An architectural line drawing of a modern building with a brick-like texture, featuring a series of vertical fins or columns on one side and several doorways on another. Tall, slender light poles with multiple lamps are positioned along a walkway in front of the building. The entire scene is set against a solid blue background that contains a faint, repeating pattern of stylized human figures in various poses, suggesting a crowd or urban activity.

URBAN REGENERATION FOR CRIME PREVENTION IN VILLA DEL PRADO I TIJUANA, MEXICO

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**URBAN REGENERATION FOR CRIME
PREVENTION IN VILLA DEL PRADO I
TIJUANA, MEXICO**

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“Para mi familia”

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SOMMARIO

Villa del Prado è un'area situata a 14 km dal centro della città di Tijuana. Quest'area nacque nel 2005 quando un forte movimento di edilizia abitativa sociale prese piede in Messico. Questi tipi di interventi erano solitamente destinati alla creazione di soluzioni abitative per la classe operaia. Uno dei problemi principali che ora affligge quest'area è l'abbandono di un gran numero di abitazioni da parte dei proprietari. Essi, infatti, si sono trovati in grande difficoltà nel saldare i finanziamenti stipulati per l'acquisto delle case, a causa della svalutazione monetaria. Conseguentemente questo fatto ha contribuito alla svalutazione delle abitazioni, che sono ora più difficili da rivendere, e a un degrado più generalizzato di tutto il centro abitato. A questo si aggiunge il fatto che, alcuni gruppi criminali hanno preso possesso delle abitazioni abbandonate per usarle per i loro illeciti (smercio di droga, deposito di oggetti rubati, ecc.). Se si considera la situazione attuale di Tijuana, città con un'alta presenza di criminalità legata perlopiù al traffico di stupefacenti, un centro abitato che tende a svuotarsi può essere il terreno fertile per i gruppi criminali; questo crea di certo un grosso disagio per i residenti. Per ovviare a questa situazione complicata questo scritto propone una serie di interventi urbanistici volti al ripopolamento di Villa del Prado, con particolare attenzione alla sicurezza e alla prevenzione del crimine.

Per cercare di risolvere le problematiche citate precedentemente è importante prendere atto della situazione socio-economica e degli aspetti culturali legati a questo territorio. Tijuana è una delle *border town* più importanti del mondo. Questo perché milioni di attraversamenti di frontiera vengono registrati ogni anno, rendendolo il confine più oltrepassato al mondo con il 38.5% del totale degli attraversamenti tra Stati Uniti e Messico (Arredondo, 2016). Il fatto che Tijuana sia così vicina agli USA

può portare alcuni benefici ai residenti, comprese le maggiori opportunità di lavoro e di studio che si possono trovare oltre valico. Infine, questa vicinanza alla frontiera aiuta a creare una società più aperta in termini di accettazione dello straniero: il risultato è una città multiculturale.

Il tema della migrazione ha una grande importanza nell'attualità, anche se questo è un fenomeno che esiste dagli inizi dell'era umana. Esistono diverse classificazioni che si basano principalmente sulle motivazioni e sullo status del migrante. Il tema della migrazione in Messico ha ovviamente un grande impatto sociale, economico e politico per il paese. Questo paese può considerarsi storicamente un paese di origine dei migranti, ma allo stesso tempo, soprattutto in epoca più recente, un territorio di transito e di destinazione. A causa della localizzazione geografica del paese, molti messicani hanno tentato di perseguire l'"American Dream" abbandonando il paese di origine per raggiungere gli Stati Uniti d'America. E' importante ricordare che questo "sogno" non è inseguito solo da una parte della popolazione messicana ma anche da alcuni abitanti dell'America Centrale. Questo significa che queste persone devono attraversare l'intero Messico, in linea d'aria 3'152 km, per raggiungere la loro meta. Conseguentemente ad alcuni accordi internazionali il governo messicano ha dovuto rafforzare la sicurezza e i controlli nel confine a sud del paese. Quest'azione ha fatto in modo che negli ultimi anni crescesse esponenzialmente il numero di persone che terminano in Messico il loro viaggio verso gli States. Molte di queste intraprendono il percorso per diventare rifugiati in Messico.

L'idea del progetto diventa quella di partire dalla necessità di inserimento dei rifugiati nella società per ripopolare le case abbandonate di Villa del Prado, con il fine di diminuire il tasso di criminalità. I residenti saranno parte integrante del progetto. L'arrivo dei

rifugiati sarà fondamentale per la prevenzione del crimine e per questa ragione vantaggioso per la comunità.

La relazione tra la prevenzione del crimine e lo spazio urbano è un concetto acclarato da tempo. Alcune teorie affermano che talvolta il design urbano e gli spazi costruiti possono incoraggiare i crimini, e viceversa, uno studio attento di alcuni fattori dell'urbanistica può essere in grado di prevenire tali crimini. Questo scritto prende in considerazione due teorie legate alla "crime prevention" che sono la teoria del "Defensible Space" e "Crime Prevention Through Environmental Design (CPTED)". Queste teorie studiano il crimine sotto vari aspetti come quello sociale, psicologico o fisico.

Poichè Villa del Prado è un centro abitato relativamente nuovo, verranno proposti interventi puntuali per ottimizzare alcuni aspetti e per alterare la percezione della città nell'ottica di prevenire il crimine. Questi interventi, proposti da entrambe le teorie appena citate, si riferiscono perlopiù all'illuminazione pubblica e alla chiusura e l'apertura di alcune strade. Queste azioni si basano sul creare la possibilità di sorveglianza naturale per i residenti assieme al senso di proprietà e controllo.

Simultaneamente, poiché il progetto prevede l'arrivo dei rifugiati, è importante incoraggiare alcune azioni che permettano ai nuovi arrivati di riconoscere e ambientarsi facilmente nel loro nuovo quartiere. Queste azioni che riprendono alcuni concetti del "CPTED" e della "Defensible Space" si basano sull'idea del "stranger danger": le persone tendono a stare più caute di fronte a qualcosa o qualcuno che è al di fuori della normalità e che potrebbe essere avvertito come un pericolo.

Un altro problema della svalutazione di Villa del Prado e la difficoltà di raggiungimento da un altro centro abitato, dovuta alla distanza, allo scarso servizio di trasporto pubblico e alla carenza di attività

attrattive. Per questa ragione, la tesi propone anche un rafforzamento del servizio di trasporto pubblico formalizzandolo con l'implementazione di stazioni di fermata localizzate in punti strategici della città.

La creazione di due spazi pubblici che ospiteranno diverse attività, attrarranno più persone con lo scopo di rafforzare lo status socio economico della città. D'altra parte, questi spazi incoraggeranno le interazioni sociali, che sono un fattore fondamentale per la riuscita del progetto.

Un altro elemento essenziale per il successo delle azioni intraprese è la partecipazione dei residenti e dei rifugiati alla messa in pratica del progetto stesso. E' previsto che i rifugiati aiutino nell'azione di costruire, in modo da fornire a loro una formazione professionale, che possa in seguito aiutarli a trovare lavoro e inserirsi nella società. Anche ai residenti, assieme ai nuovi arrivati, verrà richiesto di seguire dei corsi in cui verranno presentati il progetto e le varie azioni intraprese per il recupero del quartiere; tutto ciò per creare il senso di comunità e la consapevolezza che i migranti sono fondamentali per la messa in atto del progetto di riqualificazione.

Con questa partecipazione non solo si otterranno dei risultati dal punto di vista della sicurezza e dell'integrazione, ma si verranno a formare i cosiddetti "smart citizens", i quali riescono a integrarsi con i rifugiati creando una città multiculturale. Tutto questo con l'aiuto di una "smart governance" che prende in considerazione l'ottimizzazione delle risorse per ridurre il crimine e di conseguenza migliorare la qualità di vita degli abitanti.

Villa del Prado è anche un buon punto di partenza poiché al momento gli attuali residenti si sono già attivati chiedendo aiuto ad alcune associazioni per migliorare la situazione attuale. Questo significa che è presente l'interesse dei cittadini e una cooperazione tra essi è già in atto.

URBAN
REGENERATION
FOR CRIME
PREVENTION IN
VILLA DEL PRADO I

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INTRODUCTION

“Cities are an immense laboratory of trial and error, failure and success, in city building and city design. This is the laboratory in which city planning should have been learning and forming and testing its theories.”

– Jane Jacobs (1960, pg 6.)

Villa del Prado is an area located 14km from the city center of Tijuana. This area was born after the social housing movement in Mexico in the year of 2005. These kinds of projects were meant to be targeted to the working class. One of the main issues in this area is the abandonment of the houses due to the high price the owners need to pay after asking for a loan since the monetary devaluation has had an impact on the final price. In addition, this fact has contributed to the devaluation of the houses and therefore it has become more difficult to sell these houses to other people. The abandonment has created a domino effect since some criminal groups have claimed these houses as their property and using them as drug selling houses, garages to hide stolen things or hiding spots to rape or assault people. The high level of violence and crime in the area of Tijuana has a great impact on the life quality of the people. To overcome this critical situation this work propose some urbanistic interventions aimed at the resettlement of Villa del Prado, with particular attention on security and crime prevention.

In order to help to solve the issue it is important to see the current social and economic situation of the city. Tijuana is one of the most important border cities all over the world. This is because millions of border crossing take place here annually, making it the most crossed border in the world, with the 38.5% of the total crossing from Mexico to USA.

The closeness to the United States can bring many benefits to Tijuana's residents, including job and study opportunities that are possible to find at the other side of the border. On the other hand, this creates a more open society in terms of foreigner-acceptance, generating multicultural cities.

The migration topic has had a lot of impact in the last years, even though this phenomenon has been present since the start of human life. There have been modifications to the term and categorization of migrants based on the reasons of why the person left his/her country. One of groups to take into consideration are the refugees, those people who were forced to leave their home-countries since their lives where in risk. Mexico in terms of migration can be considered historically as a country of origin, but also as transit and destination county, especially in the last years. Due to the geographical localization of the country, a lot of Mexicans have tried to pursue the "American Dream" leaving their home country in order to arrive to its neighbor's lands. It is important to mention that this dream is not only seek by Mexicans but also by other Central American citizens. This means, that many of them have to travel all the way through Mexico to arrive to the U.S.A. Due to international agreements, the Mexican government has had to improve the security and controls in the southern border of the country, increasing the number of detentions in Mexico. Even though most of the

people that have been arrested are deported to their home countries, some of them have the requirements to ask for a refugee status.

Taking advantage of the presence of refugees and repopulating the abandoned houses in Villa del Prado can help to start preventing crime, even though it is not the only action needed in order to fulfill this. Residents will need to be involved in the project and know they have to participate and welcome the new neighbors since the refugees will have a fundamental role in this crime prevention.

The relation between crime prevention and the urban environment has been present since the beginning of times, but there are some theories that state that the urban design, or the built environment can encourage criminals to commit a crime and therefore there is a possibility that environmental design can also prevent these crimes. This thesis will take into consideration two of these theories based on this idea: Oscar Newman's "Defensible Space Theory" and C. Ray Jeffrey's "Crime Prevention Through Environmental Design" (CPTED). These theories study the crime under different aspects such social, psychological, and physical factors.

Since Villa del Prado is relatively new, the aim is to do punctual interventions in order to optimize and alter the perception of the areas to prevent crime. These interventions, as both theories propose, impact mainly on

public lighting and street closing and opening. The actions are based on creating natural surveillance opportunities for the residents as well as creating a sense of proprietorship and control.

Simultaneously, since the project foresees the arrival of refugees, it is important to encourage openness, even though CPTED and Defensible Space theory persuade neighbor recognition, based on an idea of "stranger danger": people tend to be more cautious in front of the unknown and that could be warn as a danger.

Another cause of Villa del Prado's devaluation is the high difficulty to arrive from other urban developments due to the distance, a scarce public transportation, and the lack of attraction activities. This is why also the thesis envisions a better connection with nearby urban projects with public transportation, as well as a formalization of this with the implementation of bus stops localized in strategic points.

The creation of two more public spaces that will host diverse activities, will seek to attract more people, enhancing the socio-economical status of Villa del Prado. On the other hand, these spaces will also encourage social interaction, a fundamental factor for the effectiveness of the project.

Another essential element for the success of the project is the participation of the residents and refugees on the project.



Figure 1.
Aerial view from Villa
del Prado I.

Gathered from: [https://www.
google.com/maps](https://www.google.com/maps)

Refugees are foreseen to help with the construction of elements since it will provide professional training in order to help them get a job afterwards. Also the residents will take courses together with the new arrivals so that a sense of community will be created. With this participation, not only will result in a positive outcome of the crime prevention and integration project, but it will also be creating “smart citizens”, which are able to integrate with refugees creating a multicultural society. With the help of a “smart governance”, which take into consideration the optimization of the resources to reduce crime, it is possible to improve the quality life of the inhabitants.

Villa del Prado is also a good location to start since, at the moment, the actual residents have already started asking for help to some associations to reduce crime and improve the life quality and therefore, residents’ interest and cooperation is already in act.

CHAPTER I

IMMIGRATION & MEXICO

IMMIGRATION & MEXICO

URBAN REGENERATION FOR CRIME PREVENTION IN VILLA DEL PRADO I, TIJUANA-MX.

IMMIGRATION

What is an Immigrant?

What is an immigrant? “This is referred to point out the people who arrive to a different country searching work, life opportunities, many times without the permission of the receiving country to cross their frontiers and enter its territory. This is, poor migration, one of the most vulnerable and discriminated, just below the one denominated “refugee”. (Castilla Juárez pg. 18)

The word comes from the verb “migrate”, in latin “migrare” which means to move from a space to another one. This human being that is always moving, is searching for something, but not necessarily with a specific destination, is what creates migration. There are many reason of why they decide to change places, it can be economic, familiar or personal reasons but a refugee is usually trying to escape something related to his/her security. These people, it doesn’t matter if they are migrants in search for an economic improvement, familiar reunification, or refugees, they are all people who are in a constant move, also fight to preserve their culture and tradition and at the same time they try to adapt to the new one. (Castilla Juárez pg. 20)

There is only one distinction to be made when it comes to migration, and that is internal or international. The only difference there is that

in one you have to cross a border and requires special permits, while the internal doesn't. The indicated distinction doesn't influence the human rights; therefore, people should not, and cannot be treated otherwise. (Castilla Juárez, 2015)

Types of Immigrants

It is very important to establish the difference between a tourist and a migrant. A migrant is the one who lives in a place that's different from their birth country or their citizenship. Tourists are people who travel to another place for a short period of time either for pleasure or for business. It is important to keep track of this to develop correct migration statistics.

On the 1990's, new classifications of migrants came up. According to Lopez Sala's book (pg. 53-66) these are the new groups of immigrants:

- Temporal working migrants: foreigner workers with a contract. They usually have a limited period of time and send money to their families in his or her origin country. This group of migrants comes up by the high demand of manpower that is normally limited in developed countries.
- Professional and/or high-qualified migrants: professional people that work in transnational companies and in international organizations. They are invited through programs designed

specially for them.

- Irregular migrants: These are migrants that are also known as undocumented. They enter a country without any documents or permission from the receiving country in search for work. These kinds of people are an advantage to companies that are looking for workforce at a low price.
- Forced migration: People from forced migration can also be refugees, asylum seekers and individuals who had to escape their countries due to a natural disaster or infrastructure projects imposed to society
- Refugees: Every person that live in fear of being persecuted under any circumstance. Receiving countries are compromised to protect the refugee's rights, give them an entrance permit and to live in it either temporarily or forever.
- Asylum seekers: those people who want protection but don't have the requirements to be a refugee. This group was born because it could be difficult to detect the real cause of the escape from people of the least developed countries since these could be personal, economical or persecution motives.
- Family members: people who need or want to reunify with their families or a family member who immigrated before.
- Return migration: people who return to their birth countries after a period of time. The advantage of these are that they bring with them economical contributes, knowledge and useful experiences.

There are different types of migration that exist in Latin America. Besides the international migration, there is another classification of migration that is intraregional. This means when a person migrates inside the same region. In this kind of migration, the Central American country that receives more immigrants is Costa Rica, due to the social wellness, political stability and the solid democratic system it has, especially for people from Nicaragua.

When it comes to routes that go towards the north of the continent, Mexico and other Centro American countries are affected. This is due to the new political and social demands that migration brings independently if the country serves as origin, transit or origin.

This thesis project is focused only on asylum seekers and refugees that arrive in Mexico.

Refugees

The year 2016 has the record for the biggest number of people that were forced to leave their country ever. 65.6 million of people seeked protection in another town, city, state or country according to the UNHCR (UNHCR, Estadísticas, 2017). Studies claim that these people travel immersed in migratory movements that affect different parts of the world.

There is one big difference between a refugee and a migrant. Refugees are escaping to save

their lives from any kind of fear or persecution, coming either from the government or not, for race, citizenship, sex, religion, political views, social group, sexual preferences, and they cannot seek for protection in their own country. Cartagena's Declaration of 1984 also recognizes as a refugee those who had escape their country because their lives, security, and/or freedom are threatened by the existing violence, outside aggression, internal conflicts, massive violation of human rights, and/or any other circumstances that had disturbed the public order. (UNHCR, 2013, pg. 9).

Nowadays, the war in Syria, as well as gang violence in Central America has encouraged thousands of people to leave their country in search of protection. Homicide rate data shows that 111 out of 100,000 habitants are killed in Honduras, in El Salvador 108, and in Guatemala 47 (Arredondo, 2016). Drug dealers and crime groups that commit murders and forced recruitment can cause all of this violence. "El Triángulo del Norte" or The North Triangle is conformed by Guatemala, Honduras and El Salvador. Crime groups found here have a great territorial control due to the lack of organization of the government and the high rate of corruption. People from these countries also claim that they are geographically unfortunate. They are located in the middle of two countries where powerful drug cartels are located, Mexico and Colombia.

Another important reason that Central Americans have to leave their country is poverty. These countries had suffered from the price drop of primary economical resources such as coffee and many natural disasters like hurricanes and earthquakes. Actually, hurricane Mitch on the year 1998 raised the number of immigrants that left Honduras. (“Migración centroamericana: donde la violencia y el delito no conocen de fronteras - Fundación Avina.”, 2017).

Each Centro American country has a different reason for the people to leave depending on their context. The economic crisis in 2009 caused El Salvador a decrease in the economical growth speed that hasn’t been able to recover. At the same time, there was an increase of crime and violence that affected life quality of the citizen, which causes a decrease in social development. Studies show that at least half of the Salvadorans know one or more people that has migrated, most of those without documents. One out of four Salvadorans are interested in leaving the country due to violence and crime, but what pushed them to take the decision is the lack of economical opportunities. These two factors represent the 75% of the migration reasons; family reunification, job offers, and others compose the other 25%. (“Migración centroamericana: donde la violencia y el delito no conocen de fronteras - Fundación Avina.”, 2017).

El Salvador has turned into a vulnerable and excluding country, leaving 40% of the total population in poverty. Thanks to the crime rate existing in this country, it is more common for Salvadorans to be deported due to criminal antecedents. (“Migración centroamericana: donde la violencia y el delito no conocen de fronteras - Fundación Avina.”, 2017).

Central American migration is something that is being more noticeable in the last years. Unaccompanied migration of underage children is something that concerns us all because it has serious humanitarian, legal, and political implications. During 2014, border police in the United States, reported that more than 67,000 children, under 18 years old were traveling without any parent or guardian. (“Migración centroamericana: donde la violencia y el delito no conocen de fronteras - Fundación Avina.”, 2017).

MEXICO

Mexico is a country located in the North American continent. It borders in the north with the United States, and at south with Guatemala and Belize. The total area of its territory is 1,972,550 sq.km. with 119,531,000 habitants. It is divided in 32 states and the most populous state is Mexico City with more than 20 million of residents.

The tropic of cancer divides Mexico into temperate and tropical zones, giving one of the world's most diverse weather systems. Many parts in the country, specially the northern part, have a dry climate with some sporadic rainfalls. In the summer, the temperatures can reach up to 40 °C, and 50°C in the Sonora's desert.

The geographic localization of Mexico makes immigration a topic of big importance. With its 3,152 linear km, it is the busiest land crossing in the western hemisphere. Making cities like Nuevo Laredo, Matamoros, Mexicali and Tijuana border cities with great movement of people.

Border cities can have many advantages especially in the economical aspect. The exchange rates between currencies and taxes have a great impact on the border markets. These markets are able to bring together traders with different business opportunities. For example, Tijuana has become a city where

companies, especially American's, decide to set up their factories due to the cheap labor cost. Considering this aspect, border cities help each other to grow and improve the quality of life for the citizens (Walther, 2013). On the other hand, this fact brings some disadvantages as well. The disorganized growth of the city can transform greatly the environments of the suburbs since these become a "second-hand urbanization". Also, with the opening of new factories informal settlements start to grow around them (Cruz and Forman, 2017). We can say that with this disorganized urban growth, we can say that it can be the reflection of a disorganized society and government.

As stated before, migration in Mexico has always been an important discussion topic worldwide; Mexico even has the second place in the top twenty countries with the largest diaspora population in 2015 with 12 million migrants (International Migration Report 2015, pg 19). Migration grew by 3 million in 15 years and Mexico is a one-country diaspora: in fact the migrant flow is almost always directed towards United States of America with 12 million of migrants, the 98% of the total migrants exiting from Mexico (International Migration Report 2015, pg 17).

International migration can have a significant impact on the origin countries. One of the social costs can be that the population density is reduced and if the migrant population



Figure 2.
Localization of
Mexico in the
American continent.

is young, the birth rate decreases and the country's growth slows down. Also, the no return of the migrants can cause an imbalance in the population and the perceived benefits of migration spread, encouraging others to also leave. On the other hand, the remittances sent home help the country's economy.

Although Mexico is mostly considered as an origin country since the flows of people that leave are greater than those who arrive, many Latin American people have the same desire than Mexicans to go to the U.S.A. In fact, "Migrants born in Latin America and the Caribbean represented the second largest diaspora group with 32 million persons living outside their major area of birth" (International Migration Report 2015, pg 17). The largest number of people from this group was living in Northern America, 26 million, making that the 70%. Thanks to this, Mexico can also be considered as a transit country and even a destination country.

Refugee History in Mexico

The first important stage of migration through Mexico is between 1939 and 1942, when Mexico received approximately 20,000 people coming from Spain that were escaping from the Franco's regime. It was important since there was no record or law related to any kind of asylum or refugees in the Mexican constitution. The term applied to these people was "Not an Immigrant", they came with a permit that admitted them provisionally to protect their freedom and life from political persecutions. (Cobo, & Fuerte, 2013).

The second stage comes in the 1960 with the recognition of a refugee population. In this decade, Mexico accepted many refugees coming principally from Argentina, Brazil, Chile and Uruguay due to the military dictatorship. It was different from the first stage since it was organized better and supposed a collective process, not everyone coming from those countries entered with a regular migratory status (Cobo, & Fuerte, 2013).

The third stage refers to the 1980 with the arrival of Central Americans that were escaping from armed conflict of the region. A new kind of international protection phenomenon was seen since the neighbor country of Mexico, Guatemala, suffered an unleashed violence. This provoked a massive entrance of people that were just trying to save their lives. 46,000 people were officially

recognized as refugees, some more where not even registered. Guatemalans asked for shelter in Mexico under circumstances that where not yet foreseen by the Mexican Constitution. After this event, which took by surprise Mexican authorities, there was a new vision focused on the protection of human rights (Cobo, & Fuerte, 2013).

In 2011, Mexico applied a new legal framework that represents an important development in the procedure of recognition and care for the refugee's integrity protection. These include the social, economical, and political integration. Even though the refugee law and selection has improved within time, many refugees don't live anymore in the country due to the geographical location situated near U.S.A. and Canada (Cobo, & Fuerte, 2013).

Mexico as an origin country

According to The World Bank, Mexico had 127,017,224 habitants in 2015. Due to the high level of violence and the low economy, millions of Mexicans leave their home to migrate to other countries either legally or undocumented, principally to the U.S.A (INM, 2011).

The geographic localization of Mexico makes it easy for people to think on going to go to the United States. Approximately 1 million of Mexicans cross the U.S.A.-Mexico border each year making it the most crossed border in the world, and that is only counting people that

cross it legally. While "The Herald" estimated more than 400,000 undocumented migrants that crossed this same border (Pascual Macías, 2016). At the same time, "The New York Times" estimated 840 to be apprehended daily on the month of February 2017, 36% less than February 2016 (Kulish and Santos, 2017).

Mexican migrants that are living in the United States represent the 30% of the total migrant population in this country. In 2007, they were around 30.3 million residents. (INM, 2011).

The national migration average in Mexico is 1.6%. As we can see in figure 3, the Mexican state with the highest migration index is Zacatecas, where in the year 2000, 4.8% of the total population left the state. The second place is Guanajuato with 3.5%. Then Morelos and Durango, both with 2.9%. Then San Luis Potosi, Jalisco, and Hidalgo with 2.7%. They are all above the national average. According to the National Migration Institute (INM), the principal reasons of emigration are work, family reunification and to study. (INM, 2011)

As stated before, Mexico's population density is very high and emigration's impact therefore is not negative. Another benefit this country has when it comes to migration, as an origin country, is the remittances. Mexico is the 4th country with more remittances received with 26,970 million of dollars in 2016, the highest it has ever received for this reason.

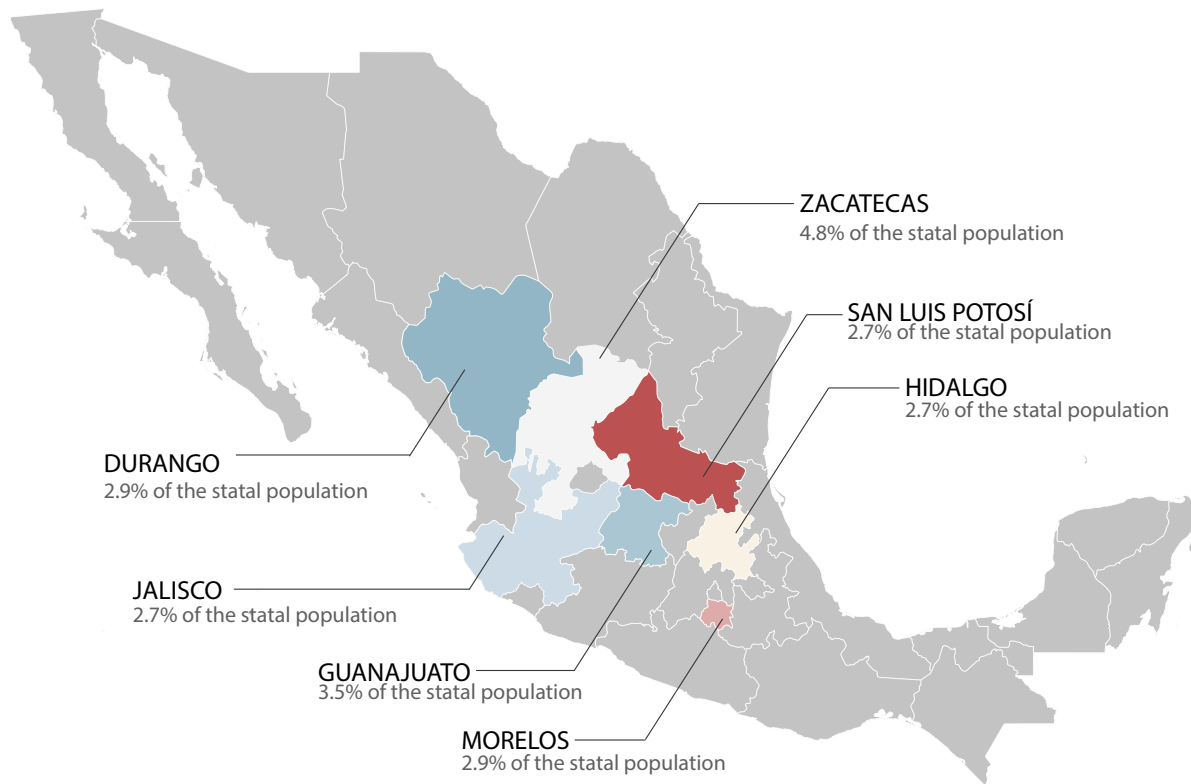


Figure 3.
Percentage of
Mexican people that
had to leave their
home country by
state in 2000.

95.5% of these come from the U.S.A., the rest comes from other 169 countries. In the top 20 countries that send remittances, 6 are European countries (Spain, France, Germany, Italy, Sweden and the Netherlands) the rest come from Latin America. These remittances represent a positive effect on consumption, savings and investments, which influence in the country's development. (Caballero, 2017).

Mexico as a transition country

Mexicans are not the only citizens that cross the U.S.A.-Mexico border. Migrants that pursue the "American Dream" come also from other countries like El Salvador, Guatemala, Honduras, etc. therefore, the most probable and possible way these people arrived undocumented to this country, was going through the whole Mexican territory. This is also the reason why Mexico has also turned into a transition country.

The U.S.A. is the principal destination for Latin American immigrants. There are approximately 8 million of undocumented workers in the U.S.A. This population has a big presence in many work-fields such as industrial, agriculture, manufacture, etc. The agriculture section is the one with more Hispanic workers with a 35% of the workers. Construction industry takes the second place with the 20%, manufacturing with 29% and hospitality sector with the 17%, while in jobs considered as well paid like engineering, Latin population represents only the 1%. (“Los hispanos ganan en promedio un 28% menos que los caucásicos en EEUU”, 2015).

Even though employment has been one of the principal reasons to emigrate towards the U.S.A., in the last years, Central America has been living under a violence crisis where criminal gangs have taken over many neighborhoods intimidating its habitants. This has forced many people to leave their country too. The immigration from Central America to Mexico has grown by the 50% during the last presidency period in countries like Honduras, El Salvador, and Guatemala (Estadísticas, 2016). People from this countries that decide to stay in Mexico, can be found near the borders, in states in the southern part of the country like Chiapas and Veracruz or in Nuevo Leon, Chihuahua, and Baja California in the northern part of Mexico. It is important to notice that less than the 10% of migrants

decide to establish themselves in this country instead of continuing their way to the U.S.A (Estadísticas, 2016).

Immigrants who want to go through Mexico to arrive to the U.S.A. have to travel 3,152 km from southern border all the way up to the northern border. These immigrant groups are composed of different types of people. They can be young men, or women, sometimes they are complete families, other times they are just unaccompanied children (referring to unaccompanied by adults, since some of the times children travel along with friends or siblings).

The most popular way to travel through Mexico is taking different trains since it might be the less risky, in terms of getting caught by the border police, in comparison to the distance they travel. Other options are by bus or walking but it takes more time.

A small part of the immigrants that arrive to Mexico decide to establish themselves in this country and not try to cross the U.S.A.-Mexico border. There are two main reasons this happens. The first one is that they see the benefits they could get by staying since they come from countries where they couldn't find opportunities or they are escaping from any kind of violence/war. The second one is that they have been forced to stay in this country due to the violence they suffer of while trying to cross the country or any kind of accident

they had been involved in, during their travel. Most of these people are located in the northern states of Mexico because of the lack of money to continue the travel.

On the other hand, the U.S.A.'s government has an agreement with Mexico. This consists on higher security and controls in the southern border of Mexico while the U.S.A. finances this migration program. In 2015, in the southern border of Mexico, the government caught 170 thousand migrants from Central America and deported them to their home countries. (Arredondo, 2016).

Mexico as a destination country

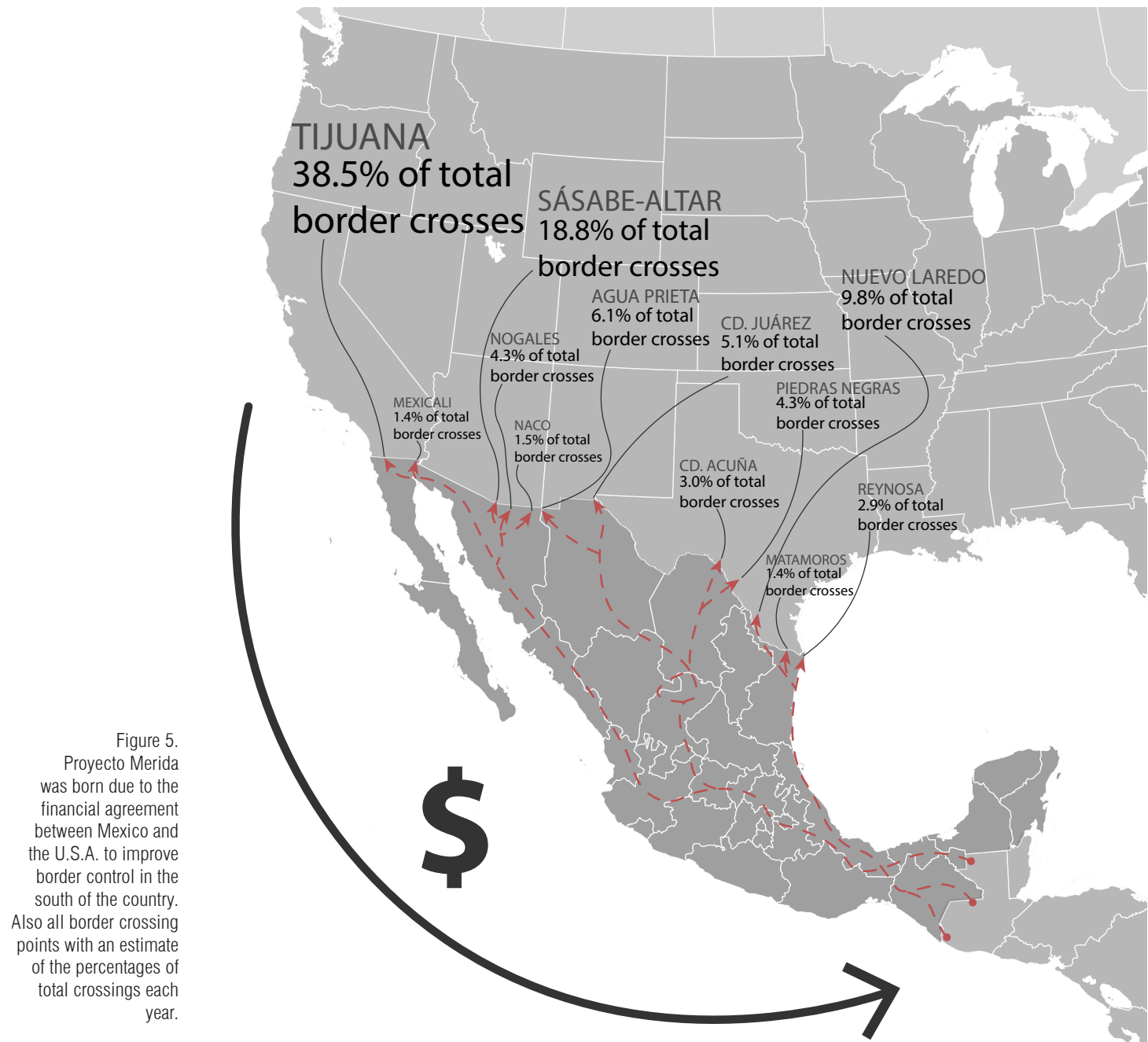
Apprehended migrants have the right to ask for asylum in any country in case they have the valid reasons to do it. It is important to know where all of these people come from so we can understand their necessities and way of living.

In 2016, there were more than 65 million of refugees in the world. The countries with more number of refugees in other countries come from Syria, Afghanistan, and Somalia. In the American continent, the country with more



Figure 4.
Migrants crossing
Mexico with the train.

Gathered from: <http://www.avancemundial.com/actualidad/los-otros-refugiados-la-crisis-humanitaria-en-el-salvador-honduras-y-guatemala/>



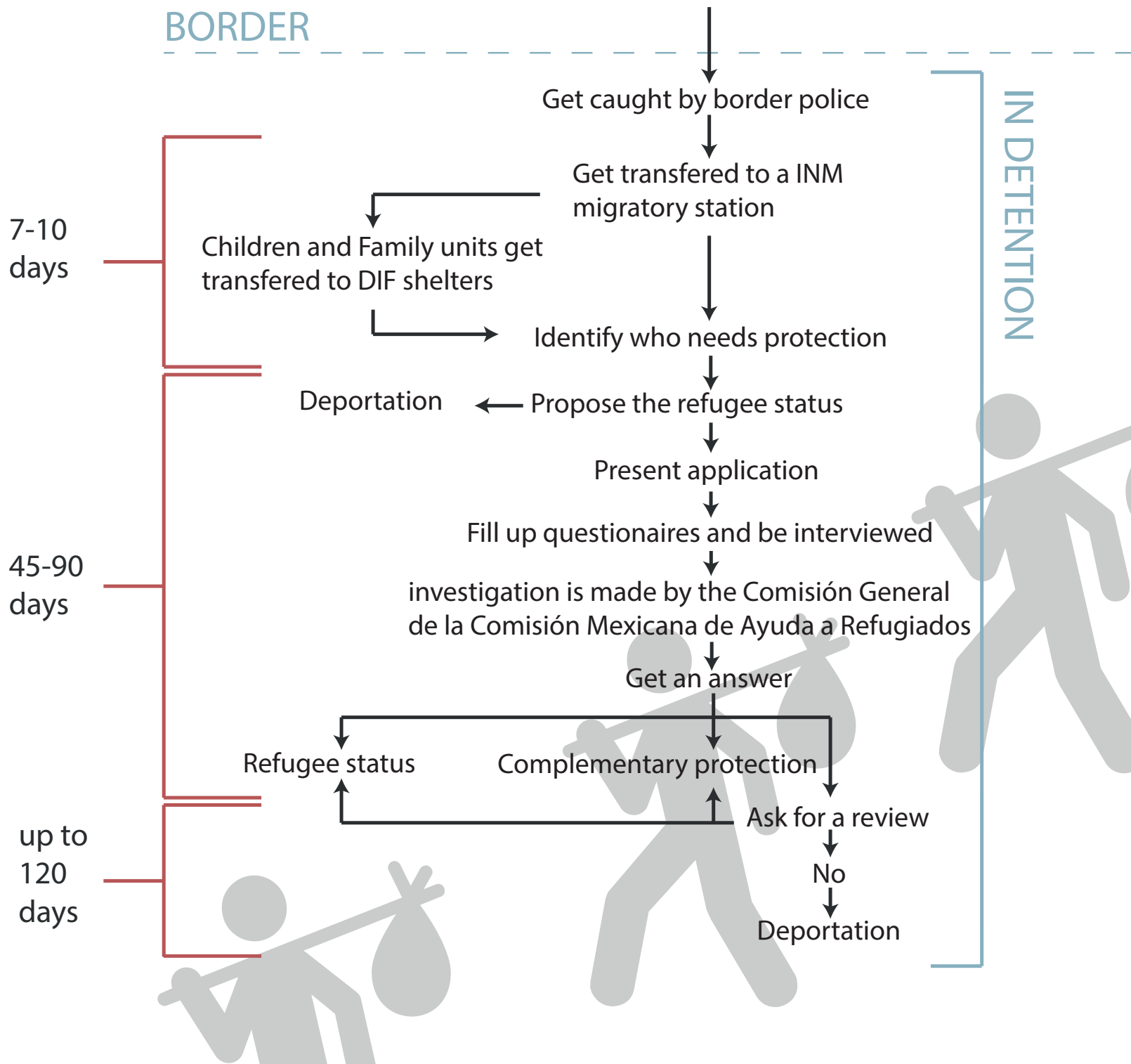
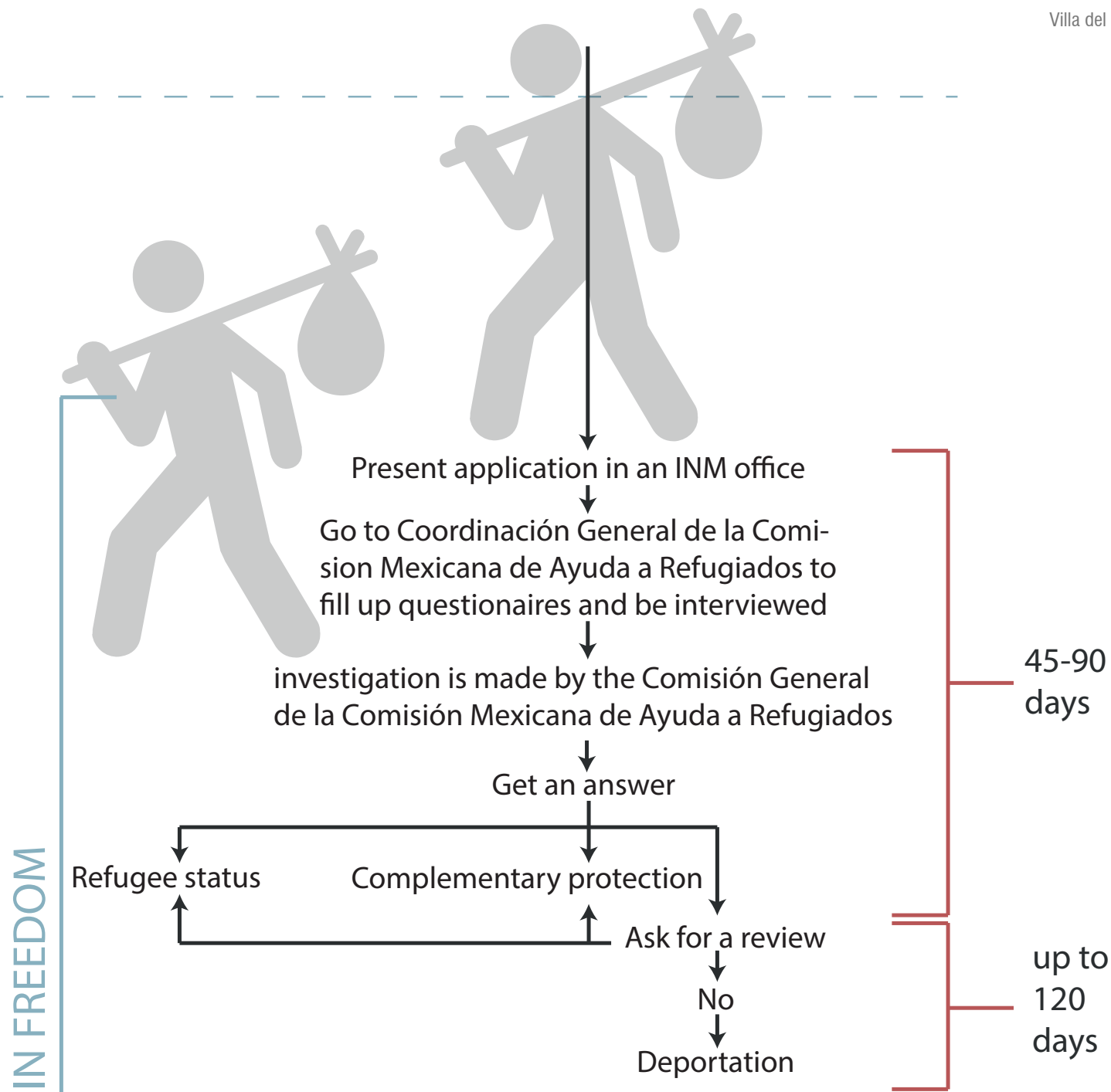


Figure 6.
Process for
refugee status
application in
Mexico as by year
2016.



refugees in the world is Colombia (Arredondo, 2016).

Refugee population represents a challenge for governmental institutions and international organisms. Mexico has a long story when it comes to protecting refugees, even though it has not always have a good legal framework for it. We can talk about three great moments that had helped develop the refugee laws in the country. These are the Spaniards arrival with Franco's regime, the South American arrival due to the military dictatorship in 1960's and the Central American asylum-seekers due to the armed conflict in 1980's, already explained in chapter 2. 2. 1. Refugee history in Mexico. (Cobo, & Fuerte, 2013).

Current refugee situation

There are two ways to ask for the refugee status in Mexico as shown in figure 6. The first one is after getting caught by the immigration police and before being deported. If an undocumented immigrant is taken to a migratory station, he/she can ask for international protection and the country is forced to assist the immigrant to start the request and investigate the case, while he is inside the migratory station. The second way is when the person goes directly to the police and asks for the refugee status. Then the case will start to be investigated while the immigrant can be outside the migratory

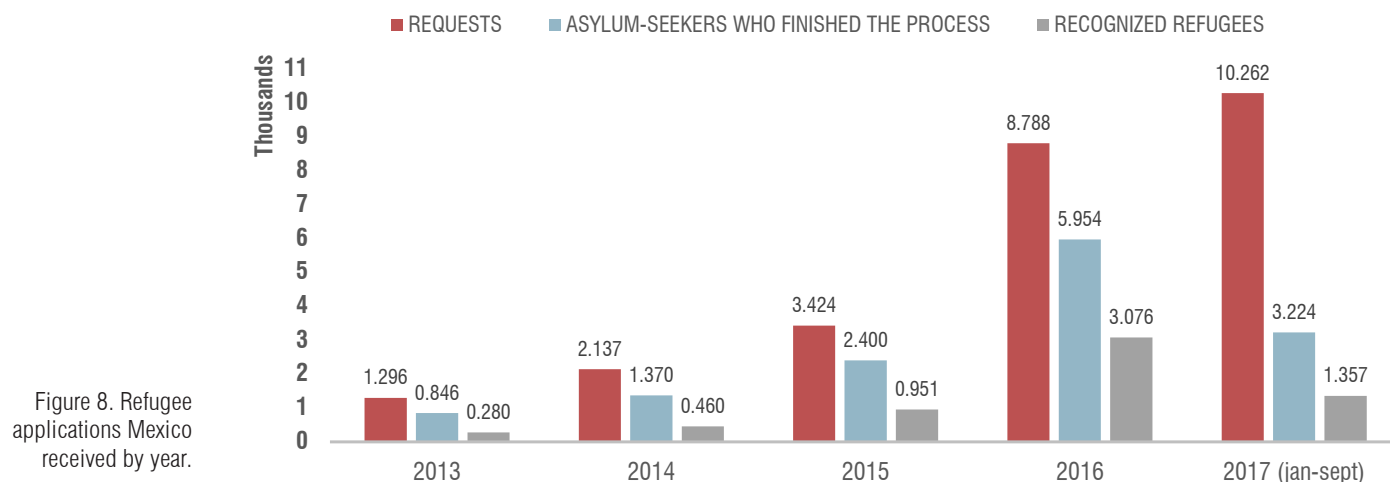


Figure 7.
Migratory stations in
Mexico in 2017.

stations. The only difference between these two processes is that in the first one, the police caught the person, while in the second one, the person was the one who went directly to the police.

Migratory stations are the detention centers where the government keeps undocumented people while investigating each one of the cases before the migrants get deported or accepted as refugees. The current situation represents an issue to the Mexican government since it has to cover the costs of the stay for all of the asylum-seekers that need to stay in a migratory station.

The people who present the refugee request in the second way, that is, when the person goes directly to the police, he/she can move freely within the city, but only inside the city where he/she presented the request, since they have to assist to several meetings in order to get to a resolution of the process. The problem with this is that the asylum seekers in need for



a place to stay, tend to so stay in shelters and due to the high demand for a bed it can cause an overflow, it is important to say that the shelters accept also other types of migrants, not only asylum-seekers.

The refugee requests have been growing exponentially in the last years. We can see in figure 8 that in 9 months of 2017, the requests have already reached a higher number than in 12 months of 2016. Even though less than half of these people are recognized as refugees, the numbers are still preoccupying since the country might not be prepared for them and therefore for the future arrivals.

Even though many people don't know or won't consider trying to apply for a refugee status in Mexico, in 2015, there were 3,424 applicants from which only 949 of them were accepted. That means that only 28% of the asylum

seekers receive this status. From those 3,424 applicants, 3,141 of them came from Central America. From those 3,141, only 879 obtained the permit to stay in Mexico as a refugee, but most importantly, 92% of the refugee people came from the same area. (Arredondo, 2016).

Migration is mainly due to the lack of opportunities and the high level index of violence and insecurity generated specially in Central America. The immigration from Central America to Mexico has grown by the 50% during the last presidency period in countries like Honduras, El Salvador, and Guatemala. People from these countries that decide to stay in Mexico, can also be found in the south of Mexico near the border, in states like Chiapas and Veracruz. It is important to notice that less than the 10% of migrants decide to establish themselves in this country instead of continuing their way to the U.S.A. Even

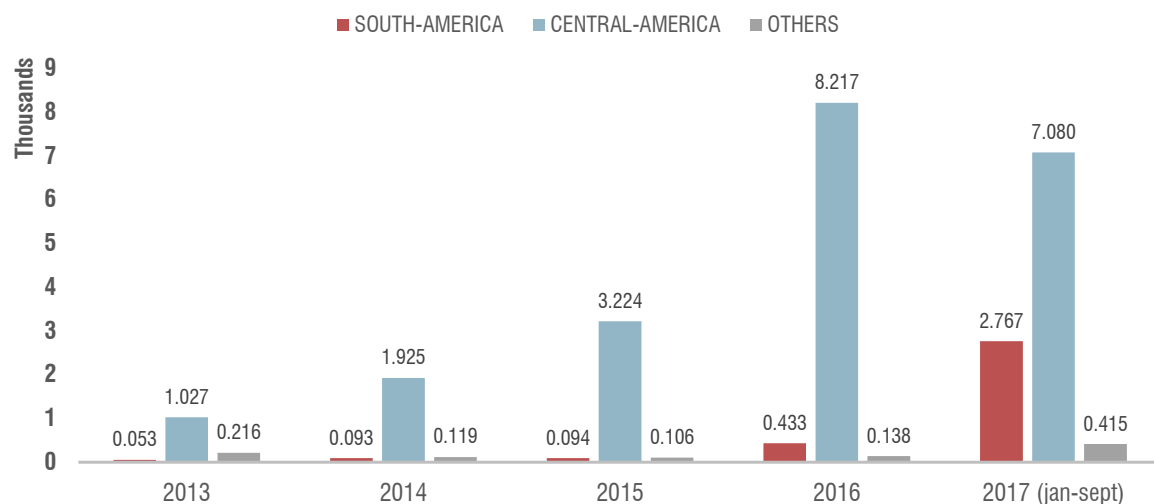


Figure 9. Refugees applications' by region by year Mexico has received

though is a small part of the total, they are economically active.

With the violence growth in Central America, the number of refugee applicants and asylum seekers raised 164% more. As we can see in figure 8, in the first four months of 2016 there were 2,100 applications, while from January to December of 2013, there were only 1,296. It almost doubled up the number of a whole year in only four months. It is believed that Mexico is suffering one of the biggest refugee crises of the last 15 years. Applications grow each year almost exponentially. In 2013, 70% of undocumented migrants in Mexico where from Central America, the next year grew up to 82% and on 2015 to 92%. (Arredondo, 2016).

On the first 4 months of 2016, Honduras has the biggest number of applicants with 987, until the same date, 708 finished the process

and only 330 where recognized as refugees, 83 obtained complementary protection and 295 where not recognized. The second country with more applicants is El Salvador with 906, only 635 finished the process, 380 where recognized, 57 obtained complementary protection and 198 where not recognized. In the third place comes Guatemala with 97 applicants, only 65 finished the process, 30 where recognized, 2 obtained complementary protection and 33 where not recognized. The total of applicants that finished the process where 1,479, and only 786 where recognized, 142 got complementary protection and 551 where nor recognized all from January-April 30th, 2016. (Estadísticas, 2016) And even though the numbers are not big compared with other countries such as Italy, a country that received 123,370 applications plus 99,920 pending applications in 2016 (Statistics; Italy, 2017), the UNHCR has declared a state

of crisis in Mexico due to the rapid growth of application numbers and the current war situation in Central America.

These increments could also have been caused to the improvements in terms of recognition of the refugee is related to the increasing number of applications. Also, there has been a greater cooperation between international protection institutions in Mexico. (Cobo, & Fuerte, 2013).

Most of these people are located in the northern states, sometimes because of the lack of money. Another reason could also be that either family or the “coyote” abandons them. Other times, they find the opportunity to work in Mexico and decide to stay. The states where we can find more immigrants are Reynosa, Tampico, Matamoros, and Nuevo Laredo.

We can conclude that the geographical localization of the country is a determining factor of the type of migration and this can

change within the years. With numbers rising up for refugee applications, the government should start thinking what to do with these people. It is important for a society and for a government to integrate them to this new context. Integration starts by having a place to live and the abilities for a obtaining a job.

It is believed that Mexico is suffering one of the biggest refugee crises of the last 15 years. We can see in figures 7 and 8 that applications grow each year, not only but, principally from people of Central America. In 2013, 70% of undocumented migrants in Mexico where from Central America, the next year grew up to 82% and on 2015 to 92%. (Arredondo, 2016).

The ACNUR (Agencia de la ONU para los refugiados) helps the government to identify who needs protection from the people who are trying to cross the country. They also give temporal assistance for the integration in the country with organisms from civil society. They monitor the border cross points,

Figure 10.
Refugee requests in
Mexico by region in 2013.

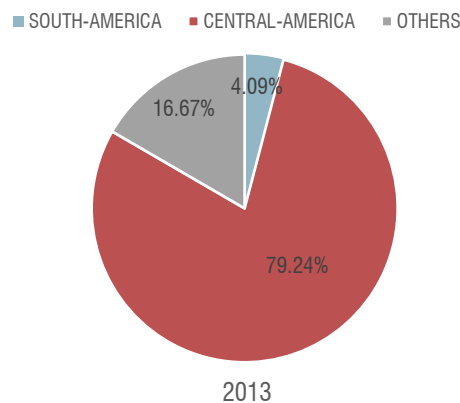
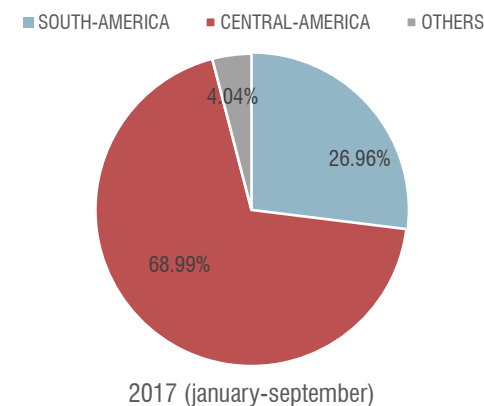


Figure 11.
Refugee requests in
Mexico by region in 2017.



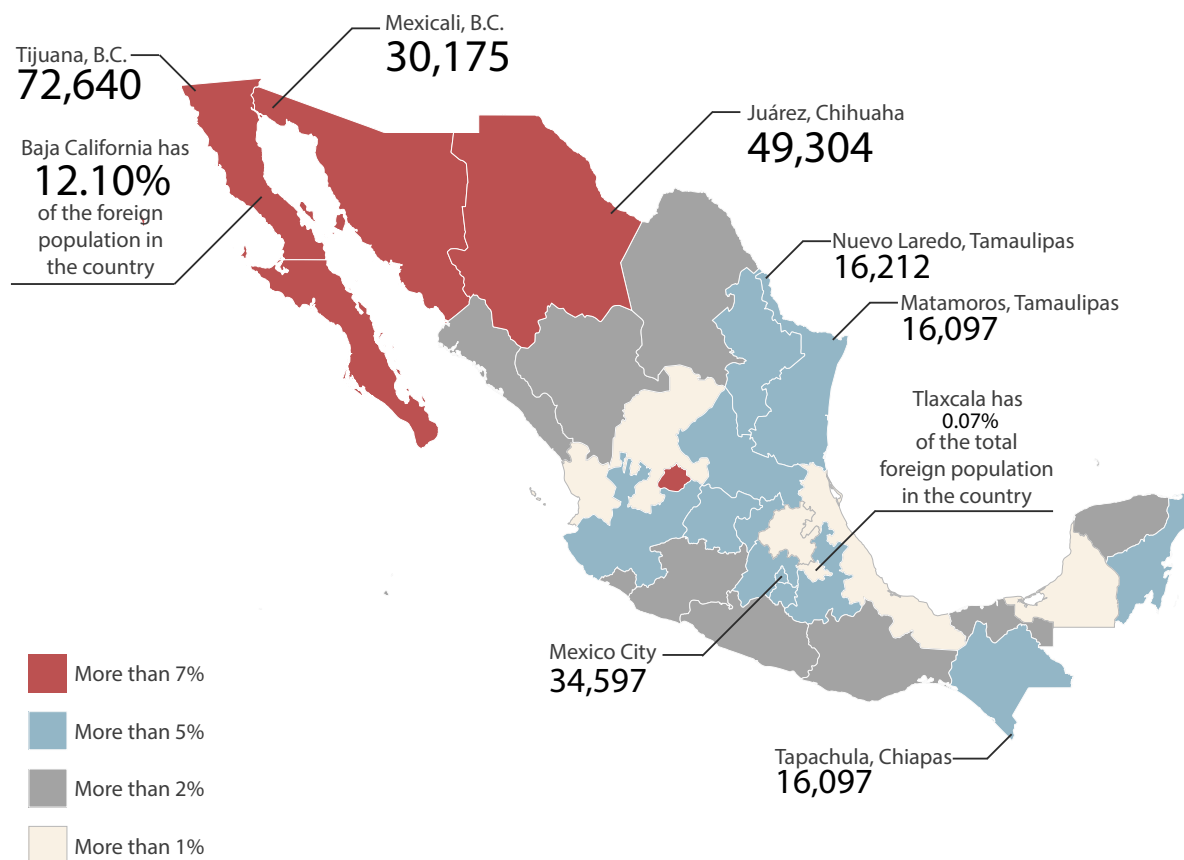


Figure 12.
Mexico's foreign
population by state
in 2016

migratory stations and migrant shelters. They also identify the cases that could apply for a change of status into refugee, protect their human rights, and facilitate integration in society. They have 3 principal programs; legal assistance and materials to refugee, implemented by Sin Fronteras IAP, socio-economic integration of refugees and asylum applicants, implemented by Programa Casa Refugiados A.C., and detections and temporal assistance for refugee applicants, refugees, people with complementary protection, and

stateless people implemented by Casa del Migrante Scalabrini A.C. ("El ACNUR en México", 2017).

"The planning figures for 2017 of the ACNUR are to provide information to people about the the asylum procedures. Also, to accommodate 7,200 individuals in reception centers and improve 25 of them. Another plan is to support with legal matter 7,000 people, including those released from detention. Also, 2,000 detainees will be monitored and individually

recorded by age and sex, while 35 advocacy interventions will promote alternatives to detention” (“Mexico”, 2017).

“ACNUR’s results for 2015 where 929 individuals (449 of whom were children) were granted refugee status. Some 152 (13 of whom were children) received complementary protection services. Also, 176 visits to 15 different migration detention facilities were organized by UNHCR to intensify the delivery of information on asylum and reinforce efforts to prevent refoulement and 32 shelters providing basic assistance to migrants and asylum-seekers intensified their engagement with UNHCR” (“Mexico”, 2017).

Besides ACNUR, there are also other ONGs that assist migrants, refugees and asylum seekers. Some of them are “Soy Migrante”, “Cultura Migrante”, Colectivo Ustedes Somos Nosotros”, “Fundación Caminos de Ayuda Coacalco”, “Movimiento Migrante Mesoamericano”, “Universidad Iberoamericana”, and “FM4”.

Mexico has had a long history with refugees but since this topic has been growing exponentially in the last years, and some of these organizations are in their first years working with these people, I decided to take refugees as the target people for the thesis. The organization FM4 states that they have assisted around 50 asylum seekers in 2017, their first year, by giving them a place to sleep.

They state, based on their experience, that it is important to take into consideration that these people have left their countries due to violence and thanks to their past experiences where gangs have control of their communities; they tend to be very cautious when it comes to strangers.

Migratory situation in Tijuana

Tijuana is a border city located in the northern part of Mexico. Thanks to its location, there is a high migrant flux in this city, actually, the cross-point with the highest activity is located here. As stated before, some of these people are residents of Tijuana that either work or go to school in the U.S.A. or vice-versa.

On 2010, a big earthquake hit Haiti, leaving many people without jobs, or homes. With the Soccer World Cup in Brazil, workforce was required and therefore many of those people went to this new country for the construction of the stadiums. When the World Cup ended, many of them were left without jobs or a place to live, and that’s when a high number of them decided to try to go to the U.S.A. as refugees. At the same time, with the increase of requests, and to try to discourage migration, the U.S.A. implemented a new law that stated that asylum-seekers needed to apply for the status outside the country to be accepted; otherwise, they would be deported. With this new regulation, many of them were

forced to stay in Mexico, especially in Tijuana.

The first wave of Haitian people that arrived to Tijuana was on May 2016, and they were 100, but by January 2017, there were already 4,500 Haitians in this same city. Some of them live in refugee/charity centers, others in places called “cuarteros” that are buildings where they rent rooms, and others live with other Haitian people that are already established in Mexico. Although these asylum-seekers have found a place to live in, charity centers are starting to be overpopulated.

Due to the preoccupation of this charity network, the church proposed to build some houses in a lot they owned for these people in order to create a community. The issue is that by creating a community thinking only on one kind of people, based on nationality, it would become a segregation camp. With this argument, the government denied the construction permits, along with a study that identified the area as risky for construction, and the project was not developed, but the issue of the over-population continued.

Although, Tijuana receives many immigrants from many parts of the world, especially Central America, Haitian people represent a major issue when it comes to the integration with society. There was a study made in 2009 called “Estudio sobre la integración local de las personas refugiadas en México”. Here they interviewed 142 refugees that were in

this country, from which 104 have Spanish as mother language. And even though the Spanish accent and some words might be different, they claimed it was easier for them to integrate with the society. Haiti, being a French language country, will represent another obstacle for this, and also for the government since they will have to implement also language courses. (Estudio sobre la integración local de las personas refugiadas en Mexico, 2009).

CONCLUSIONS

There are many types of immigrants in the world some of them are international, others can be national, some of them leave their hometowns in order to improve their life quality, while others are forced to leave their country due to life threats such as wars. These people can be classified in different categories depending on the cause that motivated the person to leave their hometown, but the most vulnerable of them are refugees, those who needed to leave their homes since they live in fear of being persecuted. The current situation of the world is forcing millions of people to seek for international protection in other countries.

Mexico due to its geographical localization is a country that has all three types of migration and it can be considered either as an origin country, transit country and destination country. Millions of Mexican people have left

the country in search for a better economical opportunity in the U.S.A. but they are not the only ones. Other Latin Americans are following this idea going through Mexico in order to arrive to the northern countries making it a transition country. Finally, many of those Latin American, and with the current internal issues in Central American countries, many asylum-seekers are applying for international protection in Mexico, making it a destination country.

Refugees' applications in Mexico have been increasing significantly in the last years. This could be due to the current violence situation in Central American countries, the improvement of the refugee law in Mexico or even the changes in the U.S.A. legal matter. This has created many issues Mexico such as overcrowded shelters and migratory stations, the increase of migratory agents and police and hence the cost, concern for these people that results in the construction of insecure houses, and the responsibility of refugee integration in the society. That is why organizations such as the United Nations have declared a refugee crisis in this country.

Cities like Tijuana are living this situation more closely since they are border cities. There can be many advantages of being localized in this part of a country, but it can also bring some issues. For example, residents in Tijuana can have the option of working or going to school in both countries, Mexico and the U.S.A. Also,

as stated before, some businessmen decide to open their companies or factories in Mexico due to the low cost of labor compared to the one existing in the U.S.A. On the other hand, many migrants and asylum-seeker are forced to stay in border cities for many reasons such as law, economical or personal, creating big foreigner communities such as the Haitian in Tijuana.

Mexico has had a long history in terms of migration. And although many of its residents have left their country, mainly towards the U.S.A., it has also accepted many other people. With the arrival of the Spaniards in 1539, Mexico started realizing it could provide international protection and it included this in its constitution. After this wave of refugees, Mexico had another one in the 1960's with the arrival of some South American residents, followed by Central Americans in the 1980's. The story seems to be repeating with this last group in this last two years since the increase of requests has been doubled each year. The main cause of this is the violence growth in their hometowns sometimes including life threats. This makes them suitable for the refugee status in other countries and due to the easy access to Mexico, this makes it a good destination country.

CHAPTER II

CITIES AND CRIME IN MEXICO

CITIES AND CRIME IN MEXICO

URBAN REGENERATION FOR CRIME PREVENTION IN VILLA DEL PRADO I, TIJUANA-MX.

URBAN AND ECONOMICAL HISTORY OF TIJUANA

The relationship of Mexico with the U.S.A. has encouraged the demographics of Mexico to grow in an exponential way. The cities located in the border have been the most affected ones, both in a positive and negative way. We can see this in the demographic sense especially after the national revolution. In the years 1930-1990, while the national population in Mexico grew up to 5 times, the border cities grew up 15 times more and just in the city of Tijuana, in the same years, the population multiplied 66 times. Many people saw the economic opportunity in these cities thanks to the establishment of a series of laws and agreements between the U.S.A. and Mexico in order to help the agriculture. This program was signed after the end of WWII, and it is where the highest peak of people migrating from the interior of the country transferred into these cities. An agriculture crisis occurred in the years of 1960-1970 since the international cotton price decreased and it was the base product of the incomes. After this, the demographic growth was significantly decreased and with it, the social growth was affected. In order to try to overcome this crisis, the government took advantage of its geographical localization. (Quintero, 1995, pg 106).

Tijuana is one of the newest cities in the country. Its foundation was on July 11th, 1889.

The first economical activities it had were in the means of tourism for American citizens, bars, gambling games, horse races and bull-related events such as fighting and riding. All of these were born from the alcohol and horse races prohibition in the American state of California in 1911. American businessmen saw the opportunity on this Mexican city that was easily reachable, not only by car but also by train, and the Mexican people saw this as an important economical opportunity. The city became an entertainment center for Americans. (Quintero, 1995, pg 108).

Since the development of Tijuana was linked to the situation in the U.S.A., it was affected by the Great Depression. The Mexican president at that time had tried to encourage the national development and prohibited the gambling houses in the territory. This made Tijuana suffer another crisis and had to change the economic activities in order to continue developing. The government invested in the agriculture sector for this state and it also improved the public services. The entrance of the American country into the WWII also boosted this new economical activity thanks to the need of forced labor in order to maintain the military productivity. This created a big migration activity from rural areas towards this city, but also from Mexican people who had lost their jobs in the United States and had to return to Mexico. The population grew from 22 000 in 1940 up to 166 000 residents in 1960. (Quintero, 1995, pg 114).

Due to the over population at the time, in 1965, the government started encouraging the industry sector to grow in the northern border cities. They not only promoted new methods to incorporate Mexican raw materials to other industrial processes but also they encouraged foreign companies to establish in the country and export Mexican products. With this, there were many production and technological changes in the city and industry has been the main economical activity. Even though the geographical localization of Tijuana promotes commercial activities and the industrial sector, it is also the principal border-crossing gate to migrate to the United States. (Quintero, 1995, pg 129).

Figure 13.
Mexico, on the
right, border with
the United States of
America, on the left.

Gathered from: <http://www.revistacodigo.com/ciudades-radicales-justing-mcguirk-alejandro-aravena-activismo-politico/>



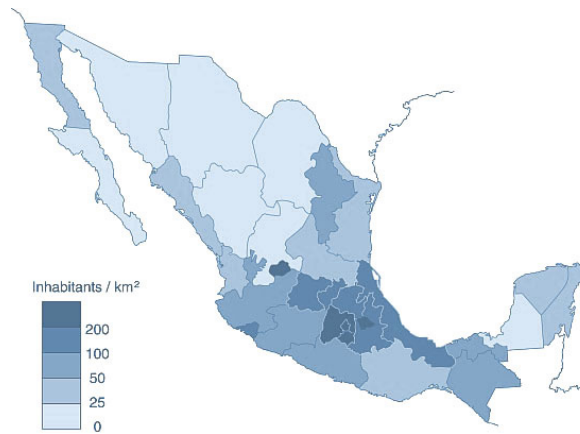
URBAN SITUATION

Urbanization has been occurring rapidly in the last decades, nowadays, 54% of the total population of the world lives in an urban area¹. It is expected that by 2050, between 60% and 70% of the population will be living in an urban area. It is expected that less developed countries will be the most affected by this rapid growth.

We can see that the population in Mexico, in 2015, was about 127 million people, from which 76.7% of them were located in urban areas¹. Many of Mexican indigenous people, along with immigrants are heading towards more developed cities for employment and education. This has been an issue for the country since the continued growth could lead to the insufficiency of the country's resources and infrastructure.

Mexico has 12 cities with more than a million people. Mexico City with 21,321,000 habitants, or a population density of 5,974 people by km² being the most populated city in the country. Tijuana has the 5th place with a population of 1,376,457.

The rapid urban growth in Mexico has caused the many concerns towards the benefits of this. The uncoordinated expansion of the cities has caused the birth of new distant, disconnected and mainly single-use housing developments. The national institute of



1. Urban areas intended as communities with 2,500 habitants or more.

Figure 14.
Population density
in Mexico by state in
2010.

Gathered from:
<http://geo-mexico.com/?tag=population-density>

statistics and geography also found out that there are 31.8 million houses in the country. Even though 3.8 people compose the average family, the average number of people living in one house is 3.9.

In 2000, the government decided to help the working class living conditions. With the help of the World Bank, Wall Street firms and other foundations, more or less 20 million people have left urban areas in order to live in these new housing developments in search of a better life. Within time, it has been found out that many social, financial and physical hazards are being developed inside these housing communities. The homebuyers got stuck with loans that increased as the development deteriorated into a slum, and the value decreased. (L.A. Times ch.1).

In Mexico, social housing policies have been passing through different models. In the last decades, social housing has consisted on a

model house replicated thousands of times in order to create new communities on the outside of the cities. These models have been very successful with the lower and middle class families. However, the ideology of the construction sector is to maximize the use of each lot even with the lack of infrastructure. “The “housing developments” exclude mosaic lands pure and serve as dormitories cities” (Schwanse, 2014).

Even though the project presumed a lot of potential, the poor interest of the government and the lack of services such as transport or parks have led to the abandonment of the houses even if the building is still in good conditions. It is interesting to notice that, according to “El Economista”, 14% of the housing in Mexico is abandoned. Some of the causes of this are the cost of transportation from house to work, the raise of criminality in the residential areas, migration, and the great production of supply that surpasses the demand. On the other hand, most of these houses are located in the states where more house loans are released. These states are Jalisco, Nuevo Leon, Estado de Mexico, Chihuahua and Baja California. Tijuana, located in Baja California has a total of 111,103 abandoned houses that equals to the 20% of all homes in this city.

The conditions of each housing complex is different one from another; in some of them, it is easy to find unfinished or inexistent infrastructure, but the tendency is that those

near major cities have had a more rapid decay. Many of these developments were built in marginal areas, far from employment centers and even scarce access to water. For example, in Guadalajara, the city approved the development of one of these projects for 300,000 people. Due to the demand of the houses, now, the water needs to be rationed and many families do not receive water every day. The same happened in Huehuetoca, Mexico City, where the water has to be delivered by truck twice a week to each home. Also, some of them do not have working streetlights. With the availability of these abandoned spaces and the scarcity of public services, people dispose garbage in vacant lots, and others burn it to deter rats. (Marosi 2017).

The life quality in these projects is not only affected by the far distance of employment, schools and other services but also the size of each unit can be as small as 30 sqm. In addition to that, families as big as 6 or 7 members can be found living inside these one-bedroom units. (Marosi 2017).

It is estimated that 300,000 people live in more than 40 incomplete developments only in Tijuana and Ensenada. Meanwhile, in the state of Mexico, there are only 36 out of 235 developments that were completed, leaving from 200,000 to 500,000 people in scarce living conditions. This have led to homeowners protests, sometimes even violent ones. (Marosi 2017).

The loans that were given to the homebuyers are tied to the inflation index, and even though the value of the house decreases, the price at which people bought the home keeps raising. Given these reasons, many people have decided to walk away from their homes, leaving the space open for gangs to take over and builders have found themselves with abandoned hundreds of developments without incomplete infrastructure. (Marosi 2017).

In 2001, Mexico's government decided to assist the poorest people in the country with this loan system, aimed largely at first-time buyer with low incomes and no savings. This encouragement leads to the increase from 205,000 loans issued in 2001 to 494,073 in 2008. But by 2011, the demand for the houses decreased and so the government started reducing the flow of mortgages. Three years after, three of the biggest construction companies (Homex, Casas Geo and Urbi) declared bankruptcy. (Marosi 2017).

The abandonment of the households creates another big problem, not only because the property values go down, but also this leaves the space for criminals to commit crimes. On the other hand, socioeconomic characteristics have a strong influence on crime rate, as well as the physical form of the residential environment.

It is important to try to restore these areas, not only because the percentage is very high, but also because they create gather spaces for drug dealers and criminals and these acts as a domino effect, leaving a big part of communities abandoned.

The abandonment of houses can lead to criminality since they are left unguarded. When there are no signs of ownership, criminal activity behavior seems to be "encouraged". This was proved with Zimbardo's experiment of 1969, where he left an abandoned damaged vehicle in the street and this was vandalized.

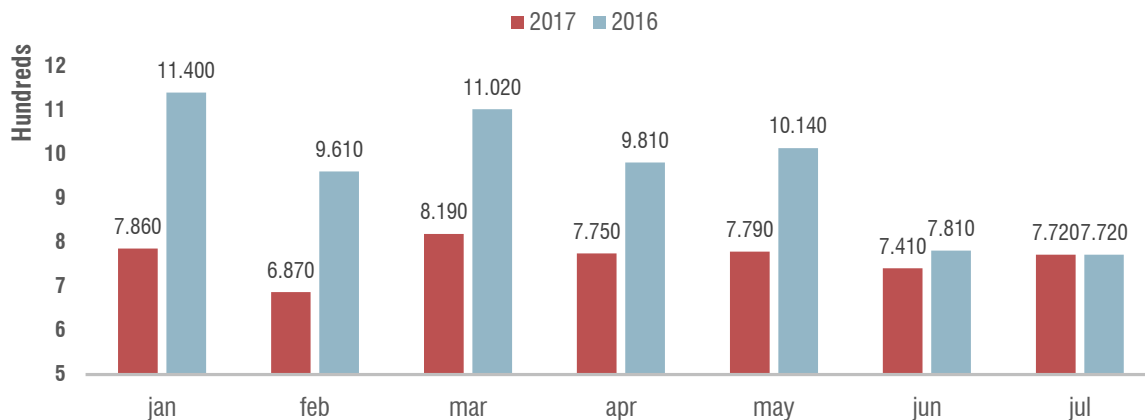


Figure 15.
Home robbery by month in
2017 in the state of Baja
California

Gathered from: <http://www.copladebc.gob.mx/publicaciones/2017/Mensual/Tijuana%202017.pdf>.

This is also proved with the Broken-window Theory that claims the properties should be maintained with a good aspect in order to reduce fear of crime and vandalism itself.

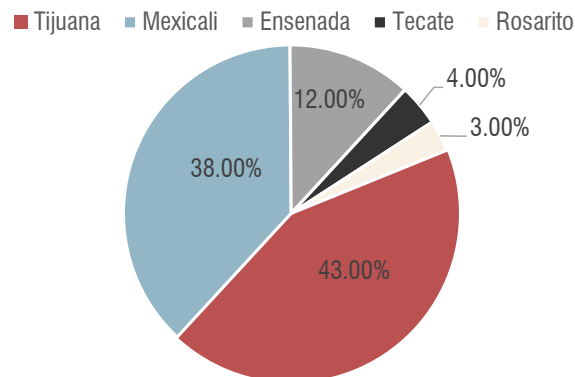
of 17 out of every 100,000 habitants in 2015 and since 2007, 26,000 forced disappearings were registered. This has cost up to 134,000 million dollars to the government.

Mexico's ONC (Observatorio Nacional Ciudadano), the organization who studies the security, justice and legal situation of the country, has registered a grow in the total criminal² rate of 7% in the state of Baja California in the first months of the year 2017 in comparison with the first 4 months of the year 2016³. The city with the highest percentage of these incidences was Tijuana with 43%.

Even though, the total criminal rate grew, the robbery to residential houses in Tijuana decreased of 30%. 93% of these cases were reported to be without violence. The days of the week with the highest number of incidences were Monday and Wednesday at 12:00pm. and 20:00. We can assume this is due to the lack of presence in the houses.

Figure 16.
Home robbery by month
in 2017 in the state of
Baja California

Gathered from: <http://www.copladebc.gob.mx/publicaciones/2017/Mensual/Tijuana%202017.pdf>.



2. Homicides, domestic violence, vehicle robbery, residential robbery, commercial robbery, sexual violence, and violent robbery.

3. January-July: 60,144 incidences; January-July 2016: 56,039 incidences.

CRIMINALITY

According to the Huffington Post, Mexico is the third most dangerous country in the world, surpassing countries such as Iraq and Syria. The root cause of this violence has been identified to be related with organized crime, showing that narcotraffics can overcome other types of conflicts such as the civil war in Syria.

The investigation made by the British consultor Verisk Maplecroft called Global Criminality Index of 2016, involves 198 countries and shows that the most violent country is Afghanistan, followed by Guatemala, Mexico, Iraq, Syria, Honduras, Venezuela, and El Salvador. The homicide rate in this country was



Figure 17.
Street view of houses in Villa
del Prado I.

Gathered from: <http://www.google.com/maps>

CONCLUSIONS

We can conclude that the main issues this community is facing are insecurity related to homicides, public lighting, gangs, drug dealers, robbery, graffiti, bad pavement, and trash. Even though this community has several basic services, they are still missing some of them or the improvement of these like public transportation, streets and community centers. The high level of insecurity makes the people abandon this development, leaving space for criminals, gangs and strangers take control of these. More than half of the residents have experienced at least one time house robbery, vehicle robbery or assaults, some of them even more than 15 times. The complex has 11 years and the houses are still in good conditions and habitable, the only issues are the abandonment, graffiti and lack of maintenance.

CHAPTER III

SAFETY THROUGH ARCHITECTURE

SAFETY THROUGH ARCHITECTURE

*“ HOW CAN I ADAPT
AN ABANDONED
COMMUNITY TO HOST
REFUGEES AND MAKE
IT SAFER? ”*

SEEKING CONTROL AS MEANS OF SAFETY

The interventions on the built environment related to the safety of the people have been present since roman times. For example, the use of walls is considered one of the most popular crime prevention tools since it protected the populations from attacks, as well as it represented the separation of rural and urban space. In the medieval times, in Paris for example, the walls remained as protection for the city, and even though urban density was growing, the walls also grew so that they could meet the necessities. But, in this same city, in the 1800s, Europeans were fighting the insurgencies and many neighborhoods were destroyed. The city was reshaped due to the demolitions and people felt the city as filthy, decadent and dangerous. The neighborhoods started transforming into high density, poor slums that needed to be controlled. With this, Bugeaud wrote *La Guerre des Rues et des Maisons*, which would become the first manual for urban welfare and that would be implemented later on by Haussmann⁴.

Bugeaud proposed a reorganization of the city fabric that was needed in order to suppress the rebellion by implementing control systems. In this way, he described several military strategies in order to form several small groups that surrounded and destroyed a barricade.

4. George Haussmann was born in 1809. He was a public functionary that proposed Paris's renovation along with Napoleon III.

“This way, we would choose houses that control several streets, bridges and large avenues in the suburbs, these houses would be closed on the long term for public use. Openings that would have a view on the streets would be walled and fortified up to the necessary height to cover well the defenders while the other openings would bring some light in. Entry doors would be fortified with iron in such a way that bullets could not pierce them; we would establish another fortified spot for second defense in case the doors would break.

[...]

These houses should be considered like small forts. The service in it would be effectuated continuously with the same regularity than during war time.”⁵ (Bugeaud, 1997, pg. 120)

Hausmann redesigned Paris in an economic depression era. He proposed an integral plan where barricade areas were to be destroyed and water, drainage, transport, residential and industrial systems needed to improve. Since the economy was not in a good place, he proposed to contract residents in order to develop the project. For him, the contributors' wealth was the city's wealth and that is why both the city and the government financed this project.

He opened up the streets in order to revalue the monuments and build a modern image of space and light, this, he thought would

go against insalubrity. In order to provide a better organization of the city's functionality, one important aspect was to eliminate multifunctionality blocks, creating either residential or monumental blocks, but never mix uses. With these interventions Haussmann targeted modernity, beauty, and especially surveillance, providing better health and city order.

Some years later, with the World War II (WWII) we can see a new city system based on inclusion and exclusion. The invention of camps was based on an old idea that differentiates the urban from the rural, but this time it segregates people that have a common factor such as religion or race. This, as Alessandro Petti states, is a degradation of a political organization that intended to conserve an order based on people who do and who don't make part of something, in this case a certain society. With these camps, the city is now difficult to be seen as a democratic space. Segregation areas are not considered as part of the city anymore, they are just camps where “dangerous” people are located and locked inside to keep certain control. Sometimes this method is also used in order to “keep people safe” for example, English people in South African guerilla, where people that were not part of the war were locked inside concentration camps to keep them far from danger, even though more than 20,000 people died inside this fences (Petti, 2007, pg 121).

5. Ainsi, on ferait choix des maisons qui commandent plusieurs rues, le passage des ponts et les grandes artères des faubourgs, ces maisons seraient affermees à long bail pour cause d'utilité publique. Les ouvertures qui ont vue sur les rues seraient murées et crénelées jusqu'à la hauteur nécessaire pour bien couvrir leurs défenseurs et le reste des ouvertures donneraient du jour. Les portes d'entrées seraient crénelées et doublées en fer de manière à ce que les balles ne puissent pas les percer ; on établirait en arrière un tambour crénelé pour seconde défense si les portes étaient forcées.

[...]

Ces maisons devraient être considérées comme de petits fortins. Le service s'y ferait constamment avec la même régularité que dans les plans de guerre. P120

With the WWII, many refugees escaped from their countries, creating concentration camps seemed to be the solution of this problem, but these segregation methods have been present in many countries before this, and not necessarily inside a fence. The act of segregation is a way of taking away a citizen's rights and his relationship with the city; camps are a form of "anti-city" (Petti, 2007, pg 123). And if the city represents a democratic space, and the camp represents the limit of a disorganized political area that is seeking for a control, there is also a suspension area. This is a third zone localized inside the city in search for safety and a proper space and social control form. Some examples of these spaces are refugee centers, vacation village, or even business centers. All of them help to remark the new problems and new objectives

of a society. (Petti, 2007, pg 128).

After the war, Berlin stayed divided in by 4 occupational sectors (Soviets, French, English, and American). Some years after, the authorities decided to divide the soviets from the rest with a wall and closing crossing points. This was to separate fascists from democrats, making a perfect example for the representation of a limit due to a disorganized political area seeking for control (Flores, 2017).

Suspension areas can be noted in occupied territories in Palestine and Israel. After Jerusalem occupation, the government wanted to establish new boundaries with the fewer amounts of Palestine people possible. Many neighborhoods were divided in two and



Figure 18.
Berlin wall with soldier
that represents
access control to
separate zones inside
a city.

Gathered from: http://www.bbc.co.uk/history/places/berlin_wall

the areas with less people in it were chosen to be part of the new Israel. The racial and spatial rule became a control tool for concentration/segregation justification of actions. (Petti, 2007, pg. 129-138).

In the last decades, new security and control concerns have started to be of concern such as urbanization, slums, and migration. In the 1950, less than the 30% of the population lived in cities. Nowadays, 54% of the total population of the world lives in an urban area. It is expected that by 2030, between 60% and 70% of the population will be living in an urban area, and more likely, the less developed countries will be the most affected by this rapid growth. (UNHCR. "Política del ACNUR sobre la protección de los refugiados y las soluciones en zonas urbanas", 2009, pg. 3).

Safety has been a common topic since the beginning of times. People had been in search for control in order to feel secure inside cities with different methods; some of them are even unconscious. Since the walls in medieval times, society has always seek a form of protection. With the issues that have been rising in modern days, new technologies have been developed within time.

To seek control has been a topic considered by many for a very long time. The Panopticon is a good example of this since it is a text written in the XVIII century and still being used as an example in books like Petti's written in 2007.

The possibility of surveillance over people has been an effective way of control, power and safety. Even though times have changed, this idea has been adapted in order to meet other problems, ideas or justifications. Another, more modernist example that was mentioned was the concentration camps. As mentioned before, these were sometimes sold as "safe places" from the exterior, even though it was the opposite, and they were used to segregate these "different" and/or "dangerous" people. This can be related once again to the Panopticon since the main objective was to keep under control and under surveillance a group of people.

This is interesting since during WWII, the use of concentration camps was based on segregation in order to obtain power and control. And even though this is a much criticized period of history, we can see that the same method has been applied in recent times such as in Berlin with the wall, Yugoslavia, with refugees and in Israel and Palestine. This is why it is important to try to find an alternative solution for camps, applying other methods such as surveillance and integration.

DEFENSIBLE SPACE THEORY AND CPTED

There are some theories that state that the urban design, or the built environment can have a huge influence on criminals to commit a crime. Some theories have been developed based on this idea like Defensible Space Theory or the Crime Prevention Through Environmental Design (CPTED). There are social, psychological, and physical factors that have been studied when trying to understand crime and instability such as risk and effort or reward and provocation. It is important that we, as architects design critically, having in mind that if by manipulating the physical environment there could be an influence towards the criminal to commit a crime, there can also be a possibility to reduce the opportunities for crimes to be committed.

Oscar Newman started the theory of defensible space. He proposed a model for residential environments where crime is easily identified and therefore also easily dealt with. One of the principles in this theory is the responsibility of the citizens to make the city function properly. (Newman, 1976).

Dr. Ronald V. Clarke is an expert in the areas of rational choice theory, situational crime prevention, problem-oriented policing and crime analysis, and wildlife crime. He is considered as the founding editor of Crime Prevention Studies.

He states that situational crime is a seeming contradiction with a broader scope than defensible space and Crime Prevention Through Environmental Design. The essential element of situational crime prevention is the notion of opportunity, tempered by concrete strategies intended to reduce, modify or redirect the roles that temptation plays as a part of opportunity. Opportunity is molded, in Clarke's conception, by 5 primary factors:

- Risk (how likely is it that I will be caught?)
- Effort (How difficult is it to get to the target?)
- Reward (How much do I have to gain?)
- Provocation (What pushed me over the edge?)
- Shame and guilt (How excusable are my actions?)

From some behavioral patterns observed by experts in environmental criminology, psychology, and local authorities, environmental criminology states that criminals tend to make decisions based on a limited rationality in which they seek to maximize pleasure and minimize pain, this rational choice model is an outgrowth of situational crime prevention. Settings are more likely to suffer from a criminal activity when there is a suitable target and there is no efficient guardianship or people who may interfere in this act. For example, if there is a burglary, first of all, the criminal will need to

analyze an easy entrance to the target, through the door for example, without having a big risk of being spotted; or at least spot also an easy escape route.

The aims of situational crime prevention are to “design safe settings...organize effective procedures...and develop safe products”. Normally, the setting where a crime occurs depends in many variables that come together at the same time. When the space comes together with suitable targets and there is an absence of guardianship, the probabilities of the presence of people who may promote crime are higher. That is the main reason crime prevention considers a safe setting design.

This project will take into account Defensible space, Situational crime, and Crime Prevention Through Environmental Design (CPTED) theories since the community I choose presents one of the common problems projects that follow crime prevention present: What to do about a development that is still on its useful life but it has a negative experience of crime, and to be demolished and constructed again is not a practical option and neither it is to leave is as it is? These are some of the proposals I could use in the thesis based on these theories.

In the mid-1900's, unsafe settings were related with vandalism and crimes. Jane Jacobs published her book in 1961 called “The Death And Life Of Great American Cities”. Here she introduces some urban interventions that are

related to safety. She criticizes the low-income projects that have become vandalism centers. One of the main ideas she proposes is that suburbs are full of strangers and that is one of the reasons why residents feel insecure. She claims that sidewalks are an important element in urbanism since they maintain the order in the city and here is where people should take the time to interact and find each other instead of just walking by quickly. The unconscious social networks in sidewalks create safety thanks to the controls among people since deserted streets tend to be more apt for crime and fear of crime. Another thing that Jacobs claims in her book is that surveillance is an informal responsibility of the residents. Basic interactions with strangers, taking care of children and other public responsibilities are the fundamental factors of a successful city life. This is considered as the base of Defensible Space Theory and CPTED.

Oscar Newman created the Defensible Space theory. He worked as city planner and architect and focused his work on crime prevention. Newman started his studies in the 1970's, where he suggested that high-rise buildings experienced a higher crime rate. He also related this with the residents' ownership feeling since they don't feel any control over their buildings. He developed 3 main factors to support this theory:

- Territoriality, it is important to make the residents understand they have an

owned space and they have to protect it. It is important to eliminate any no-man's land since these are the areas where criminals tend to take over control and commit criminal acts.

- Natural surveillance is the ability of everyday users to see into and across space thanks to the physical design and site layout where they live. Even though, environmental design can create, or eliminate, surveillance opportunities, there are also other factors to take into consideration like density and type of users. On the other hand, Newman's concept also includes as an important factor the identification, from part of the residents, of the space as their own. This, he argues, is actually the factor that will determine if the spaces will actually be surveyed, and therefore, protected and defended or not.
- Image and Milieu meaning that the project needs to be structured in a way that can provide real security and give the sense of this protection to people. The community must communicate through its built environment to the non-residents, that the people who live there are aware and care for their homes and security.

Crime Prevention Through Environmental Design (CPTED) is another classical crime prevention theory. It is a multi-disciplinary approach to prevent criminal acts by influencing the offender decisions by intervening in the built environment. Even though Newman also

focused his work on the built environment, C. Ray Jeffrey, with his CPTED, proposed a broad, system-based approach based on experimental psychology and stimulus response models developed by Skinner. He claimed that the interrelated social, behavioral, political, and biological systems affect human behavior generally. In his theory, he states that there are undeniable psychological elements to situational crime prevention like emotional triggers, calculations of reward, guilt and shame, and risk and effort elements.

General strategies

Close streets/Cul-De-Sac

Newman proposed cul-de-sac in his defensible space theory (Newman, 1976) as a solution for crime reduction. In many of his projects like Five Oaks and Pruitt-Igoe (Newman, 1996) he applied it as a useful mechanism not only for reducing crime but also traffic. He identified that the main issue in this community was that most crime was related to the location of the neighborhood in relation with the central city core, as it served as a connecting corridor. This means that people had little or no control over the open street network. Newman research revealed that residents did not have any sense of proprietorship and therefore no control. This analysis was on Five Oaks experiment where crime rates for vehicular crime like prostitution and drug sales were high until neighbors started closing streets and creating mini-neighborhoods.

“To Newman, the design and density differences meant that the Carr Square Village residents could recognize each other and could identify intruders. Who were residents and who were outsiders?” (Schneider and Kitchen, 2007: pg. 17) On “The Death and Life of Great American Cities by Jane Jacobs, she argues that crime started to develop in places where neighbors did not know each other and this also affects neighbors trust since “The trust of a city street is formed over time from many, many little public sidewalk contacts”. (Jacobs, 1960: pg 56).

One of the first questions Clarke’s had when stating his theory is on behalf of the criminals and it is related with opportunity: “how likely is it that I will be caught?” To answer this, he based this idea on territoriality and residents recognition between them. This means that people who live there are able to differentiate between residents and outsiders, making criminals a vulnerable target, supporting Newman’s idea that closing streets might be helpful in avoiding criminals stated on his Defensible Space Theory (Newman, 1976).

Another reason to sustain Newman with cul-de-sac is that it helps surveillance also in terms of access control. Both residents and criminals have to enter and exit from the only gate available. This makes residents aware of who, how and when someone enters and exits as well, making them suspicious in case

something is out of the regular basis and question the subject in case.

We can also say the last and probably the most obvious physical reason of why gates can help avoid criminality, and this is that it is more difficult for a criminal to open/jump a gate, go to the target and act than have direct access to the target. This answers the second opportunity question: How difficult is it to get to the target?

Even though the desire to commit this crime can push the criminal to commit it over this, at least the residents would have more time to either intervene or call the police.

Newman’s theory says that there is a proportional relationship between the number of families sharing space (territory) and the sense of responsibility for that same space. It is easier to control a street when there are fewer families involved. Residents recognize each other and they have a sense of protection towards the street and towards their neighbors. This idea was the start of the relationship between crime prevention and built environment, even though sociologists and social psychologists had already been studying this relation before Newman proposed it, and many of them support it.

Although defensible space has all of this support, there are some theories that go against it too. For example, Space Syntax

Theory created by Shu and Hillier, it proposes mainly the design of space based on the theory of natural movement. With this movement patterns architects can explore connections and design a configuration system in order to design space and social interaction, as well as the relationship between residents and the rest of the system. Therefore, space syntax claims that cul-de-sac designs don't allow passers-by to circulate in front of residences, creating spatial segregation. (Martinez, 2017).

The main Hillier's analysis on New Town X (1996), supports this theory saying that segregation increases crime. He also argues that there are many variables that overlap when it comes to Newman's "stranger danger" theory and the occurrence of crime depends on the presence of strangers as well as inhabitants. (Hillier 1998).

Space syntax techniques predict how space will be used. They explore connections between offences with the layout of the housing developments. This theory is focused largely on what people see, how they move through the space and if they perceive that others are seeing them. This puts special attention to "co-awareness" and free-flow movement and that's the reason why they don't support Newman's theory.

For this thesis, it is important to take into account that there is a refugee community that is going to arrive and therefore the integration

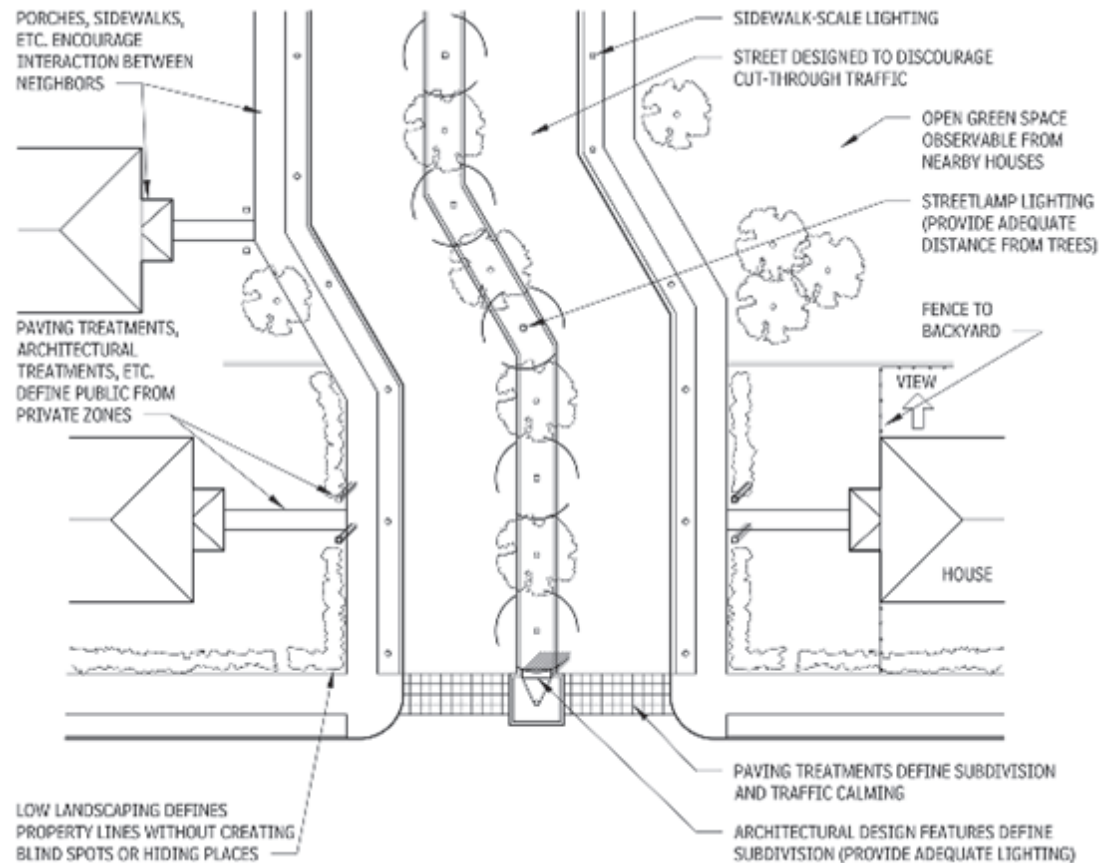
of both communities is fundamental for the success of the project. In order to make the residents identify and to get to know the new members, it might be better to apply Defensible Space Theory and CPTED instead of Space Syntax. It is important to let the residents know that they are still in control of their own houses. On the other hand, it is also important that the refugees feel safe inside the new community since they are people that come from vulnerable situations. Access control and natural surveillance can help these individuals feel observed and therefore protected, and residents can observe all the movements the refugees do and this can help them reduce the fear of the new arrivals. These two factors (access control and natural surveillance) can be the starting point for the unification of both communities.

There is also another theory that focuses on criminal patterns and the impact of the environment with human behavior, it is called Environmental criminology. Paul and Patricia Brantingham developed it in the 1980's. This incorporates assumptions that crime is not a random event but it has patterns influenced by the built environment including pathways, nodes and other social, economical and natural factors. Along with situational criminology, these are theories with a larger evidence base that support their intervention strategies. (Brantingham and Brantingham 1981).

In their book "Environmental Criminology",

Figure 19.
Defensible space
design principles

Gathered from: Randall I.
Atlas. Building Resiliency:
Crime Prevention Through
Environmental Design.
Whole building design
guide. <https://www.wbdg.org/resources/crime-prevention-environmental-design>



P.L. Brantingham and P.J. Brantingham argue against Shu and Hillier, saying that gridded networks have higher crime rates since these are more predictable and it is easier for criminals to escape, this comes back to support Newman. According to the US and UK police experience, dead-ends are the safest streets. And even though research demonstrates that there is no uniformity for criminal acts, Shu and Hillier and other sociologists argue that this kind of layout discourages criminals to act since they do not have an easy way to escape.

Also, these streets only have one way to enter and exit, which could create a feeling of being trapped. Authors Johnson and Bower argue that the protection that is present between neighbors and the opportunity to watch over suspicious activities do reduce criminal acts. With this evidence, we can say that areas with high permeability have higher crime rates as well as high-activity nodes.

The Victorian Department of Planning and Community Development are starting to

consider planning and designing Melbourne's Street to include cul-de-sacs in some municipalities. The spokesman stated that "Each municipality will determine the use of cul-de-sacs based on a range of factors such as natural land barriers, traffic flow, pedestrian and cycling links, and road safety," (The Advertiser 2013). They started this idea thanks to Thomas Hochschild's research, a sociologist professor from Valdosta State University in Georgia who supports the idea of cul-de-sacs. He claims that this street layout creates a sort of panopticon around children that play. With closed streets, there is more neighborly interaction and this improves social cohesion and therefore people watch out for each other and not only over children. The families have a stronger sense of social and territoriality sharing.

As mentioned before, closing streets minimize escape opportunities, and increase efforts and risks to offenders. This tactics have been used since medieval times with walls and barrier access control. With the development of more sophisticated and more resistant elements, burglars have adapted and created techniques to overcome these difficulties and achieve their goal making this one of the struggles we can meet when designing to prevent crime. "Moreover, there is evidence that offenders adapt to changes and that the overall costs of gating may not be balanced by the crime prevention benefits that accrue" (Schneider and Kitchen, 2007: pg 226). It is important to

know that restricting access to neighborhoods has only shown short-term results and there is not much evidence that can prove this works also in the long run.

In addition to this lack of evidence, there are other challenges we face when closing streets in this proposal. First, residents can feel they have been locked up in their own houses as well as the new arrivals. Furthermore, these new people are refugees or asylum-seekers and they can perceive this in a wrong way. They could feel like they had been taken into another kind of migratory stations since they are behind fences, making the integration program more difficult. Finally, criminals might be living inside the community; closing residents inside their streets along with criminals might cause abandonment of the residences again. In conclusion, it is important to not create a segregation feeling by closing the streets, identify possible dangers, and teach people to trust their neighbors.

LIGHTING IN STREETS AND IN COURTYARDS

Lighting might be a slightly more obvious proposal since it helps neighbors with natural surveillance at night. The positioning of lights is important since people have to be able to do surveillance from their own houses and to walk in the evening as well.

Samuels in his book called "After-Dark

Design, Night Animation, And Interpersonal Interaction: Toward A Community-Security Paradigm.” he claims that good lighting is a key design strategy when it comes to territorial ownership so that semi-public spaces can become animated, lively and safe. Here he noted the importance of good lighting in the urban developments when there is none at night and how buildings can change character in these situations. Good lighting can change crime opportunity by making targets more risky to attack in particular settings. One of the questions to be answered is whether we need to light up the territories aimed for pedestrians or the street aimed to cars but is definitely something to take into consideration when designing for crime prevention.

Light also helps to recognize colors, something vital in identifying suspects. A good lighting response takes into account many factors when choosing lighting technologies. For example, the height of poles, the wattage, the distribution of poles, and the type of light (fluorescent, led, etc.).

Another important thing to consider when installing lightning is to avoid vandal-proof and wear resistant furnishing. Newman found out that in social housing, the government prefers to use these kind of furnishing since it might be a better option in the long run. The government wouldn't have to change it every time any light would break and, in addition, these wouldn't have any maintenance costs.

Newman opposes this since he argues that this gives an institutional-look to the community. He also stated that: “These materials are an unflattering reflection of the residents. They are so demeaning, they invite vandalism. Of course, once they are vandalized, the housing authority embarks on a new search to find even more vandal-resistant, and inevitably, uglier materials to replace them At Clason Point, I broke out of that cycle by saying, with my fixtures, that the residents were special. The quality of the fixtures reflected on the residents. They evoked pride and care. The residents did not want to see them vandalized.” (Newman, 1996: pg 70-71).

Even though there is no long-term evidence that installing vandal-proof furniture evokes residents to not want to see them vandalized, it might be a strategic proposal for the integration of the refugees. These are people that tend to feel vulnerable and a non-institutional atmosphere might tell them they are inferior. To provide an environment in which residents can take pride and desire of living there can improve the integration and socialization of the community.

Light can also be used as symbolic barriers and create rules known by residents. Symbolic barriers can also be plantings, steps or pavement change. When an intruder does not know the community's rule system, he is easily spotted and questioned.

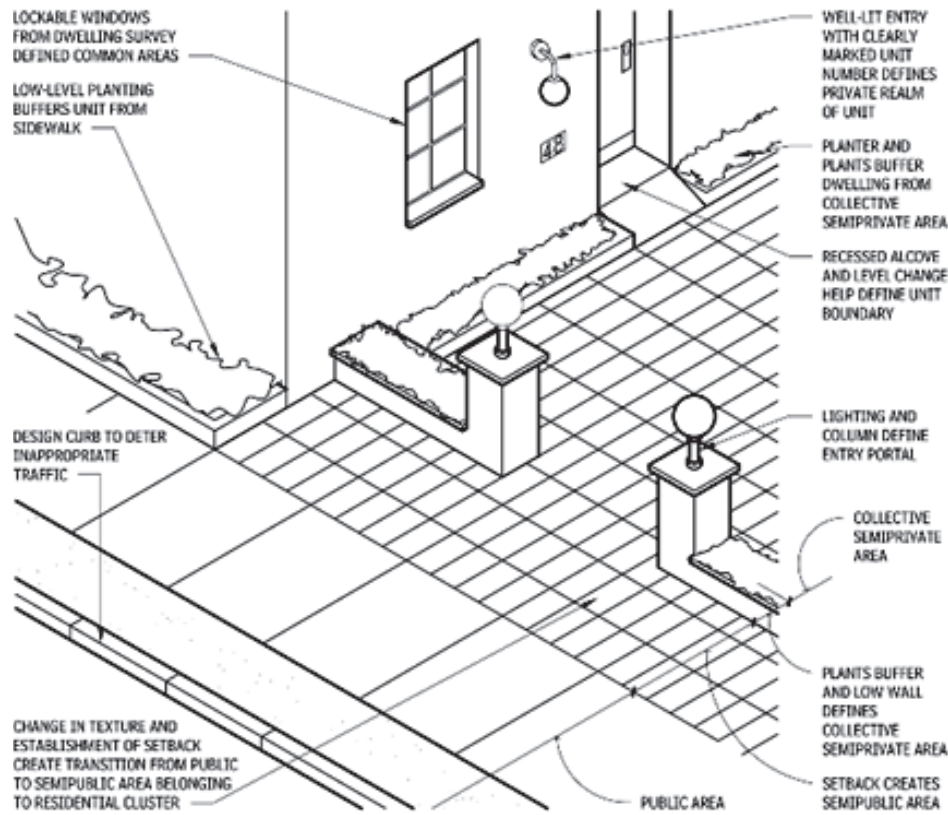


Figure 20.
Defensible Space Theory
access control principles.

Gathered from: Randall I. Atlas.
Building Resiliency: Crime Prevention
Through Environmental Design. Whole
nuilding design guide. <https://www.wbdg.org/resources/crime-prevention-environmental-design>

According to defensible space theory, light does not only work for natural surveillance or as symbolic barrier, but also to make people feel more secure. Fear of crime can have a meaningful effect since it can get to change people's behavior. It is important to make places feel less intimidating. According to a study called British Crime Survey the levels of worry were expressed by between four or five times more people than the actual victims of those crimes. And the European Crime Prevention Network suggests these kinds of interventions are more likely to have success than any other single intervention.

Owing to the fact that in 2016 there were 188 crimes were reported to the government's police department in this area and most of them were done between 23h. and 00 h. it is important to let the light on at night; but this will represent a rise in the cost for the government since more lights need to be added and this could represent a challenge. Not only due to the fact that new furniture needs to be installed but also that these need a certain maintenance and periodic replacement of some elements.

For the purpose of the creation of a smart city,

we could install light poles with solar panels that provide the energy to each one of them and recharge during the day. It can be possible due to the localization of the community since it is in the middle of the desert. This could be an opportunity to implement technology without forcing the residents to have any kind of smartphone or else and creating a long run cost efficiency for the government. Such intervention will make the semi-private furniture self-sufficient and no electricity costs will be needed in order to be effective.

BENCHES IN THE STREETS

There are many crime prevention tools (physical elements) that can help humans defend against crime. These do not have to be necessarily complex or high-tech, they can be as simple as barbed wired. There are many small-scale access technologies, “These include those associated with the layout of streets themselves, street design elements, and micro-level features associated with buildings and structures.” (Schneider and Kitchen, 2007: pg 189).

There are small-scale tools that are used to control traffic access like bollards and barriers. These are the most fundamental access control devices and can be used also as decoration and part of the landscape. The effectiveness of these have been demonstrated and they have proven that modern urban security can be blended into the landscape.

Other street-level technology is street furniture. This is the classification under which benches are included along with light posts, drinking fountains, planters, bicycle racks, garbage bins and kiosks. They have a subtle incorporation with the urban environment.

When it comes to defensible space, this also has to take into consideration the vandal-proof and resistant material. Sitting areas encourage people to be out and in this way increase activity and movement in the community. Once people are out, they have the opportunity to improve social interactions, integrating new families arriving to the community. On the other hand, sitting areas provide surveillance retaking the example of Riverbend Houses in Manhattan.

On the other hand, besides encouraging people to be outside, there is no empirical evidence to support any other kind of conclusions. Newman argued that this could be an impediment for criminals that would have to search a way around such elements, slowing their pace. One question that comes up with this intervention is if these kind of small interventions could be worth it, however the use of these elements have an impact on reducing the fear of crime even though crime might not be effectively reduced.

One of the challenges that we face by proposing such intervention is that we can risk that people won't use them. As one of

the examples in Oscar Newman's project, Clason Point experiment, he tried to divide a playground in three, where elder people, children and teenagers could be together in the same area without mixing people from these three groups. The outage of this proposal was negative since in the long run, the elderly felt overwhelmed by the presence of the teenagers, abandoning the area and letting teenagers take control of this playground. It is important to study the kind of people that will interact in the area to not cause this kind of problems and segregating any group of people due to another one, specially in this project since we foresee the integration of many different type of people.

INDIVIDUAL TRASHCANS AND TRASHCANS DISPOSED IN THE STREETS

The Office of Deputy Prime Minister in the UK, makes a survey called "English Best Value User Satisfaction Survey". On the year 2003/04, for the most important things that make somewhere a good place to live, the top three answers where:

1. Low level of crime = 66%
2. Health services = 47%
3. Clean streets = 37%

(Summarized from Office of the Deputy Prime Minister (2005))

For this project, we are already trying to prevent the first point: crime. So, to give people a good place to live as architects we

can intervene also on the third point: clean streets. (Schneider and Kitchen, 2007).

Newman proposed to eliminate the common dumpster in Yonkers and give each family and individual garbage can. His first argument was that a common dumpster, where people go and throw the garbage all together, can be considered as a "no-mans-land" or also, a "no-mans-area". This provoked the overflow of garbage and the presence of rats and cockroaches. Giving each family a proper garbage can would make them responsible for their own garbage, making it a cheaper solution, and they would also be more careful with overflows, smells, and dirtiness.

As defensible space is based on territoriality and the responsibility of property upkeep, it is important to give residents the necessary furniture to do this. Installing small garbage cans in the street can help individual efforts grace a street.

The physical environment can tell much to people. The presence of garbage can lead people to feel it as an unsafe place since there is no one that can take care of it. According to the criminal sociology expert, Guadagno:

(EN): "The lack of hygiene is a decisive source of social deviance, there is also a subtle form of adaptation to the economic habits of the environment, with the formation of tolerated parasitic fines ending with being contaminated,

6. (IT): "Va altresì considerato, alla mancanza d'igiene e di abitazioni, fonti decisive di devianza sociale, si verifica anche una forma subdola di adattamento ai costumi economici dell'ambiente, con il formarsi di ceti parassitari tollerati che finiscono con l'essere contaminati, sia per i legami con altri ambienti di criminali, sia per la graduale sottoposizione a questi (come nel banditismo sardo o nella mafia siciliana, ove si fa leva appunto sulla condizione di questi disadattati). (Guadagno and De Masi, 1971)

both for links with other criminals and for gradual submission to these (as in bandits from Sardinia or in the Sicilian mafia, where it is precisely the condition of these misfits)" (Guadagno and De Masi, 1971)⁶.

And if we add up that this community is for low-income families and refugees, hence more vulnerable for criminality, it is important to create an environment where there is no possible social deviance.

A challenge we face with this proposal is related to the city garbage collection system. If people are taught to separate the garbage for recycling and to throw it away where it is supposed to instead of the streets, little can be achieved if the system doesn't work. It is important to make an agreement with the municipal government in order to have an efficient collection system.

There have been some proposals to create intelligent trashcans where these can announce the garbage trucks when and where they are full and if they need to be emptied. The authors: Idwan, Zubairi and Mahmood, proposed the use of wireless sensor networks in order to help manage the solid waste collection. It consists of a sensor located in the dumpster that will send the truck a message about the current mode. If the dumpster has arrived to the full mode, the truck will be constrained to pass by and empty the dumpster, otherwise, it will go directly to the next one, reducing time

and providing an efficient service. (Idwan, Zubairi and Mahmood, 2016).

In order to have meet the full definition of a smart city, specially a prudent management of services in order to give a high-quality life to the residents, this point is very important. This gives notice of the importance to involve the municipal government for this proposal. Not having a good public service, can have major impacts on the results.

WINDOWS THAT FACE THE STREET

According to Newman's Defensible space; people and design for the violent city, there are some elements of physical design for the creation of secure environments. One of them is the positioning of the apartment's windows. This allows the residents to do natural surveillance from the interior of the house towards the outside and also from the exterior of the house towards the inside. It is important to have surveillance from the inside of the house since people can take care of their street and of their neighbors and also children that go out to play in the streets, in this way increasing the activity in the communities.

The defensible space theory states that: "the ability to observe the public areas of ones residential environment and to feel continually that one is under observation by other residents while on the grounds of projects and within the public areas of building interiors-

can have a pronounced effect in securing the environment for peaceful activities. It also has a demonstrable effect in reducing irrational fears and anxieties in inhabitants. This may have some self-fulfilling attributes in that residents, feeling that an area is secure, will make more frequent use of it and so further improve its security by providing the safety which comes with intensive use.” (Newman, 1976).

This is very helpful due to the type of people that will be introduced in the community. Refugees can feel safe under the surveillance of their neighbors, and the neighbors can also feel safe if they are able to see what is happening in the outside of their houses with these new arrivals.

Theories such as defensible space and

CPTED presume that surveillance is a good thing but there is not much evidence that this reduces crime. “The movement of strangers and neighbors through places, and especially those where facades open on to the street, makes places safer. Increased opportunity for surveillance is the major predicate for these findings, which suggest that certain crimes tend to cluster in places that are, by structure and placement, less observable” (Schneider and Kitchen, 2007: pg. 225). This idea is similar to the concept Michael Foucault presents in his book “Surveiller et punir” where he discusses the relation between freedom, punishment, shame and discipline. Here he says that “The success of disciplinary power derives no doubt from the use of simple instruments; hierarchical observation, normalizing judgment and their combination in a procedure that is specific to

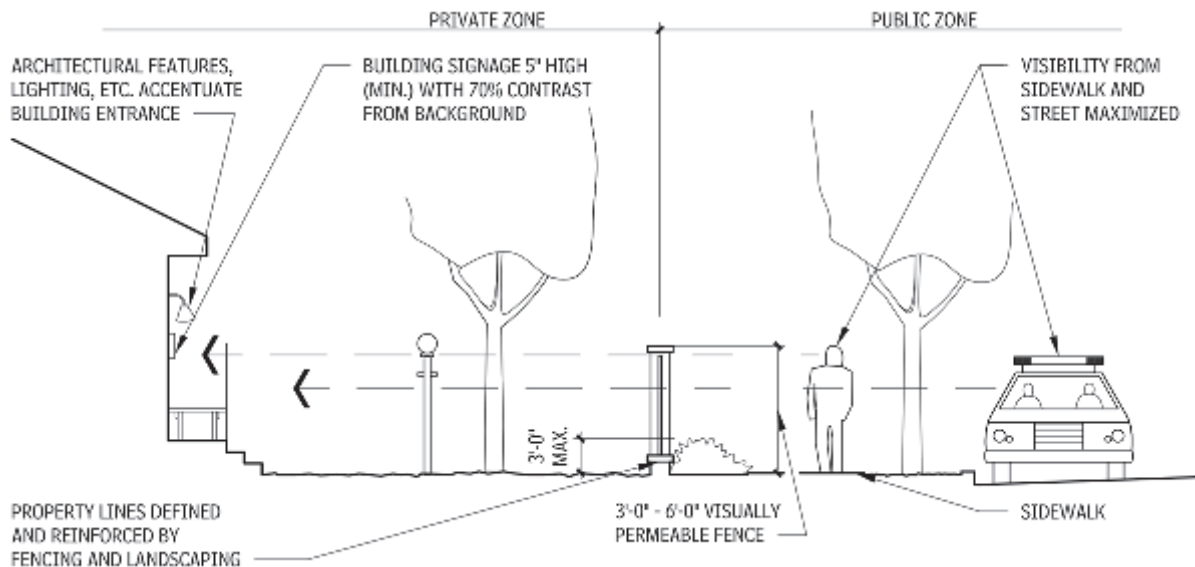


Figure 21.
Defensible Space
Theory visibility
principles.

Gathered from: Randall I. Atlas. Building Resiliency: Crime Prevention Through Environmental Design. Whole building design guide. <https://www.wbdg.org/resources/crime-prevention-environmental-design>

it, the examination” (Foucault, 1975, pg 170).

Hierarchical observation refers to the effects of power that observation can have. Foucault states that once architecture was created to be seen, like with ostentation on palaces, but now it has developed to permit an internal control. For example, hospitals have been built based on medical action allowing a better observation on patients and avoiding contagions. Also, Christian schools are structured so that adults can supervise children.

He does not refer to this idea only towards architecture but also as society. The school model is intended also to supervise the parents, to gain information of their way of life, their resources and their morals. The school tends to observe the adults through the behavior of the children and if they have a bad conduct, it might be due to the family’s lifestyle. This enables disciplinary power as it is indiscreet and the “supervisor” is always alert. The continuous surveillance is of great importance on mechanisms of power and it functions as a piece of machinery.

This disciplinary power and safe life in relation with the built environment can be found in very early years, like for example in Jeremy Bentham’s proposal: the Panopticon. Dated on the end of the XVIII century, this is the ultimate realization of a disciplinary institution. It was a prison model proposed by Bentham. It is an annular building with a tower in the center. This

tower has windows opened towards the ring. This external ring is where the cells are located. By placing a supervisor in the central tower, this model not only allowed the possibility of constant observation, but the criminal could never be sure if he was being watched over or not. This was built under the psychological idea that people are less likely to break rules if they believe they are being watched over, even if this is not true. Each individual becomes an observation object with no communication possibilities. With this model, it was intended to punish criminals “the modern way”, with natural dominance.

Along with the Panopticon, Foucault introduced a modern surveillance society conception in order to gain power or dominance over something in his book *Discipline And Punish*. Even though these proposals are not related to residential environments they prove that constant observation has been used as an effective solution to control unwanted behavioral patterns in society.

If we, as architects, provide the people with effective natural surveillance opportunity elements, such as windows, social areas, front yards etc., we can provide this power to the residents in order to reduce unwanted conducts, in this case, criminal behaviors. On the other hand, since in the project we are aiming to create an access control to assist this natural surveillance, and reduce strangers’ flow, it is important to open the facades to the

street and this takes us to the next point.

FRONT YARDS

In the area I choose, there is already the space to give residents a private front yard and this is another way to improve natural surveillance. Interaction is aimed when designing front yards. This increases likelihood between neighbors and therefore it is more probable that they will watch over each other and be more responsive to criminal acts.

Newman used this technique in the Riverbend Houses in Manhattan in the years 1972-74. Each apartment has a terrace separated from the corridor with two steps. The corridor is open towards the other housing building and the central patio. Neighbors like to spend time in the corridor/terraces and had the chance to know each other. Since the corridor opens up to the central courtyard, they can also provide surveillance to the building in front of them. Residents have to know by name their neighbors in the same floor due to the time spent together, and know by sight their neighbors in front (in the other building, same floor), they share the same concern and they have a commonly shared central play area. (Newman, 1978).

On the other hand, both proposals, the windows that face the street and the front yards can be difficult in this area since some of the houses are already inhabited. Since this

project had as initial purpose the improvement of the construction on hands of the habitants, these have made some modifications to the original houses. Residents might not want to make any other alteration or might not be able to do it since they have already built something in this area.

Making the neighbors understand that that front yard is their property, they expand their sense of territoriality beyond the physical house and this could be an advantage for the project. At the same time, this encourages the social interaction between neighbors and therefore the recognition of residents. Front yards are also symbolic barriers, sustaining the previous ideas of community rule system, as well as the same natural surveillance and protection windows give. And even though front yards can be symbolic barriers, Newman states that it is important to first put up fences around it, and this gave me the next point.

FENCE HOUSES INDIVIDUALLY

Defensible space, CPTED, and situational crime preventions have been criticized as “simple” target hardening approaches. But this is an intuitive technique based on the oldest crime prevention idea already mentioned on the first point. There is much evidence that support the success of target hardening on the prevention of some type of crimes. The aim of these type of interventions is to decrease the opportunity from offenders to get to their target.

The Defensible Space theory includes also a psychological aspect. Newman wants to make the people give a value to the physical elements in the project in order to achieve crime prevention. For example, this physical barrier, fences, separates the public area from the semi-public area, more specifically, the street from the front yard. Newman uses fences to give the perception and power of ownership. "His fundamental concept is intuitively appealing: places and spaces can be designed and built so as to increase residents feelings of ownership and control. Since people tend to protect better those areas and things they believe that they own." (Schneider and Kitchen, 2007: pg. 18).

In some projects, (i.e. Yonkers) Oscar Newman decided to put up 6-feet tall fences. This might sound a bit too much, but he argued that with putting this fences, people will start to assimilate that the front yard was actually theirs and not a public space. Once the families developed the sense of property, they would start taking this fences off and putting lower picket fences in order to delimitate their property. But not only that, he saw that families started to customize the yards, giving the neighborhood a new image.

The effectiveness of this intervention was proven in the Clason Point experiment in the years 1969-1972. This was a 400-unit public housing project in the South Bronx. The housing authority made available also

grass seeds that people could get and start growing the topsoil of the grounds. After the grass started to grow, residents were proud of their own front yards and started to show it off to their neighbors with low fences. With this, unsuccessful neighbors felt a social pressure and tried once more to grow back grass and try harder for their community. "This gave the people the opportunity to take control of the space and activities outside their dwellings. This also enhances their self-image and evokes pride, and finally to allow them the opportunity to themselves improve their space so that their identity with it is reinforced." (Newman, 1976, pg. 76).

As noticed before, even though, it could seem as a good intervention, this can also impact negatively in the image of the community at first and neighbors can oppose to this. It is important to encourage residents to implement the action in order to truly develop these ownership behavior and letting them know that in a near-future, these fences can be taken down and install new "better-looking" fences.

IMAGE AND MILIEU

Image and Milieu anticipate the "broken window" theory. This theory was created by Wilson and Kelling in 1982. James Wilson was a professor in Harvard University, he dedicated his life to political science and was the director of Joint Center for Urban studies.

Kelling, was an American criminologist, had experience working on the Manhattan Institute for Policy research. With the broken window theory, these two social scientists, proposed the relationship between disorders with crime. They state that by maintaining and monitoring urban environments, it's possible to avoid crimes. All of these arguments are based on the fear of crime, of incivility and the lack of control.

Both, Defensible Space theory and Crime Prevention Through Environmental Design propose the control through neighbors and the upkeep of the areas. In the projects that follow these theories, residents will be responsible for the upkeep of their private and semi-private areas, keeping a low maintenance and surveillance cost. This final community image will be created by itself with the lightning and bench installation, with the avoiding of garbage overflow, and with front yards taken good care of. If individual efforts to maintain a clean and ordered community sum up, there will be social expectations when the new people arrive.

It is possible though, that residents might forget about these actions once the implementation phase will finish. To keep up the image in a long term, it is important to coach people from the very beginning the importance of this and encourage them to continue with the program.

RELATION WITH LIFE QUALITY

The current quality of life in Villa del Prado can be considered low since there is a significant lack of services. The few activities the residents are provided of are one supermarket, one school, one sports area and two commercial areas with 3-4 stores each one of them. This affects also the economic status of the residents since little job offer is available nearby their homes. This forces them to commute to other urban developments, spending money and time. By increasing the population density can provide more job opportunities in the nearby areas or even inside Villa del Prado and the residents could live better and the crime rate and fear of crime will tend to decrease.

This improvement of life quality is not only related to the reduction of crime and fear of crime but these theories also foresee the improvement of social networks. CPTED and Defensible Space Theory propose the residents to get to know each other. As mentioned before, it is more likely for a person to protect someone who knows rather than someone who has never spoken with. At the moment, due to the high violence rate, people are living with fear of crime and they might want to stay inside their houses, denying any type of social contact. That is why it is important to make people interact and to encourage them through the built environment to socialize and meet their neighbors. By improving social relationships, life quality tends to improve.

When it comes to the refugees' life quality, this thesis can provide an improvement since it foresees a complete integration process. It provides a place to sleep and eat, training for a future job and social activities. Also, creating a multicultural society, can assist Villa del Prado I in getting an identity since at the moment, they are just one more social housing development in Tijuana. By giving them an identity, we are also encouraging the residents to feel proud and create a better sense of proprietorship. This will not also help to get a successful result in terms of CPTED, but as stated before, the residents can develop trust and a stronger neighborhood connection.

EFFECTIVITY EVIDENCE

Defensible space, CPTED and situational crime preventions may be criticized because they are only "target hardening", but the aim of this is to decrease the opportunities of crime happening in the designed area. Where will offenders go next is another dilemma and a presumption that they will go to another more vulnerable target. But, Schneider and Kitchen claim that it is not likely for criminals to switch from one target to another after being hold up. Actually, they tend to change the crime instead of changing area. (Schneider and Kitchen, 2007).

Defensible space, CPTED, situational crime prevention and environmental criminology

can be classified as the classical theories. These are only some of the studies that have been made about the relationship between environment, interventions and behavioral results. On the other hand, it is true that all of these interventions encounter different cultural circumstances and that the environment is so vast and variable that it has an important impact on the results. And even though there is no empirical evidence that CPTED applications work, along with the active participation of the residents and thanks to interviews made to them, these proposals are more likely to be successful than those where residents are indifferent to the project. Clarke proposed CPTED as a useful theoretical construct and its primary focus is both, the physical space and other factors such as management, use and crime opportunity. This is why it is important to design critically thinking about all the environmental characteristics of the project and also involving the residents.

Crime prevention through environmental design approaches should take into account the local characteristics and the local people. Many studies can propose standard solutions without taking into account the knowledge of residents. There are many examples on which we can see that projects are more likely to be successful when involving the community. One of them is the Clason Point Experiment, where Newman asked the residents to choose the color of the stucco for the buildings making the residents feel part of the planning. This

involvement was not only important for the community involvement but it also increased the sense of proprietorship on the residents.

Another, more recent, example we can find and that is located in Latin America is called “Hermoseando tu barrio” or in English: “Beautifying your Neighborhood”. This project started on 2003, in Villa el Caleuche, in Puente Alto, Chile. It is an intervention in a 36-residential-block where 1200 families live. They followed 4 steps: Diagnosis, proposal, development and evaluation. In all of them, the community was fully involved. For the diagnosis step, community agreements were taken in the first assemblies. For the proposal, the residents draw the interventions that were desired, but also the wall colors and green areas. For the third step, there was a “block manager” who was in charge of the materials and the active participation of the residents. Also, young people helped painting murals in the blocks that desired them. The evaluation has had successful results coming from the residents after the interventions. The regional director of the CPTED, Macarena Rau, claims that the key strategies for the success of these interventions are leadership, training and community participation.

Environmental design not only requires involving the community but also a partnership between professionals. Many individuals and organizations need to be put together in order to have different perspectives and

solve something as complex as this. With this partnership we can incorporate a theoretical framework with a practical activity on the project.

The field of crime prevention needs to move towards the practice. There is much theoretical information but not that much empirical evidence. Since environmental characteristics have an important impact on the results of this, it is important to understand why something works in a specific place. This can encourage critical interventions made on a local context in order to provide a higher quality of life to people in terms of security and the reduction of fear of crime.

Process of a CPTED Project

There is a program that was launched in Mexico called “Programa para la convivencia ciudadana” or in English: “program for the civic coexistence. The Mexican government together with the US government created this program in order to reduce the violence in resilient communities. It is based on defensible space and CPTED theories and it is financed by the US agency for international development: USAID. (Guía Para El Diseño De Espacios Públicos Seguros, 2015). In this program they state that in order to be able to put into practice these CPTED practices we have to follow the CPTED project cycle, which includes 4 steps:

1. **Diagnosis:** This refers to the current criminal situation of the community. It is important to have information from institutional fonts for three aspects: urban, social and criminal. For Mexico these are the institutions that provide this information:

- INEGI: for the socioeconomic and urban profile of the area.
 - Municipal government: for the public services and the fear of crime rate.
 - Security department, PGR, PGE: for the crime rate analysis.
 - Security observatory: Crime maps and delinquency profile of the community.
 - Social development department: for the integration with organizations and institutions of the state.f. Universities: for the violence and delinquency diagnosis.
- Here it is also important to include the local knowledge talking directly with the residents.

In this step, it is possible to do an observation analysis where the municipal functionaries that have been trained previously can identify the good and bad aspects that are currently present.

Afterwards, the residents will need to identify the areas where they feel less safe by walking designated areas. For this part of the analysis, a selection must be made to create a group of 5-10 people. It is important to choose people that represent

the typical residents of the community, for example, women, young people, children, men and in this case, refugees. After the people have finished the activity, they will need to answer a questionnaire and encourage a debate based on experiences and observations.

The descriptions should include topics like general impressions, lighting, visual area, pathways, escape routes, land use, maintenance, and natural surveillance opportunities. (Guia Para El Diseño De Espacios Publicos Seguros, 2015).

Another activity that could be done is a drawing workshop. Here residents will offer some ideas based on their “ideal community”. After gathering all the information and ideas from the residents, this will be used as support for the municipal functionaries conclusions.

This diagnosis phase should include all the indicators related with material, social and natural components. Once the diagnosis is complete, some recommendations should be noted along with costs analysis. Here the most viable proposals will be chosen, this means, an easy, fast and economical answer that responds to the interests and necessities of the community. It is important to notice that it is common on low-class communities in Mexico to find some deficiencies like public lighting,

pathways, schools, and other community centers related with cultural and recreational scopes. To solve these issues, big investments are to be made, especially in terms of economy and organizational. The community needs to work together with the government and develop projects to improve these urban spaces.

Another important thing in this phase is the creation of a interdisciplinary management team. (Guia Para El Diseño De Espacios Publicos Seguros, 2015, pg. 37-45).

2. Design: In this phase, residents are considered as the main character for the urban design since they are the experts of the area. It has been proved that the most successfully technique in Latin America for this CPTED technique is the model workshop. The most valuable part of this workshop is that people feel involved in the project and therefore the integration and sense of ownership grows. That is why all the residents should participate in this workshop, it doesn't matter sex, age or nationality. To create the model, after the management team proposes a first intervention, residents will try to position the different crime prevention tools in the area. After everyone has presented their project, the management team will work from there on using these proposals as a base for the final project. (Guia Para El Diseño De Espacios Publicos Seguros,

2015, pg. 45-47)

3. Implementation: This program proposes two different formats to implement the CPTED project but I will choose the one that involves the community workforce. This is an advantage since it develops a stronger community bond between neighbors and with the urban environment. Even though, this foresees the work done by the community, people will have to be trained by professionals and some delays must be considered. (Guia Para El Diseño De Espacios Publicos Seguros, 2015, pg. 47-48).
4. Evaluation: This can be made in two different ways. The first one is the process evaluation. Here the management team will have everything planned, from diagnosis until evaluation. They will impose the objectives on each stage, the ways to get there and the goals. To be able to do this evaluation, the team will have weekly registers of the process. The second evaluation is the result evaluation. This will start with a base line constructed on the diagnosis stage and will be compared with the final indicators in the project. The three objectives of this method are: reduce the crime opportunity and the fear of crime, and increase the community integration; while the indicators could be different factors such as number of robbery incidents, the perception of

security that residents feels, the trust they have towards their neighbors, and so on. (Guia Para El Diseño De Espacios Publicos Seguros, 2015 pg.48).

Study Case - Colonia Terremoto

One case study that is located in Mexico and followed this program is located in Colonia Terremoto in San Luis Potosí. This project was started on 2011 with the financial help of Banco Interamericano de Desarrollo (BID). They followed the four steps cited before.

The diagnosis stage was divided in three. Firstly, they trained 53 officials from the local government. Second, they performed the observation process together with residents of the community. And lastly, they created the base line for the evaluation.

The interventions that they did were: restructure a safe pathway, new pavements, and lighting and provide environmental and landscape information. With these new pedestrian flows, a new community center was created. An important architectural element in the houses was the windows since these provide a high surveillance level from the houses towards the public space. The external walls of the community remember a fortress but the community decided to paint them to make them look as murals.

This project was a challenge since the community is located where the land use is very limited and the social cohesion was an important factor to prevent crime. The BID and the municipal government were the institutions that financed this project.

Another example of a CPTED project done by USAID can be found in the same city of this project but in the community called San Francisco II. Here the first step was to clean up the empty lots in order to reduce crime opportunities. They helped organize the community to find a solution along with external sponsors that helped develop the project. Based on this example I was able to create an estimated timeline for the implementation of the project.

CONNECTIONS WITH THE CONCEPT OF SMART CITIES

In these days, a topic that is gaining popularity is Smart Cities. This concept comes from the idea that urbanism has always had a great impact in economy and society. Coming back to the Haussmannian Paris, we can see that Napoleon III got his power thanks to an internal war and decided to renew the city in order to control his opponents and to improve the country's economy. Paris reconstruction plan created many job opportunities, which helped the city develop both economically and

socially and it changed the residents' way of life as well. After WWII, Robert Moses aspired to do the same as Haussmann did on Paris, but in New York City.

These two urban projects had also major negative social impacts since people needs changed. It was thought that low-class people could not cover these needs economically; Creating a classicist city that forced some people to leave this part of the city and go live in the suburbs. Also, people were not only affected by the transfer to the suburbs but also by the rise of transportation costs. As a consequence, in 1973, credit institutions in the U.S.A. had a financial crisis since they had taken advantage on the construction boom of the previous 10 years.

Nowadays, cities are dividing in social classes. Urbanism has focused on different costs of development and these are related to tourism, cultural industry and informatics. This new way of life is trying to fulfill every citizen's dream at a high cost, without thinking about the real way of life of what represents a big part of a city, the suburbs. (Salpietro, 2008, pg 53-54).

One example we can find of this new urbanism is Smart Cities. Urban environment is evolving faster with time and thanks to new resources such as technology. Even though CPTED and Defensible Space Theory were developed in the 1960's, they proposed similar ideas

that those in these new urbanism. The same happens with Haussmann since he thought of the urban regeneration in order to control what happened in the streets by optimizing the current resources he had available.

According to Caragliu, professor of Regional and Urban Economics in Politecnico di Milano, a city can be defined as 'smart', when investment in human and social capital, along with investment in traditional and modern information and telecommunication infrastructure, generates economic development and provides a high quality of life while having prudent management of natural resources. (Caragliu, del Bo and Nijkamp 2011).

According to Rudolf Giffinder, a researcher of

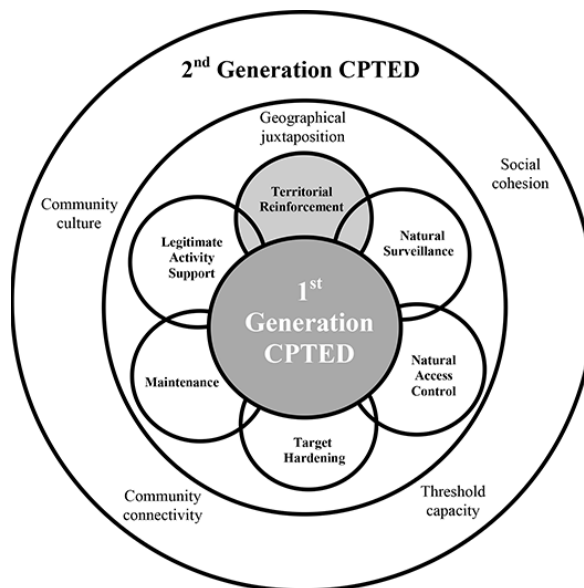


Figure 22.
CPTED evolution of
principles.

Gathered from: Paul Cozens and Terence Love. Crime Prevention Through Environmental Design (CPTED). Oxford University Press. <http://criminology.oxfordre.com/view/10.1093/>

intra-urban development, along with Lee Jung Hoon, a professor of technology & innovation management at the Graduate School of Information, smart cities consist in 6 main things:

1. Smart economy
2. Smart mobility
3. Smart environment
4. Smart people
5. Smart living
6. Smart governance

With the definition exposed before, we can see that smart cities go significantly beyond in physical and social system aspects. Smart cities should be at the service of the people and the government even though there is an important involvement of Information and Communication Technology (ICT).

As Santangelo states: “A change in community living conditions, starting from the possibilities given by the use of new technologies, is one of the strong points of the smart city paradigm (where “smart living, smart governance, smart people” represent the software version of society overlapping a hardware of “smart mobility, smart energy, smart economy”” (Santangelo, 2016) Therefore, we can see that by applying the proposals stated before, we can see the software version of society of a Smart City. With these Smart Living, Smart Governance and Smart People, we can see that this thesis is proposing a modernist urban

plan that tries to provide solutions to current issues in an innovative way even though the Defensible Space Theory was developed in the 1960s.

Smart Living

As Chiara Testoni proposes that a smart city is the one that is strongly inclusive, not only in refugee/migration but also on the empowerment of the community, the way to give an active role to operators in the development process. With this, she argues that the idea of the living labs are a good innovation project where the users involvement is the main factor when creating new services or products. (Testoni, 2016, pg 81).

The modern societies have an important percentage of foreigner population, one that tends to be more vulnerable in terms of crime and segregation. These living labs can be of great help to this population by creating innovative social services. Urban farming is a project that can provide a more sustainable way of food production, consumption and distribution. This topic can be sensitive since the foreigner community is known to be agriculture workers but, this will help take advantage of the fact that some of them may already be part of the agriculture field and have some experience. On the other hand, this kind of projects can help the refugee to integrate to the new society in economical terms. The

requalification of urban spaces in order to help the community in an economical sustainable and competitive sense is a way to have a smart city. (Testoni, 2016, pg. 87).

It is not only important to integrate the refugee in these senses but it is also fundamental to have a good quality of life, for both, native residents and refugees, for a Smart Living and therefore also for a Smart City. When living with crime or even a constant fear of crime, the life quality reduces. By implementing CPTED and Defensible Space Theory could be considered a smart solution in order to start providing a better ^o of life to residents. Also, with time, the communities won't need to have police 24 hours, they will only be required in case of emergency. This service will be provided by the residents with natural surveillance, avoiding costs and creating a Smart Community.

Smart Governance

The main actor, the one that has more responsibilities in terms of territorial management and financial resources is the government and that is why it is important for them to be smart. Actually we can support this idea with Chiara Testoni's definition presented in "Towards Smart City", she states that:

"Smart city and a definition that groups a series of Smart subdivisions (economy, environment, governance, living, mobility,

people), but that of governance seems to prevail because it is crucial for administrators to be "smart" with the same sense that has the white and pink flag (intelligence) of the international navigation code, that is "see, realize, understand". The administration must be able to know (what are the problems), understand (why there are problems) and govern (solve) the problems that the administrative management of an urban reality poses." (Testoni, 2016, pg. 7).⁷

The aim to involve municipal authorities to develop a better life in terms of living and working environment has grown in the last years. The relation of the quality of life and urban environment has "engaged in a multitude of initiatives variously aimed at upgrading urban infrastructure and services, in an effort to create better environmental, social and economic conditions and to enhance cities' attractiveness as well as their competitiveness." (de Jong, et al., 2015).

Testoni claims that having smart governance is a strategic move in terms of intelligent, sustainable and inclusive development. The participation of the government is crucial in the development of the smart city. It is important that they are aware of the problems that are present and to involve them in the project to find the best possible solution. Without having smart governance we cannot start a smart community.

7. "Smart city è una definizione che raggruppa una serie di sottoinsiemi sempre Smart (economy, environment, governance, living, mobility, people) ma quello della governance appare prevalere perché è fondamentale che siano gli amministratori a essere "intelligenti", con il medesimo senso che ha la bandiera bianca e rosa (intelligenza) del codice internazionale di navigazione, ossia "capire, comprendere, intendere". L'amministrazione deve essere in grado di conoscere (sapere quali sono i problemi), comprendere (capire perché ci sono i problema) e governare (risolvere) i problema che la gestione amministrativa di una realtà urbana pone." (Testoni, 2016, pg. 7)

The way these proposals can create a better social and economic condition to enhance the competitiveness of the community is by taking advantage of the current situation of the city. By reusing the abandoned houses, the government is not only having the opportunity to redirect the costs of construction towards other projects and improvements of infrastructure, but is also improving the life of the people that are living in this specific area.

On the other hand, the government is also facing the issue with the asylum-seekers and refugees. The repopulation of the abandoned areas with refugees is a smart way of managing the situation by the government since they are encouraging the integration of these people and at the same time they are solving the problems a community faces that are presented by abandonment such as criminality and property devaluation.

Even though this might be a proposal with optimistic results, in order to make this truly a smart solution, it is important to mention that CPTED and Defensible Space Theories are both theories with proposals that avoid segregation and the creation of a prison-like community. Hence, the government should also apply new regulations in order to obtain a successful integration of the refugees.

With this, we can say that having smart governance is not the only important thing when it comes to Smart Cities, an active

collaboration is needed in order to fulfill the new regulations imposed by the government. The participation of the various actors is essential for knowledge, and not only for the creation of the smart city but as stated before, also for the success for the crime prevention through the built environment.

Smart People

As Andrea Boeri states in Chiara Testoni's book:

"The strategies outlined (economy, environment, governance, living, mobility and people) are all a kind of "territory alliance" in a logic of concertation and public-private interaction, which presupposes active collaboration between public administration, universities, stakeholders and active citizenship. The openness to the various actors carrying knowledge and skills is a characterizing factor the European approach, which engages in interdisciplinary involvement and confrontation as a governance base for the intelligent city." (Testoni, 2016, pg. 9).⁸

To begin with, the Smart City definition includes also a certain integrative development, which foresees the creation or acceptance of a multicultural society. Since CPTED is a socio-urban intervention, it does expect certain community integration. This is seen as the most important element and could be used as

8. "Le strategie illustrate (economy, environment, governance, living, mobility, people) costituiscono nell'insieme una specie di "alleanza di territorio", in una logica di concertazione e interazione pubblico-privato, che presuppone un'attiva collaborazione tra P.A., università, soggetti interessati e cittadinanza attiva. L'apertura ai diversi soggetti portatori di conoscenze e capacità è un fattore caratterizzante dell'approccio europeo, che assume il coinvolgimento e il confronto interdisciplinare quale base di governance per la città intelligente." (Testoni, 2016, pg. 9)

an opportunity to create a Smart Community at the same time. With this, we can say that with the proposals exposed before, we are already encouraging an active collaboration, mainly from the citizens.

Oscar Newman's theory is based on active community participation to provide surveillance and protection. By implementing CPTED and Defensible Space Theory people will be taught to be active and participate, not only in the development process but also afterwards. An active collaboration is the key to reduce violence and crime as we could also see with the Panopticon. The constant observation can lead to control. As explained before, without the participation of the residents these theories tend to not be successful.

People will also be trained to be an integrated community, not only with refugees but also with other native residents. Without this integration, crime prevention would not be effective and the abandonment of the houses due to this cause will come back even if the refugees will keep on arriving. This could be the starting point of a segregation camp if not treated correctly. This is why good training courses in order to have Smart People are needed in order to have a successful project with smart solutions.

CONCLUSIONS

CPTED and Defensible Space theories are studies that have been existing for more than 30 years. They are both based on how the physical space can influence crime. There are several interventions an architect can make in order to prevent crime through environmental design. Some of these can be closing streets, making evident the privacy of the space, and most importantly, to give residents the opportunity of surveillance.

As mentioned in this chapter, what makes effective this type of interventions is the residents' participation. If the architect can provide only physical interventions, it is up to the community to participate in surveillance and to grow the proprietorship feeling towards the community. Once the community will be able to take over the physical space from the criminals, it can be a good opportunity to include refugees.

This participation and the idea that this community searches for an improvement in terms of fear of crime and crime opportunity can create a better way of life. Along with integration of people, these are some basic principles Smart Cities apply. Smart Governance can be considered since they are applying an effective way of reducing crime, and therefore improving resident's life. Also, reusing existent places are a way of reducing investment costs and at the same time, the

community's value raise instead of continuing devaluating. When it comes to terms of Smart People, CPTED is teaching residents to have an active participation in order to improve the society they are currently living in. Involving them in decisions will make them feel a stronger relationship with the physical environment, the social environment and also the governance. These two principles, Smart Governance and Smart People, can add up to creating a Smart Living, without the need of hi-tech, expensive tools.

There is much theory but little empirical knowledge. That is why it is important to continue with the practice of these theories in order to track the results and find a possible better solution for safer cities. There are many advantages this can bring us, as the ones mentioned before. Some projects are starting to be taking place in countries outside the U.S.A., such as Mexico, where the violence rate is very high. At the moment, there are many organizations that are interested in this type of projects, such as USAIDS and Fundación tú+yo, therefore it might be good opportunity to develop it and at the same time, solving another present challenge in Mexico such as the refugee crisis.

CHAPTER IV

PROJECT DEVELOPMENT

PROJECT DEVELOPMENT

“The project development consists in the improvement of the life quality and the reduction of crime by doing the punctual interventions exposed before by analyzing the current situation and flow of people in the area. This is important since the purpose of the project is to increase the natural surveillance opportunities in the urban environment and stranger recognition that can alert the residents in case of an irregular behavior.”

ACTION PLAN - INTEGRATION

For this project, the integration and citizen participation is fundamental. At the moment, the most important factor to start preventing crime is already in action since the residents are already aware of the dangers that are present and want to change the situation. Along with Fundación Tu+Yo, the residents have already made the first analysis of crimes, what propitiates crime, where criminal acts happen the most and why. If the residents start seeing change, they will most likely keep their interest in the project and will not quit participating.

The first action to be taken is the repopulation of the community in order to start taking back the lost spaces like abandoned houses and lots from criminals. Accommodating refugees in these houses can be a good option to solve two big problems that are present in Mexico; First of all, the refugee crisis that is happening at the moment, and second, the crime in Villa del Prado. As stated before, abandoned houses in these social housing developments are open for criminals for drug selling, storage of stolen items, and hiding spots for other type of crimes like rape and assaults. Also, these are a good example of the Broken Window Theory, which explains that abandoned houses and places that have not gotten any kind of maintenance in some years, including graffiti, broken windows or doors or even the absence of these, might make people sense insecurity

and fear. Even though the accommodation of refugees in these abandoned houses might help solving some issues, it can also generate a new challenge that is their integration with society. It is important to not make residents feel overwhelmed by the new arrivals.

Repopulating the area not only helps take back abandoned houses from criminals and house refugees, but also it is a way to start teaching to the society a new way of living, creating “smart citizens” since they become accepting and therefore inclusive with refugees, and at the same time they encourage security. As Ash Amin proposes in his book “Land of Strangers”, the modern society is the one who is indifferent to the differences. He explains that there is still some issues to get to this modern society since after 9/11 many people in the U.S.A. started seeing migrants as a potential danger. The same happened in Europe in WWII and after the terrorist attacks in several cities such as in Paris, London and Germany in the last years. The minorities and migrants are seen as a potential threat to peace, social equality, freedom, tolerance and openness. That is why it is important to handle the issue with care and to avoid a negative effect (Amin, 2013).

As stated before, one thing that preoccupies modern societies is the fear of strangers and therefore this creates a sort of racism and xenophobia. Racial differences as, Amin calls are a sort of “coding difference” from

where opposed type of people can create judgments. He studied the way they relate in different physical environments and he came to the conclusion that in multiethnic cities, this indifference to difference can be noted greatly in public spaces and shared workspaces thanks to a daily form of negotiation. People have been habituated to these racial differences through daily habits. He claims that the idea of this is not to make a civic virtue but to create a disciplined collaborative effort and negotiations for identity sharing (Amin, 2013).

Ash Amin also explained that another factor that make people live in a multicultural city is their daily negotiations with urban space, objects, culture and interests. It is important to give attention to the feelings towards the diversity and social experiences in terms of individualism and collective entities. He says that there is gap between singularity and plurality depending on which space they are in the moment. The quality of the relationships between strangers, in this case refugees, and natives will be defined by the strength of the communal bonds in social encounters within the public space. This will also be of support for the crime prevention through the environmental space (Amin, 2013).

In order for this social encounters to take place, many times, as Amin explains, the major effort happens to be expected be done by the minorities while the majorities feel as the “unchanging core” who does not need

any effort nor change in their usual habits or culture. This is one of the reasons why the majorities might feel unwelcoming towards the minorities. Also, they can feel that the public investment is being used to fill the needs of immigrants instead of theirs, even though they contribute to these public resources. A solution proposed in the text is to improve the social parity and public services and environment (Amin, 2013).

In *Land of Strangers*, the author proposes as guiding principles security, social awareness, organization and information exchange. With this, it is easier to track potential danger and have an open, loyal and resilient society. He also mentions that the keys for progress are the opportunities and interaction incentives between divisions (Amin, 2013). In that way awareness and obligation can grow thanks to interaction. We can see that the actions needed are very similar to those proposed by CPTED and Defensible Space Theory. That is why these two topics can be the complement of the other; they both foresee the encouragement of social interaction and collaboration between residents.

Cities around the world, especially those in Europe, are composed by a variety of people with different religions such as Catholics, Hinduists, Muslims, etc. This has been identified as one of the reasons of many socio-political conflicts and struggles over public space. Also it has been of impact

for the urban environment. For example, in the 1970's, people from some North African countries started migrating towards European countries thanks to the affordable workforce they represent and therefore better job opportunities. With this, they introduced different cultural and religious configurations creating the distinctive European Islam. In the 1990's the same happened but from nations with no particular relationship to European colonies for travel or job reasons. The continent was forced to adapt by creating spiritual centers and wellness cults, and even though these can be somewhat noticeable urban changes due to religion and migration, it can also cause public debates. There can be large Islamic communities in European countries even though cities in this continent are highly influenced by Christian-cultural terms. That can make Muslims enter the archetypal of the "other", the one incapable of integrating and accepting the new country due to their background. In addition to that, the contemporary cities struggles are influenced to how religion is related to the traditions that can be considered as part of a nation's heritage. If we follow Amin's ideas, we can say that this can cause the Muslims to represent a bigger threat to Europeans than people from other religions since they follow different ways to manifest their beliefs and traditions in the environment. (Amin, 2013).

It is important to say that 92% of the refugees that are arriving and accepted in Mexico come

from Latin and South America. This means that language, religion and culture might not represent a barrier as the one present in Europe. Although this, they might still feel outsiders for the fact that they are the new entrees and refugees. For this it is important for residents to make them feel welcomed in order to encourage them to stay in Mexico and not try to migrate again. For this, Amin's idea of creating a society that is indifferent to differences is fundamental. Giving the refugees the opportunity of having a house, training them for getting a job, and start earning money is the key to start considering a successful and complete integration.

Social interaction is an important factor for a refugee not only to make them feel welcomed in a country but it is also important for the Mexican residents to get to know their new neighbors. This can help them start a negotiation of tolerance to differences. This might help the Mexican residents feel secure again because they will know that their neighbors are not criminals anymore and will accept the refugees into the new community that is being created. This social interaction will also help the CPTED project be more effective. Making both type of people work together in the same project and collaborate in certain interventions can encourage social interaction and therefore integration and a certain confidence. This can also be proved by Amin's study where he claims that people in work and social spaces, people tend to accept

the other no matter their race or religion. It is important to let the residents know that without their new neighbors, criminals could still occupy the houses.

By making refugees do some interventions of the CPTED project, can also function as training courses in order to help them find jobs in the future, mostly in the building industry. With this, they will also feel productive and, as mentioned before, they will feel part of the community and will develop the sense of proprietorship. On the other hand, giving them the resources to find a job can lead to a better economic stability and therefore the probability for them to stay in the country is higher. This training can also be of advantage in the economic sense for the government since it will not have to spend time and money in searching, employing and paying outsiders to do the job, and will bring up the possibility to the refugees to rent/buy the houses in Villa del Prado in the future.

Another important factor to notice when integrating refugees in a community is the sense of orientation. They will be new in the development so helping them to get to know the physical space is important. In order to take advantage of the CPTED program, which gives a lot of importance to the difference between private and public space, the thesis proposes to implement a system of elements in order to recognize these two spaces along with the name of the streets. At the same time,

to follow also Amin's studies in multicultural cities, I will give more importance to the public shared spaces such as parks, plazas, and public transportation. Since residents and refugees will both work on these elements they will learn this non-written rules that will help them identify strangers and also will help the refugees to identify if they are in a public or private street. The project will also encourage social interaction in the designated areas.

By giving these opportunities to the refugees, it can be considered that we are giving a possible solution to two issues at the same time. Firstly, when it comes to refugees, housing, job training (which will lead eventually to economical independency) and social integration can be considered as a complete integration. If we are able to fully integrate the refugees, it is more likely that their desire to stay will be greater and won't try to migrate to the U.S.A. And second, reutilizing the abandoned houses will help crime prevention and reduce fear of crime in Villa del Prado. We can conclude saying that the most important factor is the participation of the people since without it, the project could not be possible and change will not be noticed.



PROJECT DEVELOPMENT

Localization

Due to the benefits and development possibilities, for this thesis, I will concentrate in one of these border cities: Tijuana. This city is also a good option since it has a high crime rate, even though in the last years it has been decreasing. This means that the benefit would be greater if it's successful. Also, Tijuana has a big number of abandoned houses. The area chosen is located distant from the city, and it is a social housing development with similar issues that were mentioned before.

Baja California is a state located in the northern part of Mexico. The climate is dry and hot since it is a desert. Temperatures can reach up to 40 °C, and 50°C. Tijuana is the second smallest city in the state but the one with the biggest population density. It is an industrial city with 1,773,500 residents and it is in constant growth. 42.5% of the population is between 30-64 years old, while 31.7% has



between 12-29 years old. Only 3.6% of the economically active population is unemployed.

Villa del Prado is a community located in the southern part of Tijuana. This community is located in the middle of the Mexican desert at 14 km from Tijuana's city center. It was built in 2006 as a social housing development and the selling of the houses was aimed to people that wanted to use the workers credit loan with INFONAVIT⁹. This development has 208 hectares where 14,147 houses are found, and it is divided in two, Villa del Prado I and Villa del Prado II; for this thesis we will only focus in Villa del Prado I, which accommodates 5,561 houses.

Current Situation

Even though these social houses are considered as cheap, the first reason why the abandonment occurs is due to the inability of the owner to continue paying the loans. Also, Villa del Prado presents the same problems most of the social housing developments have such as lack of infrastructure and services, that were presented before, for example that they are far away from a city center, they are low quality constructions and there are no or little services other than housing. Finally, when people start abandoning their houses, other neighbors desire to leave too due to the negligence, vandalism incidents, and fear of crime creating a domino effect.

These residential communities were built by

9. INFONAVIT is a national institute that gives loans to the Mexican worker class

Figure 23.
Baja California's
localization



Figure 24.
Villa del Prado I .

a construction company called Urbi Constructoras with the support of INFONAVIT. These houses were made with concrete and have 31 sqm. They are 1 floor high, with 1 room and 1 bathroom. Even though all the houses have the same area, some of them have a bigger lot with 90 sqm while others have only 51 sqm. Residents bought their houses in a value estimated in \$250,000 and \$350,000 Mexican pesos (11,360 € - 15,900 €)¹⁰ that were to be paid monthly at the exchange rate of that month. Here, it is important to mention that the minimum wage in Mexico on 2017 was of \$80.04 a day, that means that a person who has this salary, could pay the whole house in more or less 8 and a half years. With the inflation of the economy, people have to pay even more than what they thought it would be at the beginning and they are forced to sell their houses in order to pay the part that is missing, if any. Other people decide to abandon them since they don't see an economic opportunity anymore, facilitating the abandonment. Also, it is important to mention that this project has been on for 11 years, this means that a person that earns the minimum wage, and decided to buy one of this houses in the early stage of the project, should now be out of any debts and with a property house. With this decrease of population density, the houses also decrease their value, creating an expensive low value house that will be difficult to sell for those people willing to do it, and sometimes forcing them to stay in a place that is not desired anymore.

This social housing development consists of 5,561 houses, where 2,000 of them are abandoned. Abandonment of properties increases the risk of violence. Inhabited houses give the possibility to other people to occupy it in order to do illegal actions such as drug dealing and hide robbed items or even turn them into dumpsters. Also, this same people have marked territory with graffiti, making the community look even more dangerous. Since there are more than one of these groups, conflicts between them are constant resulting in street fights.

According to the Security Department of the Mexican government (SSPE) for the state of Baja California, Villa del Prado had 222 crimes in 2016 from which the most common are house robbery, vehicle robbery and violent assault. In the first 4 months of 2017, there had been 98 crimes in this same community.

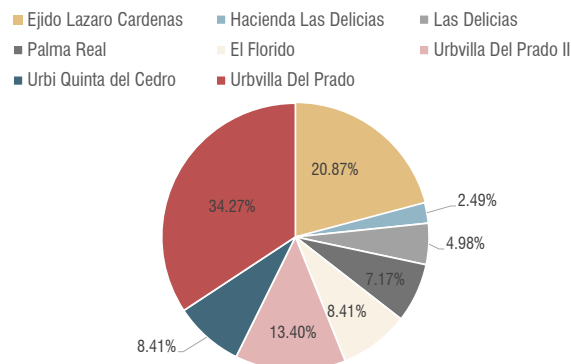
Another reason to chose this specific community is the localization. Villa del Prado is of the furthest social housing development from Tijuana's city center. The estimated time to arrive with public transportation is of 2 hours and by car it takes up to 30 minutes. At the moment, the government is connecting the southern part of Tijuana with the city center with a new 14 km. highway and this is helping raise the value of the community again. There are also several services that can be found inside the community like schools, pawn shop, Chinese restaurant, one big

¹⁰. Exchange rate of December 1st, 2017:

€1=\$22.14mxn

Figure 25. Criminal acts reported in Villa del Prado and nearby developments in the first 4 months of 2017.

Gathered from: <http://www.copladebc.gob.mx/publicaciones/2017/Mensual/Tijuana%202017.pdf>.



supermarket, one church, internet store, mini markets, gas station and a gym.

The community I chose is one of the most violent social housing developments in the area. Even though there were only 222 crimes registered in 2016 in this municipality, it represents the 30% of the crimes registered in the adjacent developments¹¹, as well as for the first months of 2017. Some CPTED projects by the USAID program and other institutions are starting to be developed in this city due to the crime rates on these social housing developments.

Project Stages

Based on the USAID program to develop a CPTED intervention, this project can be divided in 4 as well. The first stage should consist in the creation of the relationships between community, government and private institutions in order to have a strong base for the crime prevention project and it should

last around 4 months. It is important to take into account though that the coordination with the government; the police and certain organizations should start in this stage and cannot stop until the very end of the project. The activities that should be carried out on the first month are:

- Inform and summon the neighbors to be part of the community's committee
- Train the residents and the private and public representatives on CPTED methodology
- Create a promoter committee

This promoter committee should be formalized by the second month. This group should be formed by municipal officials, representatives of police and neighbors of the community.

At the moment, "Fundación tu+yo", who is the one that has worked in some CPTED USAID projects in Tijuana, is trying to decide which organizations and private institutions are the most adequate to finance this project. Some options include USAID, Home Depot and Fronteras Pro Salud. They report that neighbors are in their best interest to improve their community and are being collaborative with activities that need involvement.

11. Comparison between: Urbivilla del prado (29.75%), Ejido Lazaro Cardenas (17.09%), Las delicias (10.76%), El Florido (3.96%), Palma Real (7.12%), Hacienda las Delicias (0.16%), Urbivilla del Prado II (28.08%) Generacion 2000 (2.37%)

Another objective of this stage is the participative diagnosis. The activities to reach out this objective are:

- Carry out exploratory security walks with at least 20 residents
- Drawing workshops with at least 20 children related to the safe places
- Create security maps with at least 30 residents
- Do fear and victimization polls to at least 100 residents
- Gather criminal statistics

All of these should be carried out on the second month. This stage has already been done by Fundación tu+yo. As stated before, in the diagnosis stage it is important that the community works together with the government and develop projects to improve these urban spaces.

According to the analysis made by this institution, there are three main indicators this community suffers of criminality. The first one is the high rate of house robbery. In the poll they made 89% of the people confirmed they have suffered at least one time a robbery in their homes. This forces them not to leave it for a long time. It is important to mention that there are families that have been robbed up to 6 times. The second indicator is the assaults in the street since 51% of the people have declared being victims of this crime at least once. Finally, the third indicator is the presence

of gangs since 72% of the people are aware of this. As presented before, gangs could be the explanation of crimes towards abandoned houses and residents. Additionally, 57% of the people claimed they have suffered of vehicular robbery, some of which have been victims up to 15 times. People have also declared seen multiple homicides during both day and night, meaning that criminals tend not to fear being seen.

In this same poll, the institution found out that along with the security perception, the institution asked about the quality of services. Together with streets and security, public lighting are the categories worst rated, followed by trash collection and public spaces. Also, there are no community centers, libraries, health clinics nor police stations. People feel their community has been degrading due to criminals, dirtiness and trash in the streets, the lack of maintenance of the parks and the increase of undesired/stranger people.

Another action to be taken in this stage according to the USAID is to clean up the streets and the empty lots. This is the longer objective of the stage since it lasts 2 months. The community will be divided by areas and they will be cleaned up in different weeks with a team leader.

The second stage consists in the design of the community. Here some training should be executed. The workshops should be about

Figure 26.
CPTED project made
in Tijuana by USAID.

Courtesy of Gabriela Posada
from USAID.

financial education, values, wall painting and building. For this, “Fundación tu+yo” already have trained people from other communities and have different courses planned that teach residents to build the community integration. Also, the drawing workshops of the proposals will be done in this time. Here residents will be able to choose also if they want any specific color or materials in their own houses. Meanwhile, it is important to show the proposal that will be presented to the residents in order to demonstrate the project effectiveness. The duration of this stage needs to be of another 2 months.

Since CPTED is a socio-urban intervention, it foresees community integration. This is seen as the most important element and could be used as an opportunity to integrate refugees. The integration of both communities is fundamental for the success of the project. Therefore these first two-steps might take longer in order to ensure this.

The third stage is the implementation phase. Here the same organization “Fundación tu+yo” helps coordinate the community to develop the interventions. After the election of a group leader, the needed actions will need to be performed. The active participation of the residents is fundamental in this stage. The duration of this will depend on the quantity of interventions, in this case it will approximately take 2-3 months.



After a talk with the institution’s president Alejandro Martinez, he stated that the restoration of the houses lasts about 3 months due to the integration and training courses, but the physical action lasts only one week of those 3 months. Based on experience, he estimates that the whole project will need around 3-5 years to see the first changes.

For the final phase, evaluation polls will be lifted in order to see the success of the project after some months. Due to the research done before, this stage will be fundamental since we will also try to give empirical evidence for the CPTED and Defensible Space Theory.

Punctual Interventions

STREET INTERVENTION

As stated before, by not having a correct access control and open streets, it is more difficult to identify who is a resident and who is a potential criminal due to the high number of people that go through Villa del Prado. This can also have a negative impact on the social interactions since it does not provide the opportunity to the residents to even identify properly their neighbors by face since they can be easily confused with a passerby.

By analyzing the current situation based on the activities that attract more people and the principal streets, the intervention will be made in the streets located more far away from these. This will assist residents in neighbors' identification and interaction. As mentioned before, the probabilities of intervention in case of a crime are higher when people have a bound with the victim, on the contrary when the victim is a stranger.

At the moment, some streets are already closed, some with gates, others with a chain attached to a post on each side of the streets. Those with a gate already installed will remain closed even if they are near any kind of activity. The only intervention they will suffer is a gate modification to unify the project. Those streets with a chain will have a proper gate installed since the resident have shown an interest in closing the street and this might be due to fear

of crime, something that the thesis is trying to reduce.

As Newman stated in Defensible Space theory, it is important to control the quantity of people that are living inside each cul-de-sac since too many people can result in a negative action due to the same reason of neighbor recognition and too little amount of families can result in the closure towards new arrivals or other streets that make part of Villa del Prado. This is why it is important to connect some of the streets, taking advantage of the abandoned houses in order to create new connecting internal streets and increasing the number of residents by street.

It is fundamental to have only one gate that will function as entrance and exit of each street. This will provide a better access control. Also, it will difficult an escape from the criminal in case of a crime being committed.

The current situation of access control and the potential criminal escaping opportunities will be improved by closing a total of 20 streets from which 10 of them will get a gate installed while the other 10 will be closed definitely by continuing the current wall. Also, 16 new streets will be created by eliminating 15 abandoned houses. On the other hand, 8 new gates will be installed in those streets with a certain closing intention such as chains. In addition to that, 7 streets that used to be closed by gates will



be replaced by continuing the wall since the new internal street will be connecting those to another gate. Creating a total of 8 new gates, 7 streets with definitive closure and 16 new streets.



Figure 28.
Areas with more need of intervention due to the lack of people concurrence

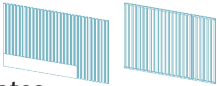
Figure 29.
Current people concurrence in Villa del Prado I due to the present activities situation on Villa del Prado

Figure 30.
Villa del Prado's current axonometry

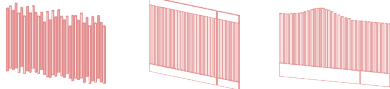
Figure 31.
Closure options based on the current gates and elements

CLOSURE OPTIONS:

Actual gates:



New gates:



Fixed elements:

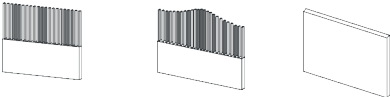


Figure 32.
Streets proposal for closure, openings and new internal streets created by demolishing abandoned houses.



Figure 33.
Close-up of the new
public plaza that
will provide this
service to the south-
western part and its
relationship with near
streets.

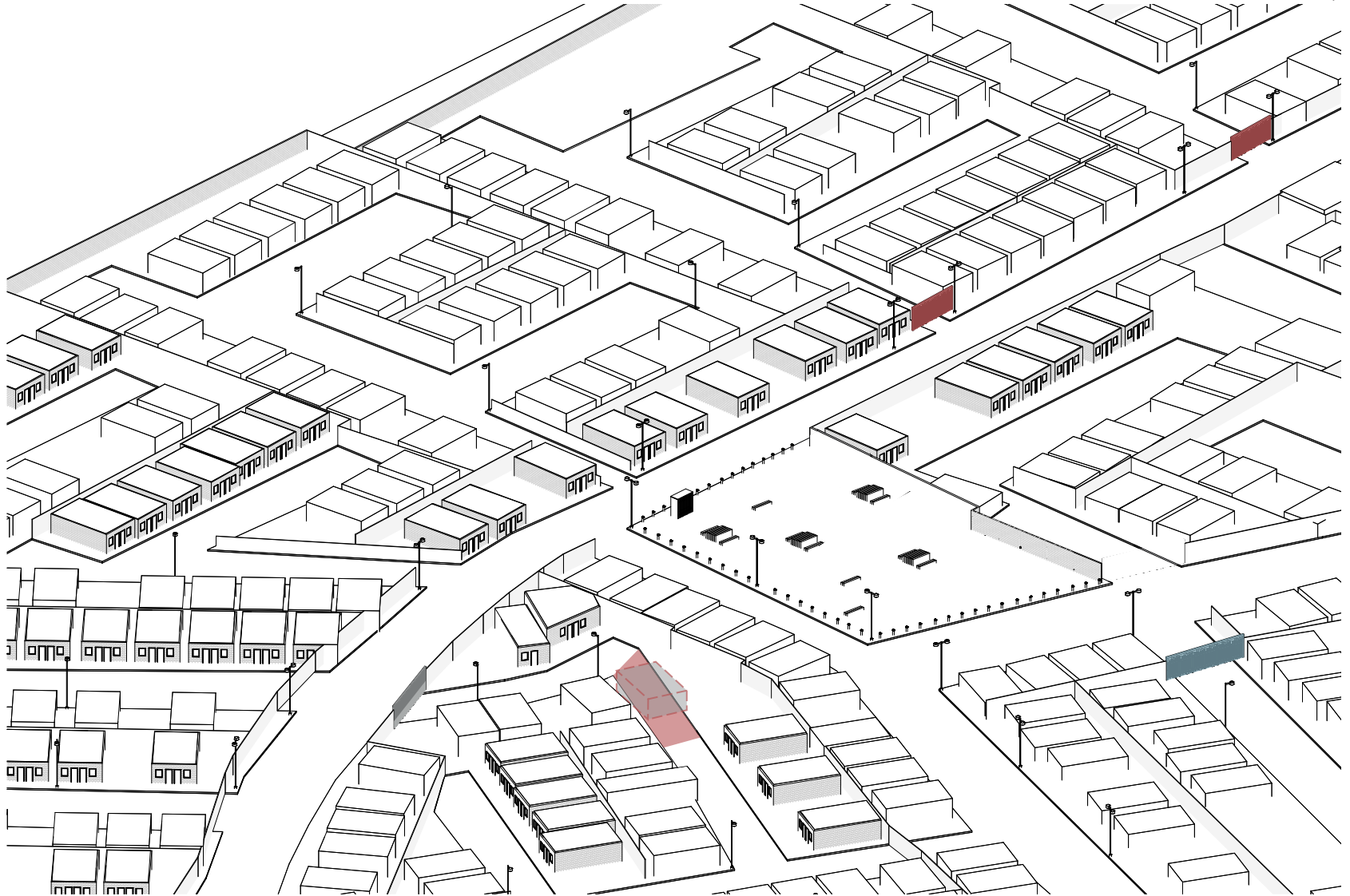
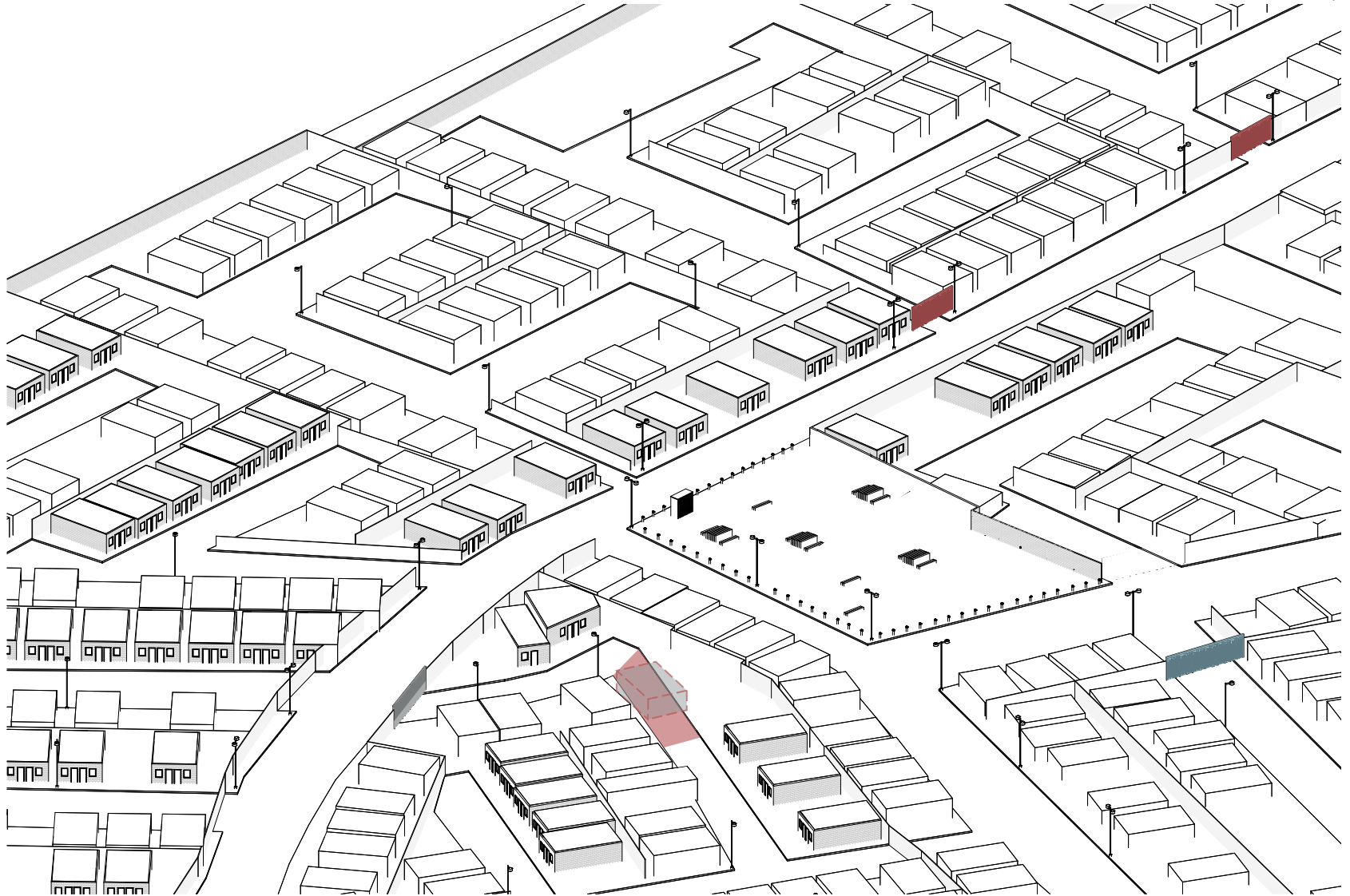


Figure 34.
Close-up of the
northern part of Villa
del Prado showing
the relationship of the
closure and opening
of the streets and
their relationship





PUBLIC LIGHT INTERVENTION

Scarce lighting provides potential hiding spots for criminals, and therefore it hardens natural surveillance. At the moment there is little light, especially in the principal streets. In order to provide an efficient illumination system it is important to keep in consideration the type of light and the area to be lit and glare zones in order to not get a negative result.

The proposal is to optimize the current lighting by localizing the current light posts in the most public areas and double the light in each one of them. This will save the money of the new post installation.

The only streets that will have this intervention are the principal streets and the areas with an activity that calls for a big concurrence

of people. This is because more natural surveillance is needed at all times since people do not know each other. For the same reason, hiding spots need to be reduced.

Private streets will have no lighting intervention since closing streets will already encourage natural surveillance. One thing though that will be encouraged is the installation of lights in each house provided by the owner of the house, but this is not a requirement since neighbors will be encouraged to see for each other.

The current lighting situation will be optimized by adding 83 secondary lights to existing posts and the installation of 28 new double light posts.

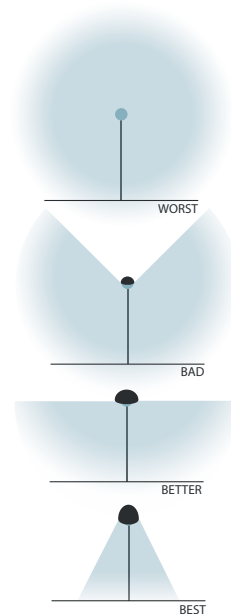
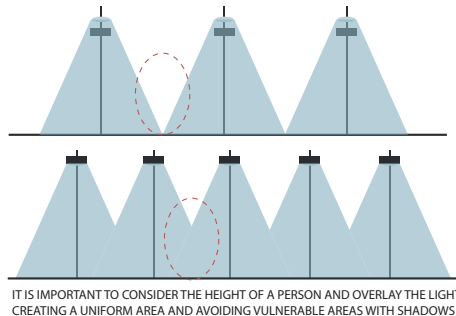
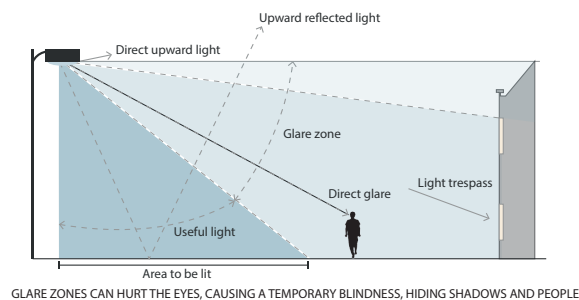


Figure 35.
Lighting
efficiency diagram

Gathered from: <https://www.lrc.rpi.edu/programs/nlpip/lightinganswers/lightpollution/img/figure2.gif>



Figure 36.
Current public
lighting in Villa del
Prado I.

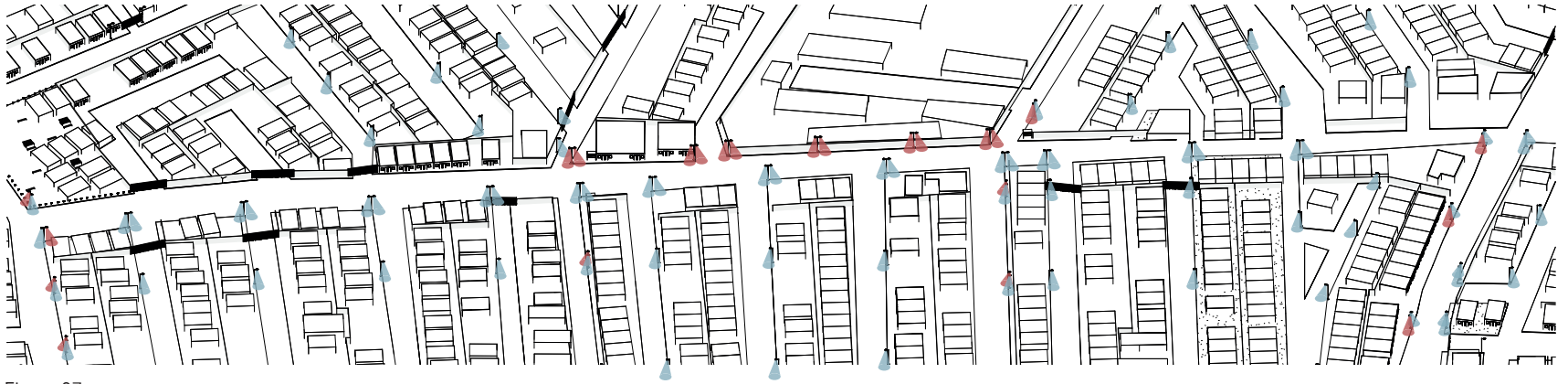


Figure 37.
Close-up of school's
street lighting
proposal.

Figure 38.
Night view of lighting
optimization in
school's street.

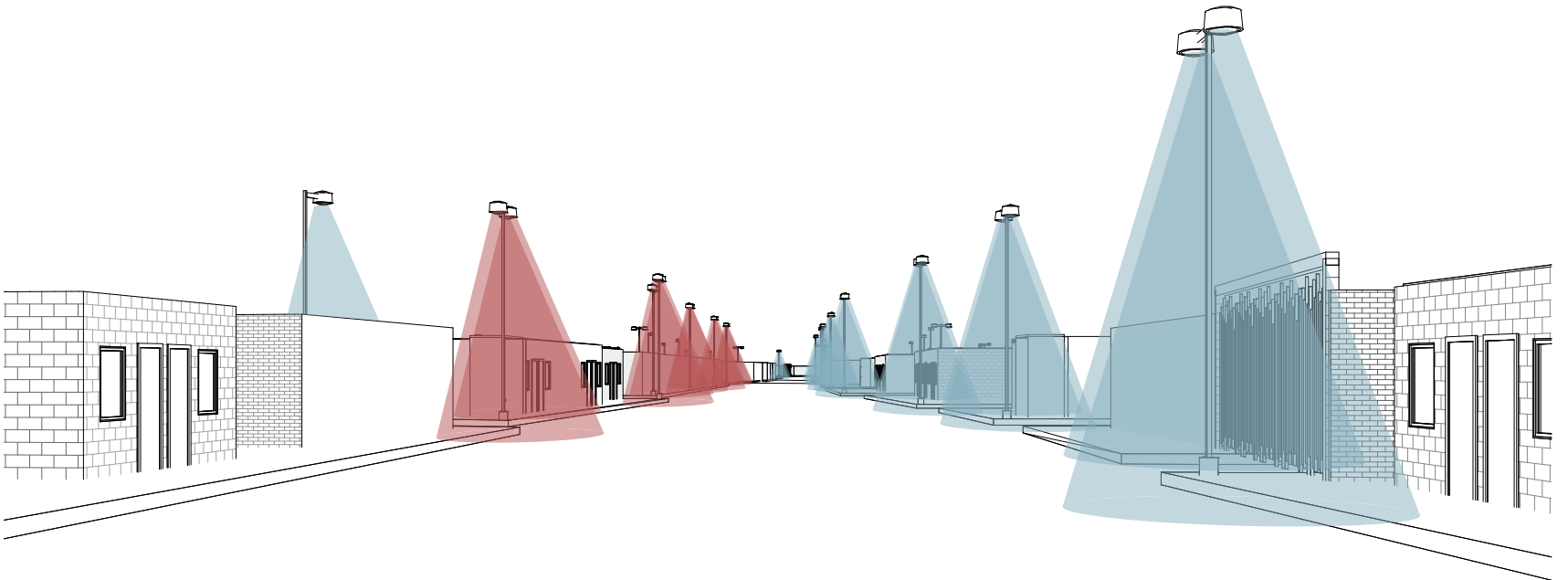




Figure 39.
Lighting
optimization
proposal.

PUBLIC TRANSPORTATION INTERVENTION - CONNECTIONS

One of the main issues there is in Villa del Prado related to life quality, abandonment and devaluation is the distance with other services, activities that can be found in other urban developments or the same city center of Tijuana. This is also affected by the scarce public transportation service that only connects Villa del Prado with Tijuana with one bus line and it can take up to 2 hours if residents do not have a car. Also, the current line only gives service to half of the development, leaving by the side the already affected south-western part.

The thesis calls for a new bus line that will pass through to the area that currently does not receive this service. This line will also create new connections between Villa del Prado I and other communities nearby such as Lázaro Cardenas, Valle Dorado and La Joya. By creating new connections, we are also improving the job opportunities and therefore the socio-economical activity of the whole area.

In order to encourage people to make use of this new bus route, bus stops will be installed in strategic places inside Villa del Prado. These will be localized in parks, commercial areas, plazas, schools and the supermarket. The formalization process of public transportation foresees the installation of a total of 14 bus

stops in both ways for both bus lines.



Figure 40.
Current bus line in
Villa del Prado I. No
bus stops are present
at the moment.

Figure 41.
Secondary bus line
proposal in red.
Formalization will
be provided with
bus stops located in
public spaces with
attractive activities.



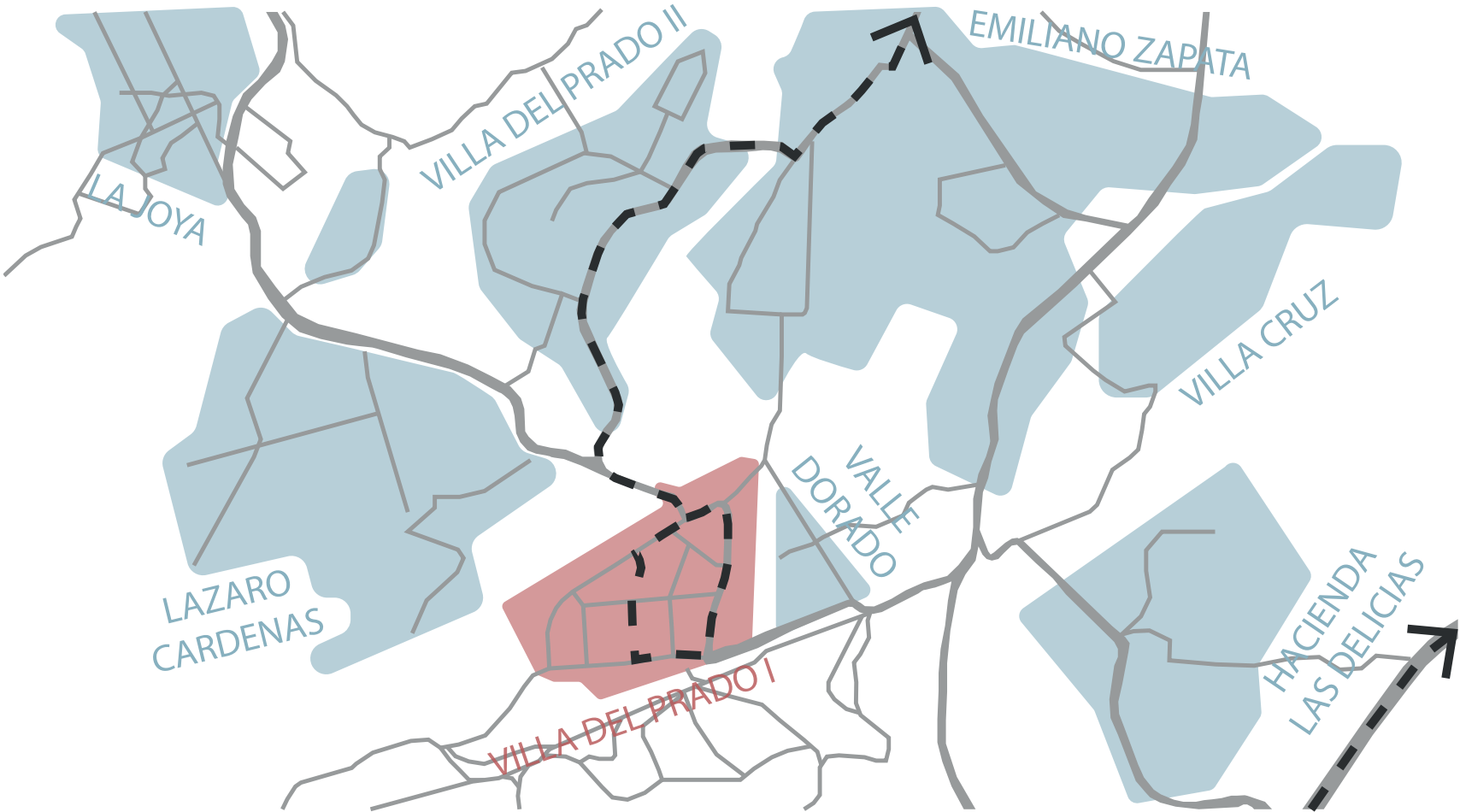


Figure 42.
Current connection
with Villa del Prado I.

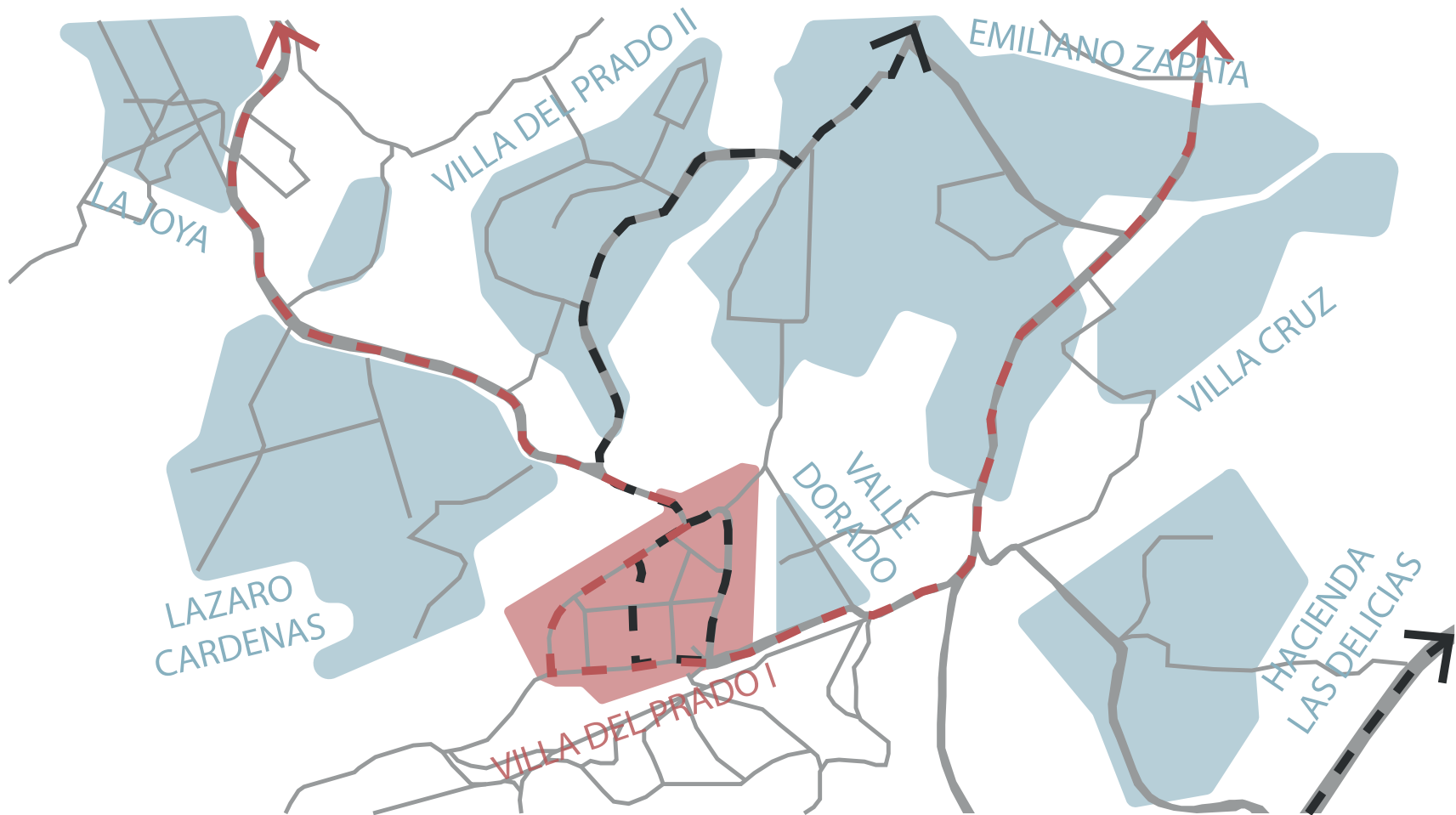


Figure 43.
Additional
connection with other
communities nearby
with a secondary bus
line.

ABANDONMENT INTERVENTION - REFUGEES INTEGRATION

Another big issue at the moment in Villa del Prado is the abandonment of the houses. As explained before, the current situation of Villa del Prado is preoccupying since 2,000 houses are abandoned, this means that almost half of the houses are potential spots for criminals for them to hide, sell drugs, rape and assault their victims.

This abandonment is also one of the reasons have fear of crime. Not only because the physical space can be potentially occupied by criminals, but also because the image affects the perception of the area in people, sustaining the theory on Broken Window. This can create or increase the fear of crime in people when being in Villa del Prado.

If no intervention related with this abandonment is done, the project will not have positive results since it has a domino effect and with the years only a few residents will be living there. Also, more eyes in the streets will help provide natural surveillance and therefore it will help prevent crime. Repopulation is not only important for natural surveillance but also to re-appropriate the spaces from potential criminals and to improve the maintenance and also the image of Villa del Prado.

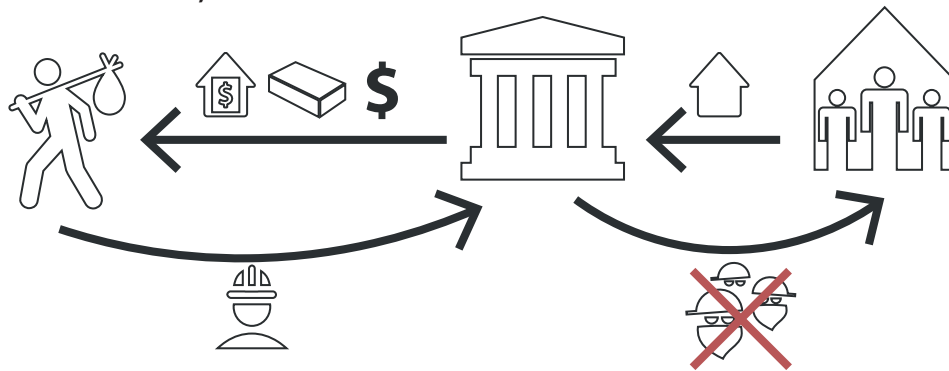
In order to solve this issue and at the same time the refugee crisis Mexico is living, the

thesis proposes repopulating Villa del Prado with refugees and asylum-seekers. This will help also reduce the costs of maintenance of each refugee in migratory stations. They will provide the workforce needed in the project, reducing also contracting costs. At the same time, if the refugees work in the project, they will be getting job training in the area of construction, increasing their opportunities to get a job in the future. By assisting refugees in a complete integration, it is less probable that they will leave the area and/or country since refugees tend to search for any kind of stability.

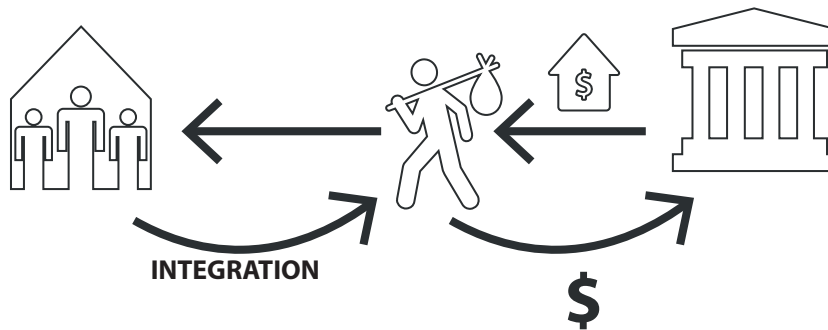
By implementing this action, the development will start gaining value again. Also, Villa del Prado will have a multicultural community as an identity, creating smart citizens and providing a full integration program to the refugees. This integration can be more successful in Villa del Prado since we are implementing a CPTED and Smart Cities model. Both foresee the integration of the people living in the same urban space, regardless the residence status or citizenship. The principal goal of the project is to create natural surveillance for crime prevention and encouraging the social integration.



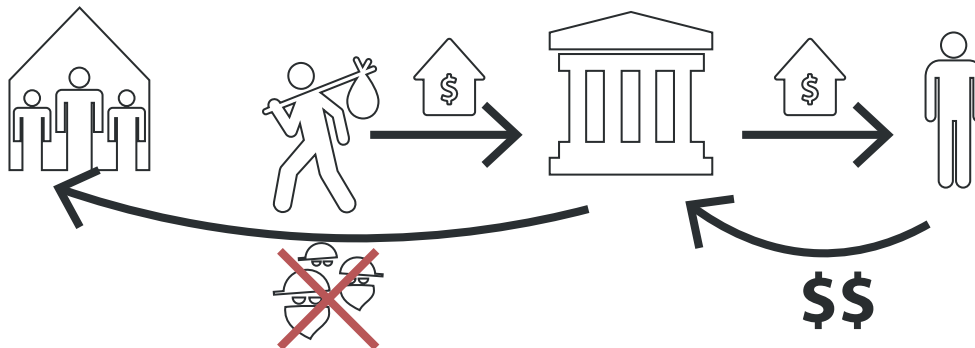
Figure 44.
Abandoned
houses
in
Villa del Prado I

FIRST 3 MONTHS, ONLY FOR ASYLUM-SEEKERS

DURING THE WAITING TIME, ASYLUM-SEEKERS CAN ENTER THE PROGRAM WHICH LETS THEM LIVE IN AN ABANDONED HOUSE WHILE REESTRUCTURING IT. IN THAT WAY, THE GOVERNMENT CAN GUARANTEE THE COMMUNITY THAT THESE HOUSES WILL BE OCCUPIED BY A MIGRANT AND THERE WILL BE NO DRUG DEALERS OR OCCUPATION BY CRIMINALS. MIGRANTS WILL DO THE WORKFORCE, EARNING THEIR OWN MONEY AND LEARNING SOMETHING THAT CAN HELP THEM FIND A JOB IN THE NEAR FUTURE. GOVERNMENT WILL PROVIDE MATERIALS, HOUSING, AND SALARY TO THE ASYLUM-SEEKER.

IF THE MIGRANT GETS A POSITIVE ANSWER FROM MEXICAN GOVERNMENT

IF THE ASYLUM-SEEKER RECIEVES A POSITIVE ANSWER, AND CAN STAY IN MEXICO REGULARLY, HE OR SHE CAN STAY LIVING IN THE HOUSE THEY'VE RESTRUCTURED. THEY WILL PAY A CERTAIN AMOUNT OF RENT FEE UNTIL THEY REACH A PREVIOUSLY ACCORDED AMOUNT OF MONEY TO THE GOVERNMENT TO MAKE IT THEIR OWN. IN THAT WAY, THE GOVERNMENT CAN STILL GUARANTEE THE COMMUNITY THERE WILL BE LESS ABANDONED HOUSES, DRUG DEALERS, AND CAN RISE THE VALUE OF THE HOUSES. THE GOVERNMENT CAN ALSO HAVE A BETTER CONTROL ON MIGRATION AND REFUGEES TO OFFER THEM THE PROTECTION NEEDED. IN THAT WAY A GOOD INTEGRATION BETWEEN COMMUNITY AND MIGRANT IS PROVIDED.

IF THE MIGRANT GETS A NEGATIVE ANSWER FROM MEXICAN GOVERNMENT

IF THE ASYLUM-SEEKER RECIEVES A NEGATIVE ANSWER, HE OR SHE WILL BE RETURNED TO HIS/HER HOME COUNTRY, GIVING BACK THE REESTRUCTURED HOUSE TO THE GOVERNMENT. THE GOVERNMENT WILL HAVE THE POSSIBILITY TO SELL THE HOUSE WITH ITS NEW (HIGHER) VALUE AND WILL KEEP GUARANTEEING THE COMMUNITY A PLACE WITH LESS DRUG DEALERS AND ILLEGAL OCCUPATION.

Figure 45.
Refugees integration project
functionality.

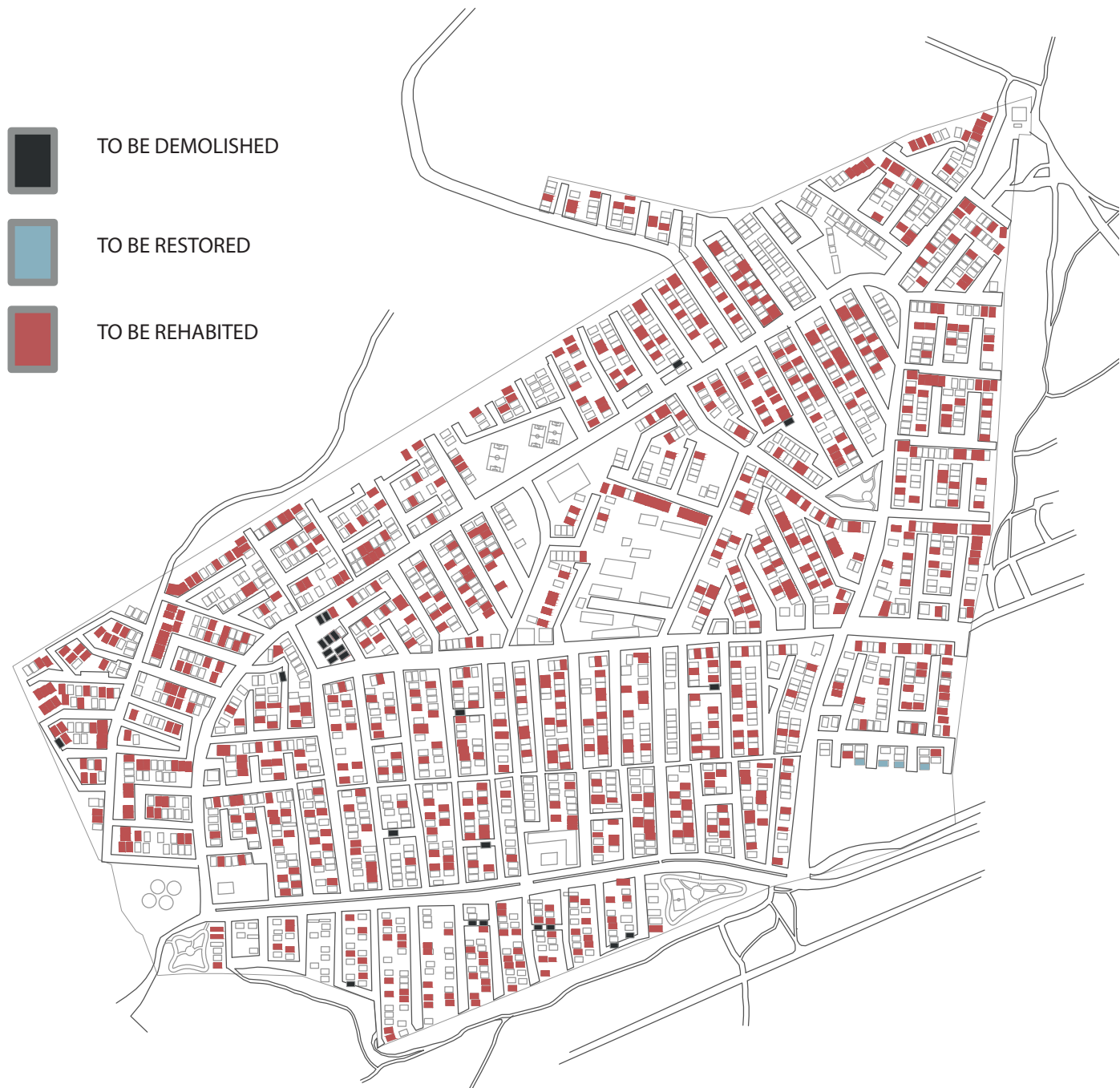


Figure 46.
Abandoned houses
destination proposal.

PUBLIC SPACES INTERVENTION - SOCIAL INTEGRATION

The current situation in Villa del Prado related with public activities is one of the reasons of the devaluation of the houses. There are little activities and job opportunities inside the urban area and people have to travel to another location for these. At the moment only 1 supermarket, 3 parks, 1 sports center and 2 schools are found in the development and these do not foresee an important interaction of residents. Also, they have little use due to the criminal situation and fear of crime.

The intervention to encourage the use of social spaces is needed since CPTED relies in social interaction. Also, by making people be outside their houses, they provide natural surveillance in more parts of Villa del Prado other than their own streets. In order to fulfill this, besides the interventions already mentioned before, the thesis proposes the creation of two new plazas. Both will be equipped with a bus stop and lighting.

For the creation of one of the plazas, the demolition of 8 houses needs to be done, one of them is already abandoned and the other 7 will need relocation to other abandoned houses in the area. This will have a similar character than the other existent plazas but it will be located in the southwest part of Villa del Prado in order to be used by the people living nearby since they do not count with a

public space.

The second plaza will be located in an abandoned space in the southeast part of Villa del Prado. This will be multi-functional and will encourage its use at most times of the day. It will be bigger since the use of it will not be the same as the other public spaces and therefore a bigger people concurrence is expected. This plaza will serve as a market place in the morning, as a social space in the afternoon and as an event/open-air cinema area at late-afternoon/night. With the activities organized at this late time of the day, natural surveillance will be encouraged also at night. This will also be also a point of reference for people living outside Villa del Prado and an invite to encourage openness.

This second plaza will also count with an integration center with classrooms in order to provide CPTED and job training courses to residents and refugees. Also, the main offices where the project planning and supervision will take place at will be located here. At the same time, the same building will be dedicated to the refugees' reception center at their arrival. In order to not build something new and to take advantage of the localization of several abandoned houses, 4 of them will be recuperated, restored and adapted to these functions.

Both plazas will encourage social interaction and also economic activities, raising the



Figure 47.
Current activities in
Villa del Prado I.

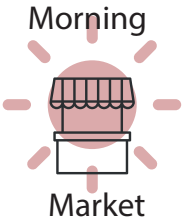
value of Villa del Prado. It will also improve residents' life quality and refugees' integration. The integration center is a key to the social integration since it will be the organizational core of the project and will turn into one of the main attraction points for external people.

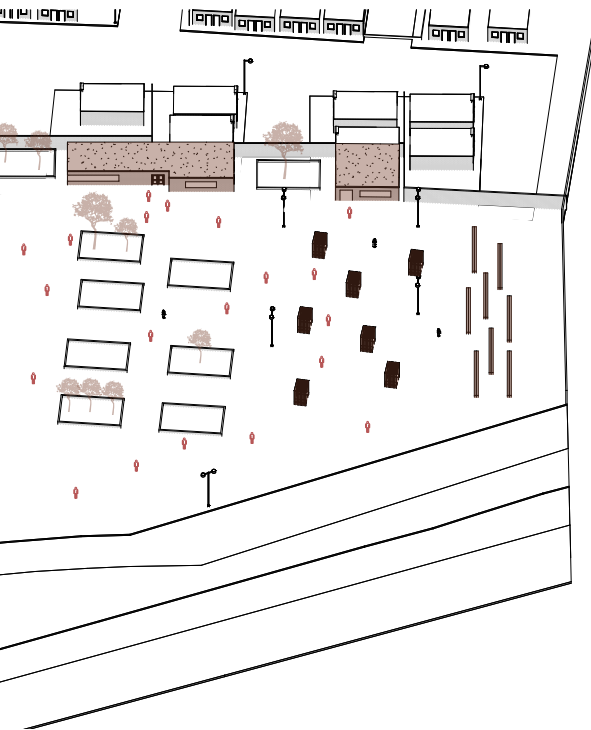


Figure 48.
Localization of the two
new public spaces in
Villa del Prado I.



Figure 49.
Close-up of the new plaza provided
for the residents in the south-western
part of Villa del Prado I.





Afternoon



Plaza



Evening



Cinema

Figure 50.
Integration center
uses depending on
the time of the day.

PROJECT BOARDS

URBAN REGENERATION FOR CRIME PREVENTION
IN VILLA DEL PRADO I, TIJUANA-MX.

	STREETS	PUBLIC LIGHTING	CONNECTIONS	ABANDONED HOUSES	INTEGRATION CENTER	PUBLIC SPACES
ACTUAL SITUATION						
PROBLEM	<p>It is more difficult to control who is in the development and to identify potential criminals due to the high number of people that live in it.</p>	<p>Scarce lighting provides potential hiding spots for criminals, therefore it makes natural surveillance more difficult.</p>	<p>Residents have limited possibilities to go to nearby developments with public transportation.</p>	<p>There are 2,000 abandoned houses in Villa del Prado, meaning there are 2,000 spaces available for criminal activity and hiding spots.</p> <p>Due to the lack of maintenance, and the level of criminality the value of the houses go down.</p> <p>Abandonment has a domino effect since people do not desire to live next to an empty house.</p>	<p>There are no spaces dedicated to integration and just some for social interaction of the residents</p>	<p>There are big areas where no public spaces can be found</p>
INTERVENTION	<p>19 streets closed</p> <p>15 new gates installed</p> <p>11 definitive closures installed</p> <p>7 gates replaced with definitive closures</p>	<p>87 light posts to be optimized</p> <p>27 new double-light posts installed</p>	<p>Create a new bus line that connects Villa del Prado with other urban developments.</p> <p>Formalize public transportation with the installation of 18 bus stops</p>	<p>Repopulate Villa del Prado with refugees and asylum-seekers</p>		<p>Provide public areas to those who are more distant to the actual.</p>
STRATEGY	<p>By controlling the number of people in each street, residents will have less faces to recognize, making stranger recognition easier, providing natural surveillance.</p>	<p>Optimize the actual lighting in the most concurred streets.</p> <p>Neighbors will provide natural surveillance and lighting in private streets.</p>	<p>Creating a new bus route that connects nearby developments, without eliminating the current.</p>	<p>With the improvement of the abandoned houses and the repopulation, the value of the development will start raising.</p>	<p>It is important to provide a space for the residents where they can learn, interact and spend their free time in order to encourage social interaction.</p>	<p>Public spaces with specific activities, can encourage people to visit Villa del Prado, improving the socio-economical activity of the area.</p>
DISPOSITIVES	<p>Definitive closure elements:</p> <p>In order to keep the current language, new gate options will consist of vertical elements and definitive closures will be the same where needed</p> <p>Actual gates:</p> <p>New gates:</p>	<p>To optimize the public lighting and get profit from the current devices, the proposal is to add a second light to the posts that are already installed in the development.</p>	<p>Bus stops will be located in strategic, public areas.</p>	<p>Refugees can go live to the abandoned houses temporarily, repopulating Villa del Prado and re-appropriating the place from criminals.</p> <p>The refugees can work in collaboration with residents in order to achieve a successful CPTED project.</p>	<p>By re-utilizing the abandoned houses available near the area, it is possible to recuperate, restore and adapt the place in order to have the main offices, classrooms for the CPTED and training courses and activities coordination.</p>	<p>In order to create points of attraction, one of the new plazas foresees these activities:</p> <p>Morning: Market</p> <p>Afternoon: Plaza</p> <p>Evening: Cinema</p> <p>This will encourage social interaction even when there is no sunlight.</p>
BENEFITS	<p>Since natural surveillance is provided by residents police costs will be reduced. Also, there are already some streets that are closed so a less number of interventions is needed.</p> <p>On the other hand, new internal streets will be opened where abandoned houses are located currently.</p>	<p>Increasing lighting in the most concurred streets will help reduce costs in police surveillance since criminals will have less hiding spots. Also, the residents will be able to identify any suspicious activity and/or the criminal. On the other hand, a small number of new light posts need to be installed since most of the interventions will be based on current devices.</p> <p>Lighting in private streets will not be needed since each resident will provide their own light and natural surveillance since they will recognize their neighbors' faces.</p>	<p>By giving the possibility to connect the development with other projects nearby, it will increase the job opportunities for residents.</p> <p>Also, by locating bus stops in strategic places, people from other developments will have a reason to visit Villa del Prado, improving the economic activity inside the project. This will also encourage people to use more the public transportation.</p>	<p>Repopulating Villa del Prado, will not only recuperate the abandoned spaces from criminals, but also it will help reduce the costs of maintenance of each refugee in migratory stations. Also, they will provide the workforce needed for this project. At the same time, refugees will be get a job-training in the field of construction to be economically independent in the near future. This will also upgrade the value of the houses.</p>	<p>Giving residents an integration center will give them a space for social interaction. It will include classrooms for CPTED training and community meetings as well as a refugee reception and information spot.</p> <p>At the same time, a community orchard will be located in the front plaza in order to provide local products for residents and people living in nearby developments. This can also improve economical activity. The plaza and integration center will profit from the abandoned spaces and houses.</p>	<p>To provide a social space in the areas that are missing one will not only provide social interaction but also natural surveillance. On the other hand, by creating attraction points and opening towards other urban communities, the economical situation in Villa del Prado can have a positive impact.</p>

1 - URBAN REGENERATION FOR CRIME PREVENTION IN VILLA DEL PRADO I, TIJUANA, MEXICO

PROJECT BOARDS

URBAN REGENERATION FOR CRIME PREVENTION
IN VILLA DEL PRADO I, TIJUANA-MX.

2 VILLA DEL PRADO I

URBAN REGENERATION FOR CRIME PREVENTION

A connection with other project developments that are nearby Villa del Prado is fundamental in order to attract more people and create better job opportunities and improve the economical activity in the area.

Public transportation currently is scarce since there is only one line that goes from Tijuana-Villa del Prado. The proposal is to create a second line that connects also La Joya, Lazaro Cardenas, Valle Dorado and Tijuana.

Bus stops are useful in order to formalize the line. These will be located in parks, plazas, supermarkets and schools in order to attract the most people possible and to concentrate all the people, especially foreigners (to Villa del Prado) in certain areas.

PUBLIC TRANSPORTATION BOARD 5

BOARD 3 STREET CLOSING

Close streets where there is less concurrence of people. This is because there is less natural surveillance. Residents in these streets need to be more aware and are more bound to know their neighbors, at least by face, in order to detect a stranger more easily and watch out for each other in case of something suspicious.

It is important to mention that there are already some streets that are closed, others that neighbors have had intentions to close them with chains. This means that this intervention is not necessary in every street, but just those in more need.

Scarce public lighting can create hiding spots for criminals. Also, it increases fear of crime in residents. The proposal is to optimize the public light, localizing the currents light posts and double the light in each one of them. The only streets that will have this intervention are the principal streets since more concurrence of people is expected and therefore it is more needed in order to provide natural surveillance at all times. Private streets do not need an intervention since the own neighbors will be encouraged to provide their own light in their own houses and also to get to know their neighbors, at least by face, so that they can provide for each other.

PUBLIC LIGHTING BOARD 4

It is fundamental to encourage social interaction since it provides natural surveillance. At the same time, by coordinating activities in these new spaces, we are creating attraction points for residents in other urban developments, improving the socio-economical activity in Villa del Prado.

An integration center is important since the project foresees a repopulation of the area with refugees that might need assistance, as well as an organization core for the development of the project.

Since CPTED and Defensible Space Theory include training courses, abandoned houses in the nearby area will be restored and adapted for classrooms where this courses will be held.

PUBLIC SPACE BOARD 5

PROJECT BOARDS

URBAN REGENERATION FOR CRIME PREVENTION
IN VILLA DEL PRADO I, TIJUANA-MX.

ZONES WITH
MORE NEEDCURRENT
PEOPLE CONCURRENCECURRENT
STREETS COSINGCURRENT
MAIN STREETSCURRENT
ACTIVITIESCURRENT
SITE

3 VILLA DEL PRADO I

STREET CLOSING INTERVENTION

URBAN REGENERATION FOR CRIME PREVENTION

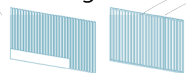
By analyzing the current situation based on the activities and principal streets, the areas with more concurrence of people can be found. Therefore the streets located in areas with less people and activities will be closed. This is because residents need to be more aware and are more bound to know their neighbors, at least by face, in order to detect a stranger more easily and watch out for each other in case of something suspicious. Also, at the moment some neighbors in identified streets have already closed their streets or have had an intention to do it by installing chains attached to two 1m. posts. This might be because they have felt the necessity to keep strangers and potential criminals outside their property. These streets will have the chains and gates changed in order to have a unification of the project.

NEW INTERNAL STREETS
ABANDONED HOUSES
TO BE DEMOLISHED

STREETS THAT NEED TO BE CLOSED
STREETS ALREADY CLOSED

CLOSURE OPTIONS:

Actual gates:

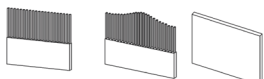


New gates:



Total installations: 6

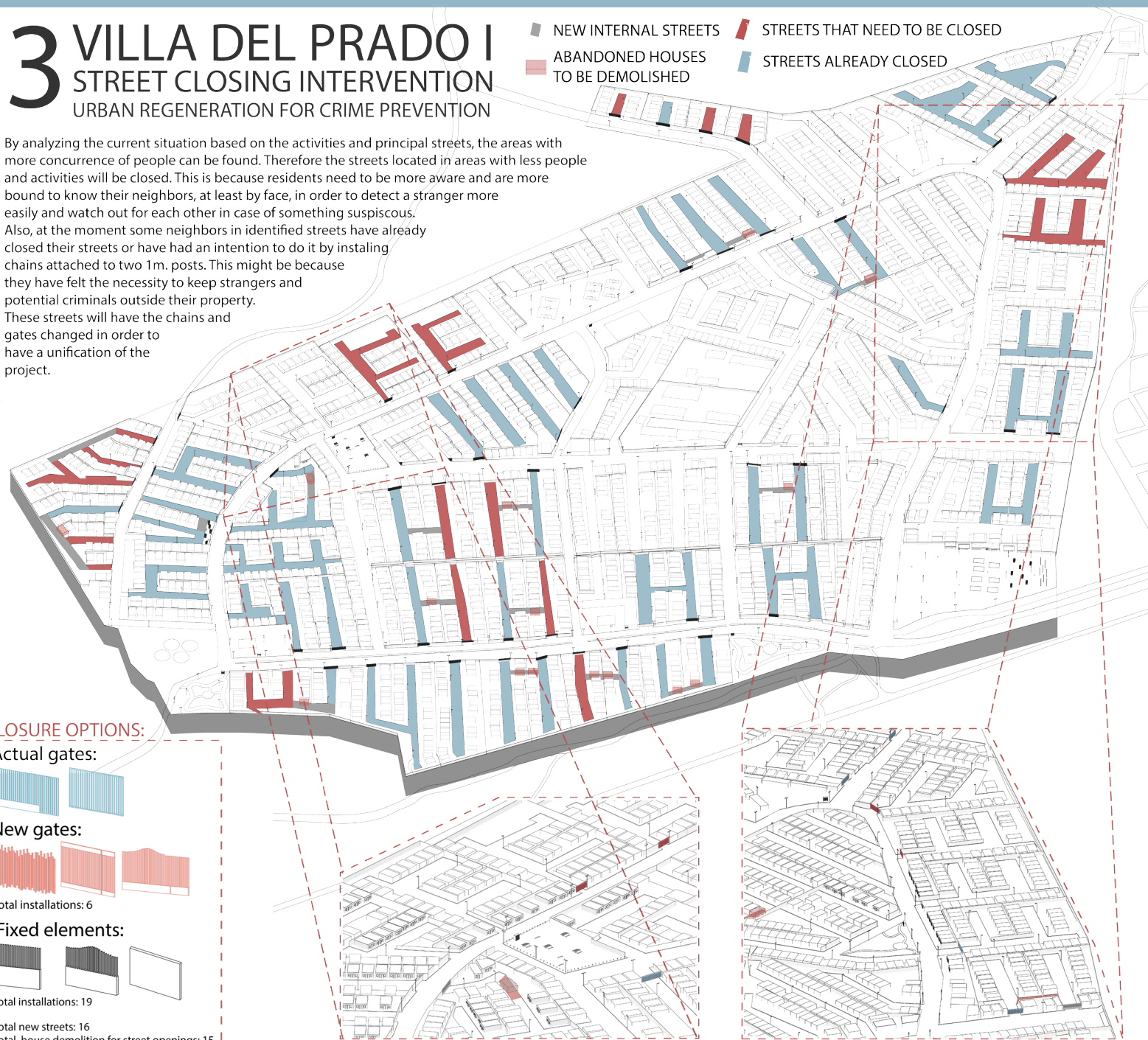
Fixed elements:



Total installations: 19

Total new streets: 16

Total house demolition for street openings: 15



PROJECT BOARDS

URBAN REGENERATION FOR CRIME PREVENTION
IN VILLA DEL PRADO I, TIJUANA-MX.

4 VILLA DEL PRADO I

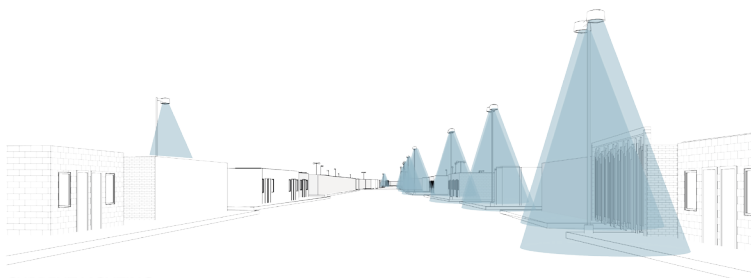
PUBLIC LIGHTING INTERVENTION

URBAN REGENERATION FOR CRIME PREVENTION

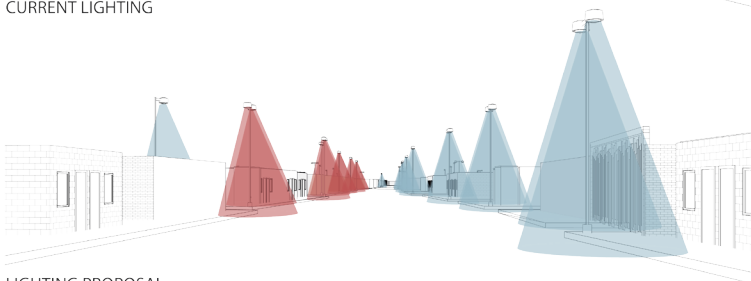
Public lighting is fundamental in terms of environmental design for crime prevention. At the moment only parks and the streets "Del Prado", "Del Granado", and "Del Ciruelo" have double light posts, all the other light in the project is generated by single light posts. This scarcity creates hiding spots for the potential criminals and it makes more difficult for residents to provide natural surveillance. Along with this, light is important also because it helps to recognize colors, something vital in identifying suspects. That is why it is important to provide more light in the areas with more public activity. To do this, the proposal is to add one light to the posts located in the more public streets such as "Del Granado", "Del Prado", "Del Agave", "Del Tamarindo" and "Del Peral". This is to optimize and take advantage of the posts that are already installed. The only area where new double-light posts will be installed is the integration center since there are no lights at the moment. Residents will be encourage to provide their own light in their own frontyards to light private streets. These don't need major intervention since neighbor interaction will be encouraged with the closing of the streets



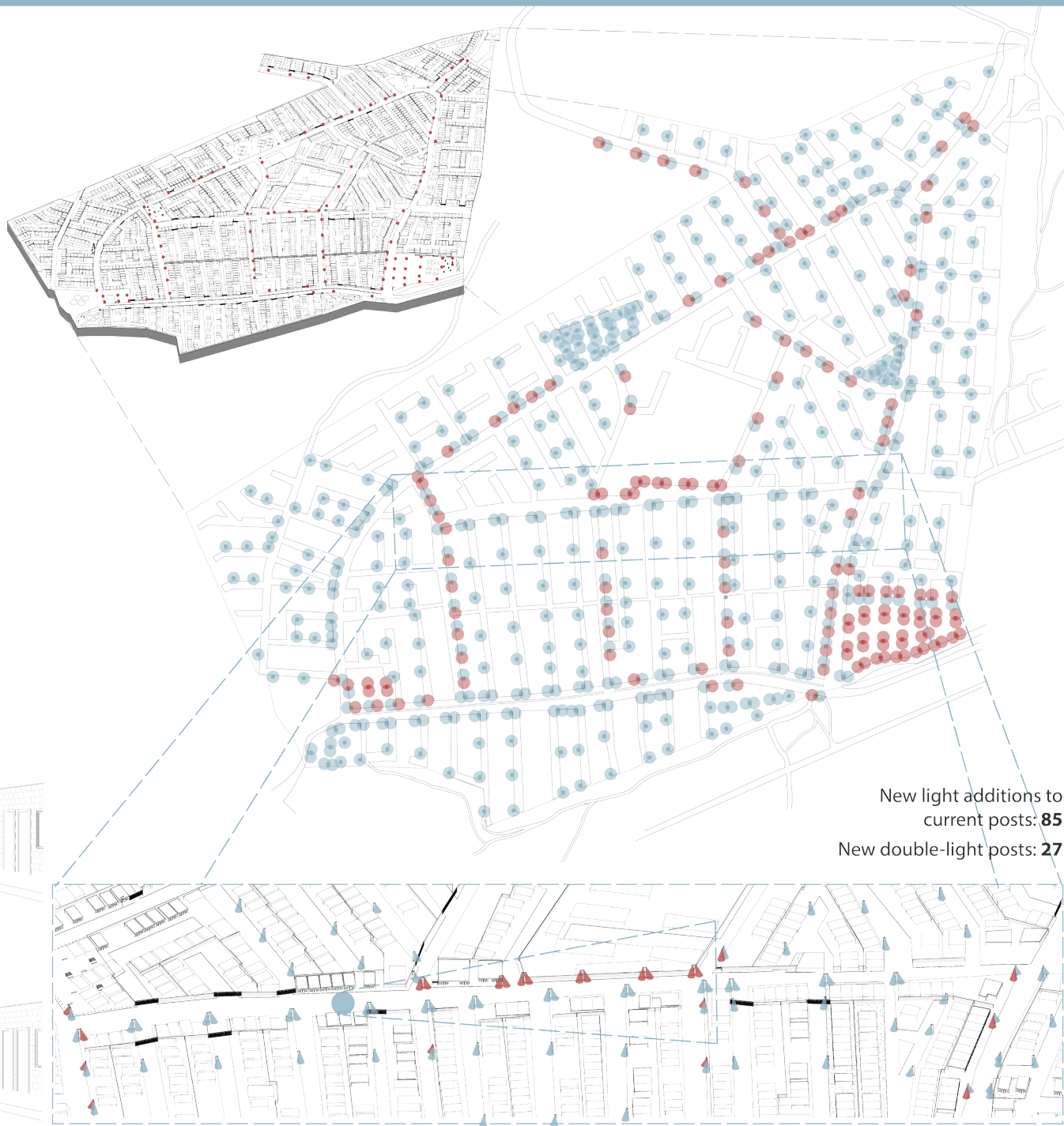
IT IS IMPORTANT TO CONSIDER THE HEIGHT OF A PERSON AND OVERLAY THE LIGHT CREATING A UNIFORM AREA AND AVOIDING VULNERABLE AREAS WITH SHADOWS



CURRENT LIGHTING



LIGHTING PROPOSAL



New light additions to
current posts: **85**
New double-light posts: **27**

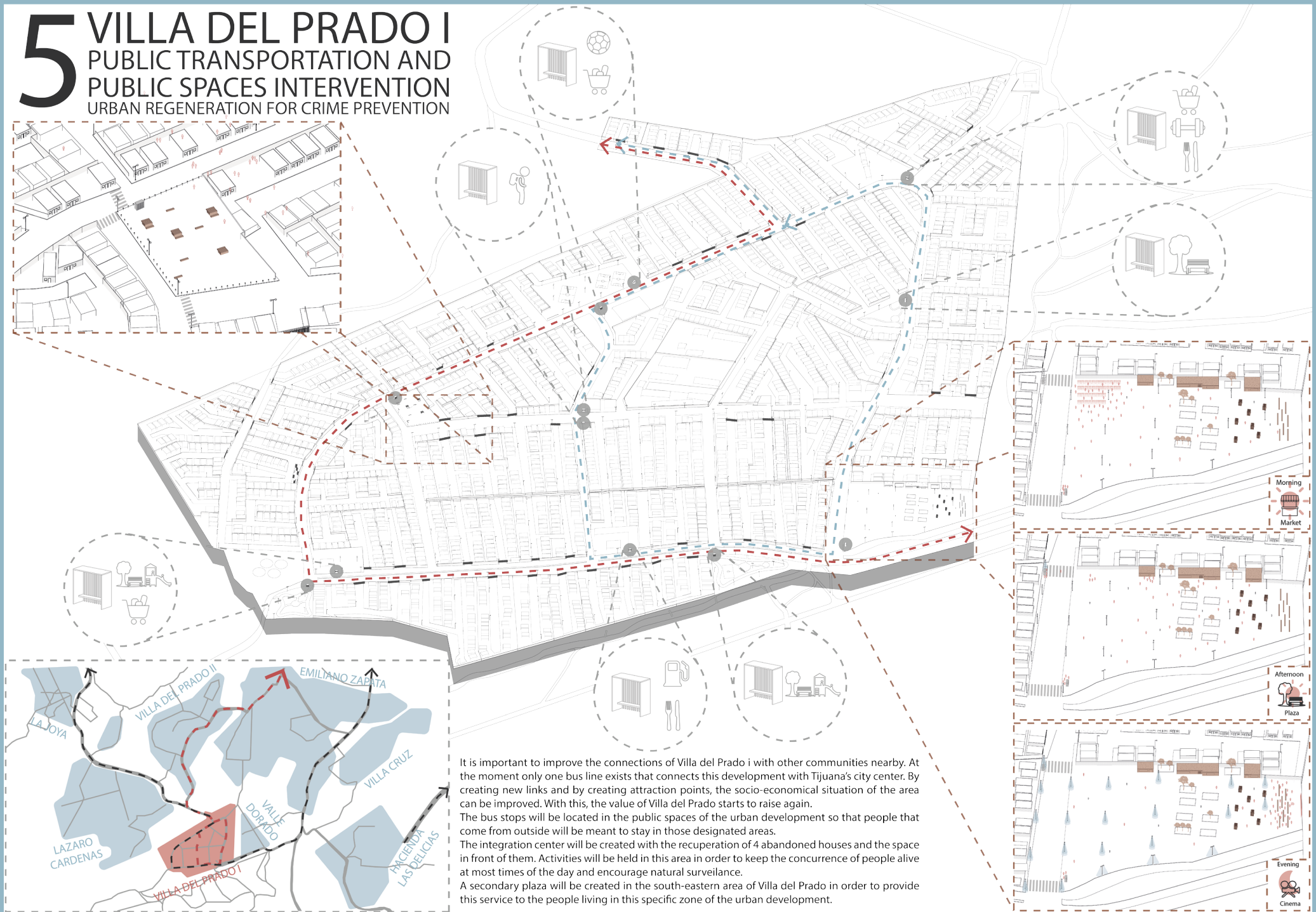
PROJECT BOARDS

URBAN REGENERATION FOR CRIME PREVENTION
IN VILLA DEL PRADO I, TIJUANA-MX.

5 VILLA DEL PRADO I

PUBLIC TRANSPORTATION AND PUBLIC SPACES INTERVENTION

URBAN REGENERATION FOR CRIME PREVENTION



CONCLUSIONS

The punctual interventions made on Villa del Prado foresee a reduction of costs for the government and at the same time an improvement of life quality and the value of the houses. Crime Prevention Through Environmental Design (CPTED) and Defensible Space Theory, even though they were developed in the 1960's, are still missing empirical knowledge therefore this thesis is to support and encourage practical interventions based on these theories.

The main issues in Villa del Prado is a high rate of criminality, indirectly linked to some problems from the urbanistic point of view, such as the poor public lighting system and the abandonment of the houses. In order to provide an effective solution for these issues, crime prevention principles studied by the environmental design for crime prevention mentioned before were followed. Also, the topic of Smart Cities was faced since the project foresees smart citizens, smart governance but most importantly, smart living.

Due to the migration and refugee situation in Mexico, it could be a proposal to solve another big problem. By hosting refugees in

abandoned urban developments, maintenance costs of both, refugees in migratory stations or shelters, and of abandoned projects can be reduced. Also, giving the opportunity to refugees to provide workforce can train them for a future job and therefore economical stability. In addition, a complete integration will be generated with the social cohesion that is foreseen with the two crime prevention theories followed.

The criminal activity in Villa del Prado has a great level of incidence in comparison with other urban developments nearby. Along with the repopulation, the principal interventions done in order to prevent crime was to encourage neighbor recognition and a proprietorship sense in residents. This is provided with limiting the number of residents in each street and create new internal connections in order to have access control. On the other hand, this will also help reduce fear of crime along with the optimization of public lighting. The project focuses on doing interventions based on the current equipment and form but most importantly on the people that can be found in a certain area.

Together with Space Syntax, an analysis of the people concurrence in Villa del Prado were made, based on the current activities, principal streets and the public transportation route. The area with less public movement was the southwestern side and therefore it was the area that needed more interventions.

This is because less people means less natural surveillance, therefore the residents in the area need to provide a better control in order to balance the less amount of observation.

Following the analysis, the closing of the streets are meant to be only in the areas that are more distant from the public activities since residents in those streets a better neighbor recognition, at least by face so that they can be alert in case of a stranger and also to provide defense when needed. This is because the research made by Oscar Newman, he concluded that people tend to protect more people that they already know than strangers. Also, when suspicious activity is perceived from a stranger, residents tend to be more alert and therefore prepared in case a crime happens.

In order to facilitate natural surveillance in the most public and concurred spaces, good lighting is needed. This is because it provides better recognition of colors and faces that can be fundamental for the identification of a potential criminal. In order to assist this surveillance, the projects proposed the optimization of the current light posts. This helped to reduce installation costs and also to avoid light pollution. Just on specific public areas new poles were installed since none were found like the integration center and the new plaza. The private streets remained the same since natural surveillance will be provided with other actions such as neighbor

recognition, although residents will be encouraged to install their own lighting in their entrances.

Since the population will grow, it is important to give the residents more social spaces; especially in the southwestern area since almost all of the activities can be found in the central, northern and eastern areas. It was important to include a place where refugees were welcomed and guided at their arrival and stay. Another important missing function at the moment is an organizational place. This is meant principally for integration between all the community in Villa del Prado and not only in one specific street. It was important to give several functions (such as a market and an open cinema) to the plaza to encourage people to be outside at any time of the day or evening in order to provide natural surveillance.

The image of Villa del Prado will be upgraded with these interventions, especially with the light optimization and the gate implementation where needed. Also, the residents and refugees will be encouraged to participate in activities such as wall painting and graffiti covering. This will also help the appearance of the urban space.

The key to a successful result, as stated many times before is participation from residents and from refugees. That is why this project in this specific area could result positively since the residents are worried about the situation

in which they are living. A pre-analysis of the area has already been done, where the main issues of the community have been identified. The estimated time to get the first successful results is 3-5 years.

This project could be a starting point to develop more CPTED projects in Mexico since the current criminal situation makes the country be at one of the firsts places in violence all over the world. At the same time, it could also be a reference project for other countries since the refugee situation in the world is alarming, especially for countries like Italy and Greece that are countries that receive many more asylum-seekers a day than Mexico. On the other hand, after talking with several institutions such as USAID, Fundacion tu+yo, which both develop CPTED programs, and FM4, a NGO that protects migrants in Mexico, support the idea of projects that face these issues are encouraged, especially in marginated areas of Mexico. In fact, Fundacion tu+yo is starting to implement CPTED training courses and activities in Villa del Prado I.

SOURCES AND REFERENCES

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CRITICAL BIBLIOGRAPHY

Immigration

The book I read to understand migration in general was from Lopez Sala called “Inmigrantes y estados: la respuesta política ante la cuestión migratoria”. Meanwhile in Morales Sanchez’s book called “La convencion internacional sobre la proteccion de los derechos de todos los trabajadores migratorios y de sus familiares” helped me gain a better view on the legal part in terms of migration in Mexico. This research was also sustained with Castilla Juarez’s book called “Los derechos humanos de las personas migrantes extranjeras en Mexico”. Also, NGO Sin Fronteras’ report called “Ser migrante no me hace delincuente” explains some mexican laws that defend immigrants.

To research on the current migratory situation in Mexico I read was called “Perspectivas migratorias” written by Durand and Schiavon. And Zeron’s “Casas de migrantes: vitales para sobrevivir en su paso hacia EU”, where he explains the importance of immigrant shelters along Mexico for these people. Migrants that are crossing this country, have different travel options, the Institute for War and Peace Reporting has written a report called “Riding “The Beast””, where they explain the dangers that people encounter when traveling by train in Mexico.

Amnesty International's report called "How President Trump's spat with Mexico will crush Central American refugees" talks about some predictions of how this new U.S.A. president will affect immigrant people in this country and at the same time the impact it will have in Mexico. Jose Luis Caballero article called "11 Datos Sobre El Envío De Remesas A México" was important in this thesis since it talks about how Mexican people in the U.S.A. are impacting Mexican economy. Olivier Walther talks as well of the economical benefits of border cities in his article called "Border markets: An introduction".

In the architectural part, it was interesting reading 'The Border Is a Way of Reinforcing Antagonism That Doesn't Exist'. This is an interview to architects Teddy Cruz and Fonna Forman who have some projects in the Mexico-U.S. border and talk about the relationship this two countries have and how they are highly connected due to migration.

Along with Arredondo's article called "México, tierra de refugiados", Cobo and Fuerte's report called "Refugiados en Mexico" were really helpful to enter the refugee topic in Mexico. A fundamental report for this part was "Estadísticas", made by the Mexican government. Here they put together all the information of refugees in Mexico since 2013, including asylum requests, nationality, age, if they finished the process and if they were accepted as refugee, they gave them

international protection or they were rejected. After that I read an article from Amnesty International that tells the journey of a Syrian student that was received in Mexico as a refugee and how the integration was made successfully.

The UNHCR's news and reports were fundamental to understand the current refugee situation both globally and in Mexico. I started first with "Politica del ACNUR sobre la proteccion de los refugiados y las soluciones en zonas urbanas". Here they talk about how this organization works and they propose some solutions to the problems this can bring in urban areas.

This same UN Organization warns about the refugee crisis that is happening in the American continent. For example: "The Americas", "UN refugee agency warns of spike in asylum-seekers fleeing violence in Central America", "UN-backed meeting on forced displacement crisis in Central America urges regional responsibility-sharing", "UNHCR warns of 'looming refugee crisis' in the Americas", and "Action urgently needed as Central America asylum claims soar". These all talk about the current situation on the Americas, especially in Central American countries such as El Salvador, Guatemala and Honduras since they have internal wars that are causing people to escape.

The refugees are not only grown adults searching for a better economical opportunity but also women and children. Actually, the UN is also writing about this topic in articles such as “UN agency warns of ‘looming’ refugee crisis as women flee Central America and Mexico”, “To escape gangs and poverty, Central American children making risky journey to US – UNICEF”, “Informe sobre la problemática de niñas, niños y adolescentes centroamericanos en contexto de migración internacional no acompañados en su tránsito por México, y con necesidades de protección internacional” and “Children on the Run: Unaccompanied Children Leaving Central America and Mexico and the need for International Protection - Executive Summary”. Immigrant children is a very delicate subject since they explain that many of them travel unaccompanied exposing themselves. Actually the UN is not the only organization that is worried about this issue, there is also IRIN with their report called: “No Refuge: Central American Children on the Run in Mexico” and the Migration Policy Group with “Unaccompanied Child Migration to the United States: The Tension between Protection and Prevention,”. As the titles say, children are subject of international protection and a high number of them are arriving to Mexico.

Due to this fact, the UN and other organizations have also dedicated their studies towards the ability of Mexican government capacity to provide this and has written some reports with proposals as well. It was important to

read first of all the “Progress Report mid-2016. Beyond Detention: A Global Strategy to support governments to end the detention of asylum-seeker and refugees, 2014-2019 - Mexico”, where they make a panoramic view on how Mexico is doing in order to provide protection instead of detaining refugees. After this, I read on this topic was “‘Nobody Left Outside’ campaign launched as UN warns of dire shelter conditions for refugees”, where they do some recommendations on a minimal standard level for refugee shelters. But a very critical report about the Mexican refugee situation is from Human Rights Watch called “Closed Doors: Mexico’s Failure to Protect Central American Refugee and Migrant Children” where they criticize the conditions where children are being located while waiting for a refugee status. They talk about physical structures where they live and also the psychological negative effects that they are presenting due to the wait or even the rejection of the international protection from Mexico.

To research about what happened to people after they got the refugee status in Mexico I read two reports coming again from the UNHCR called “Refugiados en México; perfiles sociodemográficos e integración social” and “Estudio sobre la integración local de las personas refugiadas en México”. Here they made a report interviewing several refugees in Mexico coming from different countries and from several age groups. This was fundamental for this thesis since it shows

the future and possible outcomes of the target user for the proposal. Another important topic to research about in order to avoid unsuccessful and unaccepted outcomes was refugee camps. The UN actually also wrote a report called “Policy on Alternatives to Camps” where they claim that refugee camps are only segregation areas and propose the inclusion of these people in the society.

Safety

Safety is the principal issue in the community chosen for this thesis project in Mexico. To get a base on this topic I read Foucault's “Discipline and Punish” and Marshall Thomas Robert Bugeaud: Counter-Blanquism in the Streets of 19th Century Paris” where they both state how important surveillance and observation is in order to achieve behavioral results. On the other hand Alessandro Petti with his book “Arcipelaghi” talks about how political organizations made segregation camps in order to control race.

For the definition of Smart Cities I read Sustainable–Smart–Resilient–Low Carbon–Eco–Knowledge Cities. Also, Santangelo's book “A (More?) Intelligent City” and Chiara Testoni's “Towards Smart City” helped the research with a broader idea of Smart cities and what elements and concepts were important when considering a Smart city such as society and government. This last one showed also some examples like Turin but to

get a better idea and more implementations “Smart Cities Ranking: An Effective Instrument For The Positioning Of The Cities” and “Smart Cities In Europe” where good articles to get more case studies. When it comes to specific implementations of projects in communities using technology, “Smart Solutions For Smart Cities: Using Wireless Sensor Network For Smart Dumpster Management” and “An Integrated Service-Device-Technology Roadmap For Smart City Development” where very useful since I could read about how other fields are contributing with these Smart Cities such as engineers and informatics.

Defensible Space

The book titled “La negoziazione urbana” by G. Gudagno and D. De Mesi is a book that talks about the society's problems and the diverted behavior in a urban area. It helped me see the sociological of criminality. This is a study made in Napoli but it still talks about the individual and social behavior in a community and the psychology behind human delinquency. Another important thing they have studied is how the cultural and sub-cultural differences may influence the criminal behavior in a person.

Oscar Newman was the base of this research. The books I used written by him were three. “Defensible Space : Crime Prevention Through Urban Design” where he explains his theory of how the built environment can influence crime

and make a place suitable for criminals to act. The second one is called “Creating Defensible Space.” Where he talks about some projects he has done during his career applying his theory such as Cleason Point Experiment and Five Oaks. The last one is called “Design Guidelines For Creating Defensible Space.” Where he goes more in detail of the theory explaining and justifying his proposals, materials, doors, Windows, buildings, etc. Since Newman based his theory in Jane Jacobs I also read “The Death And Life Of Great American Cities.” Where she explains why social interaction is fundamental for crime prevention.

After Newman, the most important book I read is called “Crime Prevention In The Built Environment.” By Schneider and Kitchen. Here they present three theories base don human behavior and their relationship with the urban environment in order to prevent crime and those are Defensible Space Theory, CPTED and Space Syntax. The book explores both positive and negative sides of the relationship between urban space and criminology. From this book I got to Brantinghams’ book called “Environmental Criminology” which also supports this theories.

In order to get to deeper details on interventions proposed in both Defensible Space and CPTED and effectiveness of these I read several books. The ones realted with cul-de-sac were “Neighbourhoods Thrive On Cul-De-Sacs, A Study Finds”, “Permeability and burglary

risk: Are Cul-de-sacs safer?”, “Burglary And Cul-De-Sacs: Comparing Burglaries On Cul-De-Sacs With Non-Cul-De-Sac Streets”, and “Connectivity, Sprawl, and the Cul-de-sac: An Analysis of Cul-de-sacs and Dead-end Streets in Burlington and the Surrounding Suburbs”. For the lightning topic Samuel’s book was very interesting, it is called “After-Dark Design, Night Animation, And Interpersonal Interaction: Toward A Community-Security Paradigm.” And is actually also cited inside Schneider and Kitchen’s book. And Finally, for the social interaction I read “Neighbors by Design: Determinants and Effects of Residential Social Cohesion”.

In order to proof also the effectiveness of these proposals it was important to read articles such as “Testing Ecological Theories of Offender Spatial Decision Making Using a Discrete Choice Model. Crime and Delinquency” and “Effect Of Crime Prevention Through Environmental Design (CPTED) Measures On Active Living And Fear Of Crime” but most importantly, “Guia Para El Diseño De Espacios Publicos Seguros.” That is a report written by USAID that besides explaining what is CPTED and how it must be done, they explain some of their successful projects in Mexico.

Mexico

For the Mexican context I read “Mexico Urbanization Review” where, as the title says, is a general overview of the current situation

of this country in terms of urbanization such as demographics, territoriality and urban and rural areas. Schwense's article called "The Mexican Experience In The Social Housing Sector And Programs For Green Housing" is a very interesting lecture where it explains why and how social developments in Mexico were born and how they are affecting the population and cities.

To get real and current statistics of the city of Tijuana I used the report the government makes for every city, in this case it is titled as the city; "Tijuana".

SOURCES AND REFERENCES

EXTENDED BIBLIOGRAPHY

- Amin, Ash. 2013. "Land Of Strangers". *Identities* 20 (1): 1-8. doi:10.1080/1070289x.2012.732544.
- Amnesty International. 2016. "A Syrian student's unlikely journey to Mexico". <http://www.refworld.org/docid/569752ef4.html>
- Amnesty International. 2016. "Five frightening facts about Mexico the Pope should be aware of". <http://www.refworld.org/docid/56ba03684.html>
- Amnesty International. 2017. "How President Trump's spat with Mexico will crush Central American refugees". <http://www.refworld.org/docid/58a19056d.html>
- Arredondo, I. 2016. "México, tierra de refugiados". *El Universal*. <http://www.eluniversal.com.mx/articulo/periodismo-de-investigacion/2016/06/20/mexico-tierra-de-refugiados>
- ASGI. "Statistics - Italy". 2017. *Asylumineurope.Org*. <http://www.asylumineurope.org/reports/country/italy/statistics>.
- Beauregard, Robert. 2013. "Roger Biles 2011: The Fate Of Cities: Urban America And The Federal Government, 1945-2000. Lawrence, Kansas: University

- Press Of Kansas. Chesterhartman And Gregory D.Squires (Eds.) 2010: The Integration Debate: Competing Futures For American Cities. New Y". International Journal Of Urban And Regional Research 37 (5): 1852-1856. doi:10.1111/1468-2427.12107.
- Brantingham, Patricia L, and Paul J Brantingham. 1981. Environmental Criminology. Beverly Hills [Calif.]: Sage Publications.
 - Caballero, José Luis. 2017. "11 Datos Sobre El Envío De Remesas A México". El Economista. <https://www.eleconomista.com.mx/economia/11-datos-sobre-el-envio-de-remesas-a-Mexico-20170205-0065.html>.
 - Caragliu, Andrea, Chiara del Bo, and Peter Nijkamp. 2011. "Smart Cities In Europe". Journal Of Urban Technology 18 (2): 65-82. doi:10.1080/10630732.2011.601117.
 - Cobo, S., & Fuerte, P. (2013). "Refugiados en Mexico" (1st ed.). Mexico City: ACNUR. <http://www.acnur.org/t3/fileadmin/Documentos/Publicaciones/2013/9167.pdf>
 - Cruz, Teddy, and Fonna Forman. 2017. 'The Border Is a Way of Reinforcing Antagonism That Doesn't Exist'. Interview by Tanvi Misra. Online.
 - Distel, Marshall B., 2015. Connectivity, Sprawl, and the Cul-de-sac: An Analysis of Cul-de-sacs and Dead-end Streets in Burlington and the Surrounding Suburbs. UVM College of Arts and Sciences College Honor Theses. Paper 22.
 - De Jong, Martin, Simon Joss, Daan Schraven, Changjie Zhan, and Margot Weijnen. 2015. "Sustainable-Smart-Resilient-Low Carbon-Eco-Knowledge Cities; Making Sense Of A Multitude Of Concepts Promoting Sustainable Urbanization". Journal Of Cleaner Production 109: 25-38. doi:10.1016/j.jclepro.2015.02.004.
 - Durand, J. & Schiavon, J. (2010). Perspectivas migratorias (1st ed.). México, D.F: Centro de Investigación y Docencia Económicas.
 - "Estadísticas". 2016. (1st ed.). México. http://www.comar.gob.mx/work/models/COMAR/Resource/267/6/images/ESTADISTICAS_2013_A_04-2016_act.pdf
 - Flores, José. 2018. "¿Qué motivó la construcción y la caída del muro de Berlín?". RPP Noticias. <http://rpp.pe/mundo/actualidad/que-motivo-la-construccion-y-caida-del-muro-de-berlin-noticia-740590>.

- Foucault, Michel, and Alan Sheridan. 2012. *Discipline And Punish*. New York: Vintage Books.
- Giffinger, Rudolf, and Haindlmaier Gudrun. 2010. *Smart Cities Ranking: An Effective Instrument For The Positioning Of The Cities*. Ebook. ACE: Architecture, City and Environment. https://www.researchgate.net/publication/228915976_Smart_cities_ranking_An_effective_instrument_for_the_positioning_of_the_cities.
- Guadagno, Gennaro, and Domenico De Masi. 1971. *La Negazione Urbana*. Bologna: il Mulino.
- Guffey, James E. 2014. *Burglary And Cul-De-Sacs: Comparing Burglaries On Cul-De-Sacs With Non-Cul-De-Sac Streets*. Ebook. National University. <http://www.aabri.com/SA2014Manuscripts/SA14006.pdf>.
- Guia Para El Diseño De Espacios Publicos Seguros. 2015. Ebook. Mexico: Programa para la Convivencia Ciudadana. <http://www.prevenciondelaviolencia.org/ebook/cpted/mobile/index.html#p=84>.
- Hernandez Borbolla, Manuel. 2016. "México Es El Tercer País Más Peligroso Del Mundo". *The Huffington Post Mexico*. [http://www.huffingtonpost.com.mx/2016/12/05/mexico-es-el-tercer-pais-](http://www.huffingtonpost.com.mx/2016/12/05/mexico-es-el-tercer-pais-mas-peligroso-del-mundo_a_21620441/)
[mas-peligroso-del-mundo_a_21620441/](http://www.huffingtonpost.com.mx/2016/12/05/mexico-es-el-tercer-pais-mas-peligroso-del-mundo_a_21620441/).
- Hochschild, Thomas R. 2011. *Neighbors by Design: Determinants and Effects of Residential Social Cohesion*. Doctoral Dissertations. AAI3485243. <http://opencommons.uconn.edu/dissertations/AAI3485243>
- Human Rights Watch. 2016. "Closed Doors: Mexico's Failure to Protect Central American Refugee and Migrant Children". <http://www.refworld.org/docid/56fce1b64.html>
- Idwan, Sahar, Junaid Ahmed Zubairi, and Imran Mahmood. 2016. "Smart Solutions For Smart Cities: Using Wireless Sensor Network For Smart Dumpster Management". Orlando , FL, USA: IEEE.
- Institute for War and Peace Reporting. 2016. "Riding "The Beast"". <http://www.refworld.org/docid/57061fff4.html>
- IRIN. 2016. "No Refuge: Central American Children on the Run in Mexico". <http://www.refworld.org/docid/56a5da7e4.html>
- IRIN. 2016. "Shelters overflow as more migrants opt to stay in Mexico". <http://www.refworld.org/docid/582983384.html>
- Jacobs, Jane. 1961 *The Death And Life Of Great American Cities*. New York: Random House.

- Johnson, S. D., and Bowers, K. J. (2010). Permeability and burglary risk: Are Cul-de-sacs safer? *Journal of Quantitative Criminology*.
- Johnson, S. D., & Summers, L. (2015). Testing Ecological Theories of Offender Spatial Decision Making Using a Discrete Choice Model. *Crime and Delinquency*, 61(3), 454–480. <http://doi.org/10.1177/0011128714540276>
- Kim, Yoonhee, and Bontje Zangerling. 2016. *Mexico Urbanization Review*. Washington, DC: International Bank for Reconstruction and Development / The World Bank.
- Kulish, Nicholas, and Fernanda Santos. 2017. “Los Cruces Ilegales De La Frontera Entre México Y Estados Unidos Parecen Disminuir Bajo Trump”. *The New York Times*, , 2017. <https://www.nytimes.com/es/2017/03/09/los-cruces-ilegales-de-la-frontera-entre-mexico-y-estados-unidos-parecen-disminuir-bajo-trump/>.
- Lee, Jung Hoon, Robert Phaal, and Sang-Ho Lee. 2013. “An Integrated Service-Device-Technology Roadmap For Smart City Development”. *Technological Forecasting And Social Change* 80 (2): 286-306. doi:10.1016/j.techfore.2012.09.020.
- Lee, Jae, Sungjin Park, and Sanghoon Jung. 2016. “Effect Of Crime Prevention Through Environmental Design (CPTED) Measures On Active Living And Fear Of Crime”. *Sustainability* 8 (9): 872 (1-16). doi:10.3390/su8090872.
- Lloyd, Kathy, Simone Fullagar, and Sacha Reid. 2016. “Where Is The ‘Social’ In Constructions Of ‘Liveability’? Exploring Community, Social Interaction And Social Cohesion In Changing Urban Environments”. *Urban Policy And Research* 34 (4): 343-355. doi:10.1080/08111146.2015.1118374.
- López Sala, A. (2005). *Inmigrantes y estados: la respuesta política ante la cuestión migratoria* (1st ed.). Barcelona: Anthropos.
- Maller, Cecily, and Larissa Nicholls. 2013. “Encountering The Multiplicity Of Community In Planning And Designing New Neighbourhoods”. *Urban Policy And Research* 32 (1): 17-32. doi:10.1080/08111146.2013.844120.
- Marosi, Richard. 2017. “A Failed Vision”. In *Mexico’s Housing Debacle*. Veracruz, Mexico: Los Angeles Times. <http://www.latimes.com/projects/la-me-mexico-housing/>.
- Martinez, Max. 2017. “Tesis”. Email, , 2017.

- “Marshall Thomas Robert Bugeaud: Counter-Blanquism In The Streets Of 19Th Century Paris”. 2010. THE FUNAMBULIST MAGAZINE. <https://thefunambulist.net/history/history-marshall-thomas-bugeaud-counter-blanquism-in-the-streets-of-19th-century-paris>.
- Meyer, Dietmar, and Adela Shera. 2017. “The Impact Of Remittances On Economic Growth: An Econometric Model”. *Economia* 18 (2): 147-155. doi:10.1016/j.econ.2016.06.001.
- “Migración centroamericana: donde la violencia y el delito no conocen de fronteras”. (2017). Fundación Avina. <http://www.avina.net/avina/incontext-56/>
- Migration Policy Group (MPG). 2015. “Unaccompanied Child Migration to the United States: The Tension between Protection and Prevention,”. <http://www.refworld.org/docid/555ee64c17.html>
- Newman, Oscar. 1976. *Design Guidelines For Creating Defensible Space*. Washington: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Dept. of Justice.
- Newman, Oscar. 1978. *Defensible Space : Crime Prevention Through Urban Design*. New York: Collier.
- Newman, Oscar. 1996. *Creating Defensible Space*. U.S. Department of Housing and Urban Development Office of Policy Development and Research.
- Nylund, Eric. 2006. “The War Of Streets And Houses”. *Cabinet*, , 2006. <http://cabinetmagazine.org/issues/22/bugeaud.php>.
- O’Brien, Susie. 2013. “Neighbourhoods Thrive On Cul-De-Sacs, A Study Finds”. *The Advertiser*. <http://www.adelaidenow.com.au/realestate/news/neighbourhoods-thrive-on-cul-de-sacs-a-study-finds/news-story/63eeea1e62c144a2ecb3761735d200d5?sv=72873fdf94a6cefd956db1622a4bbabf>.
- Oosterbaan, Martijn. 2014. “Public Religion And Urban Space In Europe”. *Social & Cultural Geography* 15 (6): 591-602. doi:10.1080/14649365.2014.922605.
- Pascuala Macias, Beatriz. 2016. “Crece Cifra De Indocumentados Que Cruzan Frontera De EEUU”. *The New Herald*, , 2016. <http://www.elnuevoherald.com/noticias/estados-unidos/article108864232.html>.
- Petti, Alessandro. 2007. *Arcipelaghi E Enclave*. Milano: B. Mondadori.
- Q., O. (2016). “Aumenta migración de

niños y adolescentes a Estados Unidos”. Prensa Libre. <http://www.prensalibre.com/guatemala/huehuetenango/exodo-de-nios-es-incontenible>

- Quintero, René Martín Zenteno. “Del Rancho De La Tía Juana a Tijuana: Una Breve Historia De Desarrollo Y Población En La Frontera Norte De México.” *Estudios Demográficos Y Urbanos* 10, no. 1 (28) (1995): 105-32. <http://www.jstor.org/stable/40314779>.
- “Risk Of Violent Crime Highest In Latin America – Afghanistan, Guatemala, Mexico Top Country Ranking”. 2016. Verisk Maplecroft. <https://maplecroft.com/portfolio/new-analysis/2016/12/01/risk-violent-crime-highest-latin-america-afghanistan-guatemala-mexico-top-country-ranking-verisk-maplecroft/>.
- Samuels, Robert. “After-Dark Design, Night Animation, And Interpersonal Interaction: Toward A Community-Security Paradigm.” *Journal of Architectural and Planning Research* 22, no. 4 (2005): 305-18. <http://www.jstor.org/stable/43030749>.
- Santangelo, Marco. 2016. “A (More?) IntelligentCity”. *Nóesis.RevistaDeCiencias Sociales Y Humanidades* 25 (49-1): 65-77. doi:10.20983/noesis.2016.12.5.
- Schneider, Richard H, and Ted Kitchen. 2007. *Crime Prevention In The Built Environment*. New York, NY: Routledge, Taylor & Francis Group.
- Weizman, Eyal. 2009. *Architettura Dell’occupazione*. Milano: ESBMO.
- Schwanse, Elvira. 2014. “The Mexican Experience In The Social Housing Sector And Programs For Green Housing”. *Journal Of Architectural Engineering Technology* 03 (02). doi:10.4172/2168-9717.1000124.
- Sin Fronteras. 2013. “Ser migrante no me hace delincuente”. <http://www.animalpolitico.com/2013/04/ong%C2%B4s-denuncian-calabozos-de-castigo-en-estaciones-migratorias/>
- Testoni, Chiara. 2016. *Towards Smart City*. Milano, Italy: Franco Angeli.
- Tijuana. 2017. Ebook. 1st ed. Tijuana: COPLADE. <http://www.copladebc.gob.mx/publicaciones/2017/Mensual/Tijuana%202017.pdf>.
- United Nations, Department of Economic and Social Affairs, Population Division. 2016. “International Migration Report 2015”. New York, U.S.A.: United Nations.

- UN High Commissioner for Refugees (UNHCR). 2014. "Children on the Run: Unaccompanied Children Leaving Central America and Mexico and the need for International Protection - Executive Summary". <http://www.refworld.org/docid/53fc42a24.html>
- UN High Commissioner for Refugees (UNHCR). 2009. "Estudio sobre la integración local de las personas refugiadas en México". <http://www.corteidh.or.cr/tablas/r26522.pdf>
- UN High Commissioner for Refugees (UNHCR). 2016 "Informe sobre la problemática de niñas, niños y adolescentes centroamericanos en contexto de migración internacional no acompañados en su tránsito por México, y con necesidades de protección internacional". http://www.cndh.org.mx/sites/all/doc/Informes/Especiales/Informe_NNACMNA.pdf
- UN High Commissioner for Refugees (UNHCR). 2009 "Política del ACNUR sobre la protección de los refugiados y las soluciones en zonas urbanas". <http://www.acnur.org/fileadmin/scripts/doc.php?file=fileadmin/Documentos/BDL/2009/7276>
- UN High Commissioner for Refugees (UNHCR). 2016 "Progress Report mid-2016. Beyond Detention: A Global Strategy to support governments to end the detention of asylum-seeker and refugees, 2014-2019 - Mexico" <http://www.refworld.org/docid/57dff0a818.html>
- UN High Commissioner for Refugees (UNHCR). 2014 "Policy on Alternatives to Camps" <http://www.unhcr.org/protection/statelessness/5422b8f09/unhcr-policy-alternatives-camps.html>
- UN High Commissioner for Refugees (UNHCR). 2012 "Refugiados en México; perfiles sociodemográficos e integración social". <http://www.acnur.org/t3/fileadmin/Documentos/Publicaciones/2013/9167.pdf>
- UN High Commissioner for Refugees (UNHCR). 2017. "The Americas". http://reporting.unhcr.org/sites/default/files/ga2017/pdf/10_The_Americas_Summary.pdf
- UN High Commissioner for Refugees (UNHCR). "Estadísticas". 2017. UN High Commissioner For Refugees (UNHCR). <http://www.acnur.org/recursos/estadisticas/>.
- UN High Commissioner for Refugees (UNHCR). 2016. "Action urgently needed as Central America asylum claims soar". <http://www.refworld.org/docid/57038fe74.html>

- UN High Commissioner for Refugees (UNHCR). 2015. "UNHCR warns of 'looming refugee crisis' in the Americas". <http://www.refworld.org/docid/5633323a4.html>
- UN High Commissioner for Refugees (UNHCR), The Cartagena Declaration on Refugees and the Protection of People Fleeing Armed Conflict and Other Situations of Violence in Latin America, June 2013, PPLA/2013/03, available at: <http://www.refworld.org/docid/51c801934.html> [accessed 1 May 2017]
- UN News Service. 2016. "'Nobody Left Outside' campaign launched as UN warns of dire shelter conditions for refugees". <http://www.refworld.org/docid/573d7fe940d.html>
- UN News Service. 2016. "To escape gangs and poverty, Central American children making risky journey to US – UNICEF". <http://www.refworld.org/docid/57bd4fbd40c.html>
- UN News Service. 2015. "UN agency warns of 'looming' refugee crisis as women flee Central America and Mexico". <http://www.refworld.org/docid/563324c340d.html>
- UN News Service. 2016. "UN-backed meeting on forced displacement crisis in Central America urges regional responsibility-sharing" <http://www.refworld.org/docid/57834734411.html>
- UN News Service. 2016. "UN refugee agency warns of spike in asylum-seekers fleeing violence in Central America". <http://www.refworld.org/docid/5704b49c40d.html>
- Vélez Sala, Doria del Mar, and Manuel Alejandro Vélez Sala. 2017. *Incidencia De Los Delitos De Alto Impacto En Mexico*. Ebook. Mexico City: Observatorio Nacional Ciudadano. http://onc.org.mx/wp-content/uploads/2017/06/170629VERSI%C3%93N_digital_FINAL_VF.pdf.
- Walther, Olivier. 2013. "Border Markets: An Introduction". Artículo, no. 10. doi:10.4000/articulo.2532.
- Zeron, O. (2012). "Casas de migrantes: vitales para sobrevivir en su paso hacia EU". *Animal Político*. <http://www.animalpolitico.com/2012/09/indispensables-casas-de-migrantes-en-estado-de-mexico/>



POLITECNICO DI TORINO LAUREA MAGISTRALE IN

ARCHITETTURA COSTRUZIONE E CITTÀ

SESIONE DI MARZO 2018

RELATORE: CARLO DEREGIBUS

CORELATORE: FRANCESCA GOVERNA

CANDIDATO: ANDREA SATO CARRILLO

