

# Forced displacement linked to transnational organised crime in Mexico

May 2012



# Table of contents

Executive summary .....	3
1. Introduction .....	4
2. Research goals .....	5
3. Methods and data sources .....	5
4. Key findings .....	6
5. The impact of violence on displacement: national-level mapping .....	8
6. Case study: Ciudad Juárez .....	16
7. Vulnerability after displacement: interpreting the data .....	18
8. A closer look at vulnerability: qualitative research in three selected locations .....	19
9. Government response to displacement to date: the basis for a future response .....	21
10. Towards an effective response: a framework for action .....	25
11. Study limitations and areas for further work .....	27
Acknowledgements .....	28
Annex I: Statistical correlations	
Annex II: Tables	



## Executive summary

Drug cartel violence in Mexico has increased dramatically since 2007, when the new government of President Felipe Calderón identified insecurity as a key problem and began deploying the military to fight the cartels in key locations. According to various analysts the strategy has backfired, stirring up a hornet's nest by disturbing existing arrangements between the cartels, and sparking wars both within and between them.

The impact of the violence has been enormous. Government figures put the number of people killed since the launch of the security strategy at 47,000, with more than 15,000 losing their lives in 2010 and 12,900 in the first nine months of 2011. The media have repeatedly put the death toll at 50,000, and many have referred to the violence as an insurgency or armed conflict. It is clear, however, that the cartels do not have a political agenda or ideology, and such references have prompted angry responses from the Mexican government. Whether the violence can be defined as an internal armed conflict under international humanitarian law or not, its effects on the civilian population have been significant and the response inadequate.

One impact has been forced migration, both internal and cross-border. Because of available resources and timeframe this study focuses exclusively on the former. Civil society organisations, academic institutions and the media have increasingly documented cases and patterns of forced internal displacement caused by drug cartel violence. That said, aside from two cases of mass displacement - in Tamaulipas in 2010 and in Michoacán in 2011 - most people have fled individually, and as a result information is scattered.

This study aims to fill that information gap. Firstly, it documents an empirical link between drug cartel violence and forced displacement at the national level, distinguishing it from economic migration and where possible identifying patterns of displacement. Secondly, it identifies and describes the vulnerabilities of those affected, focusing on access to the basic necessities of life and livelihood opportunities in places of displacement, and housing, land and property rights. Thirdly, it maps government responses at both the federal and state level.

Using a variety of quantitative and qualitative methods, and a range of sources including the latest national census, survey data and information gathered through interviews, it found strong evidence that drug cartel violence is causing forced displacement in the worst-affected states

of Baja California, Chihuahua, Coahuila, Durango, Guerrero, Michoacán, Nuevo León, San Luis Potosí, Sinaloa, Sonora, Tamaulipas y Veracruz. Together these states account for only 38 per cent of Mexico's population, but 68 per cent of homicides.

Initially, the statistical data showed a relation of association but not of causation between violence and migration, and when disaggregated to the municipal level the association became stronger. In the 104 municipalities with the highest levels of violence included in the analysis, the rate of displacement was 15 times higher than in municipalities without high levels of violence. When the effect of other drivers of migration including economic and demographic conditions and urbanisation were accounted for using statistical tools, the number of people leaving violent municipalities was 4.5 higher than those leaving non-violent municipalities.

In other words, the analysis established a relation of causation between violence and migration. It provided evidence that forced displacement is taking place and estimated its overall net effect. It was not possible, however, to determine the number of people who have fled their homes because of the violence.

The data also revealed broad patterns of displacement by identifying the most violent states and municipalities where rates of population loss were high, and common municipalities of destination for people fleeing violence.

The findings confirmed a pattern identified by a case study carried out in Ciudad Juárez, a city on the US border in the state of Chihuahua that has been an epicentre of violence. By means of a survey, the study showed that violence had caused displacement and estimated that around 24,000 people had been displaced in 2011. It also revealed that the majority of those fleeing took refuge within Chihuahua, and beyond in Durango, Coahuila, and Veracruz.

Once the research had established a) a relation of association between violence and migration in the 12 states of the study, b) a relation of causation between violence and migration in the most violent municipalities, c) broad patterns of displacement for the entire study area and d) detailed patterns and scale of displacement in a key location, it set out to gather information on the vulnerability of internally displaced people (IDPs).



## Introduction

It found that people who move from violent to non-violent municipalities – that is, people who presumably flee violence and are therefore IDPs rather than migrants – have less access to livelihood opportunities, education and housing than the local population. The Ciudad Juárez survey showed that IDPs from the city also have protection needs related to the property they leave behind.

In-depth interviews in three localities revealed that IDPs face difficulties in finding enough work and in exercising their housing and property rights. Most interviewees said they were employed in the informal labour market, barely earned the minimum wage and needed to work more hours to meet their basic needs. They said that where possible they had sold or rented their property, and if not they had abandoned it – in which case the authorities offered no specific support to protect their rights – and that upon arrival in their places of refuge they had been housed by family members, where they experienced overcrowding and inadequate living conditions.

Their situation in terms of access to health care and education was more encouraging. Most interviewees said their children had been enrolled in school, and that medical care – albeit not always timely – was available at local health centres.

The government's response to displacement caused by drug cartel violence has been limited. In the two cases of mass displacement in Tamaulipas and Michoacán, and in the case of displacements to Veracruz, local authorities have provided some support. At the federal level, however, the government has not acknowledged that displacement is taking place and has either ignored or played down information about it.

Both executive and legislative bodies have tried in the past to set up a framework for IDPs' protection, but these efforts were in response to displacement caused by the Zapatista uprising in Chiapas and not the more recent phenomenon of drug cartel violence. The state of Chiapas adopted a law on internal displacement in February 2012 which incorporates the definition of displacement included in the Guiding Principles, and includes various norms ranging from prevention to humanitarian assistance.

Within the federal administration, the agencies responsible for coordinating a response to displacement are the Ministry of Interior and the National Population Council. The recently-created Office for the Victims of Crime (Províctima) is mandated to document displacement and help IDPs access services provided by other government agencies.

Drug cartel violence in Mexico has increased dramatically since 2007. Government figures put the number of people killed since then at 47,000, with 15,000 lives lost in 2010 alone and 12,900 in the first nine months of 2011. The violence has been most prevalent in the northern states of Tamaulipas, Chihuahua, Nuevo León and Durango, but it has also taken place in other areas where the cartels operate, including Baja California, Coahuila, Guerrero, Michoacán, San Luis Potosí, Sinaloa, Sonora and Veracruz. There are also widespread reports of journalists, politicians and human rights activists being harassed, persecuted or killed, and of some 25 assassinations of small town mayors between 2008 and 2011.<sup>1</sup>

Forced displacement has been an unseen and undocumented outcome of this violence. No government institution has systematically tracked the extent of the phenomenon. Academic institutions, particularly in Ciudad Juárez, have conducted studies which show that up to 230,000 people have fled the area because of the violence since 2007, roughly half of whom remain displaced within the country.

<sup>1</sup> By November 2011, 25 mayors had been killed: (4 in Michoacán, 1 in Zacatecas, 4 in Oaxaca, 4 in Durango, 2 in Guerrero, 1 in Estado de México, 2 in Nuevo León, 1 in San Luis Potosí, 1 in Tamaulipas, 3 in Chihuahua, 1 in Morelos, and 1 in Coahuila). For list, names and counties of jurisdiction see: [www.terra.com.mx/noticias/articulo/965621/](http://www.terra.com.mx/noticias/articulo/965621/)

## 2

### Research goals

The research project had four main goals:

- a) To determine whether there was an empirical link between drug cartel violence and forced displacement, and if so to describe the patterns of displacement. Given that forced displacement happens alongside flows of economic and other migration, the research sought to distinguish between the various phenomena as much as possible.
- b) To identify and describe the vulnerabilities of those displaced by drug cartel violence, focusing on access to the basic necessities of life, livelihood opportunities in places of displacement and housing, land and property rights.
- c) To identify and map existing government responses at the federal level and to identify the institutions which, given their mandates, should work to address internal displacement.
- d) To provide a framework for action that might guide next the steps in setting up a response to internal displacement.

## 3

### Methods and data sources

The study used a combination of quantitative and qualitative research methods and data sources to document and describe forced displacement and ensuing protection needs. To establish a link of causation between violence and human migration in affected states and municipalities, on the one hand it used statistics on homicides and violent crimes, and on the other data from the Mexican national census, the results of which were published in 2011. A variety of statistical tools were used in the data analysis, including causal inference, propensity score matching and linear regression modelling.

The vulnerability of internally displaced people (IDPs) was inferred by comparing indicators of their access to health care, education, housing and labour markets in their places of displacement with those of the local population.

To describe the impact of violence on displacement in more detail, a case study of one key location, Ciudad Juárez in Chihuahua state, was carried out. A probability, multi-stage, stratified survey was conducted among 1,874 respondents in the city and its surroundings, providing results with a 95 per cent confidence margin and 0.5 per cent p and q values.

To gather qualitative information on IDPs' vulnerabilities and protection needs, face-to-face, in-depth interviews were carried out in three localities. The sample for the interviews was a non-probability sample; interviewees were identified through local contacts and then through snowball sampling.

Finally, a variety of policies and laws were examined to identify and describe the Mexican state's response to displacement caused by drug cartel violence. Face-to-face interviews were conducted with various state officials, civil society organisations and academics.

# 4

## Key findings

1. In 2010, 68 per cent of the country's homicides were committed within the 12 states this study focused on - Baja California, Chihuahua, Coahuila, Durango, Guerrero, Michoacán, Nuevo León, San Luis Potosí, Sinaloa, Sonora, Tamaulipas and Veracruz – which together account for only 38 per cent of the population. The study concentrated on these states as they have high levels of violence.
2. Of the 12 states, eight have a net migration rate of zero or a negative figure, meaning their population is in decline as emigration outstrips immigration. Greater Mexico City, the *Distrito Federal*, was found to be losing the highest percentage of its population, which has been the case for roughly two decades because of socio-economic factors and population redistribution. The next four states in terms of percentage of population lost are all on the list of those experiencing the worst violence: Guerrero, Sinaloa, Chihuahua and Durango.
3. In the 12 states covered, an association was found between violence - defined for this study as homicides, threats, extortion and a general atmosphere of violence - and a net migration rate. This was the first indication that the significant population loss taking place might be connected to violence perpetrated by organised crime groups.
4. This relationship of association, together with the fact that many of those who relocate do so within the same state so as not to lose their support networks, made it clear that the situation required analysis at a more local, i.e municipal level.
5. Within the 12 states, violence was found to be concentrated in a relatively small number of municipalities. The municipalities of Ciudad Juárez, Tijuana, Chihuahua, Culiacán and Acapulco have the highest number of reported homicides in Mexico. Together they account for 29 per cent of the country's homicides.
6. The study analysed the 104 municipalities with the highest rates of violence. Results showed the proportion of emigrants from these municipalities to be 15 times that of municipalities with less violence. It was possible, however, that a large part of this difference was the result of other factors in the most violent municipalities, where socio-economics, demographics and urbanisation increase the likelihood of emigration. This showed the need to control for the effects of these factors in order to isolate and measure the effect of violence alone.
7. Once the effect of socio-economic conditions normally associated with internal migration in Mexico was controlled for, violence related to organised crime was found to be associated with ongoing emigration from the most violent municipalities regardless of their economic situation. The proportion of emigrants from the most violent municipalities was found to be 4.5 times higher than in municipalities with similar conditions but with lower levels of violence. This difference represents the net effect of violence related to organised crime on migration.
8. The analysis provided statistical evidence that violence causes forced displacement in the worst-affected municipalities.
9. In terms of displacement patterns, much of the migration is taking place within rather than between states.
10. Of the most violent municipalities included in the study, roughly 70 per cent have lost population. These constitute the main areas of expulsion and should be the focus of further research and response. The municipalities with the highest rates of violence are Tijuana (Baja California), Chihuahua (Chihuahua), Juárez (Chihuahua), Monterrey (Nuevo León) and Culiacán (Sinaloa), and these all have net migration rates. The most popular municipalities of destination for people leaving the three most violent municipalities (Tijuana, Chihuahua, and Juárez) are Matamoros (Tamaulipas), Tepic (Nayarit), and Alvaro Obregón (Distrito Federal) respectively. These municipalities too should be the focus of further research.
11. The data and analysis found no significant link at the national level between the presence of violence and the thousands of empty homes identified in various states across the country, which might have indicated that those fleeing were abandoning their property regardless of the economic loss. Rather, demographic and socio-economic factors such as the oversupply of housing in some areas are most likely behind the number of empty homes.
12. The Ciudad Juárez case study found that 24,416 people left the city in 2011 because of violence. Of them,

50 per cent moved to the United States, with 18 per cent settling in El Paso, Texas. Of those who fled within Mexico, 9.6 per cent moved to Durango, 9.4 per cent to Coahuila and nine per cent to Veracruz. These findings support data gathered between 2007 and 2009.

13. The main causes of displacement from Juárez in 2011 were the climate of violence and insecurity (26 per cent) and extortion (24 per cent). The survey also found that 80.2 per cent of those who left the city had a job. This supports the hypothesis that violence and insecurity rather than economic concerns are causing displacement from Juárez.
14. The survey revealed that 72 per cent of IDPs left behind some type of property in Juárez, with a house or residence being the most common (64.7 per cent). Almost a third (32.3 per cent) of those who fled in 2011 abandoned their property as opposed to selling it, leaving it in someone's care or giving it away.
15. After establishing a) the relationship of association between violence and displacement in the 12 states, b) the relationship of causation between violence and migration, and the net effect of violence on displacement in the most violent municipalities, and c) the patterns and scale of displacement in Ciudad Juárez, census data was interpreted to distil information on IDPs' vulnerability in terms of access to health care, education, housing and labour markets. It became clear that migrants were worse off than local residents in terms of access to education and home ownership. The comparison did not, however, distinguish between economic migrants and IDPs.
16. To determine whether those who moved to a new area because of violence faced specific vulnerabilities, the same indicators were examined for emigrants from the three municipalities with the highest number of homicides to the three most popular municipalities of destination. This was done on the assumption that those undertaking such displacement did so in order to escape violence. In other words, they were very likely to be IDPs. The analysis revealed that they faced three major problems compared with the local resident population: less access to the labour market, the difficulty of children and adolescents in accessing and remaining in education, and less access to adequate housing.
17. Qualitative research in the states of Durango, Coahuila and Veracruz largely confirmed these findings, showing that IDPs face difficulties in finding employment and exercising their housing and property rights. Most interviewees said they were employed in the informal labour market, barely earned the minimum wage and needed to work more hours to meet their basic needs. They said that where possible they had sold or rented their property and if not they had abandoned it - in which case the authorities offered no specific support to protect their rights - and that upon arrival in their places of refuge they had been housed by family members, where they experienced overcrowding and inadequate living conditions. Contrary to the census data, interviewees said they generally did not face obstacles in registering their children at school.
18. The federal government has to date undertaken a number of initiatives in response to displacement caused by drug cartel violence, but in the absence of an IDP law or policy, there has been no coordination or harmonisation across agencies. Various legislative proposals have failed for reasons including a lack of political agreement and technical arguments over the definition of terms and responsibilities in addressing the issue.
19. Local authorities have provided support to those fleeing violence, particularly in cases of mass displacement, and in the case of people going to Veracruz from the Juárez area. The recent adoption in Chiapas of a law on internal displacement is encouraging, but this was driven by protracted displacement caused by the Zapatista uprising rather than the more recent phenomenon of drug cartel violence.
20. The National System for Civil Protection (SINAPROC), which is part of the Ministry of Interior, has played no role in helping those displaced by violence as its current mandate focuses on people affected by natural disasters.

# 5

## The impact of violence on displacement: national-level mapping

To provide a national-level description of the impact of drug cartel violence on forced displacement, an analysis of violence indicators and migration flows was conducted at state and municipal levels in the 12 states covered by study.

As part of this analysis, the total number of homicides reported in each state and municipality were collected and ratios were calculated with respect to national totals. The net migration rate (calculated as the total number of immigrants minus the total number of emigrants) was also estimated for the period of 2005 to 2010, and an indicator of the net migration rate was calculated relative to the state or municipality's total population in 2010 in order to control for the effect of population volume. Finally, correlation coefficients were estimated between the percentage of homicides committed in each municipality and the percentage net migration rate to confirm statistically that a negative relationship exists between the two in which high homicide levels drive people away.

Map 1 illustrates the percentage of homicides committed in each of Mexico's administrative entities. There were 25,757 homicides registered in the country as a whole in 2010, of which 17,633 (or 68 per cent) took place in the 12 states with the most violence (but which account for only 38 per cent of the population).

The state with the highest number of homicides in 2010 was Chihuahua, with 6,421 or an average of 18 a day. Risk was disproportionate throughout the state, even though just two cities - Ciudad Juárez and Chihuahua - accounted for 70 per cent of the homicides (see Map 2).

After Chihuahua, the nine most violent states were: Sinaloa (2,397 homicides), Estado de México (2,114), Guerrero (1,567), Baja California (1,525), Durango (1,112), Jalisco (1,081), Distrito Federal (1,078), Tamaulipas (963) and Nuevo León (928). Together these 10 states (including Chihuahua) registered a total of 19,186 homicides, meaning that three quarters of the country's homicides took place in only ten states. As in Chihuahua, there was a significant concentration of homicides in a small number of municipalities in both Baja California and Nuevo León. The majority in Baja California were committed in Tijuana, while in Nuevo León 344 of the state's 928 homicides took place in Monterrey (the city as opposed to the greater metropolitan area).

In four other states - Coahuila, Michoacán, San Luis Potosí and Veracruz - a total of 1,980 homicides were

reported. This may seem a relatively low figure compared with the ten most violent states, but still represents an average of more than one a day.

In order to determine whether there was a relationship between violence and migration trends in the 12 states, their net migration rate was calculated and then divided by their population in 2010. As illustrated by Map 3, eight states have a net migration rate of zero or a negative figure, which indicates that the population is in decline as emigration outstrips immigration. The state losing the highest percentage of its population is the Federal District, which is an exception with its own migratory patterns. The next four states in terms of percentage population loss (Guerrero, Sinaloa, Chihuahua and Durango) are all on the list of most violent states. Considered together, the 12 most violent states had a negative net migration rate of 55,700 people, and the correlation coefficient between homicides and net migration rate is negative (-0.27). This is evidence that they are experiencing a significant loss of population which may be linked to drug cartel violence.

Given that many of those fleeing violence and insecurity are probably doing so within the same state so as not to lose their support networks, the scale of displacement may be far greater, making it necessary to analyse migration and homicide rates and the connection between them at municipal as well as state level.

Analysis of the proportion of homicides committed in each of the municipalities within the 12 states revealed a highly uneven distribution of violence.

In most states the majority of homicides were concentrated in a small number of municipalities, while others reported far fewer<sup>2</sup>. This discrepancy is more prominent in states with higher homicide numbers. In Baja California the majority of homicides are concentrated in Tijuana, which reported 4.9 per cent of homicides nationwide and 82.4 per cent of those in the state. The other four municipalities in the state only accounted for one per cent of the country's homicides. The situation is similar in Chihuahua, where 75.7 per cent of the state's homicides took place in Ciudad Juárez and Chihuahua city, the two municipalities alone accounting for nearly 20 per cent of homicides nationwide. In Nuevo León, 37 per cent of

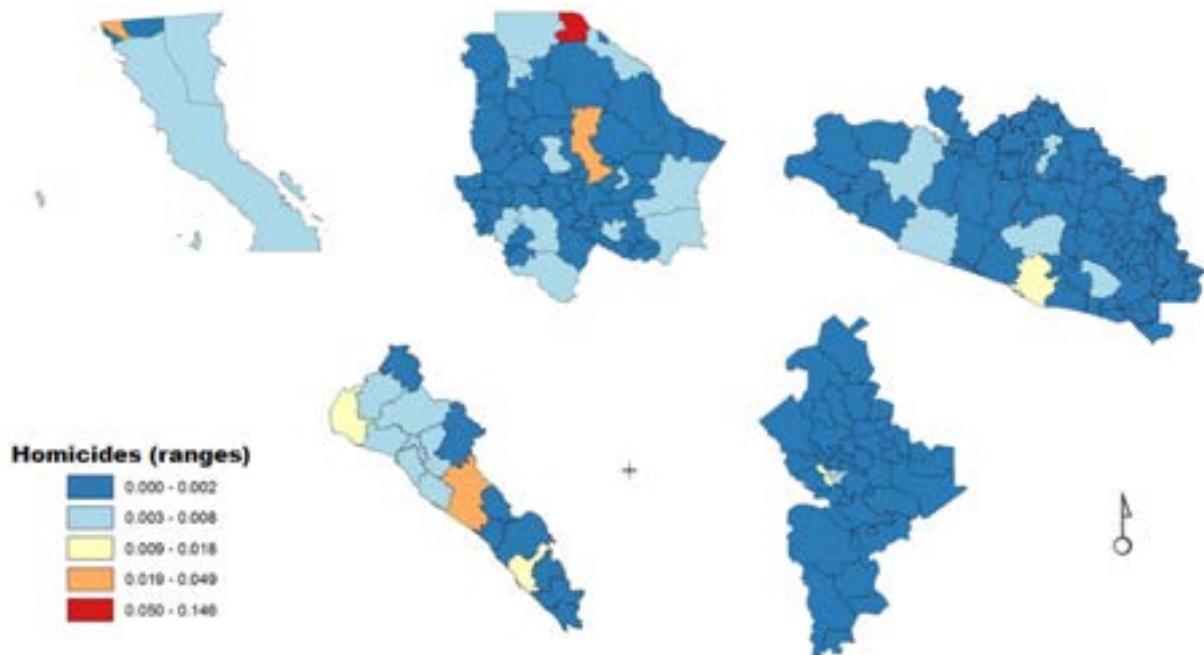
<sup>2</sup> The only states where this was not the case are Michoacán, San Luis Potosí, Tamaulipas and Veracruz (see Map 4).

**Map 1. Distribution of homicides at state level, Mexico 2010**



Source: our own calculations based on official homicide figures from the National Institute of Statistics and Geography (INEGI) 2010..

**Map 2. Distribution of homicides at municipal level\***



\* The states shown, from left to right and beginning at the top, are: Baja California, Chihuahua, Guerrero, Sinaloa and Nuevo León. Municipalities in this map and maps throughout the document are not labeled as they are used to identify patterns of concentration and dispersion of phenomena.

Source: our own calculations based on official homicide figures from the National Institute of Statistics and Geography (INEGI) 2010.

the state's homicides were committed in Monterrey; in Sinaloa, just over 60 per cent were committed in Culiacán, Ahome and Mazatlán (see Map 2). The same trends surfaced in Sonora, Durango, Coahuila and Guerrero, where municipalities such as Nogales, Durango, Gómez Palacio, Torreón and Acapulco stand out (see Map 4).

The study focused on a group of municipalities that seemed to have similar security conditions, and included analysis of crimes that might affect people's migration decisions. These types of crime normally cause population movements over and above those taking place for socio-economic reasons. The statistics complement those related to reported homicides and allow for a more comprehensive view of the intensity of violence in the states covered.

In recent years, the media as well as federal and local authorities have reported on the diversification of the drug cartels' criminal activities. Kidnappings, extortion, abductions, theft and other crimes have increased as a result of the dismantling or disruption of organised crime structures – a consequence in large part of the federal government's offensive against them<sup>3</sup>. The study compared the levels of kidnapping, theft, break-ins, illegal detention and extortion in the 12 states with national totals<sup>4</sup>, and found that they accounted for 38.4 per cent of the quoted crimes nationwide. The five municipalities with the highest homicide levels were also among the 13 with the highest overall crime rates. Of every 1,000 crimes committed in the country, between 12 and 16 took place in the municipalities of Culiacán, Mexicali, Tijuana, Nuevo Laredo, Monterrey and Reynosa.

Evidence that homicides and other crimes coincide as indicators of violence at the municipal level was backed up by analysis of the socio-economic and demographic factors as they relate to the violence. Based on estimates derived from linear regression modelling<sup>5</sup>, it was shown that the proportion of homicides at the municipal level is related to quality of labour - the lower the percentage of the working population earning less than double the minimum wage, the lower the homicide rate. It is also related to employment opportunity - the homicide rate is lower when more women participate in the labour market - and

to the population's level of education. It also increases in relation to the municipality's general economic situation as measured by an indicator of per household income<sup>6</sup>.

The proportion of other crimes was also found to rise according to demographic pressure. As the number of adolescents increases, so does competition for assets and opportunities. The crime rate rises as economic levels improve, but it decreases as education levels improve. By combining figures for homicides and other crimes, the study incorporated various socio-economic factors into its analysis of the violence, allowing different sectors of the population to be covered and creating a more realistic overall picture.

Analysis of the net migration rate at the municipal level confirmed the importance of conducting the study more locally than at state level. Results indicated that population movements are highly likely to be taking place within each state, and these would be invisible when looking at the net migration rate at state level. It was also important to focus on certain more violent municipalities and contrast them with others with lower levels of violence and migration.

While the population decreased in some municipalities between 2005 and 2010, it increased in others. Increases at the municipal level in states suffering overall population decline - Chihuahua, Coahuila, Durango, Guerrero, Michoacán, San Luis Potosí, Sinaloa and Veracruz - can largely be put down to migration within those states. The municipalities with the highest homicide figures - Tijuana, Chihuahua, Ciudad Juárez, Monterrey and Culiacán - all had a negative net migration rate.

The relationship between homicides, other crimes and migration was confirmed by analysing the simple correlation between the net migration rate variable and the percentages of homicides and other crimes at the municipal level. Results suggested: 1) that municipalities with higher levels of violence had a negative net migration rate, meaning that they lost population<sup>7</sup>; and 2) that violence in Mexico is distributed very unevenly and concentrated in certain municipalities (correlation coefficients are very small and not significant – 0.02 for homicides and 0.03 for other crimes, as the vast majority of municipalities report very low levels of violence).

3 Guerrero, E. (2010). Los hoyos negros de la estrategia contra el narco [Black Holes in the Strategy Against Drug Trafficking]. Online article: <http://www.nexos.com.mx/?P=leerarticulo&Article=248547>.

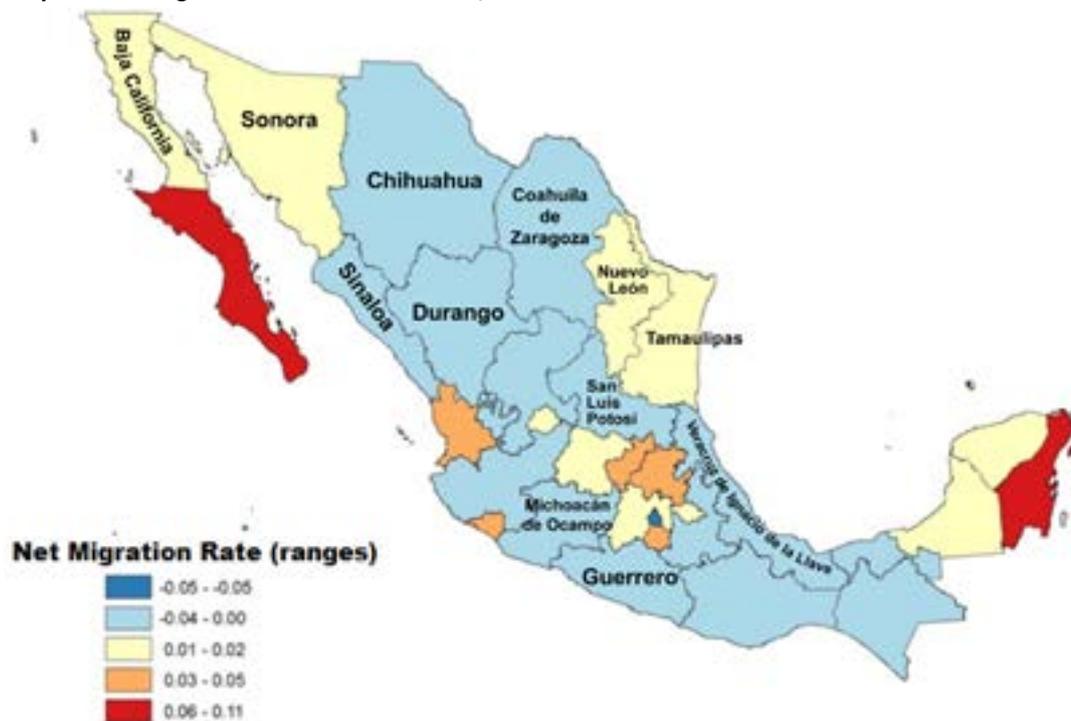
4 Crime figures were obtained from court statistics on defendants under municipal and federal jurisdictions in 2010. It is important to note that these statistics are low estimates, since they depend upon there having been a complaint by the victim as well as identification and prosecution of a suspect. Nevertheless, these records come the closest to statistics of complaints, which provide the most realistic overall understanding of crime in Mexico.

5 Models not shown.

6 Data from the income component of the Human Development Reports (HDR). They are available for consultation at: <http://www.undp.org.mx/desarrollohumano/disco/index.html>

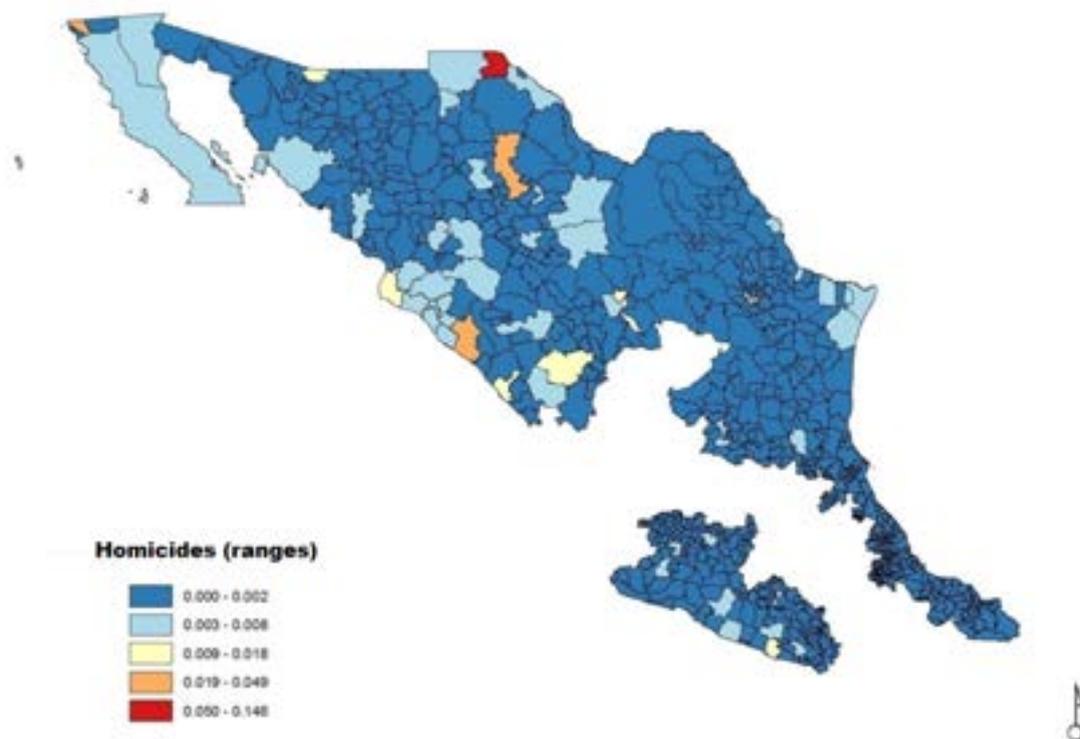
7 In statistical terms, the relationship between violence and net migration was found to be negative. Because more violence brings more emigration, there is a negative net migration rate (violence causes an overall population loss).

Map 3. Net migration rate at state level, Mexico 2010



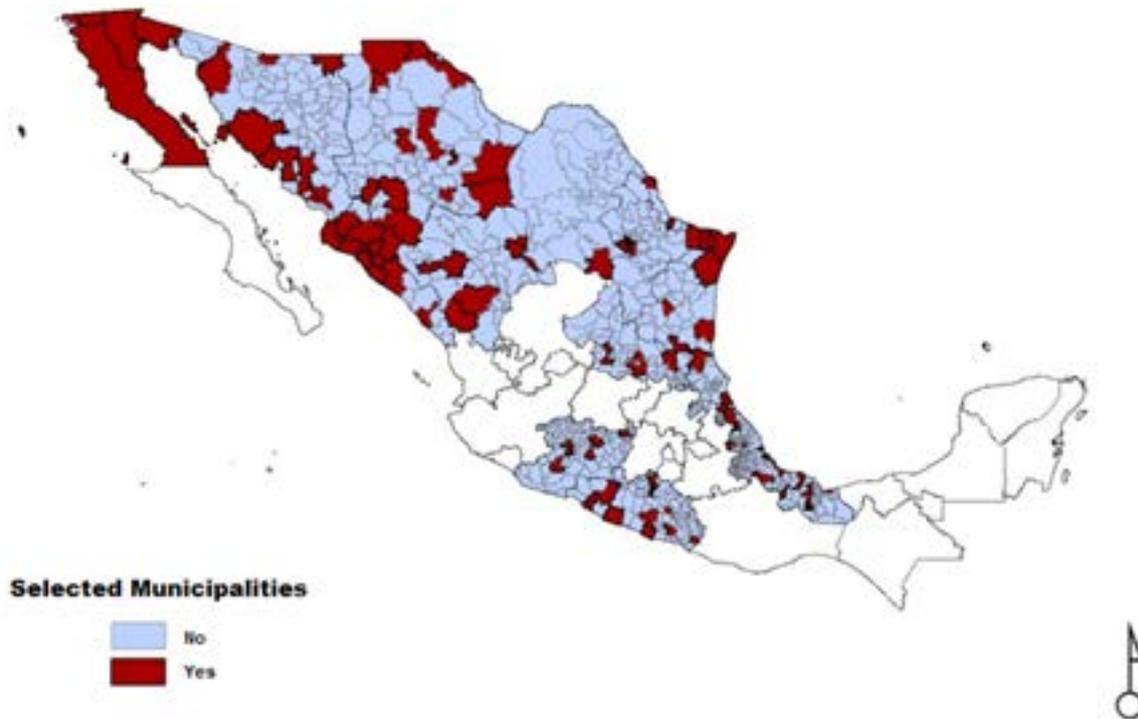
Source: our own calculations based on the population census, National Institute of Statistics and Geography (INEGI) 2010.

Map 4. Distribution of homicides at municipal level in the 12 most violent states, Mexico 2010



Source: our own calculations based on official homicide figures from the National Institute of Statistics and Geography (INEGI) 2010.

**Map 5. Municipalities with high rates of homicide or other crimes, Mexico 2010**



Source: our own calculations based on the population census, official homicide figures and court statistics from the National Institute of Statistics and Geography (INEGI) 2010.

The results made it clear that analysis of the effects of violence on population movements had to be based on municipalities with truly violent contexts. To this end, the study concentrated on municipalities with a homicide proportion greater than 0.002 or a proportion of other crimes greater than 0.001<sup>8</sup> (see Annex II, Table 1 and Map 5), of which 68 per cent reported negative net migration rates and 32 per cent positive (see Table 2).

In order to confirm a connection between violence and migration, causal inference analysis was conducted to ascertain whether the change in emigration ratios in the most violent municipalities was the result of the atmosphere of violence or whether it could be attributed to other factors such as socio-economics.

Violence related to organised crime can lead people to flee to another municipality, especially if they perceive that authorities are not doing enough to protect the lo-

cal population.<sup>9</sup> Fear, economic costs (when sales drop because customers are afraid to go out in the street, or when organised crime demand a cut of profits), unemployment (when businesses are forced to close) and lack of hope for the future may all influence a decision to leave.

Other factors unrelated to violence that drive emigration are employment opportunities and conditions, the economic situation, population structure and the education level of the population.<sup>10</sup> The correlation matrix in Annex 1 shows that all of these variables have been found to affect the proportion of emigrants at the municipal level. As such,

<sup>8</sup> The threshold for both homicides and other crimes corresponds to the first quartile of their distribution within the 12 most violent states in the country. This means that together, the municipalities with proportions of homicides greater than or equal to 0.002 or proportions of other crimes greater than or equal to 0.001 account for 75 per cent of all the homicides and other crimes in the 12 states.

<sup>9</sup> Empirical literature on criminal activity and population displacement in Mexico has yielded contradictory findings about the connection between the two factors. The majority of the literature was produced in the United States and is based on the assumption that crime in a residential area affects perceptions of security and satisfaction with the neighborhood, thus motivating people to move. The few studies that demonstrate a relationship between violence and migration indicate that criminal activity is a much weaker predictor of migration than other variables such as the age of the head of household, home ownership and duration of residence. South, Scott J. y Steven F. Messner. 2000. "Crime and Demography". In *Annual Review of Sociology*. Vol. 26, pp. 83-106.

<sup>10</sup> See Rivero, Estela. 2012. "Beyond Income Inequality: Explaining Migrants' Destinations in Mexico. In *Migration and Remittances from Mexico. Trends, Impacts and New Challenges*. Cuenca, Alejandro and Carla Pederzini (Eds.) Lexington Books: Maryland. Pp. 51-78.

**Table 2: Relationship between net migration rate and proportion of violence at municipal level\***

Violence	NMR		Negative		Positive		Total
	Low	High	Count	Percentage	Count	Percentage	
Low	363	71	52 per cent	48 per cent	329	32 per cent	692
High	71	34	68 per cent	32 per cent	34	32 per cent	105

\* This table conveys the impact of violence on emigration. Of 692 municipalities with low violence levels, 52 per cent lost population (a negative net migration rate) and 48 per cent gained population (a positive net migration rate). Of 105 municipalities with high levels of violence, 68 per cent had a negative net migration rate and 32 per cent had a positive net migration rate. Source: our own calculations based on the population census, official homicide figures and court statistics from the National Institute of Statistics and Geography (INEGI) 2010.

it is important to control for them before drawing conclusions about the relation between violence and emigration.

The propensity score matching technique was employed to this end, using the more violent municipalities and their less violent counterparts as contrast groups, the variables that drive emigration as matching criteria, and the proportion of emigrants as the dependent variable.

Using one-to-one matching for each of the 105 most violent municipalities, a less violent counterpart was found that was as similar as possible in terms of its labour market, workers' incomes, the labour market's potential for absorption, working conditions for physical labour, demographic pressure, education level and household income (see Annex II, Table 3). Matches were found for all but one municipality, which did not have enough data on household income.

As can be seen in Annex II, Table 4, when this matching is not conducted (the complete sample), the socio-economic characteristics of high-violence and low-violence municipalities are significantly different. On average, the more violent municipalities were characterised by more people working in the tertiary sector, better employment opportunities, higher education levels and households with higher incomes.<sup>11</sup> These conditions coincide with those of urban areas, which have been a significant source of emigration in recent years; emigration in Mexico has become increasingly inter-urban, with people moving from urban areas that have precisely these socio-economic conditions to other urban areas, which could potentially lead to the mistaken conclusion of attributing violence a greater role as a cause of emigration, when in reality emigration could also be these factors.

Matching up municipalities of high and low violence of similar socioeconomic factors eliminated the role of said

11 Sobrino, Jaime. 2010. Migración Urbana In *La Situación Demográfica de México* [The Demographic Situation in Mexico]. CONAPO. Pp. 155-170.

factors and ensured that the only variable to change between them was the degree of violence. The effect of the violence could now be calculated in full confidence that only the influence of this variable was being measured.

Table 5 shows the average proportion of emigrants from municipalities with high and low levels of violence, both for the complete sample and the matched sample. According to the results, in the complete sample, the average proportion of emigrants from high-violence municipalities was 0.0023, compared with 0.000149 from low-violence municipalities, that is to say 15 times higher.

When the 104 high-violence municipalities are compared with their less violent socio-economic counterparts (matched sample), their proportion of emigrants is on average 0.001783 higher. In other words, the proportion of emigrants from more violent municipalities is 4.5 times higher. This difference is the net effect that violence related to organised crime has on migration.

### **Does violence account for the high numbers of unoccupied homes?**

The 2010 census revealed that roughly one in every seven homes in the country was unoccupied, a fact about which there are a number of hypotheses as to the cause<sup>12</sup>. It has been suggested that it could be the result of depopulation in certain parts of the country, especially rural areas, where there is generally more unoccupied housing. Miscalculations in the census have also been considered. Other possible factors include increased unemployment due to the economic crisis, politics affecting housing construction and the impact of remittances used to build homes owned by people residing abroad.

12 Some of these hypotheses were recently tested at the state level in Mexico. See Sánchez, Landy and Clara Salazar (2011), "Lo que dicen las viviendas deshabitadas sobre el censo de población 2010 [What Uninhabited Homes Say About the 2010 Population Census]", in *Coyuntura Demográfica [Demographic Circumstances]*, no. 1, pp. 66-72. Online article: <http://www.somede.org/coyuntura-demografica/articulos/sanchez-20111108.pdf>

**Table 5: Difference in the average proportion of emigrants in high-violence and low-violence municipalities, complete and matched samples\***

Variables of Interest	Average Effect		Difference	t-Statistic	Significance
	High Violence	Low Violence			
Complete sample	0.0023	0.000149	0.00218	14.370	0.001
Matched sample	0.0023	0.000517	0.00181	4.620	0.001

\* The t-statistic or test statistic is a standardised test that comparatively measures the mean (average) values of two samples. In the table above, the t-statistic - the proportion of migrants in violent municipalities divided by the proportion of migrants in non-violent municipalities - decreases from 14.370 to 4.620 between the complete and matched samples. This shows that when other variables or conditions are controlled for (in the matched sample), the average proportion of emigrants decreases but is still 4.5 higher than in the complete sample.

Source: our own calculations based on the population census, official homicide figures and court statistics from the National Institute of Statistics and Geography (INEGI) 2010.

In order to determine whether there was a link between unoccupied housing and violence related to organised crime, propensity score matching was used again. A link would indicate a process of displacement in which IDPs establish a new residence and abandon their former home regardless of the economic loss. In this model, the dependent variable was the change in the ratio of unoccupied homes in each municipality between 2005 and 2010. The contrast groups and the variables for the matched sample were the same as in the previous analysis.

As seen in the correlation matrix in Annex 1 and as previously established,<sup>13</sup> employment, the economic situation, population structure and the education level of the population have an effect on the number of unoccupied homes at the municipal level, making it necessary to control for this before further analysis.

As Table 6 shows, there was a negative change in the proportion of unoccupied homes over the study period, indicating that there were more in both high and low-violence municipalities at the beginning of the study. In high-violence municipalities, however, the change was very close to zero, while in low-violence municipalities the proportion of unoccupied homes declined by an average of 0.0166 points. The difference of 0.014 is significant, with a p-value of <0.05.<sup>14</sup>

When propensity score matching was used to control for socio-economic differences, the decline in the proportion of unoccupied homes in the low-violence municipalities of the matched sample is less but still significant, while in their high-violence counterparts the change is negligible. The difference between the results of the matched

sample is not statistically significant, but still indicates that high-violence municipalities have a persistently high number of unoccupied homes over time, while in their low-violence counterparts the number has decreased, albeit only slightly.

This finding indicates that the municipalities' socio-economic characteristics - which were adequately controlled for as seen in Annex II, Table 7 - are the cause of the difference in unoccupied housing levels. To corroborate this, supplementary models were run<sup>15</sup> using the same general technique, but with two different indicators: the relative change in unoccupied housing levels between 2005 and 2010, and the proportion in 2010. These models supported the findings shown in Table 6 - that demographic and socio-economic factors are the cause of changes in unoccupied housing trends in the areas studied.

### **Patterns of displacement**

The extent to which the statistical data reveal patterns of displacement is limited to identifying violent states and municipalities which have lost population, and the preferred municipalities of destination for people fleeing violence. More specific surveys are needed to get a clearer picture of displacement patterns.

The states of Chihuahua, Durango, Sinaloa and Guerrero have the highest rates of population loss in the country (after the Federal District) and also appear on the list of states with high violence levels. Given that many displacements take place within states, attention should focus on these four as both areas of origin and destination.

Of the most violent municipalities shown on map 5 (where 75 per cent of homicides and crimes in the 12 states analysed take place), roughly 70 per cent have lost population. These constitute the main areas of expulsion and should be the focus of further research and response.

<sup>13</sup> *Ibid.*

<sup>14</sup> The p (probability) value is a calculation used to determine if the results are caused by chance or not, thus providing a measure of the confidence level. A p value less than 0.05 is statistically significant, which means that the result is not due to chance.

<sup>15</sup> Models not shown.

**Table 6: Change in average proportion of unoccupied homes in high-violence and low-violence municipalities, complete and matched samples**

Variables of Interest	Average Effect		Difference	t-Statistic	Significance
	High Violence	Low Violence			
Complete sample	-0.0026	-0.0166	0.014028	2.60	0.005
Matched sample	-0.0026	-0.0121	0.009476	0.93	0.176

Source: our own calculations based on the 2010 population census, the 2005 population count, official homicide figures and court statistics from the National Institute of Statistics and Geography (INEGI) 2010.

The municipalities with the highest violence rates are Tijuana (Baja California), Chihuahua (Chihuahua), Juárez (Chihuahua), Monterrey (Nuevo León) and Culiacán (Sinaloa), and they all have negative net migration rates. Those leaving generally preferred to go to Culiacán (Sinaloa), Juárez (Chihuahua), Torreón (Coahuila), General Escobedo (Nuevo León) and Tijuana (Baja California). The fact that some of the destinations are themselves violent municipalities might suggest the decision to move was not prompted by violence.

The most popular destinations for people leaving the three most violent municipalities (Tijuana, Chihuahua, and Juárez) are Matamoros (Tamaulipas), Tepic (Nayarit) and Alvaro Obregón (Distrito Federal). These were consequently chosen to examine vulnerability of people who have recently arrived in comparison to local residents (Section 7 below).

Overall the most popular municipalities of destination for people fleeing violence are Reynosa (Tamaulipas), Tijuana (Baja California), Mexicali (Baja California), Juárez (Chihuahua), Hermosillo (Sonora) and Chihuahua (Chihuahua).

The statistical research and the survey conducted in Juárez (see next section) both found that the most common pattern of displacement for people leaving the city was to stay within the state, with the municipality of Chihuahua being a popular destination. Others went to Durango, Coahuila and Veracruz.

In an effort to gather more detailed information on the impact of violence on displacement, the results of the Third Survey on Citizens' Perception of Insecurity in Ciudad Juárez were analysed. The survey was conducted in November 2011 and included a special section on forced internal displacement.<sup>16</sup> Ciudad Juárez is a key location because the atmosphere of violence and insecurity there has forced thousands of people to flee. Such emigration is unprecedented, given that the city had been growing at a faster rate than the national average (see Table 8).

The survey included specific questions aimed at documenting, among other relevant details, the type of crime causing displacement, the assets left behind, the fate of those assets and the type and source of help received during displacement.

Multistage stratified probability sampling was used to choose respondents who reflected the city's social and economic mix. A sample size of 2,100 was set, and 1,874 completed questionnaires were received<sup>17</sup>. The sample size meant that inferences could be made about the city's four geographical zones with a 95 per cent confidence level, a five per cent margin of error and p and q values of 0.5.<sup>18</sup>

The total number of migrants who fled the city because of violence was estimated based on responses to the following questions: "Did any of your relatives leave (emigrate from) Ciudad Juárez in 2011 for reasons related to violence and insecurity?" and "How many, and where did they move to?" The respondents were over 18, remained in Juárez and were up to date with their relatives' situation and housing conditions.

The survey found that during the first 11 months of 2011, 24,426 people had emigrated from the city as a result of the violence. Fifty per cent moved to the US, with many resettling in the neighbouring city of El Paso, Texas. Of

<sup>16</sup> The Universidad Autónoma de Ciudad Juárez has conducted this survey for the last three years. In this year's survey, specific questions related to displacement were added.

<sup>17</sup> The main reasons for the non-completion of some surveys – reported by interviewers and field supervisors – were related to the large numbers of unoccupied homes, direct threats made against the interviewers and to the impossibility of gaining access to certain developments that were closed off and guarded by neighbourhood watch teams.

<sup>18</sup> As above, note 14. The q values are adjusted p-values found using an optimised approach. They also provide a measure of confidence that the results are not due to chance.

**Table 8: Demographic growth rates for Juárez city, Chihuahua state and Mexico nationally, 1960 to 2005**

Period	Juárez City	Chihuahua State	Nationally
1960 - 1970	4.5	2.9	3.4
1970 - 1980	2.8	2.1	3.2
1980 - 1990	3.6	2.0	2.0
1990 - 2000	4.4	2.3	1.8
2000 - 2005	1.3	1.1	1.0

Source: INEGI, municipal register of statistics, 2000; general population and housing census, 1990 and 2000; population and housing count, 2005.

**Table 9: Destination of IDPs who left Ciudad Juárez because of violence and insecurity, 2011**

Destination	Totals	Percentage
Other US cities	7,691	31.5
El Paso, Texas (US)	4,517	18.5
Durango	2,344	9.6
Coahuila	2,295	9.4
Veracruz	2,197	9.0
Another city in Chihuahua	1,099	4.5
Another state in Mexico	4,151	17.0
Another country	122	0.5
<b>Total</b>	<b>24,416</b>	<b>100.0</b>

Source: CIS-UACJ. Survey on Citizens' Perception of Insecurity in Ciudad Juárez, 2011

those who fled within Mexico, 9.6 per cent moved to Durango, 9.4 per cent to Coahuila and nine per cent to Veracruz (see Table 9).

The findings support data gathered between 2007 and 2009 on migration flows prompted by high levels of insecurity and show that IDPs continue to move to the same destinations. This is consistent with the behaviour of social groups in that their displacement choices are influenced by existing support networks. It is important to note, however, that the amount of time analysed is somewhat short for the observation of any changes in the pattern of population movements.

**Table 10: Type of crime or situation that prompted displacement from Ciudad Juárez in 2011**

Crime or Situation	Number	Percentage
Atmosphere of violence and insecurity	6,348	26.0
Extortion	5,860	24.0
Theft	2,686	11.0
Murder of a relative	2,197	9.0
Threat	1,953	8.0
I don't know	1,587	6.5
Other	1,343	5.5
Loss of job due to business closing	1,465	6.0
Kidnapping	977	4.0
<b>Total</b>	<b>24,416</b>	<b>100.0</b>

Source: CIS-UACJ. Survey on Citizens' Perception of Insecurity in Ciudad Juárez, EPCIJ- 2011.

The main crimes or situations to trigger emigration in 2011 were the atmosphere of violence and insecurity, and extortion (see Table 10). For this indicator, it should be noted that respondents answered not only for relatives who were victims of crime but also for those who decided to move based their awareness of an event. As such the figures do not reflect the number of criminal acts.

# 7

## Vulnerability after displacement: interpreting the data

In order to collect information about IDPs' living conditions, a matrix of origins and destinations was created for all the high-violence municipalities in the study. For each one, the three most common municipalities of destination were established, as shown in Annex 2, Table 11. Indicators were then created to reflect the labour market and working conditions, housing and living conditions and access to health care and education for both migrants and local residents in the destination areas, and comparisons were made between the two.

The results are shown in Annex 2, Table 12. Despite the younger age profile of the immigrant population, school attendance was found to lag 10 per cent behind that of local residents. This is in part because of a tendency among young immigrants to join the workforce at an earlier age - five per cent more do so as compared with young local residents. Lack of opportunity may also be a factor, given that nearly five per cent more immigrants under the age of 24 neither work nor attend school.

There was also a significant difference between immigrants and local residents in terms of home ownership. A lower percentage of immigrants were found to own their own home, and a higher percentage to rent or have some other arrangement. It may be that they are unable to afford to buy property - whether as a result of costs incurred during their migration or because of difficulty in getting credit - or that they have yet to decide whether or not to settle permanently in the area.

No other significant differences were not found, but this could be because the cities were grouped and the assumption made that similar processes occurred in all of them when in fact this may not be the case.

For this reason, indicators were calculated for emigrants from the three municipalities with the highest number of homicides (Juárez, Tijuana and Chihuahua) who had moved to the most popular low-violence municipalities of destination - and so were most likely to be IDPs. (Any decision to migrate from one violent area to another may have had more to do with socio-economic factors than security). Annex 2, Tables 13, 14 and 15 compare the conditions of emigrants from Juárez to Matamoros, Tijuana to Tepic, and Chihuahua to the Alvaro Obregón municipality in the Federal District with those of the local populations.

Emigrants from Juárez living in Matamoros were found to be more than twice as likely to be unemployed and less

likely to have sufficient access to goods and services or own their own homes. The same was true for emigrants from Tijuana living in Tepic, whose unemployment rate is over five per cent. This group was also found to differ significantly from local residents in terms of the economic activity of its younger population, which may indicate a greater need to earn income at an early age. Emigrants from Chihuahua living in Alvaro Obregón appear to enjoy rather better conditions, probably because the municipality has some of the best economic opportunities in the country.

The survey conducted in Ciudad Juárez also revealed that people who flee from violence have protection needs related to their property rights. It showed that 72 per cent of IDPs left behind some sort of property, with a house or other type of residence being the most common (64.7 per cent). According to their relatives' statements, almost a third (32.3 per cent) of those who emigrated in 2011 abandoned their assets, as opposed to selling them or entrusting them to someone else's care (see Table 5). Given that abandoned homes have deteriorated significantly and/or have been vandalised throughout the city and especially in the south-east, the need for protection is urgent. The vast majority of IDPs who fled Juárez in 2011 (86.5 per cent) received no government help in protecting their property rights.

In conclusion, census data and the Juárez survey made it possible to identify four important issues for emigrants from high-violence to low-violence municipalities: 1) they have less access to jobs and the labour market than local residents; 2) their children are less likely stay in school; 3) they have possible difficulties in finding housing and suffer poor access to utilities; and 4) they have property protection needs relating to the homes they left behind when they fled.

## 8

## A closer look at vulnerability: qualitative research in three selected locations

In-depth interviews were conducted with IDPs in three locations to complement the information gathered from demographic data. They sought to document protection needs, focusing on housing, land and property rights, livelihood opportunities and access to basic necessities of life such as food, shelter and health care. As data from previous editions of the Juárez survey showed that most people leaving the area had fled to Coahuila, Durango and Veracruz<sup>19</sup>, these three states were chosen as research sites, along with Chihuahua (where Juárez is located).

An interviewee profile was established beforehand as someone who had left Juárez in the last five years and who had been victim of a crime or threat in the same period which influenced their decision to flee. Researchers' local contacts were asked to identify potential subjects and check that they fitted the profile. The number of interviewees was not set in advance but was determined using the saturation principle, under which the process is stopped when a given interview fails to add any new or relevant information to that gleaned from the previous ones. In total, 26 interviews were conducted, seven in Veracruz, nine in Coahuila and ten in Durango. Many of the interviewees were not originally from Juárez, but had previously migrated there in search of work. This played a role in their decision to leave when confronted with violence.

In terms of housing, land and property rights a common pattern emerged. The interviews revealed that many IDPs had opted to sell their furniture and cars, but rented their homes, entrusted them to others or as a last resort temporarily abandoned them. The experience of Fernando in

Torreón was typical: "I had my car ... I had to sell it when I came here, and we only left the store and my wife's house, which we're renting out to her niece." Pablo in Veracruz also had a common story to tell: "I left behind an Infonavit [Institute of the National Fund for Workers' Housing] house that I had there and had been paying for on a weekly basis ... When I came here my wife's relatives rented it out."

Interviewees received no special help from authorities to protect their property. Genaro in Durango said: "What the government ought to do is provide a little help so that people like me who have lost hope will come back." Referring to her housing rights, Romana in Veracruz said: "The government should support us ... because they're the ones responsible for this to some extent, and because they're the ones who manage our tax money." Lupe in Veracruz said: "They didn't give me any support. What we did was to entrust the house there to someone else and she continues to pay the mortgage ... My husband hired a van for the move so we could bring our things ... We spent approximately 12,000 or 13,000 pesos [\$800 or \$900]."

When asked about the process of integration in their places of refuge and their access to the basic necessities of life, a common response was that family networks played key role in helping IDPs to obtain housing, financial assistance, jobs and economic stability. "My husband's family lives here and we came to live with them." (Lupe in Veracruz); "I chose this place to live because we had lived here before and it's where I was born." (Cata in Coahuila); "I went back because all my family is here. I left for a while and went there so I could succeed but then I realised that it was impossible with so much violence." (Genaro in Durango); "This was my birthplace, and so my roots are here and I have more family here too." (Marco in Veracruz).

IDPs were found generally to take low-paid, temporary jobs and most had difficulties meeting their basic needs. Several interviewees in Veracruz worked as agricultural labour, in contrast to more than a decade of employment in Juárez, where they had been production operators in factories. Pablo said: "Now I work in the fields ... It took me about two months to find the job." Manuel said: "Pretty much the only work is in the fields and so that's where you go ... but there was a stretch when work was a little scarce here. The very little that there is goes towards putting food on our plates, but it's very little." The same was true in Coahuila and Durango, where IDPs entered

<sup>19</sup> At the end of 2009, a group of people from Veracruz living in Juárez and the surrounding area asked the governor of Veracruz, Fidel Herrera, for support to return because of the violence. The state government set up the Programme for the Return of Veracruzanos, which was implemented between March and July 2010. It provided transport home from Juárez, and promised to help them by speeding up registration with the federal social protection scheme Programa Oportunidades, the National Employment Service and the public health system Seguro Popular, and by helping their children enrol at school. Seven flights and 338 overland trips were organised under the programme and as many as 14,000 people were assisted, according to official figures. Interviews and testimonies gathered by local researchers, however, show that many of the pledges were not fulfilled, and that the returnees suffer poverty and discrimination. The interviews conducted for this study coincide fully with this finding in terms of access to housing and labour opportunities, but only partially in terms of access to health care and education.

the labour market through jobs in the cosmetics industry, which is notorious for low pay and a lack of job security and social protection. Many work overtime to supplement their income.

The majority of IDPs found housing by going to live with close relatives, a further example of the family network providing support. Most interviewees, however, said their families needed their own places to live. "It wasn't difficult because we came to live with my husband's aunt and so there was no need to pay rent, but the house lacked a lot of things ... There's not much room and there's a lack of privacy." (Lola in Veracruz); "The house ... was very small and had two rooms. One was the kitchen, and we lived in a single room with my children and my mother." (Julia in Coahuila); "I came to live with my parents ... [but] the house isn't big enough ... It isn't a place just for us ... I don't have the things that I'd like." (Juan in Veracruz).

The interviewees' situation as regards education was more encouraging. Displaced parents said they did not have problems enrolling their children in school, probably because the number of school places available in the Mexican education system is generally good. "It was no trouble to enrol them in school. Because we're in a village ... there's room in the schools." (Manuel in Veracruz); "I have two children who go to elementary school, and because it's a small community there aren't a lot of children and the school always has places available." (Romana in Veracruz).

In terms of access to medical services, most interviewees relied on the public health insurance scheme *Seguro Popular*, consultations at the pharmacy chain *Farmacias Similares* and visits to public health centres. "I don't have any kind of insurance. The procedure for *Seguro Popular* takes too long ... we have to go to a private doctor and it costs a lot, like around 150 pesos [\$11] plus the medicine." (Lupe in Veracruz); "God watch over me, but nothing other than *Farmacias Similares*. It's the cheapest." (Cholo in Coahuila); "We go to the Tepatlaxco health centre and they see us and give us a sheet or card for vaccines. We also use *Seguro Popular*, even though they [only] give you appointments after a month or two." (Pablo in Veracruz). None of the interviewees reported having had access to mental health care.

When it came to identity documents, which are needed to obtain credit at some institutions and to access job opportunities, the majority of interviewees said that they had been to the Federal Voting Office after displacement to update their information. When proof of residence was required they gave their close relatives' electricity bills or other similar documents. There was no evidence of IDPs facing widespread difficulties in renewing or updating their documentation. "I did have a birth certificate, but not

a voting card because I had got it in Juárez ... Now I have it again ... for the electricity bill I use the one from here where I live with my parents and it hasn't been a problem." (Marco in Veracruz); "I had all my papers in order because all the services were set up in my name there ... I was the one in charge of the store with my wife and so I had to go back and change everything at the Federal Voting Office, and to get other documents showing that I had no criminal record." (Fernando in Coahuila).

## 9

## Government response to displacement to date: the basis for a future response

The Mexican government has not explicitly acknowledged that forced internal displacement is taking place as result of drug cartel violence, with one noteworthy exception. Following publication of IDMC's 2010 Global Overview on Internal Displacement, an official at the Ministry of Interior told the *Reforma* newspaper that such displacement was "a problem that exists in some parts of the country, and we need to work to resolve it".<sup>20</sup> No action, however, has been taken.

The government has moved to address displacement in the past, but this has predominantly been in response to that caused by the Zapatista uprising in Chiapas. This section will describe and discuss those measures and other initiatives as they could potentially become the foundation for a future response to displacement in general.

The most significant moves have come from the executive branch, and to a lesser extent the legislative branch of government. None can be traced back to the judiciary. The mandates of some government institutions include assisting victims of forced internal displacement considered members of highly vulnerable groups, but the country lacks a comprehensive and coordinated policy.

Efforts to pass federal legislation on displacement have so far failed. The recently-enacted law in Chiapas is the first of its kind at state level.

### Executive branch

The executive branch is known as the Federal Public Administration (*Administración Pública Federal*, APF). It consists of 18 ministries, the Office of the Attorney General (*Procuraduría General de la República*), the State Legal Department (*Consejería Jurídica del Estado*) and autonomous decentralised institutions. The following actions have been taken by various APF institutions in response to displacement:

### Federal Public Administration

a) **Ministry of Foreign Affairs** (*Secretaría de Relaciones Exteriores*, SRE): Following his 2002 visit to Mexico, Francis Deng, then the UN Special Representative of the Secretary-General for Internally Displaced Persons, gave the government a series of recommendations for attending to IDPs, whose existence was officially

recognised at this time, albeit only in Chiapas. In 2003, Rodolfo Stavenhagen, then the Special Rapporteur on Human Rights and Fundamental Freedoms of Indigenous People, issued further recommendations after his own visit to Mexico. In response, the government promised in 2004 to review IDPs' situation and look into establishing an office charged with assisting them.

Mexico often reiterates its commitment to the UN Guiding Principles on Internal Displacement at international forums.<sup>21</sup> Ten years after Deng's visit, however, there has still been no official review of IDPs' living conditions, and no profiling has been done or official statistics produced. The ministry's October 2011 report on advances and challenges in human rights makes no reference to IDPs except in a footnote mentioning the visits of human rights rapporteurs during the previous administration, which was in power from 2000 to 2006.<sup>22</sup> The omission is evidence of the political difficulties the current administration faces in openly acknowledging the consequences of its war against organised crime.

b) **Ministry of Interior** (*Secretaría de Gobernación*, SEGOB): SEGOB has more agencies with responsibilities towards displaced communities than any other government department. The current administration, however, has overlooked both the organisations and their mandates. They include the following:

- i. The Interdepartmental Working Group on Internally Displaced People was created in 2004 as a result of agreements between the government and human rights rapporteurs. It is made up of representatives from SEGOB, the Ministry of Agrarian Reform (*Secretaría de la Reforma Agraria*, SRA), the Ministry of Defence (*Secretaría de Defensa Nacional*, SEDENA), the Ministry of Social Development (*Secretaría de Desarrollo Social*, SEDESOL), the Ministry of Environment (*Secretaría de Medio Ambiente y Recursos Naturales*, SEMARNAT), the Ministry of Foreign Affairs, the Ministry of Health (*Secretaría de Salud*, SS), the Ministry of Public Education (*Secretaría de Educación Pública*, SEP), the National Commission for Indigenous Peoples'

<sup>20</sup> <http://www.reforma.com/nacional/articulo/601/1200968/default.asp?plazaconsulta=reforma>

<sup>21</sup> Typical examples include Mexico's participation in the 2005 World Summit, where the 156 participating countries reiterated their commitment to the Guiding Principles, and its statements on IDPs' protection at the Organisation of American States.

<sup>22</sup> The report is available (in Spanish) at: <http://www.sre.gob.mx/images/stories/doceventos/2011/octubre/onu061011.pdf>

Development (*Comisión Nacional para el Desarrollo de Pueblos Indígenas*, CDI), and the Office of the Attorney General. Its objectives were to provide IDPs with physical protection, ensure their material well-being, find durable solutions to displacement, develop a legal framework, consult IDPs on all actions and development programmes affecting them, and create a national documentation programme for them.

There is no evidence of this group having met regularly since it participated in a forum on IDPs in Tlaxcala in January 2004. It has not taken part in any SEGOB subcommittees, such as those on vulnerable groups and migration, where its efforts would have been useful in getting IDPs onto SEGOB's agenda and so presenting the issue to the president.

- ii. The National Commission for the Prevention of Discrimination (*Comisión Nacional para Prevenir la Discriminación*, CONAPRED) was created by federal act in 2003 and charged with promoting public policies that eradicate discrimination in all settings, including discrimination against IDPs.

The commission's first report, for 2004-2005, established its mandate as "introducing concepts of human rights into the Federal Public Administration's public policies, with regard to non-discrimination, women's rights, rights of indigenous people, and rights for children and adolescents, migrants, refugees, and internally displaced persons".<sup>23</sup> Subsequent reports, however, have contained nothing on discrimination against IDPs except for two studies, one on internal displacement caused by religious intolerance published in 2007 and the other on policy making to protect IDPs published in 2008. The first was used as a benchmark for CDI's 2007-2009 programmes, and specifically for its Assistance Programme for Displaced Indigenous People (Programa de Atención a Indígenas Desplazados, PAID), which is explained below. There is no evidence that the second study had any impact. Since the appointment of the current commission president, who took office in 2009, no specific work has been done to protect IDPs' rights.<sup>24</sup>

- iii. The National Population Council (*Consejo Nacional de Población*, CONAPO) was created in 1974. CONAPO's mission is "to regulate issues affecting the population in terms of volume, structure, dynamics

and distribution throughout the national territory, with the goal of achieving fair and equitable participation in the benefits of social and economic development". It is mandated to record and regulate population movements that influence public order and affect the social fabric of communities.

In its report on the implementation of the action plan from the International Conference on Population and Development 1994-2009, CONAPO stated that given the lack of a specific legal definition of IDPs, and in recognition of elements of the Mexican constitution, federal legislation on human rights and international instruments such as the Guiding Principles, SEGOB had drafted such a definition in order to standardise concepts within APF<sup>25</sup>. There is no evidence, however, that it has been disseminated or used. In fact, as of 2011 the General Population Law (*Ley General de Población*) that created CONAPO continued to use the term "internal migration" to describe all population movements within the country's borders, so failing to differentiate between the reasons behind them. CONAPO's population projections for 2005 to 2050 make no mention of the effect on population movements of the escalating violence affecting a significant portion of the country.

- iv. The National Institute of Statistics and Geography (*Instituto Nacional de Estadística, Geografía e Informática*, INEGI) is the country's main institution for documentation and statistics. Its entire official data collection system has not, however, integrated any terminology or relevant census questions that could provide information on internal displacement.
- v. The National System for Civil Protection (*Sistema Nacional de Protección Civil*, SINAPROC) was created to prevent natural disasters and assist and rehabilitate populations endangered or affected by them. Its work has mainly been in assisting victims of flooding, earthquakes and droughts, and under the current administration it has been efficient in deploying the armed forces to disaster areas and coordinating government organisations at federal, state and municipal levels. This was particularly true in the aftermath of the floods that affected various parts of the country in 2009 and 2010.

23 [http://derechoshumanos-portal.segob.gob.mx/archivos/anexos/Anexos\\_Primer\\_Informe/5Cx\\_CONAPREDfinal.pdf](http://derechoshumanos-portal.segob.gob.mx/archivos/anexos/Anexos_Primer_Informe/5Cx_CONAPREDfinal.pdf)

24 Interview with the Adjunct Director of Studies, Legislation and Public Policies Sonia Río Freije, January 2012.

25 Using the Guiding Principles as a base, the Ministry of the Interior uses the following definition of IDPs: "Any individuals or groups that have been obliged or have been pressured to abandon or flee their places of residence as a result of armed conflicts, religious conflicts, generalised violence, violation of fundamental human rights, construction of infrastructure or natural disasters." [www.conapo.gob.mx/publicaciones/cipd15/Cap09.pdf](http://www.conapo.gob.mx/publicaciones/cipd15/Cap09.pdf)

- vi. One of the agency's most significant mandates is the protection of housing and infrastructure in disaster areas and the repair of damaged housing. Any programme developed to assist IDPs would greatly benefit from close collaboration with SIN-APROC.

### **Decentralised institutions**

a) The National Commission for Indigenous Peoples' Development (*Comisión Nacional para el Desarrollo de Pueblos Indígenas*, CDI) was created in 2003 to consult on indigenous matters for APF, evaluate government programmes and train federal, state and municipal public servants in order to improve services for the indigenous population.

In June 2006, the Assistance Programme for Displaced Indigenous People (PAID) was launched in response to the increased levels of forced internal displacement affecting indigenous communities. PAID's objective is to provide indigenous populations displaced by acts of violence, armed conflicts, human rights violations; or religious, political, cultural or ethnic intolerance, with the minimal conditions necessary for material and cultural reproduction in their area of relocation, or area of expulsion in the case of return. This project was viewed from the beginning as a corrective rather than a preventative measure. Since its creation, PAID has assisted indigenous IDPs in 12 municipalities in the states of Chiapas, Nayarit, Hidalgo, Guerrero and Oaxaca.

As of December 2010, it had supported 1,306 IDPs with house-building materials (31.5 per cent), urban sites (16.3 per cent) and farmland (5.1 per cent). Of the 467 families that received support and were relocated, 46 per cent were displaced by religious conflicts, 43.8 per cent fled generalised violence and human rights violations and 10.2 per cent were displaced by armed conflicts.<sup>26</sup> PAID has been very beneficial, and has helped to rebuild the social fabric of dozens of families by supporting land acquisition. That said, budget cuts in 2010 and 2011 limited its operations and reach. The lack of legislation and statistics on internal displacement have also made its work more difficult. If the Mexican government were to prioritise it, CDI could play a central role in supporting indigenous groups displaced by violence related to organised crime.

b) The Office for the Victims of Crime (*Procuraduría Social de Atención a las Víctimas de Delitos*, Províctima) was created by presidential decree in September 2011. Its mission is to coordinate the efforts of various public

bodies in helping and protecting people affected by kidnapping, forced disappearance, homicide, extortion and human trafficking. Having established that homicide and extortion are significant drivers of displacement, it has proved of great value.

Províctima has a staff of 320 spread throughout the Federal District and in 14 states: Baja California, Chiapas, Chihuahua, Coahuila, Guanajuato, Guerrero, Jalisco, Michoacán, Morelos, Nayarit, Nuevo León, Sinaloa, Veracruz and Yucatán. The senate has approved around 120 additional positions, which will be filled between February and June of this year.

At the time of writing, Províctima had assisted more than 3,500 people face-to-face and a similar number over the phone, and it has taken on the cases of people displaced by one of the five crimes under its mandate. In the case of one family displaced from Guerrero to Michoacán it supported the resettlement process, accompanying them to the appropriate authorities so that they could replace lost documentation, and assisting them in applying for credit to start a new business in their place of refuge. It has also helped cases of forced eviction and surrender of property, in which people have been forced by threats and extortion to sign over the deeds to their property or land so it can be appropriated by organised crime groups<sup>27</sup>.

Províctima is mandated to create a specific register for displacement cases, but to date information on the cases they have been involved in has not been logged in an organised system. There is a degree of uncertainty over the agency's future given the upcoming change in government in December 2012, but the General Law of Protection and Redress for Victims of Human Rights Violations Caused by Violence (*Ley General de Protección y Reparación Integral a Víctimas de Violaciones a Derechos Humanos Generados por Violencia*) – which was passed on 1 May – will be key to its survival. The bill, which was sponsored by civil organisations and the Democratic Revolution Party (*Partido de la Revolución Democrática*, PRD), enshrines Províctima's mandate in law, meaning that it should be able to become a key player in protecting and assisting IDPs.

c) The 5<sup>th</sup> Inspection Unit of the National Commission on Human Rights (*Comisión Nacional de Derechos Humanos*) participates in the general complaints process, and is in charge of the Programme for Migrant Assistance, the Programme on Offences against Journalists and Civil Defenders of Human Rights, and since 2007 the Programme against Human Trafficking. It

<sup>26</sup> See CNI Report 2010 (in Spanish) at: [http://www.cdi.gob.mx/index.php?option=com\\_docman&task=cat\\_view&gid=18&limit=5&limitstart=0&order=name&dir=ASC&Itemid=18](http://www.cdi.gob.mx/index.php?option=com_docman&task=cat_view&gid=18&limit=5&limitstart=0&order=name&dir=ASC&Itemid=18)

<sup>27</sup> Interview with Irene Herreras, Special Prosecutor, 24 January 2012.

took on cases of IDPs for the first time in September 2011. Those suffering forced displacement, however, are not formally recognised as victims and as yet there is no standard protocol for reporting displacement or assisting IDPs.

### **Legislative branch**

The first attempts to pass legislation to benefit IDPs took place in 1998 but were unsuccessful. Since then, there have been a series of initiatives to reform general laws, draft decrees, order APF institutions to gather information and present proposals with points of agreement. The outcomes are listed below:

- a) 23 April 1998: Representatives of various parties proposed a general law on IDPs, which was rejected in April 2000 as conceptually vague, and ambiguous in terms of responsibilities and methods for addressing the issue.
- b) 30 March 2004: PRD representative Emilio Zebadúa presented a draft decree to add a paragraph on the protection of IDPs to Article 4 of the Constitution.<sup>28</sup> Because displacement was a local issue to Chiapas at the time, its congress was asked to review the situation and pass legislation on IDPs at the state rather than federal level.
- c) 11 August 2008: Senator Gloria Lavara Mejía of the Ecologist Green Party (*Partido Verde Ecologista*) presented a draft decree to reform the General Population Law by including a definition of forced internal displacement to replace the term “internal migration”, which leads to displacement being overlooked or confused with other population movements. She also proposed including IDPs as a specific marginalised group in national development programmes. Her proposals were rejected.
- d) 9 September 2008: Representative Mónica Arriola Gordillo of the New Alliance Party (*Partido Nueva Alianza*) proposed reforming the General Education Law by adding a paragraph to Article 32, which would have made it easier for the children of IDPs to enrol in schools in their places of refuge, and enable them to receive credits for studies completed before their displacement.<sup>29</sup> Her proposal was not debated.
- e) 25 October 2010: On behalf of the Minister of Public Security, PRD senators Rubén F. Velázquez López and José Luis García Zalvidea called on the president of the National Commission on Human Rights to provide a report on IDPs and the violation of their rights.<sup>30</sup> There was no response from the commission.
- f) 27 July 2011: Representative Claudia Ruiz Massieu of the Institutional Revolutionary Party (*Partido Revolu-*

*cionario Institucional*) presented a proposal with points of agreement calling for the design and implementation of an IDP policy.

- g) 23 August 2011: The proposal was brought before the Permanent Commission of Congress. It included:
  - The design and implementation of a policy to protect IDPs and a proposed solution for them
  - A report was requested from the Ministry of Interior on the results of the interdepartmental working group on IDPs.
  - INEGI and the Ministry of Interior were asked to design uniform indicators and criteria for IDPs for use by federal and state governments and civil society.
  - The late Interior Secretary Francisco Blake Mora was asked for a report on the implementation of the Guiding Principles.

The proposal was approved for inclusion on the agenda, but was not given great priority. None of the requests have received a response.

At the state level, after 18 years of enduring forced displacement, the Chiapas state congress passed legislation on internal displacement (*Ley para la Prevención y Atención del Desplazamiento Interno*) that incorporates the Guiding Principles and includes various norms ranging from prevention to humanitarian assistance. The law is the first of its kind in Mexico at any legislative level.

28 <http://www.ordenjuridico.gob.mx/Publicaciones/CDs2006/CDRefEdo/pdf/REF24.pdf>

29 [http://sil.gobernacion.gob.mx/Archivos/Documentos/2008/11/asun\\_2496969\\_20081104\\_1225834294.pdf](http://sil.gobernacion.gob.mx/Archivos/Documentos/2008/11/asun_2496969_20081104_1225834294.pdf)

30 [http://sil.gobernacion.gob.mx/Archivos/Documentos/2010/11/asun\\_2713896\\_20101126\\_1290731449.pdf](http://sil.gobernacion.gob.mx/Archivos/Documentos/2010/11/asun_2713896_20101126_1290731449.pdf)

As this study has shown, both statistical (census) and qualitative data reveal that drug cartel violence is causing internal displacement. The evidence has a number of limitations, which are outlined in the next section, but it is strong enough to prompt much more concerted action to address the issue.

As set out in the Guiding Principles, national governments have the primary duty and responsibility to protect IDPs and respond to displacement, with international agencies playing a subsidiary role. This should be particularly true of Mexico, given the country's significant economic power - it is the world's 14<sup>th</sup> largest economy in terms of GDP - and its strong institutional capabilities.

Despite its strength and resources, however, the Mexican government has not set up mechanisms at the federal level to respond specifically to displacement caused by violence, and the political will to do so appears limited right up to the highest level.

In this context, protection agencies should concentrate both on motivating the government to take more robust action on internal displacement, and in the meantime on directing and strengthening its existing capacities to respond. Given that the issue of displacement caused by the government's offensive against the drug cartels is a highly sensitive one, the focus of protection agencies should not be the security strategy itself, the political debate about its efficacy or the status of the violence the country is experiencing. Rather, it should draw attention to the empirical findings of this study, emphasising that the government's own information (census data) was used to establish elements of them. The study's key findings (see section 4) should be highlighted as a factual point of entry.

As described in section 9, all attempts to pass federal legislation on displacement since 1998 have failed. The complications associated with political processes at the legislative level suggest the need to pursue a lower-level framework, such as a policy, in order to set up an interim response.

Such a policy or framework should:<sup>31</sup>

1. **Be driven and informed by existing normative standards.** It should seek to protect IDPs' full range of rights as expressed in the Mexican Constitution and in the various binding international instruments to which Mexico is a signatory. It should also seek to protect them as set out in the Guiding Principles. It should be informed by cross-cutting principles including non-discrimination (both against IDPs as a whole and against specific groups such as women, minorities, children and the elderly), equality before the law, participation and inclusion.

It should mainstream the definition of internal displacement enshrined in the Guiding Principles. This definition is incorporated into the one adopted by CONAPO, but it should also be included either in the General Population Law or in Article 3 of the Migration Law (*Ley de Migración*), and should be used uniformly throughout the Federal Public Administration.

2. **Set up a documentation and data-gathering mechanism.** Conduct studies such as this one to document displacement and IDPs' protection needs, but ultimately only the government is in the position to carry out comprehensive, sustainable data-gathering at the national level through its own institutions.

The inclusion of specific questions in the surveys INEGI uses to gather national statistical information, specifically the 2015 population count and the 2020 census, would do much to help gather information about displacement. The policy should instruct INEGI to do this.

Qualitative profiling of displacement via surveys in the localities identified in this study should also be conducted. Ideally, such surveys would be extended nationally. This would enable the number of people displaced by violence to be estimated, and their protection needs to be documented in detail. Given the cost of such an

31 What follows draws on the standards and benchmarks set out in the Framework for National Responsibility (available at [http://www.brookings.edu/~media/Files/rc/reports/2005/04\\_national\\_responsibility\\_framework/04\\_national\\_responsibility\\_framework\\_Eng.pdf](http://www.brookings.edu/~media/Files/rc/reports/2005/04_national_responsibility_framework/04_national_responsibility_framework_Eng.pdf)) and the Manual for Law and Policy Makers for the Protection of IDPs (available at [http://www.brookings.edu/~media/Files/rc/papers/2008/1016\\_internal\\_displacement/10\\_internal\\_displacement\\_manual.pdf](http://www.brookings.edu/~media/Files/rc/papers/2008/1016_internal_displacement/10_internal_displacement_manual.pdf)). Both publications should be consulted as guidance.

undertaking, it should be led by the government with technical assistance from relevant international and national agencies.

**3. Establish an institutional focal point.** The Ministry of Interior should take the political lead on displacement, and within it - given its mandate - CONAPO should be the institutional focal point, charged with leading and coordinating the government's response to displacement and providing accountability for it.

**4. Create a forum for institutional coordination.** CONAPO should provide leadership in its role as the institutional focal point, but a thematic forum should also be established to bring all agencies and ministries involved in responding to displacement together. The focus should be on the accountability of their actions. Such a forum might have a structure and mandate similar to the Interdepartmental Working Group on Internally Displaced People described in section 9, which has been inactive since 2004.

**5. Create a mechanism for humanitarian assistance and IDPs' integration.** This mechanism should draw on existing structures set up to provide emergency assistance, notably SINAPROC. As described in section 9, to date the agency has responded specifically (and successfully) to natural disasters, so its mandate would have to be expanded to include assistance to victims of violence, including IDPs.

An effective mechanism would also have to include state and local authorities. The states on which this study focused, those worst-affected by violence, should be prioritised.

**6. Create a national federal fund.** Such a fund would provide financial support to protection programmes. It should be established with an initial lump sum and then subsequently topped up.

**7. Document abuses and punish perpetrators.** Independent of the normal channels available to prosecute crimes that lead to displacement, Provéctima should be charged with registering and documenting cases of abuses against IDPs, and referring them to the appropriate judicial authorities for prosecution. The 5<sup>th</sup> Inspection Unit of the National Commission on Human Rights, which currently focuses on human mobility, should expand its work to document cases of displacement, and the government should give its recommendations due weight.

**8. Seek to promote durable solutions.** Special attention should be given to the protection gaps identified in this study, notably access to livelihoods, education, health

care and adequate housing, all of which are obstacles to IDPs achieving durable solutions.

**9. Create channels for cooperation.** The government should cooperate with international agencies, drawing on their in-depth experience of providing technical assistance and setting up protection programmes worldwide.

# 11

## Study limitations and areas for further work

The study and its findings have a number of limitations as result of its timeframe, and the resources and data available:

- 1) It did not establish IDPs' vulnerability in the 12 states covered, as the available data did not enable it to do so. The census data used did not include information on displacement, so an inference was built around information about people who have changed their place of residence. This group, however, is likely to include migrants other than IDPs.<sup>32</sup>
- 2) It did not determine the current number of people displaced by violence in Mexico, again because the available data did not enable it to do so.
- 3) It did not research cross-border displacement caused by drug cartel violence, as it had neither the time nor the resources to do so.

These limitations point to key areas for further work:

- 1) Surveys should be conducted in specific locations to collect detailed information about the displaced population's access to services and rights, ideally at the national level.
- 2) As mentioned above, work should be done with INEGI to develop questions targeted specifically at documenting forced displacement caused by violence for inclusion in its data-gathering.
- 3) Research should be conducted into displacement patterns to the US, asylum requests and the response of US authorities to people crossing the border as a result of violence in Mexico.

<sup>32</sup> Note, however, that information on vulnerabilities specific to IDPs was gleaned from census data in three locations, and in more detail from the qualitative part of the research.



## Acknowledgements

IDMC would like to thank the consultants who contributed to this study: Laura Rubio of the *Instituto Tecnológico Autónomo de México*, who coordinated the study in Mexico and contributed the section on the government's response; Edith Gutiérrez and Estela Rivero of the *Colegio de México*, who designed and conducted the statistical analysis based on census data; Socorro Velásquez and Wilebaldo Martínez, who designed and conducted the survey in Ciudad Juárez and the qualitative research in Durango, Coahuila, and Veracruz. The overall planning, design and coordination of the study was done by Sebastián Albuja of IDMC.

IDMC would also like to thank the Joint IDP Profiling Service for its input during the development phase of this study.

# Annexes I: Statistical correlations

Anexo 1. Matriz de correlaciones

Variables		Homicidios	Delitos	Vivienda deshabitada	Cambio vivienda deshabitada	Sector primario	Sector secundario	Sector terciario	Ocupados con menos de 2SM	Ocupados sin seguridad social
Homicidios	Correlación de Pearson	1	.446(**)	0.063	.084(*)	-.166(**)	.111(**)	.149(**)	-.140(**)	-.135(**)
	Sig. (bilateral)		0	0.074	0.018	0	0.002	0	0	0
	N	797	797	797	797	797	797	797	797	797
Delitos	Correlación de Pearson	.446(**)	1	0.024	.094(**)	-.321(**)	.116(**)	.367(**)	-.290(**)	-.203(**)
	Sig. (bilateral)	0		0.506	0.008	0	0.001	0	0	0
	N	797	797	797	797	797	797	797	797	797
Vivienda deshabitada	Correlación de Pearson	0.063	0.024	1	.346(**)	-.085(*)	0.061	0.035	-.145(**)	-.163(**)
	Sig. (bilateral)	0.074	0.506		0	0.016	0.087	0.326	0	0
	N	797	797	797	797	797	797	797	797	797
Cambio vivienda deshabitada	Correlación de Pearson	.084(*)	.094(**)	.346(**)	1	-0.031	0.024	0.024	0.005	-.148(**)
	Sig. (bilateral)	0.018	0.008	0		0.381	0.498	0.494	0.879	0
	N	797	797	797	797	797	797	797	797	797
Sector primario	Correlación de Pearson	-.166(**)	-.321(**)	-.085(*)	-0.031	1	-.712(**)	-.866(**)	.756(**)	.193(**)
	Sig. (bilateral)	0	0	0.016	0.381		0	0	0	0
	N	797	797	797	797	797	797	797	797	797
Sector secundario	Correlación de Pearson	.111(**)	.116(**)	0.061	0.024	-.712(**)	1	.326(**)	-.525(**)	-.216(**)
	Sig. (bilateral)	0.002	0.001	0.087	0.498	0		0	0	0
	N	797	797	797	797	797	797	797	797	797
Sector terciario	Correlación de Pearson	.149(**)	.367(**)	0.035	0.024	-.866(**)	.326(**)	1	-.684(**)	-.114(**)
	Sig. (bilateral)	0	0	0.326	0.494	0	0		0	0.001
	N	797	797	797	797	797	797	797	797	797
Ocupados con menos de 2SM	Correlación de Pearson	-.140(**)	-.290(**)	-.145(**)	0.005	.756(**)	-.525(**)	-.684(**)	1	.162(**)
	Sig. (bilateral)	0	0	0	0.879	0	0	0		0
	N	797	797	797	797	797	797	797	797	797
Ocupados sin seguridad social	Correlación de Pearson	-.135(**)	-.203(**)	-.163(**)	-.148(**)	.193(**)	-.216(**)	-.114(**)	.162(**)	1
	Sig. (bilateral)	0	0	0	0	0	0	0.001	0	
	N	797	797	797	797	797	797	797	797	797
Participación laboral masculina	Correlación de Pearson	0.033	0.059	-.238(**)	0.015	0.004	.128(**)	0.058	-.251(**)	0.03
	Sig. (bilateral)	0.352	0.095	0	0.678	0.908	0	0.1	0	0.392
	N	797	797	797	797	797	797	797	797	797
Participación laboral femenina	Correlación de Pearson	.178(**)	.371(**)	0.033	0.008	-.730(**)	.369(**)	.815(**)	-.546(**)	-.238(**)
	Sig. (bilateral)	0	0	0.348	0.816	0	0	0	0	0
	N	797	797	797	797	797	797	797	797	797
Presión demográfica	Correlación de Pearson	-0.003	-0.037	-.075(*)	0.065	.234(**)	-0.024	-.294(**)	.337(**)	-.148(**)
	Sig. (bilateral)	0.929	0.303	0.035	0.066	0	0.496	0	0	0
	N	797	797	797	797	797	797	797	797	797
Población menor de 15 con secundaria o menos	Correlación de Pearson	-.196(**)	-.449(**)	0.045	-0.056	.765(**)	-.338(**)	-.844(**)	.685(**)	.310(**)
	Sig. (bilateral)	0	0	0.203	0.117	0	0	0	0	0
	N	797	797	797	797	797	797	797	797	797
Población menor de 15 con primaria o menos	Correlación de Pearson	-.173(**)	-.371(**)	0.002	-0.019	.795(**)	-.465(**)	-.786(**)	.764(**)	.272(**)
	Sig. (bilateral)	0	0	0.954	0.587	0	0	0	0	0
	N	797	797	797	797	797	797	797	797	797
Índice de ingresos de los hogares	Correlación de Pearson	.176(**)	.297(**)	.280(**)	0.012	-.655(**)	.416(**)	.607(**)	-.783(**)	-.095(**)
	Sig. (bilateral)	0	0	0	0.738	0	0	0	0	0.008
	N	784	784	784	784	784	784	784	784	784
Proporción de emigrantes	Correlación de Pearson	.437(**)	.668(**)	-0.016	.096(**)	-.318(**)	.131(**)	.348(**)	-.302(**)	-.243(**)
	Sig. (bilateral)	0	0	0.653	0.006	0	0	0	0	0
	N	797	797	797	797	797	797	797	797	797

Participación laboral masculina	Participación laboral femenina	Presión demográfica	Población menor de 15 con secundaria o menos	Población menor de 15 con primaria o menos	Índice de ingresos de los hogares	Proporción de emigrantes
0.033	.178(**)	-0.003	-.196(**)	-.173(**)	.176(**)	.437(**)
0.352	0	0.929	0	0	0	0
797	797	797	797	797	784	797
0.059	.371(**)	-0.037	-.449(**)	-.371(**)	.297(**)	.668(**)
0.095	0	0.303	0	0	0	0
797	797	797	797	797	784	797
-.238(**)	0.033	-.075(*)	0.045	0.002	.280(**)	-0.016
0	0.348	0.035	0.203	0.954	0	0.653
797	797	797	797	797	784	797
0.015	0.008	0.065	-0.056	-0.019	0.012	.096(**)
0.678	0.816	0.066	0.117	0.587	0.738	0.006
797	797	797	797	797	784	797
0.004	-.730(**)	.234(**)	.765(**)	.795(**)	-.655(**)	-.318(**)
0.908	0	0	0	0	0	0
797	797	797	797	797	784	797
.128(**)	.369(**)	-0.024	-.338(**)	-.465(**)	.416(**)	.131(**)
0	0	0.496	0	0	0	0
797	797	797	797	797	784	797
0.058	.815(**)	-.294(**)	-.844(**)	-.786(**)	.607(**)	.348(**)
0.1	0	0	0	0	0	0
797	797	797	797	797	784	797
-.251(**)	-.546(**)	.337(**)	.685(**)	.764(**)	-.783(**)	-.302(**)
0	0	0	0	0	0	0
797	797	797	797	797	784	797
0.03	-.238(**)	-.148(**)	.310(**)	.272(**)	-.095(**)	-.243(**)
0.392	0	0	0	0	0.008	0
797	797	797	797	797	784	797
1	.124(**)	-0.065	-.140(**)	-.213(**)	.164(**)	0.058
0	0	0.065	0	0	0	0.104
797	797	797	797	797	784	797
.124(**)	1	-.109(**)	-.761(**)	-.679(**)	.502(**)	.339(**)
0	0	0.002	0	0	0	0
797	797	797	797	797	784	797
-0.065	-.109(**)	1	.318(**)	.341(**)	-.485(**)	-.073(*)
0.065	0.002	0	0	0	0	0.04
797	797	797	797	797	784	797
-.140(**)	-.761(**)	.318(**)	1	.913(**)	-.587(**)	-.443(**)
0	0	0	0	0	0	0
797	797	797	797	797	784	797
-.213(**)	-.679(**)	.341(**)	.913(**)	1	-.659(**)	-.371(**)
0	0	0	0	0	0	0
797	797	797	797	797	784	797
.164(**)	.502(**)	-.485(**)	-.587(**)	-.659(**)	1	.300(**)
0	0	0	0	0	0	0
784	784	784	784	784	784	784
0.058	.339(**)	-.073(*)	-.443(**)	-.371(**)	.300(**)	1
0.104	0	0.04	0	0	0	0
797	797	797	797	797	784	797

## Annexes II: Tables

Table 1. Cities with High Rates of Homicides or Other Crimes, Mexico 2010

State	City	Homicides	Crimes	SMN
Baja California	Ensenada	0.003	0.010	0.043
Baja California	Mexicali	0.005	0.015	0.006
Baja California	Tecate	0.001	0.003	0.035
Baja California	Tijuana	0.049	0.015	-0.001
Coahuila	Saltillo	0.001	0.002	-0.008
Coahuila	Torreón	0.011	0.003	-0.001
Chihuahua	Ascensión	0.002	0.000	-0.009
Chihuahua	Camargo	0.003	0.001	-0.015
Chihuahua	Cuauhtémoc	0.004	0.001	0.030
Chihuahua	Chihuahua	0.043	0.005	-0.001
Chihuahua	Delicias	0.003	0.001	0.018
Chihuahua	Guachochi	0.003	0.000	-0.031
Chihuahua	Guadalupe	0.002	0.000	-0.049
Chihuahua	Guadalupe y Calvo	0.005	0.000	-0.023
Chihuahua	Hidalgo del Parral	0.005	0.000	-0.022
Chihuahua	Jiménez	0.002	0.000	0.027
Chihuahua	Juárez	0.146	0.008	-0.023
Chihuahua	Meoqui	0.003	0.000	0.008
Chihuahua	Nuevo Casas Grandes	0.002	0.000	0.001
Chihuahua	Urique	0.002	0.000	-0.011
Durango	Durango	0.011	0.001	-0.010
Durango	Gómez Palacio	0.011	0.003	0.006
Durango	Lerdo	0.003	0.001	0.034
Durango	Pueblo Nuevo	0.003	0.000	-0.042
Durango	Santiago Papasquiaro	0.004	0.000	-0.023
Guerrero	Acapulco de Juárez	0.018	0.007	-0.025
Guerrero	Ayutla de los Libres	0.002	0.000	-0.041
Guerrero	Coyuca de Catalán	0.002	0.001	0.000
Guerrero	Chilapa de Álvarez	0.001	0.001	-0.025
Guerrero	Chilpancingo de los Bravo	0.004	0.005	-0.025
Guerrero	Iguala de la Independencia	0.002	0.001	0.031
Guerrero	Zihuatanejo de Azueta	0.001	0.001	0.012
Guerrero	Ometepec	0.001	0.002	-0.013
Guerrero	Pungarabato	0.002	0.000	-0.064
Guerrero	Taxco de Alarcón	0.001	0.003	-0.014
Guerrero	Tecpan de Galeana	0.002	0.000	-0.023
Michoacán	Apatzingán	0.003	0.001	-0.036

Michoacán	Maravatío	0.000	0.001	0.017
Michoacán	Morelia	0.003	0.007	-0.015
Michoacán	Paracho	0.000	0.001	-0.002
Michoacán	Tacámbaro	0.000	0.001	-0.013
Michoacán	Uruapan	0.003	0.003	-0.003
Nuevo León	San Pedro Garza García	0.001	0.001	-0.046
Nuevo León	Gral. Escobedo	0.001	0.001	0.133
Nuevo León	Guadalupe	0.002	0.002	-0.107
Nuevo León	Juárez	0.004	0.000	0.429
Nuevo León	Monterrey	0.013	0.013	-0.138
Nuevo León	San Nicolás de los Garza	0.001	0.001	-0.127
Nuevo León	Santa Catarina	0.001	0.001	-0.055
Nuevo León	Santiago	0.001	0.001	0.011
San Luis Potosí	Ciudad Valles	0.003	0.002	-0.006
San Luis Potosí	Rioverde	0.001	0.001	-0.024
San Luis Potosí	San Luis Potosí	0.005	0.008	-0.020
Sinaloa	Ahome	0.010	0.004	-0.011
Sinaloa	Angostura	0.002	0.002	0.010
Sinaloa	Badiraguato	0.001	0.001	-0.054
Sinaloa	Culiacán	0.031	0.015	-0.010
Sinaloa	El Fuerte	0.004	0.006	0.003
Sinaloa	Guasave	0.005	0.005	-0.007
Sinaloa	Mazatlán	0.015	0.002	0.003
Sinaloa	Mocorito	0.002	0.001	-0.033
Sinaloa	Salvador Alvarado	0.003	0.002	0.002
Sinaloa	Sinaloa	0.004	0.002	-0.093
Sinaloa	Navolato	0.008	0.001	-0.013
Sonora	Agua Prieta	0.001	0.003	0.017
Sonora	Caborca	0.001	0.002	0.006
Sonora	Cajeme	0.003	0.004	0.001
Sonora	Etchojoa	0.000	0.001	-0.010
Sonora	Guaymas	0.001	0.002	0.009
Sonora	Hermosillo	0.003	0.007	0.019
Sonora	Navojoa	0.001	0.002	-0.011
Sonora	Nogales	0.009	0.001	-0.026
Sonora	San Luis Río Colorado	0.001	0.002	0.022
Tamaulipas	Aldama	0.000	0.001	-0.020
Tamaulipas	El Mante	0.001	0.001	-0.019
Tamaulipas	Matamoros	0.004	0.009	-0.012
Tamaulipas	Miguel Alemán	0.002	0.001	-0.025
Tamaulipas	Nuevo Laredo	0.006	0.015	0.002
Tamaulipas	Reynosa	0.003	0.012	0.057
Tamaulipas	Río Bravo	0.000	0.002	0.013
Tamaulipas	San Fernando	0.004	0.002	-0.044

Tamaulipas	Tampico	0.003	0.003	-0.100
Tamaulipas	Valle Hermoso	0.002	0.001	-0.008
Tamaulipas	Victoria	0.002	0.005	0.011
Veracruz	Acayucan	0.000	0.002	-0.073
Veracruz	Alvarado	0.000	0.001	-0.054
Veracruz	Boca del Río	0.000	0.001	0.033
Veracruz	Coatzacoalcos	0.000	0.003	-0.013
Veracruz	Xalapa	0.001	0.006	-0.014
Veracruz	Martínez de la Torre	0.000	0.001	-0.021
Veracruz	Orizaba	0.000	0.004	-0.094
Veracruz	Pánuco	0.001	0.003	0.005
Veracruz	Papantla	0.000	0.002	-0.008
Veracruz	Perote	0.000	0.001	-0.012
Veracruz	Poza Rica de Hidalgo	0.001	0.002	-0.041
Veracruz	San Andrés Tuxtla	0.000	0.003	-0.006
Veracruz	Sayula de Alemán	0.000	0.002	-0.012
Veracruz	Soteapan	0.000	0.001	0.005
Veracruz	José Azueta	0.000	0.001	-0.024
Veracruz	Tierra Blanca	0.000	0.001	-0.005
Veracruz	Tihuatlán	0.000	0.001	0.028
Veracruz	Tlapacoyan	0.000	0.001	-0.005
Veracruz	Tuxpan	0.001	0.003	-0.006
Veracruz	Ursulo Galván	0.000	0.001	-0.022
Veracruz	Veracruz	0.001	0.004	-0.051

Source: Our own calculations based on the 2010 population census, official death reports and court statistics, INEGI 2010.

**Table 3. Description and Sources of Information on the Variables Factored Into the Analysis**

Aspects of Analysis	Variables	Description	Source
<b>Violence</b>			
	Homicides	Proportion of homicides reported in 2010 that was committed in the area, compared to the total number in the country	INEGI mortality statistics
	Other Crimes	Proportion of crimes reported in 2010 that were committed in the area, compared to the total number in the country.	INEGI court statistics
<b>Socioeconomic Conditions</b>			
	Employment prospects	Proportion of workers between 25 and 64 years of age according to gender	2010 population census, INEGI
	Industry sector	Proportion of workers per economic sector (primary, secondary, tertiary)	2010 population census, INEGI
	Working conditions	Proportion of workers with and without social security Proportion of workers earning less than 2 SM	2010 population census, INEGI
	Economic situation	Index of household incomes Proportion of the population over 15 years of age with an elementary school education or less	IDH 2000, PNUD
	Education opportunities	Proportion of the population over 15 years of age with a middle school education or less	2010 population census, INEGI
<b>Demographic Conditions</b>			
	Demographic pressure	Proportion of the population between 14 and 25 years of age compared to the population between 45 and 64	2010 population census, INEGI
<b>Internal Migration</b>			
	Emigration	Proportion of the population that lived in a different city in 2005 than in 2010	2010 population census, INEGI
	Net migration rate	Difference between the proportion of immigrants and emigrants	2010 population census, INEGI
	Unoccupied housing	Proportion of unoccupied homes compared to the total number of homes recorded (2005 and 2010) Difference between the proportions of unoccupied homes in 2005 and 2010 (relative and absolute)	2010 population census and 2005 population count, INEGI

Source: Our own calculations based on the sources cited in the table.

Table 4. Differences in the Characteristics of High-Violence and Low-Violence Cities in the Complete Samples and Matched Samples

Relevant Variables	Average Effect		Significance
	<i>High Violence</i>	<i>Low Violence</i>	
Population in primary sector			
Complete sample	0.1754	0.38688	0.000
Matched sample	0.1754	0.16654	0.711
Population in secondary sector			
Complete sample	0.2268	0.19737	0.003
Matched sample	0.2268	0.23438	0.481
Population in tertiary sector			
Complete sample	0.5362	0.35061	0.000
Matched sample	0.5362	0.53795	0.928
Population with low work income			
Complete sample	0.4057	0.58014	0.000
Matched sample	0.4057	0.42285	0.443
Population without social security			
Complete sample	0.3134	0.38908	0.000
Matched sample	0.3134	0.31691	0.808
Work situation for men			
Complete sample	0.4094	0.40095	0.053
Matched sample	0.4094	0.40267	0.076
Work situation for women			
Complete sample	0.2099	0.13688	0.000
Matched sample	0.2099	0.21144	0.848
Demographic pressure			
Complete sample	1.1383	1.1577	0.555
Matched sample	1.1383	1.1596	0.594
Population over 15 years old with a middle school education or less			
Complete sample	0.6517	0.8007	0.000
Matched sample	0.6517	0.6407	0.537
Population over 15 years old with an elementary school education or less			
Complete sample	0.3833	0.54372	0.000
Matched sample	0.3833	0.38259	0.971
Economic situation of households			
Complete sample	0.7150	0.62819	0.000
Matched sample	0.7150	0.69838	0.102

Source: Our own calculations based on the 2010 population census, official death reports and court statistics, INEGI 2010.

Table 7. Differences in the Characteristics of High-Violence and Low-Violence Cities in the Complete Samples and Matched Samples

Relevant Variables		Average Effect		Significance
		<i>High Violence</i>	<i>Low Violence</i>	
Population in primary sector				
	Complete sample	0.1754	0.3869	0.000
	Matched sample	0.1754	0.1665	0.711
Population in secondary sector				
	Complete sample	0.2268	0.1974	0.003
	Matched sample	0.2268	0.2344	0.481
Population in tertiary sector				
	Complete sample	0.5362	0.3506	0.000
	Matched sample	0.5362	0.5380	0.928
Population with low work income				
	Complete sample	0.4057	0.5801	0.000
	Matched sample	0.4057	0.4229	0.443
Population without social security				
	Complete sample	0.3134	0.3891	0.000
	Matched sample	0.3134	0.3169	0.808
Work situation for men				
	Complete sample	0.4094	0.4010	0.053
	Matched sample	0.4094	0.4027	0.076
Work situation for women				
	Complete sample	0.2099	0.1369	0.000
	Matched sample	0.2099	0.2114	0.848
Demographic pressure				
	Complete sample	1.1383	1.1577	0.555
	Matched sample	1.1383	1.1596	0.594
Population over 15 years old with a middle school education or less				
	Complete sample	0.6517	0.8007	0.000
	Matched sample	0.6517	0.6407	0.537
Population over 15 years old with an elementary school education or less				
	Complete sample	0.3833	0.5437	0.000
	Matched sample	0.3833	0.3826	0.971
Economic situation of households				
	Complete sample	0.7150	0.6282	0.000
	Matched sample	0.7150	0.6984	0.102

Source: Our own calculations based on the 2010 population census, the 2005 population count, official death reports and court statistics, INEGI 2010.

**Table 11. Matrix of Origins and Destinations**

Origin	First Destination	Second Destination	Third Destination
Ensenada	Tijuana	Mexicali	Guasave
Mexicali	Ensenada	Tijuana	San Luis Rio Colorado
Tecate	Mexicali	Tijuana	Naucalpan de Juárez
Tijuana	Culiacán	Playas De Rosarito	Ensenada
Saltillo	Ramos Arizpe	Monclova	Apodaca
Torreón	Gómez Palacio	Juárez	Lerdo
Ascensión	Nuevo Casas Grandes	Juárez	Muzquiz
Camargo	Chihuahua	Delicias	Juárez
Cuauhtemoc	Chihuahua	Azcapotzalco	Juárez
Chihuahua	Juárez	Cuauhtemoc	Delicias
Delicias	Juárez	Chihuahua	Mérida
Guachochi	Chihuahua	Juárez	Cuauhtemoc
Guadalupe	Gómez Palacio	Culiacán	Tlahualilo
Guadalupe Y Calvo	Chihuahua	Hidalgo del Parral	Delicias
Hidalgo Del Parral	Chihuahua	Juárez	Tijuana
Jiménez	Juárez	Chihuahua	Playas de Rosarito
Juárez	Torreón	Durango	Gómez Palacio
Meoqui	Delicias	Apodaca	Rosales
Nuevo Casas Grandes	Cajéeme	Juárez	Guasave
Urique	Guerrero	Cuauhtemoc	Chihuahua
Durango	Juárez	Gómez Palacio	Torreón
Gómez Palacio	Lerdo	Torreón	Juárez
Lerdo	Gómez Palacio	Torreón	Juárez
Pueblo Nuevo	Mazatlán	Durango	Zapopan
Santiago Papasquiario	Durango	Culiacán	Juárez
Acapulco de Juárez	Los Cabos	Tijuana	Benito Juárez
Ayutla de Los Libres	Morelia	Acapulco de Juárez	Jiutepec
Coyuca de Catalán	Ixtapaluca	Mulege	Lázaro Cárdenas
Chilapa de Álvarez	Los Cabos	Acapulco de Juárez	Hermosillo
Chilpancingo de Los Bravo	Acapulco de Juárez	Ecatepec de Morelos	Cuernavaca
Iguala de La Independencia	Huitzucu de Los Figueroa	Puerto Vallarta	Colima
José Azueta	Acapulco de Juárez	Morelia	Los Cabos
Ometepec	Acapulco de Juárez	Culiacán	Cuajinicuilapa
Pungarabato	Santa Catarina	Acapulco de Juárez	Chilpancingo de Los Bravo
Taxco de Alarcón	Acapulco de Juárez	Temixco	Cozumel
Tecpan de Galeana	Naucalpan de Juárez	José Azueta	Acapulco de Juárez
Apatzingán	Mexicali	Uruapan	Lázaro Cárdenas
Maravatio	Morelia	Cuatla	Tarandacua
Morelia	Tarimbaro	Uruapan	León
Paracho	Morelia	Tijuana	Uruapan
Tacambaro	Morelia	Azcapotzalco	La Paz
Uruapan	Morelia	Tijuana	Zapopan

Origin	First Destination	Second Destination	Third Destination
San Pedro Garza García	García	Santa Catarina	Monterrey
General Escobedo	General Zuazua	Apodaca	Carmen
Guadalupe	Juárez	Apodaca	Monterrey
Juárez	Guadalupe	Apodaca	Coatzacoalcos
Monterrey	General Escobedo	García	Juárez
San Nicolás de Los Garza	Apodaca	General Escobedo	General Zuazua
Santa Catarina	García	Juárez	General Escobedo
Santiago	Apodaca	Guadalupe	Allende
Ciudad Valles	Reynosa	San Luis Potosí	Tampico
Rioverde	Ciudad Fernández	Soledad de Graciano Sánchez	San Luis Potosí
San Luis Potosí	Soledad de Graciano Sánchez	Monterrey	General Zuazua
Ahome	Tijuana	Hermosillo	Zapopan
Angostura	Salvador Alvarado	Santiago Ixcuintla	Tijuana
Badiraguato	Culiacán	Navolato	Ahome
Culiacán	Tijuana	Mexicali	Mazatlán
Fuerte, El	Ahome	Nogales	Hermosillo
Guasave	Mexicali	Tijuana	Los Cabos
Mazatlán	Tijuana	Zapopan	Los Cabos
Mocorito	Reynosa	Culiacán	Ensenada
Salvador Alvarado	Ensenada	Guasave	Hermosillo
Sinaloa	Tijuana	Mexicali	Ensenada
Navolato	Culiacán	Ensenada	Mexicali
Agua Prieta	Hermosillo	Mexicali	Fronteras
Caborca	Hermosillo	Puerto Peñasco	Ensenada
Cajeme	Hermosillo	Tijuana	Nogales
Etchojoa	Navojoa	Hermosillo	Mexicali
Guaymas	Hermosillo	Tijuana	Ensenada
Hermosillo	Mexicali	Guaymas	Cajeme
Navojoa	Hermosillo	Nogales	Cajeme
Nogales	Cajeme	Hermosillo	Guasave
San Luis Rio Colorado	Mexicali	Hermosillo	Puerto Peñasco
Aldama	Altamira	Matamoros	Monterrey
Mante, El	Reynosa	Victoria	Matamoros
Matamoros	Reynosa	Victoria	Altamira
Miguel Alemán	Reynosa	Celaya	Victoria
Nuevo Laredo	San Luis Potosí	Monterrey	Cuajimalpa de Morelos
Reynosa	Poza Rica de Hidalgo	Temapache	Rio Bravo
Rio Bravo	Reynosa	Valle Hermoso	Altamira
San Fernando	Reynosa	Matamoros	Victoria
Tampico	Altamira	Ciudad Madero	Reynosa
Valle Hermoso	Reynosa	Guadalupe	Matamoros
Victoria	Matamoros	Reynosa	Nuevo Laredo

Origin	First Destination	Second Destination	Third Destination
Acayucan	Soconusco	Oluta	Reynosa
Alvarado	Tijuana	Boca Del Rio	Veracruz
Boca del Rio	Medellín	Veracruz	Puebla
Coatzacoalcos	Xalapa	Centro	Benito Juárez
Xalapa	Emiliano Zapata	Banderilla	Tlalnahuayocan
Martínez de La Torre	Atzalán	Matamoros	Reynosa
Orizaba	Ixhuatlancillo	Mariano Escobedo	Ixtaczoquitlan
Panuco	Tampico	Altamira	Matamoros
Papantla	Reynosa	Xalapa	Poza Rica de Hidalgo
Perote	Xalapa	Iztapalapa	Tláhuac
Poza Rica de Hidalgo	Reynosa	Coatzintla	Tihuatlan
San Andrés Tuxtla	Benito Juárez	García	Catemaco
Sayula de Alemán	San Juan Evangelista	Puebla	Benito Juárez
Soteapan	Zapopan	Catemaco	Hidalgotitlan
José Azueta	Loma Bonita	Isla	Gustavo A. Madero
Tierra Blanca	San Juan Bautista Tuxtepec	Boca del Rio	Tijuana
Tihuatlan	Reynosa	Coatzintla	Poza Rica de Hidalgo
Tlapacoyan	Xalapa	Martínez de La Torre	Atzalán
Tuxpam	Reynosa	Xalapa	Tampico
Ursulo Galván	Xalapa	Tijuana	Puente Nacional
Veracruz	Medellín	Boca Del Rio	Xalapa

Table 12. Living Conditions of the Population in the Three Main Areas of Destination of Emigrants of High-Violence Cities in the Region Studied, According to Migration Status and Various Sociodemographic Characteristics

	Relevant Variables	Immigrants	Residents
<b>Age structure</b>			
	0 to 14 years old	63.6	20.2
	15 to 29 years old	16.6	28.4
	30 to 64 years old	18.4	44.3
	65 or older	1.3	7.0
<b>Work situation</b>			
	<i>Employment status</i>		
	Employed	95.6	95.2
	Unemployed	4.4	4.8
	<i>Industry sector</i>		
	Primary sector	3.8	4.1
	Secondary sector	27.6	26.2
	Tertiary sector	68.6	69.7
<b>Access to health care</b>			
	<i>Eligibility for health care services</i>		
	Private practices	3.7	3.3
	Public institutions	47.9	52.5
	Seguro popular [national health insurance]	16.1	13.2
	Other services	1.8	2.0
	No access to services	30.5	29.0
<b>Access to education</b>			
	<i>School attendance and employment (5 to 24 years old)</i>		
	Attends school	60.0	70.7
	Does not attend school; is employed	20.6	15.5
	Does not attend school; is seeking employment	1.6	1.8
	Does not attend school; is not seeking employment	14.6	11.3
<b>Access to housing</b>			
	<i>Construction quality</i>		
	Low	0.9	0.7
	Average	7.9	6.1
	High	43.6	44.3
	Very high	47.6	48.9
	<i>Level of assets and services</i>		
	None	1.3	0.9
	Very low	5.2	3.5
	Low	12.7	10.3
	Average - low	26.0	25.2
	Average - high	23.6	22.6
	High	10.7	11.5
	Very high	20.4	26.1
	<i>Home ownership</i>		
	Inhabitant owns the home	61.6	79.5
	Inhabitant leases the home	26.5	12.3
	Other arrangement	10.3	7.7

Source: Our own calculations based on the 2010 population census, INEGI 2010.

**Table 13. Living Conditions of Migrants from Ciudad Juárez to Matamoros Compared to Residents, According to Various Sociodemographic Characteristics**

Relevant Variables		Immigrants	Residents
<b>Age structure</b>			
	0 a 14 years old	31.1	25.5
	15 a 29 years old	34.9	28.4
	30 a 64 years old	32.3	40.6
	65 or older	1.7	5.5
<b>Work situation</b>			
<i>Employment status</i>			
	Employed	92.1	96.9
	Unemployed	7.9	3.1
<i>Industry sector</i>			
	Primary sector	6.9	10.6
	Secondary sector	15.3	10.6
	Tertiary sector	14.9	17.0
<b>Access to health care</b>			
<i>Eligibility for health care services</i>			
	Private practices	1.4	1.1
	Public institutions	43.7	53.5
	Seguro popular [national health insurance]	10.5	12.5
	Other services	18.2	6.2
	No access to services	26.2	26.5
<b>Access to education</b>			
<i>School attendance and employment (5 to 24 years old)</i>			
	Attends school	64.5	66.1
	Does not attend school; is employed	12.5	16.2
	Does not attend school; is seeking employment	3.4	0.9
	Does not attend school; is not seeking employment	16.7	16.2
<b>Access to housing</b>			
<i>Construction quality</i>			
	Low	0.0	0.0
	Average	0.0	1.3
	High	32.7	7.4
	Very high	67.3	91.3
<i>Level of assets and services</i>			
	None	0.0	0.7
	Very low	34.3	3.4
	Low	27.0	13.2
	Average - low	28.0	33.7
	Average - high	1.7	31.4
	High	7.2	8.5
	Very high	1.7	9.2
<i>Home ownership</i>			
	Inhabitant owns the home	57.3	87.4
	Inhabitant leases the home	6.9	4.6
	Other arrangement	35.8	7.7

Source: Our own calculations based on the 2010 population census, INEGI 2010.

**Table 14. Living Conditions of Migrants from Tijuana to Tepic Compared to Residents, According to Various Sociodemographic Characteristics**

Relevant Variables		Immigrants	Residents
<b>Age structure</b>			
	0 to 14 years old	11.0	20.8
	15 to 29 years old	37.0	28.9
	30 to 64 years old	46.8	42.1
	65 or older	5.3	8.3
<b>Work situation</b>			
<i>Employment status</i>			
	Employed	94.3	96.8
	Unemployed	5.7	3.2
<i>Industry sector</i>			
	Primary sector	1.8	2.6
	Secondary sector	13.9	8.9
	Tertiary sector	53.8	35.0
<b>Access to health care</b>			
<i>Eligibility for health care services</i>			
	Private practices	0.3	0.8
	Public institutions	64.5	63.2
	Seguro popular [national health insurance]	7.3	15.1
	Other services	6.8	0.8
	No access to services	21.0	20.0
<b>Access to education</b>			
<i>School attendance and employment (5 to 24 years old)</i>			
	Attends school	50.6	74.0
	Does not attend school; is employed	34.8	15.0
	Does not attend school; is seeking employment	7.3	1.3
	Does not attend school; is not seeking employment	7.3	9.7
<b>Access to housing</b>			
<i>Construction quality</i>			
	Low	0.0	0.0
	Average	0.0	0.3
	High	10.4	4.4
	Very high	89.6	95.3
<i>Level of assets and services</i>			
	None	1.4	0.6
	Very low	0.3	2.9
	Low	19.2	10.6
	Average - low	14.0	19.8
	Average - high	25.0	24.5
	High	20.4	12.8
	Very high	19.8	28.9
<i>Home ownership</i>			
	Inhabitant owns the home	64.5	78.9
	Inhabitant leases the home	26.3	12.7
	Other arrangement	9.2	8.4

Source: Our own calculations based on the 2010 population census, INEGI 2010.

Table 15. Living Conditions of Migrants from Chihuahua to the Álvaro Obregón Development Compared to Residents, According to Various Sociodemographic Characteristics

Relevant Variables		Immigrants	Residents
<b>Age structure</b>			
	0 to 14 years old	36.3	16.0
	15 to 29 years old	39.6	27.4
	30 to 64 years old	24.2	48.4
	65 or older	0.0	8.2
<b>Work situation</b>			
	<i>Employment status</i>		
	Employed	100.0	95.7
	Unemployed	0.0	4.3
	<i>Industry sector</i>		
	Primary sector	0.0	0.1
	Secondary sector	19.8	8.5
	Tertiary sector	12.1	37.9
<b>Access to health care</b>			
	<i>Eligibility for health care services</i>		
	Private practices	60.4	5.3
	Public institutions	39.6	49.1
	Seguro popular [national health insurance]	0.0	10.5
	Other services	0.0	3.9
	No access to services	0.0	30.8
<b>Access to education</b>			
	<i>School attendance and employment (5 to 24 years old)</i>		
	Attends school	100.0	71.9
	Does not attend school; is employed	0.0	14.8
	Does not attend school; is seeking employment	0.0	1.8
	Does not attend school; is not seeking employment	0.0	10.7
<b>Access to housing</b>			
	<i>Construction quality</i>		
	Low	0.0	0.0
	Average	0.0	0.1
	High	0.0	5.0
	Very high	100.0	94.9
	<i>Level of assets and services</i>		
	None	0.0	0.2
	Very low	0.0	2.7
	Low	0.0	8.0
	Average - low	0.0	25.7
	Average - high	0.0	18.0
	High	0.0	13.8
	Very high	100.0	31.5
	<i>Home ownership</i>		
	Inhabitant owns the home	60.4	72.8
	Inhabitant leases the home	39.6	14.8
	Other arrangement	0.0	11.4

Source: Our own calculations based on the 2010 population census, INEGI 2010.