yes	Medium	2007
Palma Real V, etapa I	CTU Hogar	70	N	Yes	Medium	2012
Palma Real V, etapa II	CTU Hogar	132	N	Yes	Medium	2012
Palma Real VI	CTU Hogar	69	N	Yes	Medium	2008
Palma Real VII	CTU Hogar	45	N	Yes	Medium	2016
Palma Real VIII	CTU Hogar	130	N	Yes	Medium	2009
Palma Real X	CTU Hogar	214	N	Yes	Medium	2010
Parque Industrial Impulso VII	IOSA	564	N	Yes	High	2007
Parque Industrial Impulso VIII	IOSA	687	N	Yes	High	2007
Paseo de las Misiones	Grupo Ruba	310	N	Yes	Medium	2004
Paseo de las Moras II	Inmobiliaria millenium	178	NE	Yes	High	2002
Paseo de los Leones	HSBC México	2331	E	Yes	Medium	2009
Paseo del Camino Real V	Fraccionadora independiente	1330	E	No	Social housing	2009
Paseos del Camino Real I	FINSA	909	E	No	Social housing	2004
Paseos del Camino Real II	FINSA	814	SE	No	Social housing	2005
Paseos del Camino Real III	FINSA	1026	SE	No	Social housing	2005
Paseos del Camino Real IV	FINSA	921	SE	No	Social housing	2006

Pedregal de San Ángel	Grupo Valles	186	W	Yes	High	2012
Pedregal del Alba	?	128	W	Yes	High	2016
Pedregal del Real	Grupama	69	NE	Yes	Medium	2011
Pedregal del Valle	Grupo Valles	139	W	Yes	High	?
Península Residencial	Brasa	68	SW	Yes	High	?
Pensiones Civiles del Estado	?	853	S	No	?	2015
Portal de las Lomas I	CTU	126	W	Yes	High	?
Portal de las Lomas II	CTU	134	W	Yes	High	?
Portal del Real I	Grupo YVASA	888	SE	Yes	Social housing	2015
Portal del Real II	Grupo YVASA	983	SE	Yes	Social housing	2015
Portal del Valle	Grupo YVASA	?	SE	No	Social housing	?
Portal Paseo de los Leones	Grupo Ruba	?	SE	Yes	Medium	?
Pórticos de Bella Cumbre I	Desarrolladora de ciudades	146	E	Yes	Medium	2009
Pórticos de Bella Cumbre II	Desarrolladora de ciudades	128	E	Yes	Medium	2009
Pórticos de Bella Cumbre III	Desarrolladora de ciudades	149	E	Yes	Medium	2009
Pórticos de Bella Cumbre IV	Desarrolladora de ciudades	138	E	Yes	Medium	2009
Praderas del Sur I	Ingeniería y Obras SA de CV	642	SE	Yes	Social housing	2009
Praderas del Sur II	IOSA	1058	SE	No	Social housing	2006
Praderas del Sur III	Ingeniería y Obras SA de CV	1021	E	No	Social housing	2006
Praderas del Sur IV	Ingeniería y Obras SA de CV	715	SE	No	Social housing	2008
Prado Sur	CTU Hogar	247	SE	No	Social housing	2010
Prado Sur II	CTU Hogar	124	E	Yes	Social housing	2013
Privanza San Ángel	Espacio Ideal	92	NE	Yes	High	2007
Provincia de Santa Clara I	Materiales industriales Chihuahua	195	N	Yes	Medium	2007
Provincia de Santa Clara II	Materiales industriales Chihuahua	119	N	Yes	Medium	2008
Provincia de Santa Clara III	Materiales industriales Chihuahua	76	N	Yes	Medium	2006
Provincia de Santa Clara III	Materiales industriales Chihuahua	161	N	Yes	Medium	2008
Provincia de Santa Clara IV	Materiales industriales Chihuahua	134	N	Yes	Medium	2006

Provincia de Santa Clara IX	Materiales industriales Chihuahua	90	N	Yes	Medium	2007
Provincia de Santa Clara V	Materiales industriales Chihuahua	112	N	Yes	Medium	2007
Provincia de Santa Clara VI	Materiales industriales Chihuahua	55	N	Yes	Medium	2006
Provincia de Santa Clara VII	Materiales industriales Chihuahua	52	N	Yes	Medium	2006
Provincia de Santa Clara VIII	Materiales industriales Chihuahua	64	N	Yes	Medium	2006
Provincia de Santa Clara X	Materiales industriales Chihuahua	90	N	Yes	Medium	2007
Provincia de Santa Clara XI	Materiales industriales Chihuahua	118	N	Yes	Medium	2007
Provincia de Santa Clara XII	Materiales industriales Chihuahua	90	N	Yes	Medium	2007
Provincia de Santa Clara XIII	Materiales industriales Chihuahua	121	N	Yes	Medium	2008
Provincia de Santa Clara XV A	Materiales industriales Chihuahua	82	N	Yes	Medium	2007
Provincia de Santa Clara XV B	Materiales industriales Chihuahua	176	N	Yes	Medium	2007
Puente de Cantera	Privanza	436	W	Yes	High	2013
Puente de Piedra	Jesús Duarte	494	W	Yes	High	2011
Puerta Cibeles I	Desarrolladora de ciudades	79	E	Yes	Medium	2012
Puerta Cibeles II	Desarrolladora de ciudades	72	E	Yes	Medium	2012
Puerta Cibeles III	Desarrolladora de ciudades	63	NE	Yes	Medium	2012
Puerta de Hierro IV	Trillenium	130	W	Yes	High	2004
Puerta del Valle I	Desarrolladora de ciudades	177	N	Yes	High	2006
Puerta del Valle II	Desarrolladora de ciudades	27	NW	Yes	High	2007
Puerta del Valle III	Desarrolladora de ciudades	24	N	Yes	High	2007

Puerta del Valle IV	Desarrolladora de ciudades	32	N	Yes	High	2008
Puerta del Valle V	Desarrolladora de ciudades	58	N	Yes	High	2008
Puerta Esmeralda Residencial	Qual Desarrollos	128	SE	Yes	Medium	2010
Puerta Rivera Real	MYKONOS	388	NW	Yes	High	2013
Puerta Savona	Casa Atlas	733	SE	Yes	Medium	2011
Punta Naranjos Oriente I	Proyectos construcción y conservación	426	E	No	Social housing	2009
Punta Naranjos Oriente II	Proyectos construcción y conservación	196	SE	No	Social housing	2016
Punta Naranjos Oriente IV	Proyectos construcción y conservación	378	E	No	Social housing	2011
Punta Naranjos Oriente V	Proyectos construcción y conservación	461	E	No	Social housing	2013
Punta Oriente I	IVI	451	SE	No	Social housing	2008
Punta Oriente II	IVI	318	SE	No	Social housing	2008
Punta Oriente III	IVI	397	SE	No	Social housing	2008
Punta Oriente IV	IVI	660	SE	No	Social housing	2008
Punta Oriente V	IVI	286	SE	No	Social housing	2008
Punta Oriente VI	IVI	579	SE	No	Social housing	2008
Quinta Arboleda Oriente	Grupo YVASA	767	SW	Yes	Social housing	2015
Quinta Balboa	URBI	73	NW	Yes	High	?
Quinta Balboa	URBI	73	NW	Yes	High	?
Quinta Balboa	URBI	73	NW	Yes	High	?
Quinta Balboa	URBI	73	NW	Yes	High	?
Quinta Balboa	URBI	73	NW	Yes	High	?
Quinta Montecarlo	?	?	?	Yes	Medium	?
Quinta San Carlo	?	515	N	Yes	High	2014
Quinta San Miguel	?	138	N	No	Medium	2014
Quinta San Sebastian	?	?	?	Yes	Medium	?
Quintas del Rio	Proyecto 21	54	NE	Yes	Medium	2006
Quintas Juan Pablo	Grupo Casas Grandes	137	E	?	Social housing	2005
Quintas Juan Pablo II	Grupo Casas Grandes	213	SE	?	Social housing	2007
Quintas San Antonio	Zulema Ochoa	170	W	?	Social housing	2002
R. Bosques de S. Fco. II	Hogares, comercio e industria	85	W	Yes	High	2004

R. Bosques de S. Fco. III	Hogares, comercio e industria	131	W	Yes	High	2004
Rachali	Rachali de Chihuahua	65	S	No	Social housing	2004
Rachali II	Rachali de Chihuahua	62	S	No	Social housing	2005
Real Carolinas II	CTU	195	NE	No	Social housing	2004
Real Carolinas III	CTU	280	NE	No	Social housing	2004
Real Carolinas IV	CTU	332	NE	No	Social housing	2005
Real de Colinas	Arturo Pierce	15	NW	Yes	High	2008
Real de Guzmán	Catalina Sandoval	10	NE	Yes	Medium	2005
Real de Potrerros	DUVSA	107	N	Yes	Medium	2008
Real Universidad	Casas Abita	?	N	No	Medium	?
Reserva del parque	?	470	SW	Yes	High	2014
Residencial Albaterra III	CTU	132	W	Yes	High	2014
Residencial Andares	DGA	78	SW	Yes	High	2013
Residencial Denver	Althon Desarrollos	2	W	?	?	2005
Residencial el León	IVI	1622	E	Yes	Medium	2004
Residencial Natura	?	93	W	Yes	?	2014
Riberas del Sacramento	Grupo Roma	?	SE	No	Social housing	?
Riberas del Sacramento II	Promotora Inmobiliaria del Sacramento	3011	N	No	Social housing	2005
Riberas del Sacramento III	Grupo Roma	1798	N	No	Social housing	2008
Riberas del Valle	IVI	306	E	Yes	Medium	2008
Rincón de la Mora	Daniel Piñera	33	N	?	?	2007
Rincón de las Flores	Kokopelli Desarrollo Inmobiliario	34	W	Yes	High	2011
Rincón de los Olivos	Pulte México División Norte	995	N	Yes	Medium	2006
Rincón de Zaragoza	MYKONOS	280	NE	Yes	Medium	2002
Rincón del Arcangel	ISI	35	NE	Yes	Medium	2006
Rincón del Arcangel II	Delapaz.com	50	NE	Yes	Medium	2008
Rinconada de la esmeralda	CONDAK PULTE	909	E	?	?	2002
Rinconada de la Sierra VII	MYKONOS	195	NW	Yes	Medium	2006
Rinconada de Oriente	CONDAK PULTE	419	E	No	Social housing	2007
Rinconada los Nogales I	IVI	335	SE	No	Social housing	2005
Rinconada Los Nogales III	IVI	335	SE	No	Social housing	2005

Rinconada Los Nogales III	IVI	356	SE	No	Social housing	2005
Rinconada Oriente	CONDAK PULTE	547	SE	No	Medium	2005
Rinconada Quintas	NK construcciones	7	W	?	High	2005
Rinconada Taurina	Inmobiliaria hacienda la Esperanza	32	W	Yes	Medium	2007
Rinconadas de la Sierra VI	MYKONOS	195	N	Yes	High	2004
Rinconadas de la Sierra VIII	MYKONOS	51	NW	Yes	High	2013
Rinconadas del Valle I	CTU	61	W	Yes	High	?
Rinconadas del Valle II	CTU	78	W	Yes	High	?
Rinconadas del Valle III	CTU	73	W	Yes	High	?
Rinconadas del Valle IV	CTU	94	W	Yes	High	2011
Rinconadas del Valle V	CTU	112	W	Yes	High	2015
Rinconadas del Valle VI Etapas I y II	CTU	179	W	Yes	High	2016
Rincones de San Francisco	Hogares, comercio e industria	260	N	Yes	High	2002
Rincones de Santa Rosa	Oscar Banda	8	S	?	?	2005
Rincones de Sierra Azul	CTU	176	SE	No	Social housing	2004
Rincones de Sierra Azul II	CTU	277	SE	No	Social housing	2004
Rincones de Sierra Azul III	CTU	283	SE	No	Social housing	2005
Rincones de Sierra Azul IV	CTU	302	SE	No	Social housing	2005
Rincones del Pedregal	Deportivo del Norte	95	NW	Yes	High	2005
Rincones del Pedregal II	Deportivo del Norte	39	W	Yes	High	2016
Rincones del Picacho	Materiales industriales Chihuahua	151	NW	No	High	2005
Rincones del Sacramento	Cartonera de Chihuahua	62	NW	No	Medium	2005
Riscos del Ángel	ISI	140	N	Yes	Medium	2006
Riscos del Sol I	Novourba	375	N	Yes	Medium	2005
Romance	YVASA	2561	E	Yes	Medium	2008
Romance II	YVASA	519	E	Yes	Medium	2016
San Cristóbal	Impulsora REYSA	49	NE	Yes	Medium	2005

San Gabriel I	Campestre Las Carolinas	196	N	Yes	Medium	2006
San Gabriel II	Campestre Las Carolinas	195	N	Yes	Medium	2006
San Gabriel II	Campestre Las Carolinas	197	N	Yes	Medium	2012
Santa Mónica	Reynalda Salmon	259	N	?	?	2007
Seratta 36 I	?	70	SW	Yes	?	2016
Seratta 36 II	?	173	SW	Yes	?	2016
Seratta 36 III	?	85	SW	Yes	?	2016
Sol de Oriente	Grupo Ruba	577	SE	No	Social housing	2008
Sol de Oriente II	Grupo Ruba	578	SE	No	Social housing	2008
Sol de Oriente III	Grupo Ruba	277	SE	No	Social housing	2010
Sol de Oriente IV	Grupo Ruba	61	SE	No	Social housing	2010
Toscana Rezidencial	Casa Atlas	141	W	Yes	High	?
Valle de San Pedro	Grupo Ruba	329	N	Yes	Medium	2007
Valle de San Pedro II	Grupo Ruba	215	N	Yes	Medium	2016
Valle de San Pedro III	Grupo Ruba	537	N	Yes	Medium	2016
Valle del Sauco	Corporativo Inmobiliario del Norte	385	N	?	Social housing	2012
Veneto Fraccionamiento	Grupo YVASA	90	E	Yes	Medium	?
Verandah Residencial	DGA	101	SW	Yes	High	?
Veredas del sur I	Productora agrícola de Chihuahua	171	E	Yes	Social housing	2008
Veredas del Sur I	CTU Hogar	108	SE	Yes	Social housing	?
Veredas del Sur II	Productora agrícola de Chihuahua	131	E	Yes	Social housing	2010
Veredas del Sur II	CTU Hogar	65	SE	Yes	Social housing	?
Veredas del Sur III	CTU Hogar	377	SE	Yes	Social housing	2015
Veredas del Sur III	CTU Hogar	131	SE	Yes	Social housing	?
Verona Residencial	Grupo YVASA	?	E	Yes	High	?
Veteranos	Mario González	2	SE	No	Social housing	2012
Villa Del Prado	URBI	?	SE	?	Social housing	?
Villa del Rey I etapa	IOSA	97	W	No	Medium	2002
Villa del Rey V	IOSA	135	N	No	Medium	2005
Villa Santa Lucia	IVI	13	SW	Yes	High	2009
Villa Santa Lucia	Casa Atlas	182	SW	Yes	High	2012
Villas de Nueva España	Campestre Las Carolinas	20	S	No	Medium	2011
Villas de Nueva España III	Campestre Las Carolinas	13	SE	No	Social housing	2010
Villas de San Cristóbal	Plaza Habitacional	186	NE	?	Social housing	2011
Villas del Sol III	Cindy Cuevas	3	N	No	Medium	2012

Villas Los Nogales	David Álvarez	120	S	Yes	High	2007
Vistas del Norte	Grupo Ruba	2309	N	No	Social housing	2010
Vistas del Norte II	Grupo Ruba	2,546	N	Yes	Social housing	2014
Vistas del Pedregal	Grupo Valles	24	W	Yes	High	2008
Vistas del Prado	?	875	N	Yes	Medium	2016
Vistas del Reliz	Construcciones y diseños de Monterrey	123	W	Yes	High	2010
Vistas del Valle	?	108	W	Yes	High	2014

Annex 2. Interview with Benito Rodríguez, director of municipal institute of planning (Instituto Municipal de Planeación, IMPLAN)

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. Could you tell me about the structure and duties of IMPLAN?

IMPLAN is a municipal decentralized organism, which aims to satisfy a binding function with civil society. Through IMPLAN and its council, which is a civil society representative council, the fulfilment of planning instruments by the municipal and state authorities is monitored. For this objective, there are linkages between different institutions from both governments. With the help of a technical team, IMPLAN creates strategies and public policies to guide the **city's development**. **Some of these are sometimes unsuccessfully driven due to the authority's priorities. For the past two years, IMPLAN and the municipal government have been able to cooperate successfully.** The municipality has followed the development municipal plan, the main instrument under which the mayor works and which was built taking into consideration the contained strategies in the urban director plan (PDU). From my experience, the cooperation with the state government through the urban development and ecology secretariat (SEDUE) has not been as good since they have been acting in a more political than technical way. IMPLAN binds with the municipal urban **development direction (DDUM)**. **IMPLAN attends cases dealing with neighbors' reactions to urban actions, which in a way promote policies like higher densities and urban fabric integration to be more efficient as urban structure but also harm in many cases the neighbors' rights.** For example, there is a 700m² land in Quintas Del Sol, with a H25 density and a developer wants to build an apartments complex. The law and the PDU allow the developer to construct such project but the neighbors are opposed to it. In this case, IMPLAN proceeds making a social and technical analysis determining the possible impact of this project to neighboring properties. Even though IMPLAN develops technical opinions, these also consider the social impacts. What is contained in the law cannot be separated from reality. Quintas Del Sol was constructed to be a single-family housing project. IMPLAN is a binding instance, between the society and the authority. It has a technical base but considers what is not written. Other case, is Cantera avenue intersection where traffic lights were removed benefitting 7 out of 10 car drivers. Plan Tabalaopa Concordia considers an avenue to reconnect the southeast part of the city. There are many problems in this area, such as lack of infrastructure and land ownership regularization. In this case the neighbors approached IMPLAN to ask for help, and they conformed a group out of 5 neighborhoods.

The council is the instance that determines IMPLAN's actions. It is composed by 36 counsellors, which are the civil society representatives. The council is divided in 4 sectors with the same number of members. One is the government sector, representing municipal, state and federal governments. Other ones are the academic sector, representing different universities and schools, **and the civil society organizations' sector, composed by colleges of engineers, architects, etc.** The last one is the private sector. **Some mechanisms are being implemented to optimize the council's decision making, such as voting should be done by at least 75% of the members and each group must be represented when the voting takes place.** This might not be well received politically (the architect means that sometimes the authority wants to have the ultimate decision). In Mexico

there is no city manager figure, and society driven movements are emerging. We are now experiencing the system against the system.

2. Is IMPLAN, being the linking organism between society and the municipality, involved with security perception in gated communities?

Yes, it gets involved but also very limited. From over 15 years, privative housing developments started to spread, which originally were planned to be condominiums or high income housing which was motivated mostly by a status statement and had impacts in the society because even to get a liter of milk you had to use the car. Subsequently, from 2007 or 2008 zones that were not designed to be closed were closed because of security reasons. In some way, that started having the same effect, interior communities separated from neighboring communities and both have impacts in terms of mobility and public services provision, such as waste pick up. IMPLAN is contrary to all of that, but the neighborhoods that arrive today to be revised, they do so because in a way they had the right to be built through the PDU. What IMPLAN is actually doing is promoting a non-growing urban sprawl, to respect the size of the city that was established in the latest actualization of the PDU. The city size cannot be reduced because in such case, the rights of the people that one day acquired permission to live in a certain way (in this case, the ones that live in gated communities) would be violated.

3. Is it the developer that develops these type of neighbourhoods or is it the people that wish to live this way?

It works both ways. The developer constructs what people is going to buy. There is a demand for this product, and therefore there is an offer. Nowadays people feel safer, and you can notice that in the city. Even so, people are starting to aspire to live in denser developments, like apartment buildings. One of the public policies that started in IMPLAN is the urban bonus (bono urbano). It firstly contemplated Chihuahua downtown and it was created to incentivize development in this area by taxes reduction. The main objective was the downtown re densification. Nowadays it not only considers the city downtown but also the 3 urban sub downtowns: north zone (Dostoyevsky), south west (presas) and south (deportiva sur). There 4 zones are linked by the public transportation corridor that are established in the mobility plan. If any action is developed in one of these 4 zones the developer is subject to obtain the urban bonus benefit. This is one of the public policies that is being driven to promote a higher density. Some developers are not attracted by this benefit with the argument that it only represents a 2% saving but the reality is that they already own land at the outskirts and will continue to develop there. Truth is, such developments continue to get sold and their price is really high.

4. What is the position of the IMPLAN regarding gated communities development?

If it was up to us, we would control such developments. Because they do have those impacts (low density development, social segregation, influence on urban security perception) and others. They have an impact on mobility and the environment. They have a very strong social impact, living in one of those secluded developments implies that more time has to be invested on commuting. That time reduces life quality and it even has an economic dimension. IMPLAN is trying to promote that new developments occurred within contained areas. The actual city size has territorial reservations to develop until 2063 with the actual densities which are the lowest in the country. From my point of view, the permissibility to continue developing these housing typologies (gated communities in the periphery) has to stop in one point. The Cantera case is a

serious mobility problem. It is caused by many new housing developments that use this avenue as the only in and out way.

Many developers are basing their selling strategies promoting easy access to their developments. This access is translated into few main avenues that end up stuck with traffic at peak hours. It happens the same in many areas of the city. The south-eastern gated communities only have the highway to Aldama to access their neighborhoods and therefore this road suffers from high traffic congestions. It happens the same north of the city. This housing model is proving its **malfunctioning with Chihuahua's urban structure. The government does not** have the technical nor the economic capacity to solve it.

The city is a chaos, there are 572,000 registered vehicles plus the non-registered ones they sum up an approximate of 600,000 cars for a population of less than 900,000 inhabitants.

5. What is the IMPLAN doing to counteract these effects?

IMPLAN has been primarily working with public transportation and cycling promotion and public space re appropriation. If IMPLAN had the attribution to stop those types of development, we would do it but it is against the law and in this matter the developer has the reason.

6. Is the developer the one that has the priority?

They do because they acquired a right to develop land that is subject of these conditions (bad connection with urban structure) and that right cannot be revoked.

7. What can be done to promote that land is developed under certain parameters (ensuring connectivity, infrastructure, public space, etc.)?

IMPLAN is trying to raise citizenship awareness. At the end, the citizen is the one that will take the decision whether or not to live in a gated community. Developers use a promise of security to promote their developments but if one checks the statistics you will notice that there is also crime incidence in gated communities. There are other security concepts in which IMPLAN can make an influence and can be attended: ensuring that children can go out and play, this is perceived **differently in a gated community and in an open neighborhood. In this matter "zone 30" is being promoted in open neighborhoods from homogenous zones, where the maximum permitted velocity is 30km/hour and inhibit that the neighborhood is accessed by everyone (by car) to allow that the life inside that polygon is the life from the people that live there. This project is not yet implemented, and the idea is that it will link to other projects like safe sidewalks and cycling routes. For example, there is a high demand for parking, if more parking is constructed the demand will raise. Maybe it would be a good idea to let people know there is no parking available. The main objective of most of the initiatives and programs the IMPLAN has implemented is to raise awareness, like "Via Recreativa" and to make that difference start from children. To make people ask themselves, who has the responsibility to do some things? To make a difference? "Casita Ordenada" tries to educate children to understand the city would work better if it was in order. There could be many plans and projects, but most importantly there should be an engagement with the society.**

In the 3 “Presas” zone, there were many uses but it was modified to ZEDECA (strategic zone of controlled development, Zona Estratégica de Desarrollo Controlado) everything can be constructed there but the environment must not be affected. And it turned into an official use, which allows mixture.

IMPLAN is no authority, it only gives an opinion. IMPLAN has a strong back up. It is part of the Mexican association of IMPLAN, and the Chihuahua one coordinates the north zone composed by 36 more. By no order of the municipality can be dissolved because it has support from outside. When the right people do not know about a problem, nothing happens. In one of the municipal public works warehouses many cycling parking stations were found. New and abandoned.

Annex 3. Interview with Jesús Vargas, subdirector of the department of urban programming from the municipal urban development direction (Dirección de Desarrollo Urbano Municipal, DDUM)

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. Could you tell me about the structure and duties of DDUM?

The municipal urban development direction is in charge of programming and managing human settlements in Chihuahua municipality. It obeys the PDU, in base of constitutional premises and the human settlements law. These two infer in the urban development law where it is established, where are the obligations that both the state and the municipality have to preserve the constitutional precepts. In that sense, the municipalities develop their own planning scheme. In this case (the municipality of Chihuahua) there are many vehicles. One of them which is established in the sustainability urban development law, is the participatory planning. This means that the community participates in the planning process of its own city. At the end, we are talking of citizens that LIVE the city. In this sense, the authority (in this case DDUM) is an entity that administrates the urban process and for it there must be a legal framework: federal and state laws, and municipal codes and regulations. Between the municipal regulations and the state laws is considered the Chihuahua state planning process. There is a state urban development plan, municipal urban development plan, population center plans, partial plans, master plans, subdivisions and the latest part would be the architectonic project. This framework, both the urban development plan and the regulations, allow to establish which are the policies and strategies that the urban development direction has to follow to fulfill its legal obligation of arranging and managing the city development process. The urban development plan establishes growth zones. This plan is designed up to 2040. Chihuahua has land reserves up to that year according to the population growth and land occupation trends. The density oscillates depending of the number of people per family and the amount of population that occupies a certain area of land. In the last 10 years, there has been a population growth trend decrease, so instead of 2040 the land reservations should be enough to contain the growth until the year 2065. The life rhythm is also changing. Young people take longer to get their own place, and this also affects the territory occupation scheme. Nevertheless, the ones that propose the estate offer are the developers and the plan only regulates the process.

2. What is the difference between DDUM and the secretary of urban development and IMPLAN? How these three cooperate?

The state regulates the conditions under which the municipalities establish compliance regulations. For instance, when a municipality lacks an urban development plan that establishes growth guidelines the urban development secretary (state level) attends municipality requests. The secretary is in charge of the scheme under which human settlements exist and the large infrastructures that link the municipalities. The municipal governments attend in a practical manner what happens inside the municipality boundaries. Speaking of the relationship between municipal urban development and IMPLAN, both IMPLAN regulations and the sustainable urban development regulations for the municipality establish that IMPLAN is an advisory

technical organism that helps in certain matters the DDUM labors. For example, if the urban development plan has to be updated IMPLAN helps evaluating new planning processes or new growth zones. A lot of the DDUM labor attends the managing of the urban development plan (PDU). Both institutions collaborate.

3. Speaking specifically of neighborhoods, what is the housing development process? Is there an established plan or is it a private initiative?

The locality has a regulatory framework. Land uses are regulated through an urban charter. The urban charter establishes three basic areas: the actual urban area, the growth reserved area and the ecological preservation area. The last one is the environment that delimitates the population center. The first two areas have either urban or developable uses. The development will occur when the land owner promotes it or the authority through an instrument obligates it. A determinant factor in the development case is that most of the land in the city is privately owned. Therefore, the authority can only regulates what private actors want to do, taking as a premise the collective good. There cannot be an action against the private interests but the collective good must be preserved. Some of the regulations that all lots are subject, are: land use, land exploitation (COS and CUS), heights, number of parking spots and permeable areas. The first procedure to build a neighborhood is for the developer to get the land use constancy to see what is and what is not allowed. The project must not impact the environment negatively.

4. What is the process to approve a new neighborhood project?

All paperwork must be done by the land owner. The urban potential of the land must be established (what is the land use? What are the topography, infrastructure, etc. restrictions?). The developers must comply with a series of requisites that go from the land use to the service provision feasibility (water determined by the JMAS, municipal board of water and sanitation and electricity by the CFE, federal electricity commission). With the feasibility constancies, the developer must integrate an executive project that adapts well to the environment conditions (topography, hydrography). This project has to be validated by municipal-managers and afterwards by the city council. To obtain authorization to develop a neighborhood, environmental and urban impact studies must be done. In comparison with other municipalities, Chihuahua is very strict regarding the way the land is developed.

5. What is the vision DDUM has of how the housing development in Chihuahua SHOULD be?

DDUM follows what is established in the urban development law, regulations and the plan. The set policies for city development. If the paradigm is a socio residential segregation due to land uses aggrupation, this will be reflected by the exploitation coefficients table according to the established density. This attend the operative part. The authority could interfere into financial adjustments associated to value capture, but they are actually not doing it. For instance, if the government invests into infrastructure that will benefit landowners. Therefore, the expense of such infrastructure must be transferred to the land in a balanced way, the ones that have the higher benefit will also have the higher cost. Another instrument that is also not used, transfer development potential, where utilization coefficients are transferred in order to be used in another area where development is still possible. The city is influencing that added value, and therefore the city should obtain some benefit in order to invest it in developing. This administration (the municipal government from 2013-2016) had a mission of a compact city, due to the present low

density. Since the development director plan paradigm cannot be changed, the influence area resided in tax incentives. Developers that construct in urbanized areas or sub utilized lots would pay less to the municipality for the development. Empty lots have a high cost to the city, because they are provisioned with services that are not being used. In addition, if the authority does not encourages developers to construct in these areas, they will do at the outskirts and therefore the service network has to grow. The government, cannot manipulate the estate market. Demand and offer are self-regulated.

6. What can be done to integrate gated communities into the city?

There is a low density effect that can be counteracted with policies that will eventually force densification through benefiting the private actor (economic incentives through tax condemnation). The problem is that that vision is disassociated with the city model currently being sold. The atypical violence period Chihuahua went through some years ago had social and economic impacts. The consequence was that 6 years ago, the municipal code was modified to allow neighbors to close their streets and those modifications still exist. The model existed because gated communities existed at that time but it became stronger when streets that were fully integrated in the urban structure became closed. To close partially the city to benefit some citizens implies the private enjoyment of public space. It was established as an obligation for the residents of the streets to be closed to take care of cleaning and maintenance of public space, as well as repaving services if necessary. They also had to let free access for emergency services (ambulance, firefighters). The permission also requires an annual payment and justification. If the authority determines there is no reason enough for them to remain closed, the street can be reopened. Lately, there have not been many closings and the main reason residents have nowadays to close a street is to impede the access of too many cars. This has to do with the high motorization rate the city has. Many of these applications are denied because is considered no reason enough. There are other tools that could be implemented for this purpose, not necessarily a closing.

The mobility problems the city has are based on the high amount of cars, not in the lack of infrastructure. Distances are also increasing. Employment could be less concentrated. This has to do with the constructed city. The scheme of the current developing cities are proposals that developers make. There is no regulation regarding the walls.

7. What percentage of gated communities in Chihuahua is under a condominium regimen?

Very few. Because the developer has no incentive to do them that way. The condominium regime allows the developer to donate the required area for services in a different place. The green area remains there, but the one for services must be outside the polygon because it is a public area. All residents have to pay and manage services: lighting, cleaning, etc. And this is legally established under the regime. The vast majority of gated communities in Chihuahua are not under this regime. The municipality administrates the “public space” inside them, but it is allowed for them to have controlled access because the neighborhood was created with this conditions.

8. Isn't that illegal? That the space inside them is legally public?

It is unconstitutional in a way. On the one hand, there is the estate offer that would not be that way if there was no demand for it. If the residents didn't want an access point, there would not be. They wish to live in a gated community to feel safer. If one wishes to enter one of these communities, it would be legal but the residents from that particular neighborhood will not allow it. Both the developer and the authority would not have a role in it. The authority only regulates,

and listens to society demands. Quintas del Sol apartments case again. Beyond just listening to **the community desires, the authority must find technical justification. But at the end, the people's opinion prevails.**

9. **Wouldn't be useful to have certain strategies or tools to ensure desirable parameters (mobility, public space, pedestrian connection, etc.)?**

There are. But in the city of Chihuahua is happening according to the developer interest. The developers steer the city growth.

10. **Would it be possible to regulate at lot level? To instead of giving free will to the developer to design... certain parameters would be ensured.**

Car use is being promoted. The scheme of urban structure establishes district nodes, to ensure heterogeneity of uses. And the main corridors are enabled as mixed use area. The macro lots, in which gated communities single projects are developed limit those dynamics (speaking of mixture of uses). Sometimes, the authority negotiates to favor the user by the closeness of commercial areas. Nevertheless, there is no regulation instrument that obligates the developer to develop such services at a close distance. There are partial plans that establish land uses, but the instrument that should ensure them is not developed yet because it should be associated with a law. For example, in other cities the government by law can demand a land owner to either develop or sell. Anyhow Chihuahua is in the top 10 of the cities with higher life quality in the country.

11. **What is the stand point of DDUM regarding social segregation (since some of the larger construction companies own big portions of land and it seems it is up to them to decide where social housing and where residential housing will be placed) in promoting a more inclusive city?**

Mobility, connectivity and accessibility. Mobility through the BRT. Secondly, spaces could be more inclusive. Those impoverished areas, should have social services and infrastructure. On the one hand there is a social legacy, based on these services and the second one an economic legacy. It is true that social segregation is being promoted, but that is deeply related to the estate market. It can be regulated through mixed uses. That is the next stage of the PDU, which allow different densities and uses through them ensure service closeness. It might not be reversible to have richer areas in the city, or the fact that people with higher economic capacity wish to access one of those areas. For instance, in the historical downtown is only inhabited for 350 people according to the 2010 census. This in part is promoted by gentrification processes, people are no longer able to pay to live in that area or the area has changed its vocation and now it is desirable to live someone else. The current exclusion of the rich people is voluntary. They wish to live in their own world, with people they identify as similar to them. This is aspirational, some other groups also wish to live in a gated community. There are two types of housing city management: the auto management, the people that look for a land to live and might end up occupying a risk area if they do not have the resources, the involuntary exclusion, and the rich that look for a privileged place to live and exclude themselves. Secondly, the developers that construct a whole neighborhood. The city is an economic phenomenon with social repercussions. Speaking of security a desirable land should have services, should be able to pay, and should have the best location. There are different types of desired security, legal security (papers in order), physical security (not in a risk area, well-constructed houses) and social security (no crime).

12. Which elements do you consider have an influence in the urban security perception?

Both tangible and intangible. Tangible are the walls that also are a status statement. People like to feel accepted, but very often these communities do not promote social interaction. The life cycle of neighborhoods. At the beginning they are occupied by young families with children that use the park... but how is it going to evolve? Multifunctional spaces should be constructed instead and that is the same that happens at city level with mixed used. If one space is only labelled for one use, only certain dynamics can take place. The city has different challenges to the ones it had when the PDU was developed back in 2009. Now the challenge is to densify. The only financial source that the city has is the land taxation. What would happen if there is an economic crisis?

From the developers, a long time vision is needed. For them to develop environments that contribute to a better life quality, instead of an immediate solution to recover the investment.

Regarding security, SEDESOL developed a public space rescue program in 2000, based on three theories. The public space is going to be better preserved and safer the more it is used. Crime is inhibited when people are watching.

Annex 4. Interview with Juan Carlos Bautista, director of RUBA (developer company)

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. Could you briefly introduce Grupo RUBA?

It exists since 1980. Enrique Terrazas was the biggest actionist. It started in Juarez but is not present in: Chihuahua, Torreon, Saltillo, Monterrey, Tijuana, Mexicali, Hermosillo, **Guadalajara...** Cities mainly in the north of the country. Lately in Guadalajara, Queretaro, Leon, Veracruz, Estado de Mexico y Cancun. Approximately 4 years ago, the biggest development countries in the country fell. They used to construct around 50,000 houses per year. And were the 1, 2 and 3 biggest in the country. RUBA once made 17,000 per year and now 12,000 and is the 3rd main in the country, in terms of unities and cost effectiveness.

2. What does RUBA offer?

All types. When the government policy for social housing of President Fox, RUBA focused on it. That means a high volume of small houses. Back then, it was very focused on social housing, has always developed medium level but recently (since 2 years) it constructs also residential. In Chihuahua all segments are present.

3. Specifically in Chihuahua, what is the offer?

In unities, RUBA constructs 1000 houses per year. From those 800 are social housing, 200 are medium and 30-50 residential.

4. What determines how much is constructed of each?

The market. RUBA has been working in Chihuahua since 1999.

5. Which physical and social characteristics have a neighborhood of medium-high income and high income?

Practically the same. The differences are the type of house and maybe some attributes are more generous. They definitely have to be a gated community. A neighborhood with one entrance and one exit. One check point where the residents can place a security guard that controls security. Since what happened 6-8 years ago in the city (violence rate increased) it is very difficult that people buy a house outside a gated community. RUBA has still some houses left, in neighborhoods from this level that are not gated and they are very difficult to sell, even though the price is way lower. What people also look for when buying a house is a vigilance system, composed by cameras in specific places (streets, parks) that could be monitored by the security guard as well as in the entrance to identify car plates in case something happens. Scenography is also important, something that looks appealing. The bigger and greener the park, the better. The type of house and the location are what make the big difference.

6. Why the current offer of residential neighborhoods is only gated communities?

Because of the people. In fact, people are closing their streets... maybe not anymore. But the main reason is insecurity. Supposedly also for a community belonging feeling, but mainly security. RUBA has a department that helps people build the neighbors committee once the neighborhood is sold. Even when the space inside is still public, the municipality does not do much. RUBA is even nowadays starting to develop gated communities for social housing, because people ask for it. In social housing there are hard vandalism topics, and the closer the neighborhood is, the harder for vandalism to occur. RUBA tries to promote residents bonding.

7. Does it have an aspirational part?

Yes it could be, but what people say is that they want to feel safe.

8. What are the regular physical dimensions of a gated community?

Around 80 to 100 houses. Many factors interfere in the size. One of them is the regulation. It is not allowed to have only one access for a certain number of houses. And people do not want to have more access points, and it also has an impact on the cost. It has also been learnt by practice that a gated community of more than 100 house does not work so well. It is more complicated to put the committee together. The smaller the gated community is, the easier to organize the residents. But they also must not be too small. For example, a case of 35 houses where not only wanted to pay for security and it was very expensive to pay for the rest.

9. How is the estate market moving in Chihuahua?

Medium income and residential are selling well, but social housing is currently lower due to the reduction of federal subsidies. People are less likely to buy when there are no subsidies available.

10. How much does the square meter of medium high and residential houses cost?

Between 5,500 and 8,500 pesos maybe, but it has a lot to do with the location. The houses might be exactly the same, but the land is more expensive in some areas. The cost of the land is determined by the market, it is speculative. It is 100% speculative. Why do we construct small houses in far locations? Because the land is cheaper. RUBA buys the land, but also sometimes makes negotiations with land owners.

11. Checking the webpage, it is said the residential neighborhoods offer a “lifestyle”, which lifestyle is that?

Good question...For a client to feel the satisfaction to live in such place, because of the location, security and scenography. To leave the job, and arrive to your neighborhood, where you are received happily by the security guard, to know that your kids were able to play in the park without being endangered.

12. To whom these neighborhoods are offered?

Regularly are young families. People that are just married. It has to do with having 2 levels. Most young marriages look for that typology.

13. What is the life cycle of a neighborhood?

Parents usually stay there living and the children go away. Houses from residential level are also harder to sell, because they are expensive.

14. How is it decided where a certain neighborhood will be developed? Where to construct social housing and where to construct residential

Based on experience. In Chihuahua, we all know where residential neighborhoods are placed (west). Services also influence.

15. Could you tell me about the re densification policies the municipality are trying to implement and how this relates to what RUBA does?

It is better to develop in urbanized areas where services are already provided. According to the municipality, there are land reservations to develop the city up to the year 2065 but in reality that area is pulverized. For a developer that makes 1000 houses per year, to build a neighborhood of only a few houses is just not profitable. Besides, not all land owners have the disposition to sell or to associate to develop. Some also want to sell at a very high price. Incentives from the municipality, like the urban bonus, are simply not enough against a high land price. Developers, like CTU and Grupo Valles already own big portions of land, and they develop there. They have therefore a high competitive advantage. The more compact the city is, the lower the cost.

16. How profitable it is to develop a residential neighborhood project in Chihuahua?

Very. But again, the problem relies on finding good land at a good price.

17. What is the process to develop a new residential neighborhood?

That's called the value chain. First, the land is looked for and purchased (or maybe an association). Then paperwork: subdivisions, land fusions or land use changes. Then comes the project, one part are the negotiations and the other is carried on by the project area (drawings, engineering, etc.). Once the project is completed, it is taken to the authorities, and this is the more complicated part because many instances have to authorize it (DDUM, JMAS, etc.). Once authorized there it a cost area, to calculate how much the project will cost. Afterwards comes urbanization that has a parallel bureaucratic process where at the end the municipality receives the neighborhood (streets, parks, etc.). Then houses are constructed, and cannot be sold if the neighborhood is not **"municipalized"** (it means, that in order to sell a house from a neighborhood that was constructed from scratch, it must have gone to the process of being received and recognized by the municipality as part of the city). Then comes the selling, divided into different types: social housing, medium income and residential. Legalization. At the end comes client service, which are the ones that help neighbors organize the committee.

18. What is the relationship with DDUM?

We know each other. We have worked together many times. We are constantly doing paperwork. The city managers commission has to approve the neighborhood, and this commission is presided by the DUM director. Is a constant relationship. The regulations are very clear but they also have ambiguities, and that you can negotiate.

19. Why gated communities are not being developed under the condominium regime?

Because the resident has to pay land tax for both and their common area. They also have to pay for lighting and waste management services. It is therefore more expensive for someone to live in a condominium than in the other regime, and that is the main reason why gated communities are not being developed under this regime. The fact that these neighborhoods have a check point and are gated without being under a condominium regime has been allowed by the practice, and the negotiation with the authority with time. In theory anyone can enter to them, but practically not. Through CANADEVI (national chamber of development industry and housing promotion) RUBA has looked to modify the regulations, in order to find real incentives to start constructing under this regime.

Annex 5. Interview with Guillermo Soto, director of municipal urban development direction (Dirección de Desarrollo Urbano Municipal, DDUM)

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

*The interviewee starts talking about urban development and gated communities prior to the first question

There is a huge disassociation between academic theoreticians, IMPLAN theoreticians and the **real life**. **The city is seen from the outside as a sustainable city (prizes from... somewhere)** and when you see it, it is a mess. There is a media manipulation in terms of urbanism.

I had already occupied the same position in 2010, when the city went through the insecurity crisis. Under my direction, the first demolition of an authorized closing took place and the first permission to close a street was given.

An ordinance was issued establishing the “game rules” to close a street. This ordinance was obligatory, and the direction of urban development had no power to deny it. The requisites to get a street closing are easy to comply. To get permission from firefighters, police, cleaning services... the entrance and exit of emergency vehicles.

Gated communities are an illegal figure, that over the years the habit has turned into legal. There are two legal forms to own land in the city: private property and condominium regime. There are only those two figures in the law. Many years ago, under a private property regime the council approved a gated community. But the public space in there, remains public. The street still belongs to the city and is maintained by it. Under a condominium regime, it is stipulated that the residents most pay a maintenance fee. And it is not legal to avoid the payment. For example, in San Francisco **when one neighbor doesn't** pay the fee for three months, his/her property can be auctioned. In conclusion, gated communities in Chihuahua are custom practice. They are not contemplated directly in any regulations.

1. Based on your experience, what is the reason for gated communities to exist?

The first one is status. The insecurity started some years ago, but the first gated community 30 years ago.

2. What defines the status of living in a gated community?

The one that having a bodyguard, a driver, to pay expensive restaurants. It is a way to establish an exclusivity area, a power symbol. To impede access to other people and declare certain zone. In Chihuahua, Campestre detonated the practice (Campestre is an exclusive golf and sports club that was founded 60 years ago).

3. Why the offer of medium-high income housing are only gated communities?

The market has responded to that product. People look up to other gated developments. Besides from offering exclusivity, you can emphasize security. They are current.

4. What is your personal opinion?

I believe the social tissue breaks or comes together due to people's habits. Segregation is a social and economic issue. It is cultural and not urbanistic. You cannot simply use urbanism to place the rich next to the poor, to solve social inequalities. What urbanism can do is to improve the situation, provide services.

5. Who is making the city?

The developers are the ones making city. They are the main actors. As well as they comply with the law, it does not matter what the direction thinks. There are some non-written aspects that can be negotiated.

6. Is there a way to have it established instead of just being a negotiation?

Yes and it is predicted in the law, in the PDU. It has the character of a law. The problem is that it is patched, and remains being patched every single day. There is a plan. But sometimes it lacks vision. For example, the roads' connectivity has to be planned before the city grows. But some omissions, are related to personal interests and corruption. Months ago, the municipality tried to change a huge area from ecological preservation to industrial, against what is established in the PDU.

7. What is the relationship between DDUM and IMPLAN?

IMPLAN is a decentralized organism. The municipal planning council has three branches: the technical area is IMPLAN, a technical council (28 counselors from 4 social areas) and an executive commission (human resources). IMPLAN is only a part and the technical council is above it. The problem is that the council is composed not only by experts on the matter.

8. What is the developers' role?

Real estate development is a business. Developers are businessmen, not architects or urbanists and their job is to make money. Everything that the developers have constructed has previously been approved by the authority. The urban disorder is multifactorial. Not only developers, the government, architects or the society.

9. What is the position of DDUM regarding the closing of streets?

Gated communities main reasoning is status. But regarding closing of streets, there is no position. The law has to be followed, and it currently allows street closings.

10. How can a joint of the different instances to take the best decision be achieved?

To modify the closing ordinance but it has to be a deputy initiative. IMPLAN could make a statistical study to measure how the closings have behaved and the impact they have had in the city, to give technical support.

From my architect point of view, if you see the street structure and it was well designed from the beginning, people that do not live there, have nothing to do in those places. Permeability is good, but there are reasons for gated communities to exist. I am against street closings but I understand the reasoning behind them. The developer cannot preview the city growth that is up to the authority to do.

Annex 6. Interview with Alejandra Varela, director of Observatorio Ciudadano (organization in charge of crime statistics)

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. Could you tell me about Observatorio Ciudadano?

Observatorio Ciudadano emerged in 2008 due to the increased levels of violence in the city. Ciudad Juárez was even considered the most dangerous city in the world. It started by the movement of 3 businessmen. Co working with the authority they created work tables now called security and justice tables. Also looked for community participation in security success models. In order to do so, they travelled to Medellín and saw a model similar to Observatorio. With the help of Colombian advisers, started working in Juárez and Chihuahua. They started developing a crime characterization model. This model includes different parts: economic development, crime geo referencing, health, education... to develop a scheme and understand the situation in both cities. In 2010 the government changed, and these businessmen agreed with the candidates to create Observatorio as an auxiliary body of the security system. On the other hand, an escrow was created to ensure the subsistence of Observatorio. Right now, 32 000 businessmen are currently contributing a 5% of the payroll tax that goes to a fund called “Fideicomiso para la Competitividad y Seguridad Ciudadana” or FICOSEC (escrow for competitiveness and public security). FICOSEC has currently three main projects. In 2012 the first project, Observatorio Ciudadano, started working as a civil association. Observatorio works recording and measuring crime and presenting it through an annual atlas. In 2013 the other two organizations emerged. The second one is Consejo Ciudadano (citizen council). This project has two objectives: on one hand to promote denunciation (could be anonymous on one line, and on the other one psychological and legal help are provided) and on the other to help young and adults that have just come out from jail to readapt into society (therapies, job finding, continue studies). The third is CEDIPOL (sport center for policemen and firefighters) to dignify the figure of policemen and their families, to motivate them and avoid them getting involved in corruption. In conclusion, FICOSEC has three projects. Observatorio Ciudadano maps crime and Consejo Ciudadano has the direct contact with society. Once hot spots of crime are identified, relevant actions are taken. All actors are involved and in work tables the issue is presented and discussed among them. Also, creating awareness and a culture of legality.

Inside Observatorio Ciudadano there are three areas being attended. The first one is prevention, primary for people that have not committed any crime but because of the area they live in they might either commit it or be a victim and secondary for people that have committed administrative offenses (minor problems like drinking alcohol in the street or playing loud music). These geographical areas are previously identified. The second one is security, which involves statistics of high-impact crimes, a telephone survey asking people if they have been victim of a crime and if they denounced it and a bigger survey of security perception at state level, segregated by quadrants (unlike of what INEGI does only at municipal level). From this year, Observatorio is not only working with the office of prosecution as the main source of information but also with insurance companies, media, hospitals, neighborhoods committees,

SEMEFO (forensic sciences institute). The third area is enforcement and administration of justice. This is not very much explored at national level and it involves analyzing what is happening in the judicial process, looking at how many cases that were presented were also processed before a judge. At the end, documents evaluating the judicial process and recommendations are presented.

2. Which are the high-impact crimes?

There are six, which are not the only ones identified in criminal laws but are the ones used in statistics. Homicide, extortion, kidnapping, robbery to pedestrians, home burglary and robbery to businesses. All have with and without violence variables.

3. Which factors influence crime incidence and insecurity perception?

From March 2016 the crime incidence started to increase again and the factors have not yet been identified. Most of these crimes are related to organized crime, and not exactly to a geographic location. This is believed for many reasons, like the modus operandi and the usage of high caliber weapons. But overall media has high influence on security perception. Also, from 2010 due to the violence increase most people started to feel insecure and as a consequence they started to install cameras and close their streets. It is also hard to work against crime if people do not denunciate and this happens very often in the case of home burglary. The statistics are really low on that topic **and doesn't mean that is how it is in reality. But the majority of home burglary with violence is denunciated, because life was exposed.** There is a black cipher, and the neighbors committee are usually hard to work with because they do not rely on the authority. Lone neighborhoods in the periphery without basic services are also very vulnerable to crime (she speaks of social housing). Some neighborhoods that are really far from work places remain alone all day and are therefore an easy target for crime.

4. How big is the incidence in gated communities that are also located in the periphery but planned for medium and high income families?

The city is divided into quadrants that are municipal public security quadrants because that is the police reaction area. Each quadrant has many neighborhoods, and the city is divided into 62 quadrants. Inside one, services are year by year identified and how that influences security. For example in July, there were many burglaries in a gated community near Plaza del Sol. The place where crime took place is not only identified, but also the place where people that commit a crime live. Many times public spaces have an influence, like the broken windows theory. The Atlas is a **mixture of data, from INEGI, CONAPO, fiscalia, etc. The atlas identifies all quadrants... population, services...etc. and everything is shown in a characterization model. How each profile is doing and which are the reasons...The objective is not only to inform people about crime statistics and increase their fear, but to promote a culture of legality and understand that as a society we are all co responsible. And also a community culture.** The gangs and people that belong to a criminal group will not typically commit a crime in their neighborhood, due to a sense of belonging and respect. They typically go and commit the crime somewhere else. But there is a theory that analyses that the crime is still committed inside a certain ratio. The trend to close streets, also impede the access to streets that are public. The perception is presented as the results from the survey of perception and victimization. The ideal would be to pair the information from perception and information from the atlas. Homicides occur indistinct of the zone. That crime in specific.

Annex 7. Interview with Gabriel Valdez, former subdirector of the department of urban programming from the municipal urban development direction (Dirección de Desarrollo Urbano Municipal, DDUM)

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

*The interviewee starts talking about urban development and gated communities prior to the first question

The boom of closing streets went from 2008 to 2013. Nowadays the closings are not as strong, but that derived in all new neighborhoods being developed as gated communities. In the opinion of developers, if they do not do gated communities, they do not sell. Gated communities are against what is established in the free transit article established in the constitution. Gated communities do not promote an intensive use of the land, and therefore promote a low density.

Closings that people asked, are more than a 100 but neighborhoods that were designed to be closed, almost all were developed in the last years. In the city there are approximately 300 colonias and 750 fraccionamientos. About 100 condominiums, most of them commercial. 2500 residential houses are sold each year between Ciudad Juárez and Chihuahua. None of these neighborhoods, at least from the past two administrations (2010-2013, 2013-2016) is open.

In practice, it is seem that gated communities must comply with certain physical characteristics in order to be sellable. Like having a certain number of houses, just one access point that is located in the center.

In the case of Quintas del Sol, those apartments are possible in the regulations. So if the residents do not want that to happen, the norm has to be changed. It is inhabited mostly by older people.

1. Which is the percentage of housing under condominium regime in the city?

There are approximately 290,000 households in the city, and maybe only 5% is under that percentage. That 5% includes Chihuahua 2000, Infonavit Karike and the apartments near transit direction plus the ones from the towers. All those are vertical. Grupo Valles does promote **condominium regime**. **CTU doesn't. There are very less incentives**, both for the developer to construct and for the buyer. It implies a higher land tax, but it should be lower, because people pay for the maintenance of the common areas. To work on those incentives, is a matter of political will. At first glance it seems to the municipality that they would get less money, but they have to analyze that they would have less expenditure. If the gated communities were under this regime, they would at least free duties to the municipality regard them.

2. Based on your experience, which are the strongest effects these developments have in the city?

They complicate mobility. They all have one main street as exit and entrance. They do not plan a secondary road trace that relieves that traffic. La Cantera is one example. To sum it up, the proposal of gated communities do not favor the road structure. Distances increase, and commuting time does as well. Segregation is also another effect. It is social and of uses.

Complementary uses are very distant from one another, and the short distance traveling is limited to leisure purposes. It is a social effect that goes to the extent that people often do not even know each other.

3. What can be done? What can DDUM do?

It is hard to do something, because it has an economic effect. That is what people buy, and therefore that is what developers offer. There should be a more active participation in terms of regulation. This participation should aim to conduct development in a better way, not stop them. To have a lot of regulations could stop development **and one of the main engines of Chihuahua's** economy is the construction industry. There are more than 20 economy branches in the city that are linked to construction. Given that premise, there should be a mediation between regulating and let the developer do. Developers are not charitable, but can have a social responsibility and ally with the authority. It is important to consider cultural aspects. People in Chihuahua want to have their own house, their own lot.

4. How is the value determined?

INFONAVIT gives credit to people that once to buy a house based in part on a score that is determined with the mixture of uses in the area. In the west of the city, I feel the value is established due to conditions of status. It has nothing to do with a systemized valuation.

It would also be a good tool to punish land owners that do not develop their land. To charge higher taxes. They represent a cost to the city and are not remunerating. The municipality should be a facilitator. Allow development.

5. What about the public space inside gated communities?

Legally anyone could enter gated communities, but the residents won't allow it. The regulation does not coincide with the law. When this tolerance was given, the public space was encroached. Even in groupings of gated communities. For example, where the engineer lives, three gated communities are a group that share a club house. Residents from all three can use the club house, but they cannot use the park from another one. The children are not allowed to go and play to the other one. To that extent of segregation they function. There have been cases where, there have been home burglaries **that the neighbors didn't even noticed. Because these neighborhoods do** not promote community building.

The gated community where I live has 142 lots. One committee with community commitment used to promote social reunions. The authority asks for the developer to create a committee, once the neighborhood is completed, help the neighbors establishing the committee and explain they have to care about the maintenance. In some way, this is the compensation for privatizing public space.

Donation of new neighborhoods must be 11-12% of the total area. The biggest part goes to facilities and the rest to green areas (from 11% maybe 6.5 to facilities and 4.5 to green areas). Most of the neighborhoods in the west, leave the green areas inside and facilities are located in other part. There is no regulation for the size of the neighborhoods. The challenge of the authority is to update. The regulations are generalized and the city has different areas. Like cadaster constantly updates, urban development department should too. The norm has to be adjusted.

The authority won't remove closings. That happened only once and had a high political cost. The removal had even more social claim than other events. When the closings started and the regulations were changed to allow that tendency, the municipality tried to charge a fee for each lot inside the area to be closed to motivate neighbors not to do it. But still the closings took place and they did not pay. Years ago (before the 80's), the construction of a wall was unthinkable. Once, a stone wall was constructed close to the today Palomar park. The wall was constructed for security reasons, Emiliano Zapata was a problematic neighborhood. Back then, that wall seemed insulting. Children used to play in the streets. Nowadays, that does not happen. The perception of security took urban measures: the closings. This urban measure to attend problems of public security had no big incidence in high-impact crime. Yes people have in a way avoided to have unknown people wandering in their streets, but whoever is going to commit a high-impact crime will do it taking circumstances aside. The authority has the obligation to better the security conditions.

6. And what about the life cycle of neighborhoods?

It is what is happening now in San Felipe. Houses are now inhabited by old people. Sometimes they look to sell, but in the case of San Felipe who buys wants to build an office or a store. It is a cultural issue, when we buy a property, it is forever. There are many social and urban phenomena related to it. Nobody does urban research. Despite of the many schools that are present in the state, there is no urban research. There is no way to reverse it. But at least if research is done and this phenomenon is documented, could be a first step. The regulations have to change constantly. The city is an evolving entity.

Annex 8. Focus group with residents of Valle del Ángel II

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. How big is the neighborhood? How many houses does it have?

Lady 1. I am not sure, about 80 houses I think.

Lady 2. I do not know, but I do now it is small compared to others.

2. **Could you tell me about the neighbors committee? (which people integrate it... what does it do)**

Lady 2. The direction has just changed a couple weeks ago and it is now integrated by 4 women. They have struggled because the last administration did not put pressure into collecting the fees, and therefore many people did not pay. In these residential subdivisions, a lot of pressure has to be put in order for all neighbors to pay their fees. Actually, each administration has a different idea, of how often to do meetings, and discuss which the necessities of the neighborhood are.

Lady 1. The maintenance fee includes security, the guards at the entrance. Maintenance of green areas, or replacement of a light. But some things are paid by the municipality.

Lady 3. We pay for example for the paint of the walls. Being honest, the previous administration was us. One administration previous to us, worked really well. They made social activities, fixed the walls, etc. But when we had the opportunity, we did not do our job well. We did not charge the fees, we were not well organized, and we made no social events. As a result, there is currently a deficit in the guardhouse. Now we have “**cholos**” as security guards. **The other day the security guard asked me how expensive my bike was, and if he could use it. Now I fear that a security guard would steal my bike. The thing is, the security companies have certain levels. Security guards are like a “product” and the once that offer a better service are more expensive. So, since we are not paying... we do not have good security guards. We actually owe 3 months of fees. There should be a business in charge of the administration of the residential subdivisions that would care about charging the fees, care about the speed levels, etc. At the end, all residents from a residential subdivision are businessmen and employees that have responsibilities and children and will hardly look up for the neighborhood necessities. When we moved to this neighborhood, there was another one that I liked, but the park there really ugly (the playground, the maintenance). And this one seemed taken care of, and social events were organized. Eventually the administration did not care anymore.**

Lady 2. I think that happens in all residential subdivisions. A friend of mine lives in Cantera V. Three or four years ago I loved the parks, and last year I went and the green areas were really dry. So I thought that here was better.

Lady 3. In the residential subdivision where my parents live, there is a person that has that job and does not live there. He has his office next to the guardhouse. And it is his job to charge the fees and keep the green areas in good shape. When people buy in a residential subdivision, it is

understood that they have to pay the fee. If not, a juridical process can be done. But that is an exhausting process. In the end, people rather leave the neighborhood, as the guy up the street did.

Lady 2. There are a lot of people that choose to live in a fraccionamiento, but do not want to pay the fees. I do not understand that people. It is not logical and not fair for the rest of the neighbors that make an effort to pay. And it is not an obligation to live in a fraccionamiento, which necessity they have?

3. What about the social structure of the neighborhood. How many people live in your house, what about your neighbors?

Lady 1. Young families, the majority. But it is kind of divided. From the guardhouse to the right, there are more young families, with young children. And from the guardhouse to the left, families with older sons. Those were the first houses to be constructed.

4. How old is the residential subdivision?

Lady 1. It initiated in 1998. I have been living here for 8 years. Since 2008

Lady 2. I have been living here for 11 years (2005). When we arrived, there was no one in charge of the guardhouse, no security guards. There were just a few houses and we had no problems. Until one person started to organize the fee collection, and she is again in charge of the committee.

Lady 3. I have been living here for 5 years (2011).

5. What made you take the decision to live in a gated community, and to live in this one particularly?

Lady 3. Security. We always looked for a gated community for the security of our children. For them to have a park to which they can get out to and play. Also for a social reason. My husband knew the neighbors and knew they had children too.

Lady 2. We liked it, and saw it as an investment.

Lady 1. We also liked it. We liked that it was small, it was going to be safe and well located too.

Lady 2. I believe that the developer CTU knows how to sell the product. When we started here, we had a very good gardener, and he had all green areas in a perfect condition. And it was also very clean.

6. What do you like the most of living here?

Lady 1. In our case, the neighbors. We have excellent neighbors. The location. And the fact that on this side of the neighborhood our children have the same age. So they get together. And that is a lifestyle that you no longer see outside a gated community. Children no longer play in the streets. And here they can.

Lady 2. Also security, and the neighbors of course

7. To speak about your lifestyle, what do you do on a regular day? You and your neighbors?

Lady 2. Focused on the children. To take them and bring them from their activities. Their homework. It has been a long time since we had time to socialize.

8. You mentioned that a previous administration of the neighbors committee used to organize social events. What kind of events it organized and what kind of events are organized now?

Lady 3. I remember when I first arrived in 2011, they did events for special occasions like mother's day or Día del Niño. And in our administration we never organized an event for the community. We used to gather, but just us, the couples that took the administration.

9. Who uses the parks?

Lady 1, 2 and 3. The kids. The small kids.

Lady 1. And the biggest one young couples too.

10. How do you move to do activities outside the residential subdivision?

Lady 1, 2 and 3. If we can join and use each other's car (ronda), we do. For example for the school.

Lady 2. And that we do among us that we know each other. People from this side of the neighborhood. People from the other side we do not know them. We ask each other, "who is going to La Salle?"... And that is how we help each other.

Lady 3. But during vacations, children are always on the street.

11. Which places in the city do you frequently visit?

Lady 1. We go to the movies, or to a café. To La Presa to run.

Lady 3. To socialize, we go to dinner, to Distrito 1 or La Plaza. Recreational, we go to El Campestre and La Presa.

12. And health?

Lady 3. Star Medica

Lady 2. Yes, or Christus Muguerza

13. And how do you move?

Lady 1, 2 and 3. By car

14. Is there public transportation provision here?

Lady 2. No.....

Lady 3. Yes... well, the bus stop is 1km from my house. In Periférico de La Juventud.

15. And do you normally use public transportation? Or your neighbors?

Lady 3. We don't, but the service does (cleaning ladies).

16. How well connected you think the neighborhood is with the rest of the city? How accessible facilities are (education, health)?

Lady 1, 2 and 3. We have everything here. It is very central.

Lady 2. For example the other day, my father came and asked me about a medical laboratory and I remembered Christus Muguerza does that and it is very close. We have everything.

Lady 1. And the Oxxo that has just been constructed too. We have everything, yes.

17. For example, if you have a craving at night, and you want a refreshment, where do you have to go?

All. To Oxxo. Right across the street. It was constructed one year ago.

Lady 3. Children go walking. But if you want alcohol there is another one but up the street and you have to go by car.

18. How the guardhouse works, who selects the security guards?

Lady 1, 2 and 3. The company that provides the service.

19. How safe do you feel, to live in a gated community and specifically in this one?

Lady 1. The truth is... it is very safe.

Lady 3. I used to feel safe until the security guards were changed.

Lady 2. For a very long time, there was no rotation of personal in the guardhouse. A man we all knew lasted 8 years here. He was a very charismatic person, he would always do a favor. Of course some people, the ones that do not pay, did not like him. But since neighbors did not pay their fees, the company removed him.

Lady 3. Well, the justification is that he has a certain salary, and since we did not pay, they had to change him for someone with a lower salary. Now we have a "made in China" product (bad quality product).

Lady 2. Now that the administration has just changed, there has been a lot of personal rotation. And that is what scares us. We do not even know who they are, or which their intentions are.

Lady 1. Something else that I have always been afraid of, is the section of the park that has fence instead of wall. Anyone can jump inside the residential subdivision. And people outside can look inside.

20. Which characteristics of this neighborhood would you say make you feel safe?

Lady 1, 2 and 3. The neighbors. We look for each other

Lady 3. I know that if my children are not outside, are in the house of one of my neighbors. And that makes me feel calm.

21. And how safe do you feel in the city?

Lady 1. Well, now it seems insecurity has started again. You do not know them by formal media, but you listen stories. Of people you know, that were victims of a crime.

Lady 2. It is insecure in general. One year ago, I had the wheels of my car stolen outside of a temple. Now, if you go to a place and are going to last a long time there, you do not feel calmed anymore. Also, not long time ago I was driving near Starbucks (Periférico de la Juventud) and I listening to a shooting and afterwards heard in the news someone was murdered there.

22. In comparison, from what do you feel safe in the neighborhood and in the city?

Lady 3. Here I am afraid that someone breaks into the house. I am very afraid to leave my kids alone. And that is a general fear, not related to this neighborhood. It could happen anywhere.

23. And speaking of physical aspects, which characteristics make you feel safe?

Lady 3. I feel insecure because of the security guards and secure for the neighbors that I know. The security guards just open the gates to anyone, without asking anything. In former times, it was not like that. Actually, my brother, badly done, argued one time with the security guard because he did not want to show him his ID. And that happens when the administration stops demanding from them to require ID to everyone. There is a camera system that is not working right now, and there is also a system of closing the gates at night, and then every neighbors opens it if he needs to, but it is also not working right now.

24. In case of an emergency what is the protocol? Since there is only one entrance...

Lady 1, 2 and 3. There isn't any.

25. Isn't that something required by the municipality?

Lady 2. There is another exit that could be open in case of an emergency. But it is always closed.

Lady 3. In case the municipality asked for it when the neighborhood was constructed there it is. But it is now closed.

Lady 2. I think that is very insecure. Because in other neighborhoods there is a lane for residents and a lane for visitors. In this one we only have one lane, there is very little space. And sometimes when the guards ask for requisites the process of accessing and exiting is slow.

26. I was about to ask that. How fluent is the access and exit?

Lady 3. Since they no longer ask for information, it is flowy. But before when they asked for information, it would take a very long time.

Lady 2. And there are peak hours. For example at the hour of schools exit.

27. And during the day, is there are lot of activity?

Lady 2. No. People leave for work and it is very calmed here.

28. Which positive and negative characteristics would you say this residential subdivision has in comparison to others?

Lady 2. I see negative that there aren't two lanes to access

Lady 3. And again, the current bad administration. And positive, the relationship with the neighbors.

29. Which would you say is the advantage of living in a gated community?

Lady 2. Well, one that my husband always mention is that people do not knock at your door all day. When you live in an open neighborhood, people come begging or selling something. And that does not happen here.

Lady 3. And that kids can play in the street.

30. And speaking of security, particularly of high-impact crimes. How safe do you feel by living in a gated community, in comparison to the rest of the city?

Lady 1. Yes there is a difference. I feel that if we lived in an open neighborhood I would feel more insecure.

Lady 2. Being in a gated community does not protect you from high-impact crimes. In La Cañada, I remember that one time, criminals entered and murdered the owner of a famous restaurant. I believe we are all exposed to that kind of situations. Here someone could come with a gun and get in. In this zone, there has been a lot of shootings and homicides. In Francisco Villa, and close to Juventus. I remember a shooting that lasted 1 hour in the middle of the night, my husband and I laid on the floor because the sound was very strong and we believed it was happening inside our gated community. I think anything could happen, we are living in a time where we are all exposed.

Lady 3. But we do have a bit of an advantage, to the houses that are not inside a gated community. Often thieves are lazy, so from breaking into a house where they have to pass through a guard or a house without any surveillance, they would go to the easiest option. Of course in many occasions they have a stronger motivation, or they know people that live there have money. But speaking of those lazy thieves, there is a difference. I think it is important to have a security guard.

31. Lastly, I was going to ask you about your crime experiences.

Lady 2. The shooting close to Starbucks. I always enter there, but that day I do not know why I used the other entrance. And the shooting was where I always enter.

Lady 1. When the shootings started, down the bridge of Francisco Villa, where Star Medica now is, an homicide had just happened. We saw the dead body lying outside the car.

Lady 2. Yes, there was a very critical time.

32. Inside the neighborhood, have you known of burglaries or anything?

Lady 1, 2 and 3, No, inside nothing

33. So based on what you told me, it seems that the relationship with your neighbors is what **makes you feel safe...**

Lady 3. Yes, that is the base. Your children grow with your neighbors. More than any wall or fence. Where I used to live, I did not socialize with my neighbors. But also they were older, they had teenagers, and I was very young.

Lady 2. And sometimes you really need something and you can ask your neighbors for it. For example the closest butchery, you have to go very far.

Lady 2. Here I believe we lack facilities. In front of here, there is a park that we share with Valle del Angel I, and it is fenced and we do not have the keys. You have to go and ask for them. The parks are only used by the little children. I have teenagers and there is no place where they can gather with the neighbors of their age.

Annex 9. Interview with resident of Valle del Ángel II

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. Can you tell me about your neighborhood, and the neighbors committee?

The committee has just changed. And the last administration was not doing a good job. We stopped paying because we had problems. We pay 600 pesos each month. My theory is that the municipality allows gated communities, to stop maintaining green areas of the city and give that responsibility to the neighbors committee. And they only care for big parks. During one **neighbors' meeting, the vast majority argued to pay more for a better security. They all seemed really scared, and they had the sensation that without the guards the neighborhood would be really dangerous.** I fear for my kids, not that they could get kidnapped but that a car driver would not care and speed. The security is only a matter of perception in the case of gated communities. People are chased and murdered wherever they go. And the security guards are not even armed. It is also a factor whether your backyard faces the wall and the outside or other neighbor. In San Francisco I have heard cases of robberies, because people from the outside jump the wall and has access to the backyard. I would feel more safe if behind my house where another house and not the wall.

2. But the majority of gated communities are designed to face the center and give the back to the outside...

Yes, because the objective of developers is to construct the most houses possible, or the most lots. That is why we constructed our house with the backyard on the side and not on the back. But I am calmed because the wall faces an empty lot and the wall is very high, because I made it higher. So it is very unlikely that someone would jump. Inside of my house it has about 6mts. But we do not have any fences on the house. I have the preparation but I have not done it. The door from the garage is always open, so after opening the garage door, my house is open. Here all neighbors are afraid of insecurity. In terms of security, what I think is good of a gated community is that cars are not passing by constantly, and the neighborhood is more calmed. That makes me feel safe.

3. So what do you think your neighbors are afraid of?

That someone breaks into the neighborhood and robs their houses or their kids.

4. Has it happened something in Valle del Ángel II that you know of?

No...But I do not know my neighbors. And among them, two or three are friends. But apparently, there are no friends overall. Before they used to be closer, because a previous committee used to organize social events for people to meet each other. In Valle del Angel I, apparently people are very close. There should be an administration that promotes social cohesion.

5. From your neighborhood, how possible it is to go walking around?

It is not possible. My block is really big, there are no intersections, and that happens because it is a mountain. I once left my car in the Renault agency. I went walking to my house, and I filmed it.

And it is really bad. In some parts there are sidewalks, in other sections there are not. And before the Oxxo, which was installed one year ago, I had to take the car, go and make a U turn and go to the Oxxo close to Juventus, for a very simple shop.

6. So I went to walk close to La Cantera, where most gated communities are, and I parked **my car in the nearest Oxxo...**

That was the Oxxo that sold the most in the state (because it was the only option for all those neighborhoods).

Annex 10. Focus group with residents of Lomas Altas V

Interviewer: Mariana Enríquez

Note: the following interview was originally done in Spanish, and afterwards translated and transcribed by the interviewer.

1. Which are the main characteristics of this neighborhood?

Man 2. We are about 80 lots, there are built house that are habited and inhabited. Between those there is a total of 45. There is an occupation of approximately 50%. Initially this was not a gated community. We as neighbors integrated and we decided to close it. We did all the process with the municipality, and we achieved from them the permit. Little by little, between all neighbors we have created the infrastructure (he means the gates). During the time, the physical condition helped us to close it, because there are only cul-de-sacs and no main streets that would affect mobility. In that time, the only one that opposed were neighbors down the street because they would enter fast where the gate is now. That was even dangerous for the children. During that time, the president of the neighbors committee supported the closing. Lomas Altas V, between all the other neighborhoods in the area (closed ones), is the only one that has a permit (for being closed). And it complies to several conditions, like having constant surveillance (a guard 24 hours), **the guardhouse has a specific design, there are regulations...** 100% of the neighbors agreed to the closing.

2. When was this residential subdivision developed?

Man 2. I bought at the end of 2006 or beginning of 2007. From a man that bought directly from the developer. Many lots were sold, without the future owners seeing the actual land and afterwards realized the complex topography. When I bought, the situation of the city was not as critical as it has been in the last years (he means in relation to crime), and I even thought that in such case and given the physical condition and layout of the neighborhood we would be able to close the streets. Luckily, there was one person that had the vision and the initiative to close the neighborhood. We are composed by only 5 streets. The park was initially a cliff, and we had to **organize... and a neighbor was involved in the government, he supported us. We did it ourselves** (now he means the closing), each neighbor supported with a certain amount of money and we were able to close the perimeter with mesh. Then we saw outsiders started to get in from below the mesh so we had to add concrete. In addition, we installed cameras and hired security. Another aspect that was put from the neighbors was the expertise on the matter. I for example have experience on security systems. I have the idea that the neighborhood was developed around 2005

3. If the neighborhood was firstly developed in 2005, when was it closed?

Man 5. It was around 5 or 6 years ago. Back then, the city was very insecure. We used to see that were the street Lomas de Samalayuca ends, many cars would arrive and speed there, we would listen to shootings down there and in the Reliz park. We would not sleep, we used to see groups of armed men getting in. It was just tension, stress and preoccupation what we had. The initiative was born from the end side of the street and was the idea of 4 neighbors, we wanted to close that street only. We would meet and discuss, and we started planning how to close. In my case, I had the problem that I had an access from the other side of the street so the closing would solve the front but not the back side. From that moment on, the initiative grew (to close the neighborhood).

Between the neighbors, the topic of every day was just how preoccupied we were. We also started having a problem with the theft of construction materials, since this is a neighborhood where people get a lot and then construct.

Man 2. The problem people from the last street had was that on the back of their lots, there is an empty area that is used as a sightseeing spot to the dam, and many couples and strangers would park there. On the other hand, people living in the front side of the neighborhood would suffer more from the theft of material of houses in construction. And the thieves would typically be the construction workers. Since these are very few streets, and they are cul de sac, very few cars would enter. So every car that would enter would annoy us. When I built my house (before the closing) I had to pay for a night guard 1750 pesos per week, and the people that are constructing now have the advantage that since the neighborhood is closed now, they do not have to pay for that. Here is extremely safe, there are very specific instructions to the security guards on how the guardhouse must operate. For instance, the construction workers have to leave their cars outside. So far we have had 4 security companies, it was difficult because they would not give us the service that we wanted so we decided to hire our own guards. They are directly our employees now, and they have a sense of belonging.

4. So, as a recap the main reasons for the closing were...?

Man 2. Insecurity, of every kind. From theft from construction workers, to aspects of organized crime. **Actually, right outside our neighborhood "some" were executed. That happened 5 houses** from the guardhouse, and we were already closed. Those houses are still part of our neighborhood but giving the physical conditions they are unfortunately excluded from this security concept that we created. They are located in the Lomas avenue and have no way to integrate to the closing, and actually we do not even know them. **I walk my dog, and go outside to walk... and I had already** noticed they looked like bad people, suspicious with black windows. We have experienced bad things, one time soldiers entered to look into a specific house. Another day, security guards left us because some men pointed guns at them so that they could enter, and they did and were wandering in the neighborhood looking for someone. The closing was a necessity, of all the neighbors and that is why it was decided unanimously. Only one neighbor was against it, but she was a very negative person and even wanted to reopen, and wanted to ask for signatures but one of her neighbors said, no, we have passed through a lot to obtain this (the closing) for you to ask us to reopen it. What she did not want was to pay.

5. So practically in what consisted the closing?

Man 1. Installing gates, the one from the guardhouse is placed, and the one on the side. Install mesh in the lots that had no construction. And in the park. This one neighbors a park on the other side, so it had to be installed.

Man 2. A containing wall was constructed. Two streets are closed with fences what we paid, and in case they have to be opened, they can. The controlled access (the guardhouse) where we have surveillance 24 hours.

6. How was the legal process done?

Man 2. We asked for it to the municipality. We had to create a neighbors committee and register it, we had to go to meetings and the authorization has to be paid annually. In addition we have to

pay for security, and the maintenance of the park and perimeters. Also for security cameras and the automatization in the entrance.

7. The initiative to close, was it because you saw that other neighborhoods were doing the same? The civil code was modified in that time, is that a coincidence?

Man 2. Well back then many streets were closing without authorization, including Campanario. And a study has to be done, to determine that no third parties would be affected. In our case we do not affect anybody

Man 1. During that time, Quintas was still open and we were the optional exit. And since we did the process first, that is why we were able to and they were not.

Man 2. But they cannot close legally, because they have a connecting street. Therefore, they have gates but they have to authorize entrance to whoever wants to get inside. Three months ago they tried to close completely, but the neighbors from the other side complained and the municipality forced them to open. They did that because in this area, a lot of home burglary took place (Las Fuentes, Lomas Altas and Fuentes del Sol). That happened to all, except to our neighborhood. Just a stereo was robbed from a car. One day, I saw a young man inside the neighborhood that was not from here and asked him to leave. When I checked I saw a hole in the fence.

8. Could each one of you tell me, what is your perception of security? How safe do you feel inside the gated community and outside?

Man 5. To me, it has been a great difference (the closing). I still have present waking up at night because of hearing to shootings, even though that did not happen here but in Reliz or somewhere close.

Man 2. That was very common. I remember shootings on a Tuesday, and some days afterwards police found a dead man (close to the dam). And it was very common to listen to them, even more because of the location of the neighborhood. Since we are in an upper side, it echoes. It was an **everyday thing to listen to shootings and one would just think: "oh someone was just murdered"** While your kids were playing outside (normally, as if nothing happened), but with the tranquility that they are in a closed place.

Man 5. In my case, all fears summed up. For me it changed a lot. Generally the crime rates have decreased and I do not listen to shootings anymore. Now that the neighborhood is closed I feel safer. It is not a guarantee, because the security guards are not armed and anyone could enter at any time. But it is a difference, even in the simple fact that unknown cars do not enter at midnight and pass in front of your car, or drunk people. Looking into your house. That is more controlled, and it is less physiological charge.

9. Do you let your kids go alone to the park? (the one inside the gated community)

Man 5. No never, I go with them.

Man 2. Mine are 13 and 7. And since we closed I feel the tranquility to let them go alone to the park. I just tell them to be careful of the cars.

10. Then the main preoccupation now are the cars?

Man 2. Yes, the cars. Some of the tranquility that we have it that the security guards know our kids, they even know their names and they do not let them go out. All kids that I see in the park are alone. That is the peacefulness that we have earned. That is how we sold the concept through all the neighborhood, by saying that the closing was going to benefit the children.

11. So what is your security perception of a public space outside the gated community?

Man 2. Zero. But obviously we cannot live locked in. The city has good public spaces, but there is not only violence from organized crime but also from someone that could rob your or even kidnap a kid. A little kid you cannot leave alone in a public space, **but in “our times” it was different.**

Man 5. There were not even cars.

Man 6. When one arrives to a new neighborhood, a social network has to be created. When a necessity rises is when a social network is created. If we had not had the necessity to close, we would only share a greeting but not a relationship. The closing has made us have a team. The fact that you start building your own house, it makes you care even more for it, because it is your heritage. In my case, I got the copper installation of my house robbed twice. That happened to many of us and made us group and look how to defend our properties on one side and at the same time have security for us and our families. For me, the closing is not something that can be discussed (he means to remove it). I will continue to bet for security. We have to have the culture to invest in security too, as you invest on other things. In one occasion I left for vacation and left the garage opened. When we came back, my wife was scared, but it was sure nothing had happened and I had forgotten to close it when we left. My daughters have 24 and 21 years old, so I do not worry the same way as my neighbors do, when their kids go to the park or with the cars. Their security is different. They are affected by what happened outside the neighborhood even more, but one has to cope with it and live with it.

Man 2. In the last meeting there was an initiative from one neighbor to automatize the security and avoid having security guards. But that had more to do with a personal conflict with a guard.

12. What catches my attention is that you are mentioning that since you had to come together to discuss the closing, you met each other and a big part of that security perception that you have now is that you know each other, and know that your neighbors will look after **your house...**

Man 2. **We know each other I believe at 90%. Some houses are sold or rented...but we all know each other, which family lives in each house.**

13. So the committee exists since you had to close, but which are now its duties?

Man 4. We have to meet minimum once every six months, but now we do once every three months. We discuss the monthly paying. If something very important comes up, then we gather. One of the requirements of the municipality for us to maintain the closing is to have a security guard 24 hours, it cannot be automatized. That is required by civil protection, it has to do with emergency scenarios. You are also required an acceptance letter of 100% of the neighbors, which had to be updated each year.

Man 2. Now with 60 or 70% of the neighbors you can close it. It was modified and no longer has to be 100%

Man 4. There is also an annual payment to renew the allowance for the closing, since this is not a gated community since its conception. It is updated each year, and by the fact it has just been tremendously incremented.

14. **Why did you decide to live here? It was open... And what do you do in a regular day, how do you move?**

Man 5. In some way I had privileged information on how this area was going to develop. I knew how this area was going to come out, the value it was going to have. We spend most of the time outside the house. My wife is the one that relatively is in the house. In general, my daughters and I are very little time in our house, between work and schools. It has to be 100% by car, there are no bus routes to consider that, so it has to be by car.

Lady 1. I also chose this neighborhood because we liked the area. And also everything has to be with car, because there is no public transport

Man 2. Before here I looked too many other places. But when I saw this area, I liked it a lot and I saw it had a lot of future. I knew that the development was going to continue in this way. And also the great alternatives of roads we have: canal, Ortiz Mena and Periférico de la Juventud. They are all very close to here. The parks are also very close (El Rejón) and you know that nothing is going to be constructed there.

Man 3. No problems with connectivity as what happens in La Cantera or Egipto street.

Man 2. In Lomas Universidad I used to live and we were sick of traffic. That is why I wanted to live in a gated community, and this was open but I saw the layout with cul de sac, and that the entrance was for the people that live here.

Man 4. My parents did it, as a scaling up. To get something better. We used to live in la dale. And we came and saw the house, and liked the zone. That is why we bought it.

Man 1. We used to live in Residencial Universidad. We liked this one because of the access and the connection options it had, plus the mall close by. It is a very good area. We bought directly from the developer 12 years ago, and constructed 7 years ago.

Man 6. In my case the process was easy, and I did not even saw the lot.

*They chatted about other things, and said they live comfortably there. And they will not leave. And they know each other and the only thing that makes them feel uneasy are constructions, knowing that people get in at any time.

Man 7. I live very comfortable here, since we close it. We are out our home very often. And I leave with the tranquility that when I come back everything is going to be as I left it. Last week I forgot to close, and I was in Creel.

Man 2. They even sleep with their fences open. I do close the ones from my house but I see that they leave them open. And even have their things in the garage, and have it open.

Man 7. We are like that since it closed. Before the closing I even lost my dogs (he implies that someone took them).

Man 4. In my house during the day the doors are open many hours during the day, because of the dogs, and nothing has ever happened in the 3.5 years we have living here. And even when our house neighbors two abandoned houses from the side that is open.

15. Have you had a crime experience after the closing?

Man 2. The only problem are construction workers. Robberies, car crashing. They have to comply to **our rules, specified hours to work and to enter....any way we are not exempt.**

Man 6. Recently I had a TV and some tools robbed.

Man 2. We feel safe. Many neighbors leave their cars outside their garage, and sometimes even open. Back in Meoqui I always left my car open, even with the keys in, and those are habits I did not have. I did not have the culture to close my vehicle.

16. Lastly I would like to speak **with you about your lifestyle, what do you usually do, let's say you need to buy milk in the night, where do you go?**

Man 1. We take our kids to the school in the morning and I go to work, and my wife stays at home. **My work is around 5 kms from home... and about the milk, we go to smart, and we do by car.** The public transport is not reliable nor has good quality. There is no other option but to use the car.

Man 2. The closest store is smart, and it opens 24 hours. We even go in pajamas. Everything is really close, we are talking about 4 or 5kms, and everything is by car. My kids are studying in Cumbres and we also go to the club, Britania. The connectivity is really good, even when something is far, it will be fast. No more than 15 or 20 minutes. But everything is by car.

17. Have you something walked or used a bike?

Man 2. I do very often, but it is just recreational. Everything is really close!!! The mall, **supermarkets (4 or 5 close by), hospitals.... This area is privileged. We are very comfortable here,** I would not leave.

Man 4. In every neighborhood are always different ways of thinking.

Man 6. We are retired so my wife stays at home most of the time. I am retired as well but I am working, and my daughters go to school. They share a car. Today one of my daughters wanted to **go from her university to a clinic and she used public transportation and took her 3.5 hours. So...** the main reason that we use cars is that the public transport is not efficient. There is a stop at Periférico de la Juventud but you have to change in Ortiz Mena and it passes by with very long time distances. So if someone wants to use it, has to leave 2 hours before to get in time. And it also influences the lifestyle.

Annex 11. Interviews with residents of Quintas del Sol II

Interviewer: Mariana Enríquez

Note: the following interviews were originally done in Spanish, and afterwards translated and transcribed by the interviewer. Interviews were made separately, but answers were written together for convenience.

1. When was this neighborhood developed?

Lady 1. It started to develop in 1981. This used to be a mountain. When I came, most lots were already sold, except for two. I like to live here. Now there is a neighbors committee. And we are fighting to avoid the opening of businesses in the area, as it happened in San Felipe. In San Felipe now there are more businesses than houses, because it is a neighborhood that got old. It became inhabited by old people only, and that is happening here too.

2. So, Quintas del Sol is inhabited mostly by people that bought the lot back in 1981?

Lady 1. That is right. We are only grandparents now. I feel that we have to defend ourselves, because if it becomes very commercial, we will lose the residential sense. We are fighting that no businesses open from Campestre to California, and from Ortiz Mena to Montana. There is actually one school, for which we have fought to remove and we have not been able to. I believe that one day, our kids will come back, and the neighborhood will be young again. Like it was when we moved here.

Lady 4. This is now a neighborhood of old people. Is not inhabited by young couples anymore, as it was when we moved. We grew old. Back when we moved, all children from the neighborhood would play together in the street.

3. When was the committee formed?

Lady 1. Supposedly 30 years ago, but we never had any problem. In fact, all the people that live in this street (Oregon) know each other, and that is why we have lived very comfortably here. Most of us constructed at the same time, and our kids grew together. One year ago that an apartments project was being constructed in the corner and we were against it, we gathered again and the municipality told us that that committee was not good anymore and we had to constitute another one. Now we are trying to unite with a committee from another neighborhood, to be stronger. In Lomas del Santuario I have heard that the neighbors united and achieved that no businesses can open there. We also united because we noticed that the land taxes suddenly augmented. I feel that now it is increasing randomly. The inhabitants of this street are the ones that initiated everything.

4. **Why don't you want other use than habitational here?**

Because if there is a business close by, for example cars would come. And then it would be more insecure. But we do not like gated communities. There was an initiative to close the street once but we decided not to do it because we felt the insecurity would increase right outside the gates. Gated communities are good for the people inside, but what happens to the people outside?

5. Could you tell me more about the intention to close the neighborhood?

Lady 1. In Quintas there are some streets that closed, but the majority did not. Closings complicate traffic. And also if something bad happens to someone outside, he/she would just see the gates and nobody to help him/her. Violence started to disturb some neighbors and they proposed to close the access from Avenida Campestre, but the majority did not want to. But we united to stop **the apartments' project**, and it was reduced to only 8 apartments. Most of all because we do not want a lot of cars circulating here.

Lady 3. The closing did not happen because not everyone agreed. And we felt in between, but we did not want to increase the walls and create more insecurity.

Lady 4. I do not remember if I wanted to close the street, but if you ask me now I would not close it. It looks like a prison. All those neighborhoods that installed gates, like Campanario, look like prisons. How horrible, you are not free anymore. I do not like it personally. But if I go to the **United States, and I see a proper gated community with its entrance... that I like. If we moved, I would move to a gated community that was designed to be closed. And I would like it because supposedly criminals do not enter. And most of all, there is not much traffic. I would like to live in a gated community, because I would have more privacy.**

6. You say you live very comfortably here, why?

Lady 1. First, that we know all our neighbors. We all know each other and care for each other. When we travel, neighbors watch over my house. We are also comfortable because Ortiz Mena and Periférico de la Juventud are really close. And also many things are close, like the supermarket. And the neighborhood is overall very calmed.

Man 1. We like the green areas. The park. We are even reforesting the park. And we want to ask the municipality for more trees and green areas.

7. How many people live here in Quintas?

Lady 1. **I do not know...because the committee considers certain streets, not the real borders of the neighborhood.**

8. How safe do you feel living here?

Lady 1. Quite a lot. I think the neighbors are really important. When we leave for vacation, I ask my neighbors to watch over my house, and they do the same. We are people that if we see a strange car parked the whole day, we call each other. And during the violent years, things happened here **of course. Robberies... during the violent years we felt insecure, a lot of home burglaries happened.** And even a lot of neighbors started to install fences in their houses. Back then you would not even see people in the park. In two occasions, my husband had parts of his car stolen right outside our garage. And another time, burglars broke in and stole the computer of my son. But now it is very calmed.

Lady 2. Now I feel safe to live here. And what makes me feel safe, in first place are the neighbors. That is a very important aspect for us

Lady 3. Yes, we feel safe. And most of all because of the neighbors. There is confidence between us

Lady 4. I feel very safe. I am very calmed. Even though there have been some home burglaries in this block. And the house in front of this one was shot.

9. Speaking of your lifestyle, what do you normally do?

Lady 1. **Neighbors work all day... they own businesses. People are busy.**

Lady 2. I work as a real estate agent. Mostly with people that I already know. And I have my own schedule and work from home.

Lady 3. We go out to work, or leave my daughter at her school. But in the neighborhood there are no social activities.

Lady 4. We paint. We go out very often to eat.

10. The church is the only thing in the neighborhood that is not residential use. Which is its relationship with the community?

Lady 1. Very close relationship. The church makes a report each month and invites the neighborhood. And there are many very catholic neighborhoods here. Not all residents are active with the church. But still some are.

11. Where do you go for basic necessities?

Lady 1. To the Oxxo in Montana and Campestre.

Lady 2. Yes the Oxxo, and we can go walking.

Lady 3. We go to Oxxo. And we go by car, especially at night. Because I do not feel safe. Even my niece and my nephew were robbed in the way to Oxxo.

Lady 4. I go to Alsuper, because it is close and nicer. I like smaller shops, that are pretty and everything is put on its place

12. Do people from this neighborhood usually walk?

Lady 1. Yes but mostly for recreational purposes. People walk at the park. And not only from this neighborhood, people from neighboring settlements come to walk here. And it is even a gathering point for scouts. And brides take their pictures there. And it is more alive because it is open, and that in return makes it safer.

Lady 3. We do not go to the park very often because we feel insecure. There was a time, when the city was violent that the park was always empty. But nowadays there are always people in the park, particularly in the mornings and evenings. I think there are even free aerobic classes for old ladies. And if we need something basic we go to Oxxo, and we do so by car, particularly during the night because we feel insecure. In fact my cousin was robbed in his way to Oxxo.

Lady 4. I go everywhere by car. I rarely go to Oxxo, and if so I go by foot.

Man 1. I remember when I was in high school, most of the neighbors of my age were also attending to La Salle and I often saw them walking back home too.

13. Why did you come to live here?

Lady 2. Because we needed a bigger house. Now only me and my husband live there

Lady 3. We have lived here for 30 years approximately. And we liked the neighborhood, despite there was nothing yet. I saw it as a scaling up.

Lady 4. We live here since 1981. And we came because it was a new neighborhood. We were the second house to be constructed.

14. What do you like the most about the neighborhood?

Lady 2. Its location, everything is really close. The Campestre club is also really close, and businesses. And the church.

Lady 3. We liked the tranquility. There is no much noise and not much traffic.

Lady 4. I liked that the neighborhood was new. And besides from San Felipe, was a neighborhood **that you would say "how pretty"**. **And now I like to live here, but recently there are commercial activities and that I do not like.** And that is what we are fighting against. But I like that the neighborhood is pretty, and Campestre is close by.

15. To all these places you often go, how do you go?

Lady 2. To the church walking, and another places by car.

16. Since when do you live here?

Lady 2. Since 1990

17. What do you think about gated communities?

Lady 2. I think they are a good option. Because in any way we do not have security at a 100%, it helps. Because not anyone could enter there. I think it helps to security. And I would like to live in a gated community. Besides, it gives an added value. People still prefer a gated community. So if at any moment you want to sell or rent your house, you will be able to.

Lady 3. I would like to live in a gated community, for the security of my daughter, and for her to have a playground to play in. I believe that in a gated community, children can play freely. The cars are only of the neighbors and they would care.

18. How much of the current offer of the real estate market right now, especially for middle-upper class, are gated communities?

Lady 2. Right now, middle class, high class, and even social house, are all gated communities. Everybody wants to live in a gated community. Some people that have been trying to sell their house in this neighborhood have struggled because they did not find anyone interested, since people wanted a gated community. And that is because everybody wants to be safe. It is more expensive to live in a gated community, people have to pay fees. And houses inside gated communities are regularly more expensive, because they have a high demand and that increases the price.

19. Have you had an experience with crime

Lady 3. Yes. One day I heard that some people wanted to get in, while I was inside. That happened in 2014. And since then I cannot stay alone anymore. And I called the neighbors (lady 1). And that happened because apparently they knew my schedule, and the car was not here. So they thought the house was alone. But other than that, nothing has happened.

20. How often do you see your neighbors?

Lady 4. Not very often anymore. We used to, when our children were little. But not anymore. We all now just get into our houses. And now we all have fences. I installed them one morning that a couple entered my garage and passed the night there.

Annex 12. Interviews with users of park Los Tronquitos (Quintas del Sol II)

Interviewer: Mariana Enríquez

Note: the following interviews were originally done in Spanish, and afterwards translated and transcribed by the interviewer. Interviews were made separately, but answers were written together for convenience.

1. How long have you lived here?

Lady 1. Since the 80s, I grew up here.

Man 1. I live in Residencial Campestre, and I have lived here for 30 years.

Man 2. I have lived here for a long time. Not in Quintas but in Virreyes.

Man 3. I have lived here since 1986 approximately.

Man 4. I have lived here since 1986.

2. What do you like the most about living here?

Lady 1. The neighbors. Because I know them all.

Man 1. I like it because it is very calmed. It is well designed and has all services. And my grandson likes the playground and to come here to the park often.

Man 2. The park is what I like the most. I come here every day.

Man 3. The tranquility. There is not much noise, not much traffic. Neighbors respect each other.

Lady 2. I live in Guadalupe neighborhood, close to here. And I like it but I am considering to buy a smaller house in a gated community. Because I am alone now and I would like to feel safe.

Man 4. I like it because we live very calmed. But there would be better options, especially in a gated community. Today because of the insecurity one wants to live in a gated community.

3. Do you feel safe living here?

Lady 1. No, I do not feel safe in any place in Mexico. What makes me feel insecure is that sometimes strange cars park.

Man 1. I think the neighborhood is very safe, we have never had any problem.

Man 2. I can say that we are relatively fine. But things still happen. But there is no specific factor that makes me feel safe. The neighbors in a way maybe.

Man 3. I do feel safe here. There is surveillance. I do not know many neighbors though, I am a loner.

Lady 2. I do not feel unsafe here. I live in Guadalupe. I like open neighborhoods a lot, but I think that they are exposed to crime. But I feel safe because my neighborhood is very old and we all know each other.

Man 4. I do, but I would rather live in a gated community.

4. In case your street closed, would you like it? Would you like to live in a gated community?

Lady 1. Yes and no. Because you have privacy but also limitations.

Man 1. Some neighbors from my street wanted to close but we opposed, because I think is very coward to lock up with the discourse of the security. I do not want to be locked up, afraid.

Man 3. My street is not closed. But there was an intention to close it. But I am against it. To start with, a lot of people that do not live here use the park, and they would not be able to do so anymore. I do not think that closing the neighborhood is a solution. I would not live in a gated community, I do not like it. I think it is very complicated that even if people are going to visit you, have to go through security. I do not like that.

Man 4. Yes I would, to feel safer.

5. What do you like the most about the neighborhood

Man 1. The modernity. And the accessibility to everywhere.

6. To move around the area, do you walk or use the car?

Man 1. I walk. But if it is a long way, then I use the car.

Man 2. I go to Oxxo if I need something. And I use the car. I walk only for recreation.

Man 3. I had an accident and I cannot walk much. Before the accident I used to walk a lot but not anymore.

7. Where do you regularly go if you need anything, what do you do in a normal day

Man 3. I go to Oxxo

Lady 2. I like to go out walking. Here or La Presa. And If I need anything I would go to Alsuper or for anything fast I go walking to Oxxo.

Man 4. I go out during the day. If I need anything, everything is close by. We walk and also use the car. Sometimes I go to the supermarket by foot.

Annex 13. Street closings approved by DDUM, 2012

Neighborhood name	Street name	Total streets	Total households
?	Ignacio Camargo	1	4
?	Gustavo Alvarado	1	6
?	Francisco Portillo	1	12
?	Universidad Reforma	5	76
20 aniversario	Privada de Miguel Sigala	1	21
Abraham González Norte	Privada de Encino	1	10
Arquitectos	Arquitectos	5	25
Barrio Londres	Privada 33 1/2	1	12
Campanario	Campanario	8	135
Campanario III etapa	Privada de Las Vegas	1	16
Campestre	Utah	1	11
Campestre	Louisiana y Tennessee	2	45
Campestre Washington residencial	Cerrada de las Cruces	1	14
Campo bello	Campo de Algodón (Campo Bello)	4	200
Cerro de la Cruz	Privada de José E. Coronado	1	10
Charrerías	Charrerías	2	24
Chihuahuense	Chihuahuense	1	17
Colinas del Sol III	Prol. Av. Las Águilas	1	8
Colinas del valle	Monte Pirineos	1	10
Colinas del valle	Monte Ararat	1	20
Cordilleras	Cordilleras II	9	96
Cordilleras	Cordilleras VI	10	120
Country Álamos	Country Álamos	1	85
Cumbres III	Monte Misti (Cumbres III)	1	18
Cumbres III	Cumbres III	8	90
Cumbres Universidad	Paseos de San Ignacio	1	37
Cumbres Universidad	Cumbres Universidad IV	3	90
Cumbres V	Cumbres V	2	19
Deportistas	Deportistas	6	95
El Torreón	El Torreón	3	45
El Torreón	Cerro La Minita	3	200
Haciendas del Valle	Haciendas de la Manga y las Matrinás	2	70
Haciendas del Valle	Haciendas del Valle	5	125
Haciendas e	Las Haciendas	11	85
Herradura la Salle	Herraduras La Salle	5	100
Infonavit nacional	Infonavit Nacional	1	14
Jardines de San Francisco	Juan María Salvatierra	1	20

Jardines de San Francisco	Ocotillos (Jardines de San Francisco)	1	55
Jardines del Saucito	Sierra Nevada	2	27
La Galera	La Galera I y II (Calle Oz y Mesteño)	2	205
Las Américas	Fracc Américas	9	250
Las Fuentes	Fuente Trillenum	3	115
Las Fuentes	Fuente Paulina	5	215
Las Misiones	Residencial Las Misiones	4	234
Las Palmas	Las Palmas II	1	15
Leonardo Bravo	Privada Heroico Colegio Militar	1	4
Lomas Altas	Lomas Américas	2	64
Lomas Altas	Lomas Altas V	4	80
Lomas Altas	Lomas Montecarlo	5	84
Lomas del santuario	Presa del Marquez	1	18
Lomas del santuario II	Presa Sinaloa	1	16
Lomas del santuario II	Rincón De los Olivos	1	80
Lomas Universidad	Univ. De Barcelona	4	46
Los Álamos	Fracc Los Álamos	2	150
Los Huertos	Los Huertos	2	90
Mirador	Berlín	1	8
Misión Universidad	Colegio de San Benavente	3	60
Misión Universidad	Misión Universidad	6	153
Nombre de Dios	Privada de Anita	1	16
Palma Real I	Circuito del Árbol de la Vida	1	86
Panamericana	Republica de Guyana y Año de la Patria	2	21
Paseos de chihuahua	Privada Hidalgo del Parral	1	18
Popular	Privada de Rosales	1	11
Privanza San Ángel	Privanza San Ángel	4	49
Quinta Sebastián	Paseo del Arte	1	46
Quintas Juan Pablo	Quintas Juan Pablo	4	31
Rachali	Circuito Rachali	1	35
Real de Potreros	Real de Potreros	1	80
Real San Juan	Real San Juan	2	24
Residencial La Escondida	Residencial La Escondida	1	95
Riberas del Valle	Riberas del Valle	8	200
Rincones del Picacho	Rincones del Picacho	4	125
Romance	Matera (fracc Romanza)	2	66
Romance	Romanza II	5	79
Romance	Romanza	6	86
Romance	Alessandra (Romance etapa G)	1	90
San Carlos	Fracc San Carlos	7	150
San Cristóbal	Privada de San Cristóforo	1	14
San Felipe II	Privada Del Parque y Lázaro de Baigorri	1	15
San Felipe V	Privada Laguna de Clavos	1	8

San Gabriel	San Gabriel II	1	80
Santo Niño	Col. Santo Niño (priv. Eligio Muñoz)	1	16
Santo Niño	Privada José Eligio Muñoz	1	19
Valle de San Pedro	Valle de San Pedro	6	89
Valle del Ángel	Valle Del Ángel	8	196
Versalles	Quinta Versalles	4	85
Villa del Rey	Villa del Rey	4	126
Villa Toscana	Villa Toscana	1	63