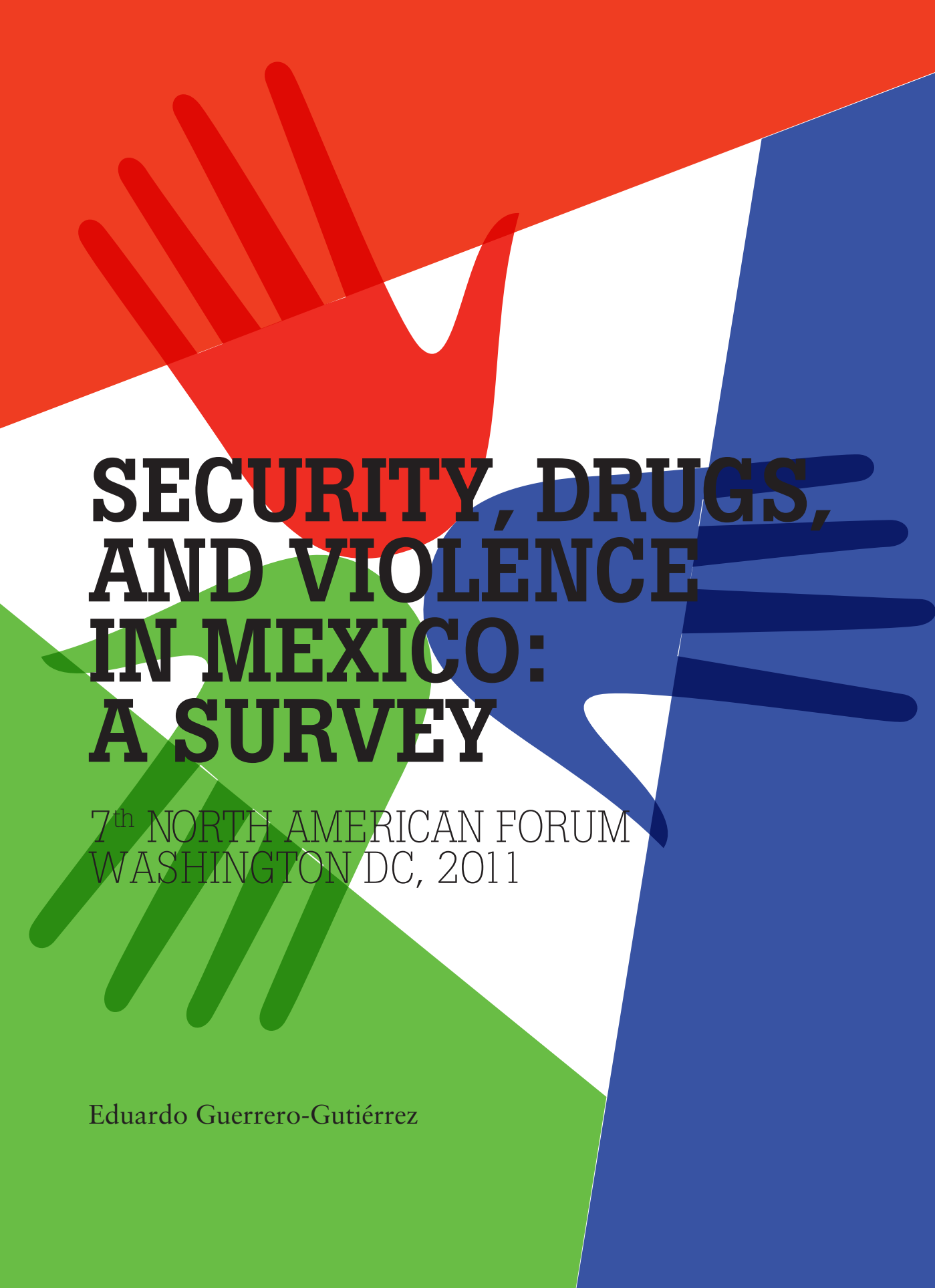


SECURITY, DRUGS, AND VIOLENCE IN MEXICO: A SURVEY

7th NORTH AMERICAN FORUM
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This survey has been carried out for the seventh North American Forum meeting. The report expresses the opinion of Eduardo Guerrero-Gutiérrez, who performed the study. These views have not been adopted or in any way approved by the North American Forum and should not be relied upon as a statement of the North American Forum's views.

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PREFACE

For the second consecutive year, this survey was written under the auspices of Pedro Aspe, former Mexican Minister of Finance, and North American Forum Co-Chair, to serve as a reference document at the Seventh North American Forum (NAF). Also, as in the previous year, Pedro Aspe requested Eduardo Guerrero the elaboration of the survey. NAF is an annual meeting of American, Canadian and Mexican government and business representatives to discuss a broad regional policy agenda that includes security, energy, and economic issues. The Seventh NAF will be held at Washington, D.C. (October 6-8, 2011).

The survey is composed by five sections. The first one is a diagnosis with two components. The first one is a brief description of Mexico's security institutions. The survey includes a brief update of the most significant changes on these institutions during the last year, especially a report on the current situation of the police forces. The second component has to do with the present dynamics of Mexican organized crime. Here, the survey provides an account of Mexico's drug trafficking organizations, including the different criminal activities these organizations perform, their geographic distribution, and the relationships among them. Also, the fragmentation of some of these organizations is described, and a new typology of cartels is included.

The second section is about organized crime violence. Considering that violence trends are changing quickly this survey includes a general update of the phenomenon. In addition to the factors that explain increases of violence, the survey also points out the main factors that explain the geographic dispersion of violence as well as its regional specifics. The third section reviews the government's strategy and actions against organized crime. This section includes an analysis of the outcomes of the Federal Government's deployment of the force against organized crime through "joint operations" (*operativos conjuntos*), and an assessment of the government's security policy impact on violence levels. The fourth section describes the general traits of the Mexican and North American drug markets. Finally, the fifth section addresses Mexican public opinion; it brings together the results of recent polls regarding security and government actions against organized crime, and provides an account of the government's communication strategy on security issues.

This Survey's Data Sources

The survey exhibits extensive public data from Mexican government agencies, and from American and international agencies such as the U.S. Department of Justice and United Nations. Some tables and figures derive from two databases constructed by the author, through the systematic recollection of information in newspapers, weekly magazines, and press releases from official agencies.

The first database shows the number of organized crime executions. For its construction more than 30,000 news articles related to organized crime homicides were collected. These articles were taken from the following 19 national and regional newspapers: Crónica, El Economista, El Financiero, El Gráfico, El Norte, El Sol de México, El Universal, Excélsior, Imagen, Impacto, La Jornada, La Prensa, La Razón, La Segunda de Ovaciones, Metro, Milenio, Ovaciones, Reforma, and UnoMásUno. This database is complementary to the official one, which has not been updated since December 2010.

The second database contains information on 1,029 messages placed by criminal organizations next to corpses of executed individuals.

About the Author

Eduardo Guerrero-Gutierrez is a University of Chicago trained political scientist who, as a policy and political analyst, has received the following awards: Joseph Cropsey Prize (University of Chicago), Carlos Pereyra Award (Nexos Foundation, México), National Essay Award (Federal Electoral Institute, Mexico), and the Accountability Award (Chamber of Federal Deputies, Mexico). Eduardo Guerrero has held executive posts at the Ministry of Social Development, the Federal Institute of Access to Information, and the Federal Electoral Institute. Eduardo Guerrero has also held advisory posts at the Office of the President, the Center for Investigation and National Security, and the Chamber of Deputies. At present, Eduardo Guerrero is partner of Lantia Consultores (*www.lantiaconsultores.com*), a consultant firm in public affairs. The author would like to thank the valuable support he received from Eunises Rosillo, Roberto Arnaud and Roberto Valladares in preparing this survey.

ACRONYMS

AFI	Agencia Federal de Investigación [Federal Investigation Agency]
ATF	U. S. Bureau of Alcohol, Tobacco, Firearms, and Explosives
CIDAC	Centro de Investigación para el Desarrollo [Research for Development Center]
CISEN	Centro de Investigación y Seguridad Nacional [Investigation and National Security Center]
CONADIC	Consejo Nacional de Adicciones [National Addictions Council]
CSN	Consejo de Seguridad Nacional [National Security Council]
FASP	Fondo de Aportaciones a la Seguridad Pública [Public Security Contributions Fund]
ICESI	Instituto Ciudadano de Estudios Sobre la Inseguridad [Citizens Institute for Security Studies]
INEGI	Instituto Nacional de Estadística y Geografía [National Institute of Statistics and Geography]
INM	Instituto Nacional de Migración [National Migration Institute]
INSYDE	Instituto para la Seguridad y la Democracia [Institute for Security and Democracy]
NAFTA	North America Free Trade Agreement
NDIC	U. S. National Drug Intelligence Center
PF	Policía Federal [Federal Police]
PFP	Policía Federal Preventiva [Federal Preventive Police]
PGR	Procuraduría General de la República [General Attorney Office]
PJE	Procuraduría de Justicia del Estado [State Attorney Office]
SAT	Servicio de Administración Tributaria [Tax Service Administration]
SEDENA	Secretaría de la Defensa Nacional [Secretary of National Defense]
SEGOB	Secretaría de Gobernación [Secretary of the Interior]
SEMAR	Secretaría de Marina [Secretary of the Navy]
SHCP	Secretaría de Hacienda y Crédito Público [Secretary of Finance]
SIEDO	Subprocuraduría de Investigación Especializada en Delincuencia Organizada [Specialized Deputy Attorney on Organized Crime Investigation]
SNSP	Sistema Nacional de Seguridad Pública [Public Security National System]
SRE	Secretaría de Relaciones Exteriores [Secretary of Foreign Affairs]
SS	Secretaría de Salud [Secretary of Health]
SSP	Secretaría de Seguridad Pública [Secretary of Public Security]
USAID	United States Agency for International Development

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EXECUTIVE SUMMARY

1. *Instability and lack of coordination remain endemic in federal, state and municipal public security institutions.* Top level members from security ministries, police departments and the National and State Attorney bureaus change constantly due to dismissals, resignations, arrests and homicides. For example, in August 1st, 2011, 21 state delegates of the Attorney General's office resigned simultaneously. On the other hand, regarding the lack of coordination, one important factor is that Federal Government authorities did not build broad coalitions with governors and mayors to support his security strategy.

2. *While the security budget has substantially increased during the last four years, this expenditure remains largely unaccountable.* PGR, SEGOB and SSP received the largest increases in the 2011 Federal Budget, so it follows that the year's priorities were to improve law enforcement and the Federal Police. Expenditure in security institutions remains largely unaccountable and there are no reports or indicators that assess the effectiveness of these expenditures. Opacity is also prevalent at the state and municipal level, and the states with the highest violence levels and criminal incidence are not the ones that spend the most in the security sector.

3. *The ineffective Mexican criminal justice system is undergoing an ambitious reform, but the Federal Government and the states are not devoting enough resources to implement it in a timely and sound fashion.* In 2008 Mexico introduced a set of legislative changes aimed at improving its criminal justice system, including the introduction of oral adversarial trials. Although some progress has been achieved there are still major challenges for a full-fledged implementation of these reforms. Delays in the reform of the regulatory framework and in personnel training —as well as lack of resources— are the main challenges for a timely implementation of the criminal justice system reform. The goal is to fully implement these reforms by 2016. By January 2011, six out of 32 states were in the final stage to implement the criminal justice system reform (they had started personnel training and were already building the facilities needed for oral trials).

The new criminal justice system was already working in another state (Chihuahua).

4. *State and local police departments are not making progress towards professionalization.* A large proportion of municipalities —including several with the highest criminal incidence and violence levels— have police to population ratios below recommended thresholds (defined using a methodology that takes into account police and military casualties). Additionally, only 8.6 percent of state police officers and 34.3 percent of municipal police officers were evaluated between 2008 and 2010.

5. *The Single Police Command Bill, as proposed by President Calderon, is stopped in Congress. However, some states are moving towards a unified state police structure.* The bill proposed by the President aimed to integrate each of the 32 state police corps under a single command, supported by the Federal Police (PF). This bill was rejected by mayors because they considered that it undermined municipal autonomy. This bill implies amending several constitutional articles related to municipal functions and responsibilities. Hence, its approval requires lengthy processes of negotiation among political actors. These two factors have stopped the bill in Congress. However, at the state level governors are supporting the idea of a single police command and respectively have promoted it. Currently, states like Coahuila, Veracruz, Chihuahua and Nuevo León have passed laws to create a single state police force, and in some of them this force is already operating.

6. *Cartels are expanding to a new set of criminal activities and specialized local criminal organizations are emerging in some regions of the country.* Some Mexican cartels have expanded their business activities from drug trafficking to human smuggling and oil and fuel theft. Depending on the role they play in the drug trafficking business these criminal organizations may be identified as:

- National cartels (Sinaloa, Los Zetas and Golfo).
- Toll collector cartels (Tijuana and Juárez cartels).
- Regional cartels (Los Caballeros Templarios and Cártel del Pacífico Sur).
- Local organizations (64 across the country).

The first three types of cartels exercise violence mainly through executions of rivals, clashes with other organizations or authorities, and attacks to military and police facilities. This first type of violence is called *drug-trafficking ridden violence* because its main purpose is to maintain or gain control over drug trafficking routes, points of entry and exit, and distribution markets. A second type of violence is *mafia ridden violence*, and it is usually performed by local organizations and gangs through kidnapping, extortion and executions.

7. *The number of deaths is stabilizing at record high levels and more disruptive types of violence are emerging.* During the months previous to August 2011 organized crime-related violence upward trend flattened. If annual organized crime-related deaths remain stable, the death toll for the current six-year administration will total 64 thousand. The nature of organized crime-related violence is changing. This violence is becoming more geographically dispersed, more intrusive into

broad sectors of the economy and is provoking a higher incidence of some criminal activities that harm citizens the most (e.g., kidnapping, extortion and vehicle theft).

8. *Violence is spreading swiftly throughout the country and becoming endemic in several cities*. The progressive fragmentation of cartels in previous years has been followed by a process of dispersion of violence. In 2007, only 53 municipalities had at least one death per month on average. For 2011, 227 municipalities are expected to meet this condition. Moreover, organized crime-related deaths are following "epidemic" trends. This means that once the level of violence passes a statistical threshold (an event identified as "outbreak") it may well continue growing, stabilize, or even decrease marginally, but it remains well above the pre-outbreak level. Monterrey Metropolitan Area and Acapulco are two examples of large urban areas where violence epidemics started during 2010 (monthly average of organized crime-related deaths jumped from 7 to 66 in Monterrey Metropolitan Area and from 10 to 78 in Acapulco).

9. *Extortion accounts for an increasing share of organized crime-related violence*. Another distinctive feature is that violence, which earlier on was tightly linked to fights among drug-trafficking cartels, is increasingly the outcome of illegal protection markets. Organizations that engage in highly visible violence, develop intensive communication strategies, and try to intimidate business owners through arsons and drive-by shootings, are becoming more frequent as remnants of fragmented cartels turn into local mafias.

10. *A strategy based on the non-selective arrest of criminal leaders contributed to cartel fragmentation and the emergence of bloody conflicts among organizations*. The current administration has focused on striking criminal organizations through an intensive and non-selective arrest policy. The arrest (or killing) of kingpins, bosses and leaders was particular high in the 2008-2010 period, while other actions, such as drug seizures or crop eradication either remained stagnant or declined. Cartel fragmentation has been the most straightforward effect of the arrest policy. The number of DTO's that operate in Mexico grew from six in 2006 to 16 by 2011. The arrest policy has also had the effect of increasing violence, as divided organizations fight against each other for drug trafficking and other illegal activities rents. Data analysis also shows that the deployment of the military and the revamped federal forces —through "joint operations" in areas where criminal organizations have a stronger presence— have also caused an increase in violence.

11. *Without official recognition, in the last few months the Federal Government has moved towards a selective strategy to deter violence*. During the first four years of the current administration, actions against organized crime attempted to encompass all major criminal organizations. This strategy did not provide incentives for DTO's to restrain from intensive violence or to avoid high impact criminal activities (such as extortion or kidnapping for ransom). Some subtle changes in the official communication as well as a large scale operation that narrowly targets Zetas (the most violent large Mexican DTO) suggest that the Federal Government may finally be shifting the strategy in order to

focus on the most violent organizations and increase deterrence. The absence of official recognition of the strategy shift would allow the government to claim that improvements in security were the result of efforts performed during the entire administration.

12. *There has been a dramatic increase in illegal drugs production.* According to the United Nations Office on Drugs and Crime *World Drug Report 2011* the opium poppy cultivation in Mexico increased from 6,900 hectares in 2007 to 19,500 hectares in 2009. The same source shows that marijuana production in Mexico increased from 15,800 metric tons in 2007 to 21,500 metric tons in 2010. The World Drug Report 2011 also points out that Mexico remains a key transit country for South American cocaine shipments bound to the United States.

13. *While in-state drug production increases consumption, drug prices do not to have a similar effect.* The overall geographic distribution of drug production matches the states with the higher consumption rates. On the other hand, even though drug-dealers may use artificially low prices to "hook" new consumers, there is not a statistical relationship (either positive or negative) between drug prices and consumption levels at the state level.

14. *Violence and crime seem to be having an impact on public opinion.* The most relevant findings in relation to public opinion and the war against organized crime include the following:
- President Calderon approval has fallen to 54 percent from its 64 percent peak in May 2009.
- The most trusted public institution in Mexico is the army (32.3 percent), meanwhile police forces are among the least trusted institutions (6.5 percent), just above senators (5.8 percent) and deputies (5.3 percent).
- The 56 percent of the population thinks that the country is less safe because of the government strategies implemented against drugs and crime.
- States with the highest insecurity perception: Chihuahua (88 percent), D.F. (85 percent), Sinaloa (83 percent), Nuevo León (82 percent) and Durango (80 percent).
- Until January 2011 economic issues were the top concern. Since February 2011 security issues are considered the most worrisome. This trend has sharpened, in August 2011 Security Issues were 8 points above economic issues.
- Winners and losers: 29 percent of the population thinks that the army is winning, while 42 percent think that the drug traffickers are winning.

15. *The Federal Government has implemented a strategy to revert these public opinion trends in the context of an upcoming federal election in which the ruling party is lagging behind the front runner.* This strategy has included, among other elements, the following: broadcasting interrogations of high-profile cartel members, TV series about the federal police, and a media campaign intended to undermine criticisms to the government strategy.

DIAGNOSIS

1. SECURITY SECTOR

A. MAIN AREAS
FEDERAL LEVEL

In Mexico, security agencies have had to cope with the sustained strengthening of organized crime. National security and public safety responsibilities are carried out by the President and seven cabinet ministries.[1] However, some problems persist among security institutions like instability, duplicated responsibilities, and uncoordinated efforts across federal, state, and local authorities.

Five security agencies have experienced a high top level public official turnover. In the previous 57-month period, the following five agencies have switched their top officials: the Ministry of Interior (three times), PGR (three times), the National Public Security System (four times), the National Security Council (four times), and the PF (five times).[2] Duplicated responsibilities across agencies are caused by jurisdictional roles that are not clearly defined in the legislation, which in turn leads to overlapping jurisdictions.

Each of the houses of Congress has a Commission on Public Security, and there is also a Bicameral Commission on National Security. Formally, the policies and actions related to national security are subject to monitoring and evaluation from the Congress through the Bicameral Commission for National Security. But when the powers of the Bicameral Commission are reviewed, it is immediately perceived that legislative monitoring and the evaluation of decisions and actions on national security matters are a mere aspiration. Indeed, the powers of the Bicameral Commission are only directed at knowing the content of reports or projects or, at best, to request information. Therefore, the Commission lacks the necessary *de facto* powers to fully comply with its obligations to monitor and evaluate policies and actions related to national security.

So far, the only genuine, but limited, instrument of legislative oversight of national security agencies is the Chamber of Deputies Audit Agency, which reviews public accounts through financial audits related to performance.[3]

1. Secretary of the Interior (SEGOB), the Secretary of Public Security (SSP), the General Attorney's Office (PGR), the Secretary of Finance (SHCP), the Secretary of Foreign Affairs (SRE), the Secretary of National Defense (SEDENA), and the Secretary of the Navy (SEMAR). Two important security agencies are subordinated to a couple of these ministries: the main agency of civil intelligence (CISEN) is a branch of the SEGOB, and the Federal Police (PF) is a decentralized body of the SSP.
2. See Appendix I, Table 1.

STATE AND LOCAL LEVEL

The public security sector at the state level is typically composed by the public security secretary, the state attorney, the police corps (preventive and investigative) and the penitentiary system.

From July 2006 to February 2011 there have been 79 changes at top level state security agencies (through resignations, removals, casualties, deaths or even arrests).[4] The states with more than three top level staff changes during the reviewed period are Veracruz, San Luis Potosi, Quintana Roo, Tabasco, Oaxaca, Nayarit, Morelos, Aguascalientes, Durango, Guanajuato, Nuevo León, Chiapas, Baja California and Michoacán (the latter with 12 changes). At the municipal level there have been at least 158 changes of staff in high-level public security positions (mainly through resignations, removals, deaths and detentions). States with more than five changes in top level municipal staff are Durango (7), Guanajuato (7), Sinaloa (8), Tamaulipas (8), Quintana Roo (8), Chihuahua (9), Jalisco (10), Michoacán (15), Nuevo León (17), and Coahuila (19).

Municipal police departments are frequently the least professional and worst paid (the average wage for a municipal policeman is about half the wage a federal policeman earns). In municipalities with a strong presence of criminal organizations, the municipal police is frequently infiltrated.
The situation of the penitentiary centers is an acute security problem in all the states. Overcrowding and linkages between inmate groups and organized crime in these centers have compromised the control of the facilities to the extent that sometimes inmates carry out crimes outside the prison with the help of the authorities. For example, in July 2010 a group of inmates was allowed to leave the prison house to execute 17 people in Durango. The prison authorities did not only let the inmates leave the prison; they also lent them weapons and vehicles to commit the crimes. Also, in August 2011 there were 17 inmates dead in a fight in the Ciudad Juárez prison, all allegedly belonging to La Línea (the armed wing of the Juárez Cartel). This event revealed irregularities and corruption that allowed the entrance of at least two weapons to the prison every two weeks.

The levels of penitentiary overcrowding in Mexico can be illustrated with data. Average national prison overcrowding was approximately 30 percent in 2009, in 2010 it was 27.3 percent and it is 21.7 percent in 2011. The top ten states with the most severe problem of prison overcrowding in 2010 are Distrito Federal, Nayarit, Sonora, Estado de México, Jalisco, Morelos, Puebla, Chiapas, Guerrero and Tabasco. In these states, prison overcrowding ranges between 40 and 110 percent. The states with the largest penitentiary sub-population are Zacatecas, Tlaxcala and Michoacán, where the population is 35 percent below its total accommodation capacity.

3. Mexico, Cámara de Senadores. Retrieved from the Internet on September 6, 2010, http://www.senado.gob.mx/comisiones/LX/seguridadpublica/content/informe_plan/docs/plan_trabajo.pdf, Pp. 10-11.
4. Heads of the secretary of public security, the state and municipal police, and the state attorney office.

Table 1. Expenditure by Security Agency (in Millions of Pesos)

AGENCY	2007	%	2008	%	2009	%	2010	%	2011*	%
SEGOB	7,032.4	7.4	8,352.3	8.1	9,564.2	7.7	14,819.7	11.3	16,386.1	12.4
SEDENA	40,813.6	43.1	42,771.9	41.4	48,736.0	39.3	54,586.1	41.7	50,039.5	37.8
SEMAR	14,537.2	15.3	17,461.6	16.9	17,694.3	14.3	19,112.2	14.6	18,270.2	13.8
PGR	11,278.9	11.9	10,312.3	10.0	11,744.3	9.5	11,054.7	8.4	11,997.8	9.1
SSP	21,061.8	22.2	24,357.6	23.6	36,378.7	29.3	31,326.5	23.9	35,519.1	26.9
SEGOB (CISEN)	1,903.8	2.0	2,374.9	2.3	2,399.9	1.9	2,442.3	1.9	2,244.2	1.7
TOTAL	94,723.9	100.0	103,255.7	100.0	124,117.5	100.0	130,899.1	100.0	132,212.7	100.0
TOTAL (as percentage of total federal government expenditures)		4.1%		4.0%		4.7%		4.8%		5.0%

*Allocated budget.

Source: Presupuesto de Egresos de la Federación 2011 and Cuenta de la Hacienda Pública Federal, 2007, 2008, 2009, 2010. A discount factor, based on the National Index of Consumer Prices of January's each year, was used to calculate the budget amount at constant prices (2011 base year).

Note: In 2007 the total exercised budget was 2,283,774.3 million pesos, in 2008 it was 2,568,400.2 million pesos, in 2009 it was 2,666,412.7 million pesos, and in 2010 it was 2,740,494.6 million pesos. The total Federal Budget Expenditure in 2011 was 2,622,527.9 million pesos.

B. BUDGET
FEDERAL LEVEL

Table 1 shows that SEDENA receives the largest share of the security budget (around 41 percent), while SSP has experienced the largest budget increase in the last five years (from 22.2 percent of total security budget to 29.3 percent).

It is also striking to see the low amount of resources allocated to the national intelligence agency (CISEN) in comparison to the other security agencies over the 2007-2011 period (only 2 percent of the security budget). This is consistent with the federal strategic goal of developing a more professional and skilled federal police force. Finally, it is important to consider that total security expenditures ranged between 4.1 and 5 percent of federal budget from 2007 to 2011.

Almost all security agencies have seen a budget increase between 2008 and 2009 (in the cases of SSP and SEGOB the increase was 49.4 and 14.5 percent, respectively). The two agencies with the largest increases in 2010 were SEGOB and SEDENA, which suggests that these two agencies were top priorities for the current administration. However, during 2011 SEMAR, CISEN and SEDENA had a budget decrease between 4.4 and 8.3 percent, and, PGR, SEGOB and SSP had an increase ranging between 8.5 and 13.4 percent. Clearly the priorities during the year have been the improvement of police and security institutions.

Tables 3, 4, 5 and 6 in Appendix I show the differences between allocated resources and spent resources per agency in 2007, 2008, 2009 and 2010. In sum, in 2007 there was a 11.5 percent over-expenditure. Furthermore, SSP spent 29 percent more than its allocated budget for 2007. In 2008, SEMAR is the

Table 2. Annual Budget Variation by Security Agency

AGENCY	2008	2009	2010	2011*
SEGOB	18.8	14.5	54.9	10.6
SEDENA	4.8	13.9	12.0	-8.3
SEMAR	20.1	1.3	8.0	-4.4
PGR	-8.6	13.9	-5.9	8.5
SSP	15.6	49.4	-13.9	13.4
SEGOB (CISEN)	24.7	1.1	1.8	-8.1
TOTAL	9.0	20.2	5.5	1.0

*Allocated budget.

agency that spent more (13.2 percent more in relation to the allocated budget), while PGR spent 3.8 less of its allocated resources. For 2009, SEGOB and PGR spent less, with an 8 and 12 percent respectively. In 2010 there was an over-expenditure of 12.4 percent, SEGOB was the agency that spent more (70.6 percent in relation to the allocated budget), while PGR spent 9.6 percent less of its allocated budget.

STATE LEVEL

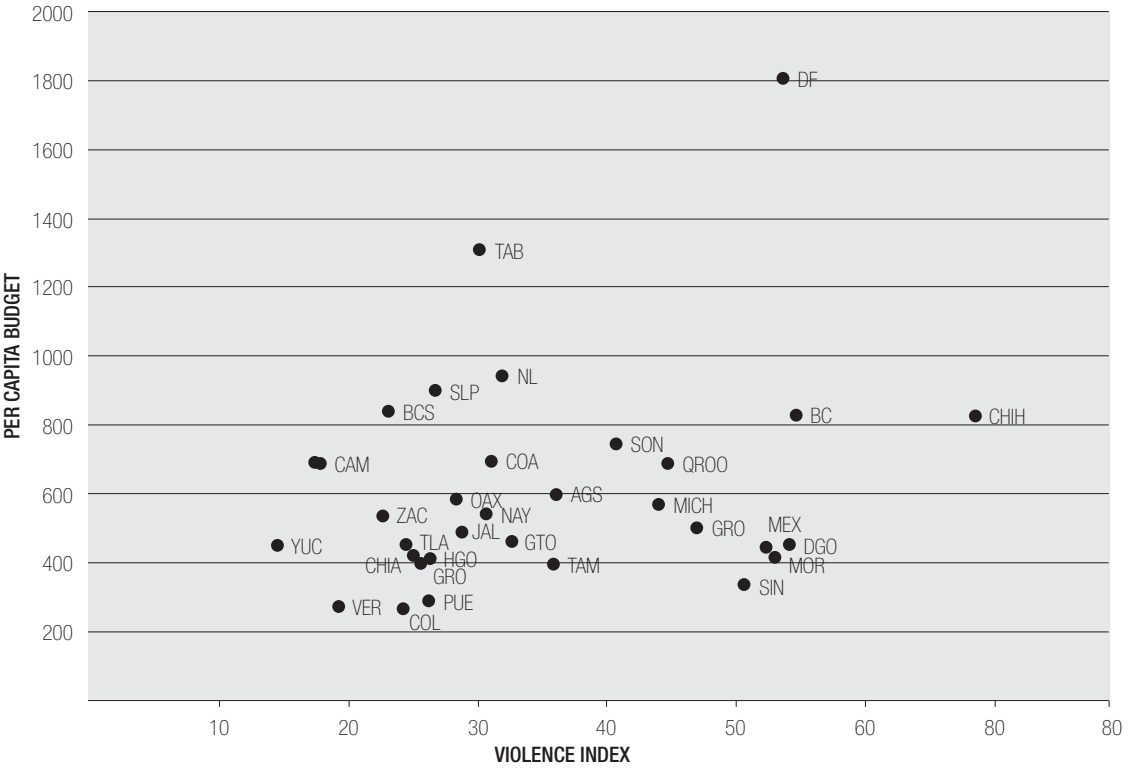
As shown on Table 7 of Appendix I, in 2011 the state with the largest expenditure on security and law enforcement in the country is the Distrito Federal. Its expenditure on security and law enforcement takes up the largest share of its total budget (11.7 percent).[5] The second largest amount spent by a state on security (as a percentage of its total budget) is Tabasco's 9.2 percent. A remarkable fact is that the D.F. spends 22.4 percent of the total security budget allocated to all states. In terms of per capita figures, in general, states spend more on public safety that in law enforcement, with the exception of Durango, Guanajuato, Queretaro, San Luis Potosi, and Sinaloa. The D.F. is the state that allocates the highest per capita budget to public safety, while Tabasco is the state that allocates the highest per capita budget to law enforcement. On one hand, 18 states are below the state average per capita budget. On the other hand, 15 states are below the state average per capita budget on law enforcement (see Appendix I, Table 8)

As shown on Figure 1, state level security spending is not statistically significant nor exist a strong correlation associated with state levels of insecurity and violence.[6] Note that there is no correlation between a high incidence of crime and violence (as displayed in Chihuahua, Baja California, Durango, Morelos, and Estado de México), and the proportion of the budget that each state allocates to security expenditure. D.F. is by far the jurisdiction with the largest *per capita* security and law enforcement budget and it is not the state with the highest incidence of insecurity and violence. This may be a result of its population density or that it is the country capital, and, as such, it needs to invest more in security and law enforcement.

The *Fondo de Aportaciones para la Seguridad Pública* (FASP) is a federal fund to transfer

5. As stated in Article 44 of the Mexican Constitution, the Distrito Federal is the seat of the Powers of the Union and capital of Mexico.
6. The state levels of insecurity and violence is measured by the Insecurity and Violence Index. This index consists in five indicators: incidence crime and victimization, violent crimes, organized crime, unintentional violence, and public perception (México Evalúa, 2010).

Figure 1. Per Capita Budget on Security and Law Enforcement *vis-à-vis* the Insecurity and Violence Index (2010-2011)



Source: Presupuestos de Egresos Estatales, 2011. Índice de Inseguridad Ciudadana y Violencia 2010, México Evalúa. http://mexicoevalua.org/descargables/551328_INDICE_INSEGURIDAD-VIOLENCIA.pdf

resources to each state's public security budgets. These resources are intended for recruitment, training, evaluation of public security human resources, police equipment, establishment of the national telecommunications network, and the national emergency telephone line.

During 2010 (January to June) a total of 4,150.1 million pesos were transferred to states through FASP, this is an average of 129.7 million dollars to each state. However, these funds registered high under-expenditure levels. For example in 2010 (January to June), only 21.7 percent of the FASP was spent.

According to the quarterly reports submitted to SHCP[7] in 2009, funds are not fully exercised due to excessive red tape. In 2010 some improvements in the regulatory framework were made in order to streamline cash flow and its application. However, it appears that the general practice is to receive the resources and use them during the next year.[8]

7. "Formato Único" annexes to each of the quarterly reports published online by SHCP. http://www.shcp.gob.mx/FINANZASPUBLICAS/Paginas/InformeTrimestral_2.aspx
8. "Evolución del Gasto Presupuestal del Ramo 36 Seguridad Pública 2001-2010", Centro de Estudios de las Finanzas Públicas, Cámara de Diputados, México, 2010. http://www.cefp.gob.mx/publicaciones/documento/2010/septiembre/cefp0152010.pdf

C. MILITARY AND POLICE FORCES

MILITARY FORCES

As shown in Figure 2, SEDENA personnel registered a gradual increase since 1990, from circa 151,000 soldiers to 206,000 soldiers in 2011. The increase in the number of soldiers means that, over a period of 22 years, the number of SEDENA available soldiers grew by 36.3 percent. In contrast with the ascending trend in SEDENA personnel, over the last 22 years the number of SEMAR personnel remained relatively stable.

The percentage of SEDENA staff that defects decreased from 12.2 percent in 2000 to 2.1 percent in 2010. Besides, in SEMAR this percent decreased from 4.8 percent in 2000 to 1.7 percent in 2010. These decreases have been the consequence of the improvement of wages and benefits. From 2006 to 2011, lower income staff saw their salaries increase by 124 percent. From September 2010 to June 2011 were granted 3,165 housing loans. From September 2010 to August 2011 7,347 scholarships for primary school and 5,901 scholarships for high school and college were awarded to children of military personnel.

POLICE FORCES

In total, there are 2,139 independent police agencies in Mexico, with jurisdiction at the federal, state, and municipal levels (see Table 3). Most policing services are provided at the state and local levels. In 2010, Mexico had approximately 531,078 federal, state and municipal police officers; 90 percent (479,647) of them were under the control of state and local authorities.[9] The remaining 51,431 officers are under federal control. During the last year, the number of state and municipal police officers increased from 479,647 in 2010 to 490,020 in 2011.

Of the universe of 2,453 municipalities in the country, 2,038 had a municipal police force (83 percent). A bill to integrate all municipal police agencies under 32 state commands has not been approved by the Senate (that received the bill, previously approved by the Chamber of Deputies, on Octorber 6th, 2010).

Federal Police

There was an increase in the number of federal police personnel over the 2009-2010 period (more than 10 percent). The number of migration police officers has shown a notable increase too (25.1 percent). In contrast, the number of ministerial police officers decreased by 1.4 percent. This reduction may be because the 2009 *Ley de la Policía Federal* gave investigative powers to the Federal Police. Finally, in 2010-2011 period, federal police decreased by 2.3 percent, while the number of guards in federal prisons increased by 17 percent; ministerial police decreased by 0.9 percent.

State and Local Police

From 2010 to 2011 the number of state and municipal police officers has increased

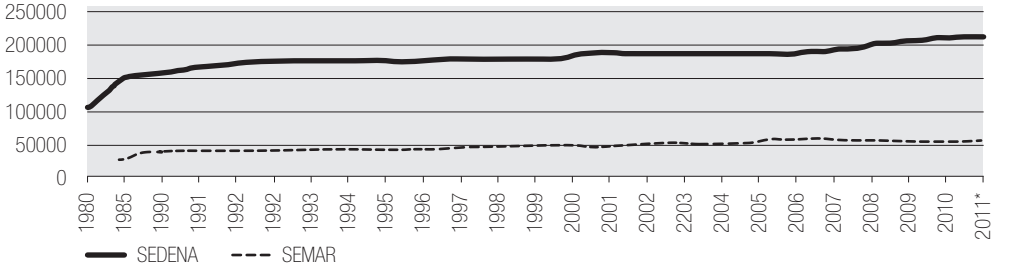
9. This figure results from adding up the elements of federal police (51,431), state police (308,759) and municipal police (170,888).

Table 3. Number of Police Agencies by Government Level (2009–2010)

	GOVERNMENT LEVEL	NUMBER OF POLICE AGENCIES
FEDERAL	Preventive, PGR (Judiciary), Migration	3
STATE	Preventive	32
	Judiciary	32
	Transit	11
	Bank, Commercial, Auxiliary	13
	Touristic, Rural, Others	10
MUNICIPAL		2,038
TOTAL		2,139

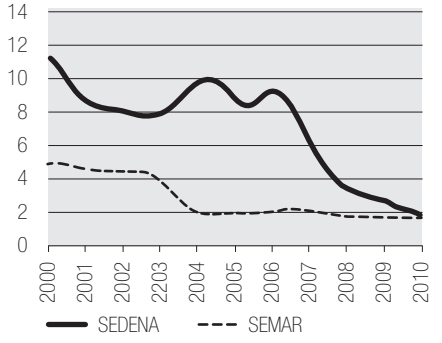
Source: Secretaría de Seguridad Pública, 2009. Information Request No. 2210300015709. *Milenio*, 27 June, 2010. http://impreso.milenio.com/node/8790670

Figure 2. Number of Military Personnel



* Preliminary figures for June 2011.
Source: Data from Felipe Calderón, *Quinto Informe de Gobierno* (Fifth Government Report).

Figure 3. Number of Military Personnel Defected



Source: Own elaboration with data from Felipe Calderón, *Cuarto Informe de Gobierno* (Fourth Government Report) and SEDENA.

only by 2.2 percent. Also, during this period the number of police officers decreased in states like Nuevo León (-6.9 percent), Tabasco (-4 percent) and Tamaulipas (-1 percent).

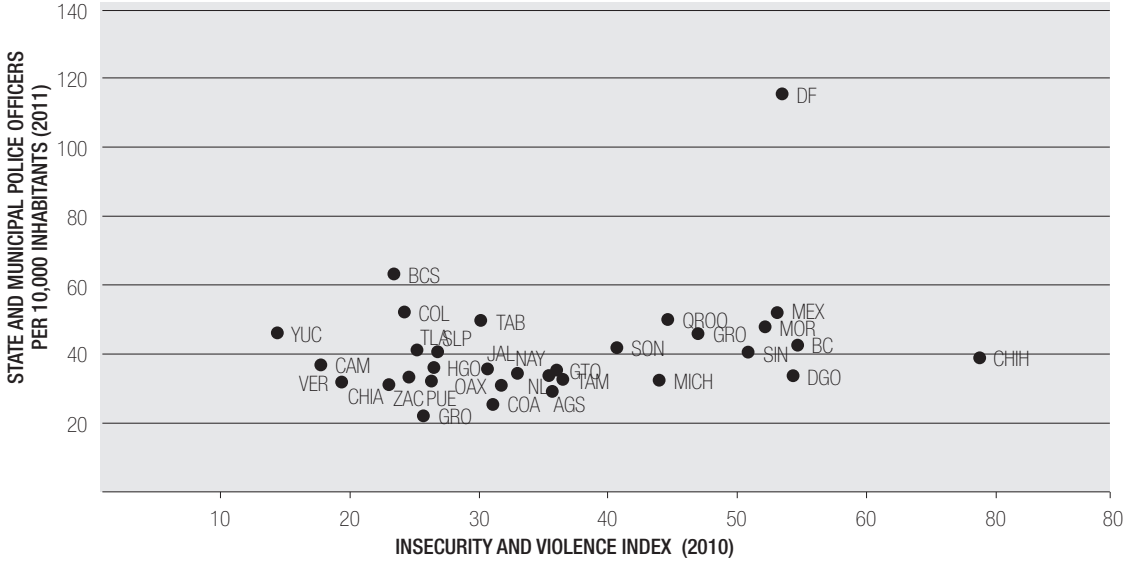
Figure 4 shows that there seems to be no strong correlation between the number of municipal and state police officers and criminal and violence incidence.

Table 4. Federal Police Personnel Variation (2007, 2009, 2010 and 2011)

	SSP						
FEDERAL POLICE AGENCIES	**2007**	**2009**	**% Variation**	**2010**	**% Variation**	**2011**	**% Variation**
Federal Police	21,761	32,264	48.3	35,464	9.9	34,646	-2.3
Federal Prison Guards	5,483	5,000	-8.8	5,765	15.3	6,743	17.0
TOTAL	27,244	37,264	36.8	41,229	10.6	41,389	0.4
	PGR						
Ministerial Police	7,992	4,974	-37.8	4,902	-1.4	4,857	-0.9
TOTAL	7,992	4,974	-37.8	4,902	-1.4	4,857	-0.9
	INM						
Preventive Police	2,832	4,298	51.8	5,378	25.1	ND	ND
TOTAL	2,832	4,298	51.8	5,378	25.1	ND	ND

Source: Own elaboration with data from Felipe Calderón, *Quinto Informe de Gobierno* (Fifth Government Report) and information from SNSP-CON, 2007, 2009 and 2010.
ND: No data available.

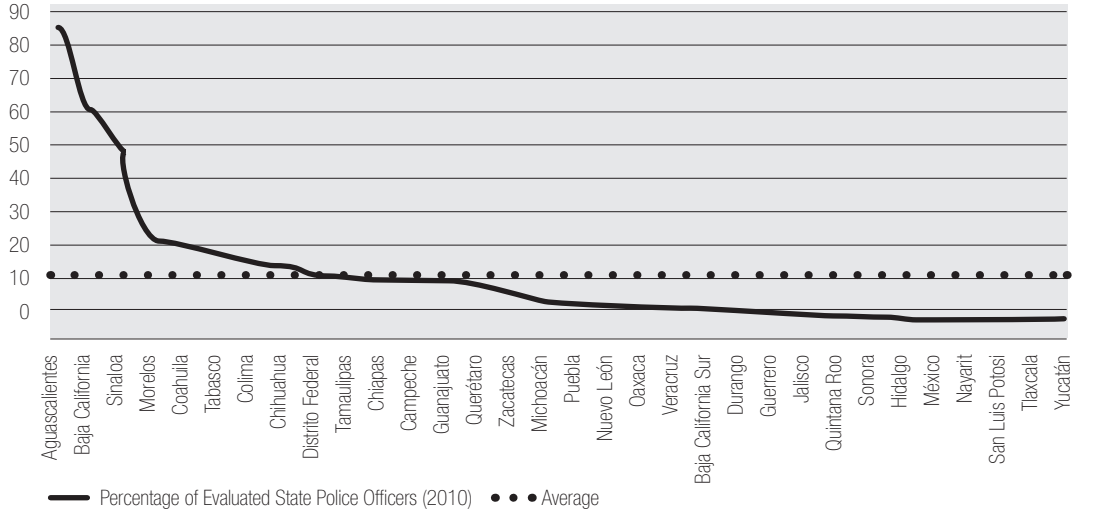
Figure 4. State and Municipal Police Officers per 10,000 Inhabitants and Criminal Incidence and Violence (2010–2011)



Source: Own elaboration with information from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2011, and Índice de Inseguridad Ciudadana y Violencia 2010, México Evalúa. http://mexicoevalua.org/descargables/551328_INDICE_INSEGURIDAD-VIOLENCIA.pdf

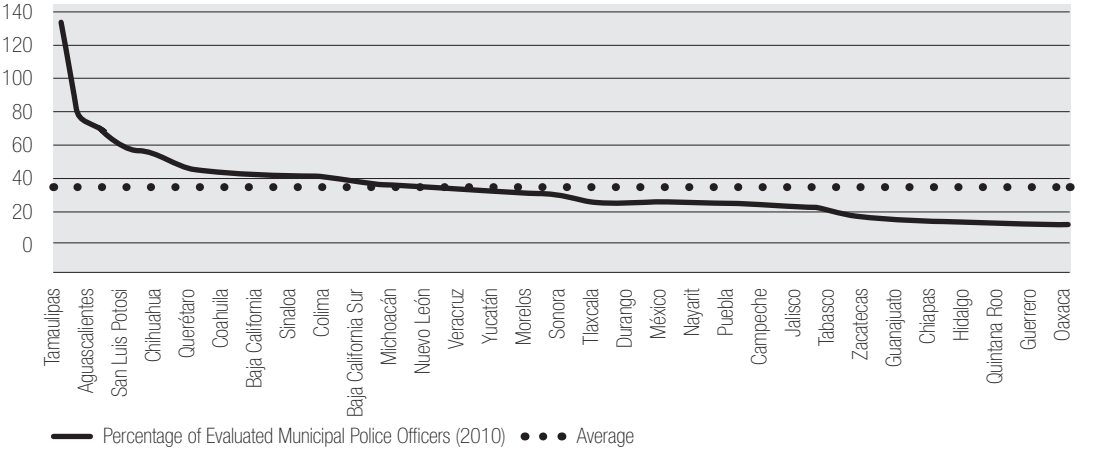
The lack of state and local police collaboration and involvement in the strategy against organized crime is clear when we observe the evolution of the number of state and municipal police officers evaluated in the last year. For example, as shown in Figure 5, Chihuahua (the most violent state in the country) evaluated, 2008 to 2010, only 11 percent of its police officers. Something similar happened in Tamaulipas, Michoacán, Nuevo León, Baja California Sur, Durango, Guerrero and Jalisco from 2008 to 2010. In

Figure 5. State Police Officers Evaluated (2008–2010)



Source: Own elaboration with data from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2010.

Figure 6. Municipal Police Officers Evaluated (2008–2010)



Source: Own elaboration with data from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2010.

all of these states there is a high presence of organized crime, and the efforts to strengthen police forces seem to be below requirements (just between 2 and 10 percent of its number of police officers are evaluated). In sum, only 8.6 percent of the total state police officers were evaluated from 2008 to 2010.

At the municipal level only 34.3 percent of municipal police officers were evaluated from 2008 to 2010. In Guerrero, Jalisco, Estado de México and Durango, where there is a high presence of organized crime, there have been evaluated among 11 and 26 percent of the municipal police officers. On the other

Table 5. Additional Forces Required in Each State According to Two Criteria

	STATE AND MUNICIPAL POLICE OFFICERS (2011)		DEFICIT OR SURPLUS OF POLICE IN BASE ON THE UN STANDARD (2.8 PER 1,000 INHABITANTS)	SECURITY FORCE REQUIRED (BASED ON MILITARY AND POLICE CASUALTIES IN 2010)		SECURITY FORCES PRESENT IN THE STATE (MILITARY AND POLICE)	DEFICIT OR SURPLUS OF MILITARY AND POLICE CASUALTIES IN THE STATE (TAKING INTO ACCOUNT POLICE AND MILITARY CASUALTIES)
	TOTAL	PER 1,000 INHABITANTS		TOTAL	PER 1,000 INHABITANTS		
STATE							
Aguascalientes	3,919	3.3	601	13.5	15,639	3,919	-11,720
Baja California	13,130	4.2	4,296	6.3	20,534	17,476	-3,058
Baja California Sur	4,069	6.4	2,285	2.8	1,622	4,169	2,547
Campeche	3,030	3.7	727	2.8	2,255	3,030	775
Coahuila	6,950	2.5	-745	18.4	48,854	7,270	-41,584
Colima	3,368	5.2	1,546	2.8	1,704	3,668	1964
Chiapas	16,229	3.4	2,799	6.9	31,583	16,229	-15,354
Chihuahua	13,306	3.9	3,768	19	65,029	22,360	-42,669
Distrito Federal	101,495	11.5	76,712	4.5	39,996	101,525	61,529
Durango	5,506	3.4	934	13.9	21,548	15,968	-5,580
Guanajuato	18,119	3.3	2,757	6.9	35,071	18,119	-16,952
Guerrero	15,038	4.4	5,549	14.2	44,377	22,638	-21,739
Hidalgo	9,466	3.6	2,004	2.8	6,814	11,066	4252
Jalisco	25,260	3.4	4,678	10.9	76,757	25,410	-51,347
México	72,456	4.8	29,964	4	59,455	72,556	13101
Michoacán	14,130	3.2	1,947	16.2	64,031	19,130	-44,901
Morelos	8,908	5.0	3,932	9.9	16,690	12,988	-3,702
Nayarit	3,825	3.5	787	33.5	32,592	3,825	-28,767
Nuevo León	14,244	3.1	1,214	11	49,711	16,874	-32,837
Oaxaca	13,081	3.4	2,436	2.8	9,936	13,081	3145
Puebla	18,165	3.1	1,981	7.6	43,463	18,215	-25,248
Querétaro	4,120	2.3	-998	11	19,215	4,370	-14,845
Quintana Roo	6,513	4.9	2,801	2.8	3,813	6,513	2700
San Luis Potosí	10,333	4.0	3,094	13.9	34,659	10,333	-24,326
Sinaloa	11,064	4.0	3,314	13.5	35,847	16,887	-18,960
Sonora	11,114	4.2	3,659	8.4	21,275	11,114	-10,161
Tabasco	10,882	4.9	4,614	2.8	5,770	10,882	5,112
Tamaulipas	10,456	3.2	1,304	24.8	80,075	11,411	-68,664
Tlaxcala	4,673	4.0	1,397	2.8	3,219	4,673	1454
Veracruz	23,537	3.1	2,136	6.1	44,754	23,537	-21,217
Yucatán	8,946	4.6	3,470	2.8	5,448	8,946	3,498
Zacatecas	4,688	3.1	514	12.6	17,330	4,688	-12,642

Source: Own elaboration with information from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2011.

hand, Chihuahua has evaluated 61 percent of its municipal police.

Chihuahua (the most violent state in the country from 2008 to 2010) did not increase its number of police officers between 2007 and 2009, probably because of a higher federal police presence. However, during 2010 the number of police officers in this state increased by 397 percent. Something similar happened in Baja California Sur, Durango, Baja California, Nayarit and Quintana Roo between 2009 and 2010. In all of these states their number of state police officers increased at least eight times. (See Appendix I, Table 11)

In contrast with the increase of 65 percent in the state police corps from 2009 to 2010, municipal police forces increased only 7.2 percent during the same period. The only state that notably increased its number of municipal police officers was Chihuahua (the most violent state in the country) by 61.9 percent (see Appendix I, Table 12).

The states that have a figure of state and municipal police officers (per 1,000 inhabitants) below the UN recommended average are Coahuila and Querétaro. This means that 30 out of 32 states are above the UN recommended average.

Table 5 shows Goode's formula, a calculation of the size of the security force required based on a metric that takes into account the casualties among police and military forces, the current security force in the states (adding up members of the federal police and military forces) and, finally, the shortfall in the security forces, based on the metric mentioned.[10] According to Goode's formula, the more intense the "insurgency" (understood as an uprising against established authority), the greater the force that will be required to turn back the increase in violence. Among the 10 states that, according to this criterion, need to drastically boost the number of military and police forces are Tamaulipas, Jalisco, Chihuahua, Michoacán, Estado de México, and Nuevo León. According to the criterion of police and military casualties, these states need more security forces than Coahuila, Veracruz, Guerrero, and Puebla.

10. Steven M. Goode, "A Historical Basis for Force Requirements in Counterinsurgency", in *Parameters*, Winter 2009-2010, pp. 45-57. Goode´s formula is as follows: [1.2 (Numbers of deaths of members of the security forces per million population / Proportion of security forces located in the region) $^{0.45}$] + 2.8.

2. THE DYNAMICS OF MEXICAN ORGANIZED CRIME

Criminal organizations are companies that provide illicit goods and services for which there is a high demand. Two essential features allow these companies to operate successfully: the exercise of violence and the exercise of bribery. The first one allows them to maintain internal discipline, resolve disputes, prevent the entry of competitors, monitor their territory, and respond to military or police harassment. The ability to corrupt, in turn, decreases or neutralizes the government's action against the organization, which reduces the incentives of its members to defect and strengthens internal cohesion.[11]

Modus Operandi of Cartels

Within the Mexican illegal drug market four types of drug trafficking organizations (DTO's) coexist. The following typology was made according to the role that each organization performs in the drug market. These are described in Table 6.

Thus we have that national cartels, toll collector cartels and regional cartels exercise violence mainly through executions of rivals, and aggressions and clashes with other DTO's or authorities. This violence is mainly directed towards rival cartels and authorities and it is marginally exercised toward the civil society. This first type of violence is called *Drug-Trafficking Ridden Violence* because its main purpose is to maintain or gain control over drug trafficking routes, points of entry and exit, and distribution markets.

A second type of violence is *mafia ridden violence*. Local organizations and gangs usually perform this kind of violence through kidnapping, extortion and executions usually indistinctively directed towards rivals, authorities or citizens. When it is directed toward citizens, the main purpose is to gain profits given that these DTO's have a marginal role in the drug trafficking business. When directed towards rival gangs and authorities, the purpose of this type of violence is to keep or gain control over a limited territory (a few blocks or a neighborhood) in which the organization could run its illegal activities.

11. Gianluca Fiorentini and Sam Peltzman, "Introduction", in The Economics of Organized Crime, New York: Cambridge University Press.

Table 6. Drug Trafficking Organizations Typology

CATEGORY	DESCRIPTION	ORGANIZATIONS
National Cartels	Cartels control or maintain presence along routes of several drugs. They also operate important international routes to and from Mexico. These DTO's keep control of drug points of entry and exit in the country. However, they are interested in expanding their control toward new points of exit along the northern border, and this is why they currently sustain disputes with other cartels to control these border localities. These DTO's have presence in broad areas of the country and have sought to increase their profits they receive from drug trafficking through diversifying their illegal activities towards human smuggling and oil and fuel theft.	Sinaloa, Los Zetas and Golfo cartels, (though Golfo has a significantly less important role than the other two)
"Toll Collector" Cartels	These are the cartels whose main income comes from toll fees received from the cartels and regional cartels that cross drug shipments through their controlled municipalities along the northern border. As such, they receive a smaller proportion of profits from drug trading compared with the cartels. Given that these cartels are largely confined into some border municipalities, they cannot diversify their illegal activities as actively as the national cartels. If these cartels eventually lose control of their respective border areas they will either intensify their diversification efforts to other business (such as extortion or kidnapping) or they will disappear.	Tijuana and Juárez cartels
Regional Cartels	These DTO's keep limited control over segments of drug trafficking routes that pass along their territory. Like the toll collector cartels, the regional cartels play a secondary role in the drug trading business and receive small profits from it and have limited capabilities to diversify to other criminal business like human smuggling or oil and fuel theft.	Los CaballerosTemplarios and Pacífico Sur cartels
Local Organizations	These cartels are disbanded cells from fragmented national or regional cartels. These are locally based in a few contiguous localities that can extend to several states. Their business activities are mainly focused in drug distribution and dealing within their controlled municipalities, and have extended their illegal business towards extortion, kidnapping and vehicle theft.	La Resistencia, Cártel de Jalisco-Nueva Generación, Cártel del Charro, La Mano con Ojos, Los Incorregibles, La Empresa, La Nueva Administración, La Nueva Federación para Vivir Mejor, and Cártel Independiente de Acapulco, among others.

Regardless of the role that the organization performs in the drug trafficking business, or the kind of violence they exercise, cartels have a hierarchical structure of five levels. The first is the "bosses" level. On the second level are the specialized operators such as lawyers and accountants. On the next level are the lieutenants and gunmen leaders, known as "logistics operators"; gunmen are located in the fourth level. The lowest level is the operative base, composed by drug dealers, drivers and drug smugglers. Kinship and cronyism are important foundations for authority and legitimacy within the organization. Based on these criteria, the cartels are able to maintain high, though vulnerable, levels of cohesion and internal solidarity.

Geographical Location

Los Zetas and the Sinaloa Cartel are the DTO's with the most extended presence in the country, in 21 and 17 states, respectively. In seven states there is only one established drug cartel, these states are: Aguascalientes (Zetas), Baja California Sur, (Sinaloa),

Table 7. Cartel Presence per State (as of August 2011)[12]

STATE	ZET	SIN	GOL	CT	PS	CJ	LR	DC	LI	LE	MO	NA	JUA	TIJ	NF	CIA	TOTAL
Aguascalientes	X																1
Baja California		X												X			2
Baja California Sur		X															1
Campeche	X																1
Chiapas		X	X														2
Chihuahua		X											X				2
Coahuila	X		X														2
Colima		X				X	X										3
Distrito Federal	X	X		X	X			X			X	X					7
Durango	X	X															2
Guanajuato	X			X													2
Guerrero	X	X		X	X											X	5
Hidalgo	X			X													2
Jalisco	X	X				X	X										4
México	X	X	X	X	X			X	X	X	X	X					10
Michoacán				X					X	X							3
Morelos					X			X									2
Nayarit	X	X				X	X										4
Nuevo León	X		X												X		3
Oaxaca	X		X														2
Puebla	X	X															2
Querétaro	X	X															2
Quintana Roo	X																1
San Luis Potosí	X		X														2
Sinaloa		X			X												2
Sonora		X															1
Tabasco	X																1
Tamaulipas	X		X														2
Tlaxcala																	0
Veracruz	X																1
Yucatán		X	X														2
Zacatecas	X	X															2
TOTAL	21	17	8	6	5	3	3	3	2	2	2	2	1	1	1	1	

Source: Own elaboration with information collected from national and local newspapers.

Campeche (Zetas), Quintana Roo (Zetas), Sonora (Sinaloa), Tabasco (Zetas) and Veracruz (Zetas). Tlaxcala is the only state without record of stable drug cartel presence. The states with the largest presence of cartels are Estado de México (10), Distrito Federal (7), and Guerrero (5). The presence of just one cartel is relevant because territorial struggles between two or more cartels lead to higher levels of violence.

Evolution of Mexican Cartels

Over the last six years there has been an increase in the number of Mexican cartels. In 2006 there were six large cartels: Sinaloa, Juárez, Tijuana, Golfo, La Familia Michoacana and Milenio. By mid-2011 there are 16 cartels, of which seven play a significant role in the drug trafficking business, and nine are considered local organizations for its

12. Table Key: ZET: Zetas, SIN: Sinaloa, GOL: Golfo, CT: Los Caballeros Templarios, PS: Pacífico Sur, CJ: Cártel de Jalisco-Nueva Generación, LR: La Resistencia, LF: La Familia Michoacana, DC: Cártel del Charro, JUA: Juárez, MO: La Mano con Ojos, LI: Los Incorregibles, LE: La Empresa, TIJ: Tijuana, NA: La Nueva Administración, NF: LA Nueva Federación para Vivir Mejor, and CIA: Cártel Independiente de Acapulco.

marginal influence in the drug market (see table 8). The proliferation of cartels in 2011 was due to the fragmentation of large criminal organizations into smaller ones, usually due to the capture or decease of its leaders.

Fragmentation of the Beltrán Leyva Cartel

After the death of Arturo Beltrán Leyva in December 2009, the organization split into two factions: the Pacífico Sur Cartel, led by his brother Héctor and his lieutenant, Sergio Villarreal Barragán, aka "El Grande"; La Barbie Cartel, headed by Édgar Valdez Villarreal, aka "La Barbie" and Gerardo Álvarez Vázquez, aka "El Indio". These two factions began to fight for control over some municipalities in Estado de México, Morelos and Guerrero. However, by mid-2010 all the leaders of these cartels —with the exception of Héctor Beltrán Leyva— were detained.

The detention of the cartels' leadership divided, once more, the structures of the organizations. From the Pacífico Sur Cartel, La Mano con Ojos and La Nueva Administración emerged, with presence in Estado de México and Distrito Federal. La Barbie Cartel disappeared and from it emerged the Cártel Independiente de Acapulco and Cártel del Charro —the latter leaded by the father-in-law of Édgar Valdez Villarreal, Carlos Montemayor, aka "El Charro", who was also detained in November 2010.

Fragmentation of La Familia Michoacana

After de death of Nazario Moreno González, aka "El Más Loco", La Familia Michoacana began a restructuration period. In January 2011 *narcobanners* appeared claiming that the organization had disbanded. However, it was reported that the cartel fragmented in two groups, one under control of José de Jesús Méndez, aka "El Chango", and the other led by Servando Martínez, aka "La Tuta", and Enrique Plancarte Solís, aka "La Chiva". This latter faction announced in March 2011 that it would operate under the name of Los Caballeros Templarios. This new organization combines most of the former La Familia Michoacana members and operates the majority of the business of the extinct organization. After the death of Nazario Moreno also emerged two cells from La Familia Michoacana that operate in Estado de México and Michoacán, these groups are Los Incorregibles and La Empresa.

Fragmentation of Cártel del Milenio

In May 2010 Juan Nava Valencia, aka "El Tigre", leader of the Milenio Cartel, was detained. This detention provoked the division of his organization into two groups. One group allied itself with members of La Familia Michoacana and Golfo operating in Jalisco and Colima, and formed La Resistencia. The other group included the Milenio Cartel members allied to the

deceased Ignacio Coronel Villarreal, aka "Nacho Coronel", and it was called Cártel de Jalisco-Nueva Generación. These two factions are fighting over control of Jalisco, Colima and Nayarit.

La Nueva Federación para Vivir Mejor

This small organization only has presence in the city of Monterrey. It appeared in January 2011. Members of the Sinaloa, La Familia Michoacana and Golfo cartels created it to fight against Los Zetas.

Intercartel conflicts and alliances

Between 2010 and 2011, the number of intercartel conflicts has grown from seven to 11 (see Appendix I. Figure 7). Yet, as the number of conflicts between cartels has increased so has the number of alliances among them. Each cartel is continually looking for ways to geographically expand its presence and control new points of entry/exit and transport routes. This leads to local alliances among cartels as a way to ensure safe passage through certain areas or to counterbalance rival cartels. In 2007 there were two large cartel alliances (Sinaloa and Juárez; Golfo and Tijuana); in 2011 there are still two large national alliances (one headed by the Sinaloa Cartel and the other by Los Zetas), and several local alliances (for example, in Nuevo León, Golfo is allied to Sinaloa in the fight against Los Zetas; in Tijuana, the Tijuana Cartel is allied to Los Zetas to fight against Sinaloa). The Sinaloa and Zetas cartels are the most active alliance-seeking organizations because they have national presence and, therefore, they have interests over extended areas of the national territory. Also, they have the largest capabilities in terms of equipment, personnel, and vehicles.

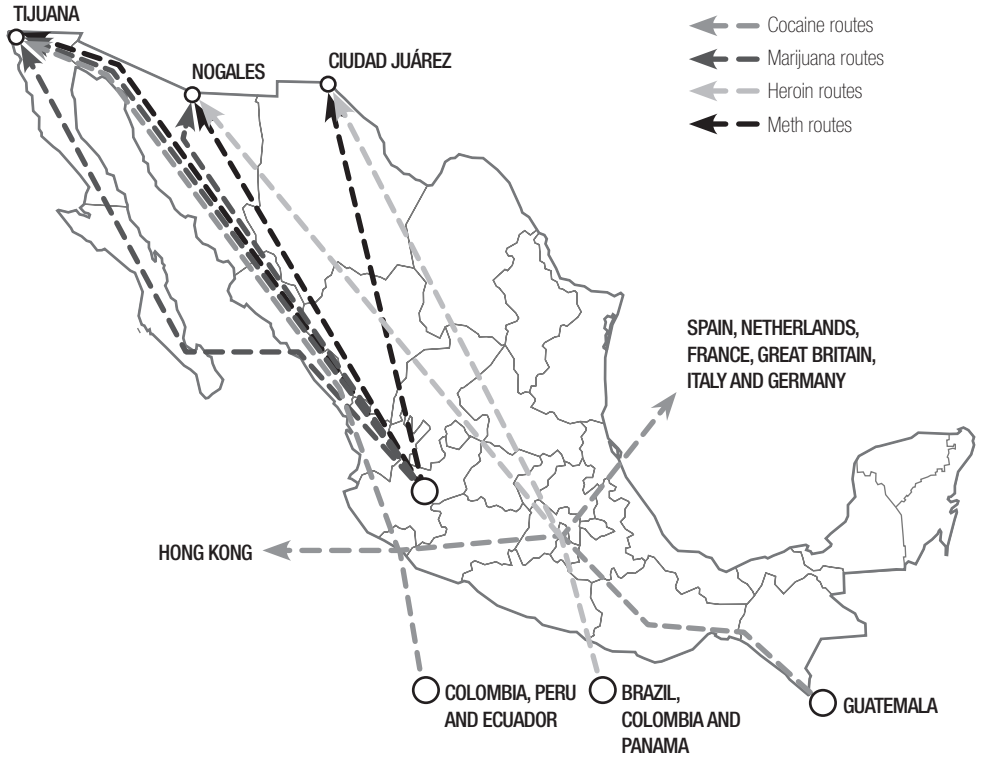
A. NATIONAL CARTELS

SINALOA CARTEL

In the breakup of La Federación in 2008, the Sinaloa organization managed to maintain its cocaine smuggling routes from South America to the United States and emerged as Mexico's single most powerful trafficking organization. The Sinaloa Cartel, headed by Joaquín Guzmán Loera, aka "El Chapo", Ismael Zambada, aka "El Mayo", and Juan José Esparragoza Moreno, aka "El Azul", operates in about 17 Mexican states. Additionally, the organization has expanded operations throughout Latin America and is believed to be the largest purchaser of Peruvian cocaine.

Since 2008 the Sinaloa Cartel has been locked in a deadly battle against the Juárez and Tijuana organizations. While the conflict is largely about access to the U.S. market via the Juárez-El Paso and Tijuana-San Diego corridors, there are also elements of reputation building and personal rivalries among the organizations that help explain the sustained and brutal nature of the killings in these two areas. The

Map 1. Sinaloa Cartel Drug Trafficking Routes



Sinaloa Cartel appears to have the upper hand in both conflicts because it has been able to extend its presence in both Chihuahua and Baja California, as well as to small towns along the Rio Grande formerly under rival control. Nevertheless, the Sinaloa Cartel has not yet gained control over Juárez or Tijuana.

The Sinaloa Cartel is the only Mexican DTO that traffics all drugs by all means: land, air or sea. It controls all marijuana shipping routes by sea. Sinaloa Cartel trafficking routes are depicted in Map 1. Due the need to increase its income to fund its army, the organization expanded into other illicit activities such as human smuggling through the Sonora-Arizona border. However —unlike other organizations— the Sinaloa Cartel does not relies on migrant kidnapping as a gunmen recruitment source. The Sinaloa Cartel also plays a major role in the highly lucrative oil and fuel theft business. Since the demise of the Beltrán Leyva organization in 2010, the Sinaloa Cartel has claimed almost total control over illegal activities in the state of Sinaloa. From January to May 2011, Sinaloa was the state where more illegal pipelines were found.[13]

LOS ZETAS

As Los Zetas grew more powerful and autonomous, their relationship with the Golfo Cartel deteriorated. In early 2010 Los Zetas split from the Golfo Cartel and they now seem

13. 138 illegal pipeline connections were found in Sinaloa, followed by Veracruz (79), Tamaulipas (40), Coahuila (33), and Nuevo León (29). Despite reductions in the amounts of oil and fuel illegally subtracted from Pemex pipelines since 2008, this activity has grown considerably during 2011: from January to April 969,120 barrels, have been illegally subtracted, which represent a 49 percent increase compared with the amount of barrels subtracted during the same period in 2010. Pemex, June 2011, "Combate al Mercado Ilícito de Combustible", retrieved from Internet in September 5, 2011: http://goo.gl/W4JvV

Map 2. Los Zetas Drug Trafficking Routes



to have the upper hand in some areas, wresting control from the Golfo Cartel in Tamaulipas and Nuevo León. Additionally, Los Zetas have effectively expanded their control over illegal activities throughout Veracruz.

Los Zetas are the second most important national cartel in terms of drug trafficking: this organization smuggles cocaine and marijuana, within Mexico and abroad, and controls several drug entry and exit points (see Map 2). Additionally, they have also stretched their criminal enterprises to include human trafficking and fuel theft. In order to broaden access to the US (so far Nuevo Laredo is the only town along the border where the cartel has predominance), Los Zetas are fighting against the Golfo Cartel over Matamoros, Reynosa and Frontera Chica in Tamaulipas.[14] Los Zetas are currently smuggling cocaine through Tijuana —a location far from their sphere of influence— in order to diversify its trafficking routes.

Los Zetas also control an extensive human smuggling network along the Gulf of Mexico. Los Zetas extort *polleros* (migrant smugglers) and force migrants to carry small amounts of drugs to the United States (nevertheless this sort of drug trafficking is not efficient since a single person can only carry a small amount of drugs and runs a high risk of interdiction). Los Zetas also recruit migrants forcefully to work for them. Recently, *narcofosas* (mass graves) have been discovered in some of the municipalities where Los Zetas operate. Los

14. "Frontera Chica "Includes the municipaltities of Mier, Nueva Ciudad Guerrero, Miguel Alemán, Camargo and Díaz Ordaz.

Map 3. Golfo Cartel Drug Trafficking Routes



Zetas have also resorted intensively to oil and fuel theft —especially in Veracruz— as an additional income source.

GOLFO CARTEL

One of the major events in the Mexican organized crime landscape during 2010 was the breakdown between the Golfo and Los Zetas cartels. This breakdown has resulted in a spike of violence in the Northeastern corridor of Mexico, and has led to a new alliance between the Golfo and (its former rival) Sinaloa Cartel. The Golfo Cartel has been severely weakened due to its conflict against Los Zetas and now it relies heavily on its new ally. Its control over illegal activities is currently circumscribed to the Tamaulipas-Texas border, specifically in the area known as Frontera Chica, and Reynosa and Matamoros. The survival of the Golfo Cartel largely depends on its ability to retain this stronghold, especially the cities of Matamoros and Reynosa, which are important exit points for drugs bound to the US. The Golfo and Sinaloa cartels alliance is currently trying to beat Los Zetas in Monterrey. If they succeed, Golfo will attempt to beat Los Zetas in Nueva Laredo and regain preponderance throughout Tamaulipas and Nuevo León.

The Golfo Cartel primarily trafficks cocaine and marijuana and it also works as a "toll collector" organization that charges fees

to Sinaloa Cartel's marijuana shipments. It also takes part in human smuggling in a fashion similar to Los Zetas (income from *pollero* extortion and forceful recruitment of migrants). However, due to its limited geographic scope, Golfo Cartel focuses on seizing buses with migrants on board in Nuevo León and Tamaulipas roads. The Golfo Cartel also controls a small share of the oil and fuel theft business in some areas of Nuevo León and Tamaulipas.

B. TOLL COLLECTOR CARTELS[15]

TIJUANA CARTEL

Since the detention of Eduardo Arellano Félix in October 26, 2008, leader of the Tijuana Cartel, the organization began a declining trend. The detention of Arellano Félix led to a split between two factions, one led by Luis Fernando Arellano Félix, and the other by Teodoro García Simental, aka "El Teo". The Sinaloa Cartel took advantage of this rupture and formed an alliance with "El Teo" against the remnants of the Tijuana Cartel. Tijuana, a city bordering San Diego, is a hotly contested spot between DTO's because it is one of the most important points of entry to the United States. At the moment, Luis Fernando Sánchez Arellano and his aunt, Enedina, command the Tijuana Cartel. The conflict between this organization and the Sinaloa Cartel continues because the former is still the predominant criminal organization in the Tijuana Metropolitan Area. Nonetheless, the Sinaloa Cartel has a dominant position in the rest of the Baja California Peninsula. If Sinaloa Cartel defeats the Tijuana Cartel, the latter will most certainly fragment into local criminal cells engaged in drug dealing, kidnapping and extortion.

The Tijuana Cartel plays a minor role in the drug trafficking business as a toll collector cartel. It receives toll fees for crossing to the US cocaine, marijuana, heroin, and methamphetamine shipments from the Sinaloa, Los Zetas, Los Caballeros Templarios, and Pacífico Sur cartels. It also smuggles migrants though tunnels that link Tijuana and San Diego. Finally, the Tijuana Cartel may steal oil and fuel from illegal connections from two pipelines in Northern Baja California.

JUÁREZ CARTEL

The Juárez Cartel had a longstanding alliance with the Beltran Leyva Organization and, since 2010, allied itself with Los Zetas and the Tijuana Cartel in an effort to hold off the aggressive challenges from the Sinaloa Cartel. Ciudad Juárez is another key point of entry for drug to the United States, and it is violently contested between the Juárez and Sinaloa cartels. The Juárez Cartel has been worn down by the conflict and is increasingly relying in domestic drug sales —assisted by local gangs— as a revenue source. As a toll collector cartel, the Juárez DTO only operates a small trafficking network in the municipalities of Chihuahua, Cuauhtémoc and Juárez. In Juárez this DTO smuggles all kinds of drugs from the Sinaloa, Los Caballeros Templarios, and Pacífico Sur cartels to El Paso, Texas.

15. For toll collector cartels, regional cartels, and local organizations, the Maps in Appendix I show each DTO's drug trafficking routes, human smuggling networks and oil theft points.

There are about 30 gangs considered highly dangerous in Ciudad Juárez. The extended presence of gangs in Ciudad Juárez has provoked that these were recruited by the DTO's operating in the area as drug dealers, distributors and hitmen. The Juárez Cartel has relied on Los Aztecas gang in the drug dealing business in Ciudad Juárez. This has had the effect of increasing violence in the city, as well as drug consumption.

C. REGIONAL CARTELS

LOS CABALLEROS TEMPLARIOS

Since the death of one of its leaders, Nazario Moreno González, aka "El Más Loco", in December 9, 2010, the organization formerly known as La Familia Michoacana, began a period of fractures and reorganization. In January 2011 *narcobanners* appeared in Michoacán announcing the dissolution of La Familia Michoacana, and in March appeared messages proclaiming the presence of a new organization called Los Caballeros Templarios. Apparently after the death of Moreno, José de Jesús Méndez, aka "El Chango", tried to reorganize the remnants of La Familia Michoacana through an alliance with Los Zetas. Méndez was detained in June 2011 and it is likely that the cells under his influence disbanded. Some official reports indicate that Servando Gómez Martínez, aka "La Tuta", leader of the now extinguished La Familia Michoacana, is the current leader of Los Caballeros Templarios. This organization is trying to reorganize La Familia Michoacana fragmented cells and is controlling some of its former drug routes.

Los Caballeros Templarios do not participate in the cocaine market, however, they traffic marijuana, heroin and methamphetamines. La Familia Michoacana also developed the capacity to produce crystal meth, marijuana and opium poppy plants. This DTO has specialized in methamphetamine production and smuggling (reportedly for sale in the US only) and is also a vigorous trafficker of marijuana and heroin. This organization does not exert control over any drug entry or exit point and, though it is present in Acapulco, it does not operate here independently because the city is contested among several organizations. Los Caballeros Templarios only control segments along drug routes and they have to pay toll fees to cross drugs to the United States. They also run oil and fuel smuggling operations in Estado de México, Guanajuato, Michoacán, Puebla, and Querétaro.

PACÍFICO SUR CARTEL

Since the death of Arturo Beltran Leyva in December 2009, the Beltran Leyva Cartel began to crumble. In its place a new group emerged: the Pacífico Sur Cartel. In all likelihood, this organization is headed by Héctor Beltran Leyva (Arturo's brother). After Héctor took over the family business he began to fight for control of the organization with Edgar Valdez Villarreal, aka "La Barbie" —former head of the Beltrán Leyva Organization in Cuernavaca and Acapulco, and the leader of the organization's gunmen structure.

Héctor Beltrán Leyva rebranded his organization as Cartel Pacífico Sur, established an alliance with Los Zetas and adopted a new strategy in order to fight larger and better-established organizations. In 2010 the Beltrán Leyva Organization split in five DTO's: Pacífico Sur Cartel, Cártel Independiente de Acapulco, La Mano con Ojos, Cártel del Charro, and La Nueva Administración. At the moment the Pacífico Sur organization is the most consolidated of them and is fighting against the other factions to control criminal activities in Cuernavaca, Acapulco, and some municipalities of Estado de México surrounding Distrito Federal. Like its former ally, the Sinaloa Cartel, the Pacífico Sur Cartel trafficks four types of drugs: cocaine, marijuana, heroin and methamphetamines.

D. LOCAL ORGANIZATIONS

Local organizations frequently consist of disbanded cells from large cartels. The business activities of these DTO's are focused mainly in drug distribution and dealing within their controlled municipalities, and have extended their illegal business towards extortion, kidnapping, and vehicle theft. Currently 64 organizations have been identified within this category. However, this report analyzes just nine of them —the ones that used to be part of one of the large six cartels that controlled drug trafficking in Mexico in 2006 and, as such, their origins can be traced. These are the following: La Resistencia, Cártel de Jalisco-Nueva Generación, Cártel del Charro, La Mano con Ojos, Los Incorregibles, La Empresa, La Nueva Administración, La Nueva Federación para Vivir Mejor, and Cártel Independiente de Acapulco. (See Map 12 and Table 16 in Appendix I).

These organizations are involved in intense fights —mostly at the municipal level— against other bands, criminal gangs and DTO's. In Central Mexico (Distrito Federal, Estado de México and Morelos) the organizations fighting against each other are La Nueva Administración, La Mano con Ojos, Cártel del Charro, Los Incorregibles, La Empresa, Los Caballeros Templarios, and Cártel del Pacífico Sur. The violence produced by these conflicts has appeared in Cuernavaca, and the municipalities of Estado de México bordering Distrito Federal. In Acapulco, the Cártel Independiente de Acapulco is fighting against Los Zetas, Sinaloa and Los Caballeros Templarios. La Resistencia, the Cártel de Jalisco-Nueva Generación, Los Zetas and Sinaloa are fighting to control the western region of Jalisco, Colima and Nayarit.

E. ILLEGAL BUSINESS ACTIVITIES OF MEXICAN DRUG TRAFFICKING ORGANIZATIONS

Some Mexican DTO's have expanded their business activities from drug trafficking to human smuggling and oil and fuel theft. The analysis about which cartel exercises

control over which drug trafficking route offers information about the incentives that each cartel has in diversifying its activities, and the kind of illicit activities each organization can develop. For example, DTO's that have control over major drug trafficking routes will diversify their illegal activities towards human smuggling or fuel theft, taking advantage of the routes they control. On the other hand, smaller DTO's do not have the capacity to play a significant role into other illegal activities (such as oil and fuel theft and human smuggling) besides drug trafficking. Criminal organizations may also seek to diversify their revenues in order to sustain costly and prolonged conflicts against their rivals. Such conflicts imply large expenditures on equipment and personnel.[16]

F. COOPERATION BETWEEN CARTELS AND GANGS

Mexican cartels are dynamic organizations with a high adaptation capacity. The logic of the war waged by the government against drug cartels and other criminal organizations, together with the business logic of expanding markets and maximizing profits, have pushed the cartels to take decisive steps towards their professionalization. One of these steps is the practice of outsourcing specialized services provided by the local gangs, with which the cartels have established a relationship of mutual convenience. Gangs offer various services to the cartels in the areas of drug-deals enforcement, freight transport, distribution and sale. Together with the cartels, gangs are also actively forayed into kidnapping, extortion, human trafficking, money laundering, vehicle theft, and weapons traffic, which are typical organized crime activities.

There are at least five factors for which cartels hire gangs and the services they can provide:

1. *Risk reduction through outsourcing*. When they operate with semi-autonomous cells, the leaders of the cartels reduce the probability of infiltration by government agents or other criminal groups. Also, when gang members are arrested by the authorities or recruited by rival cartels, they cannot provide information about the modus operandi of the cartel because they do not know it: they have worked *for* the cartel but *outside* of it.
2. *Logistical, informational and operational advantages*. The gangs are located in various parts of the country and each one knows thoroughly its "own" area. Collaboration with gangs allows cartels to carry out activities swiftly, and it increases the information flow between the leaders and its various cells across the country. In addition, outsourcing increases versatility and specialization within the cartel.
3. *Effective exercise of violence*. The gangs' ability to display violence throughout the country (especially in border areas in the north and south), is increasingly being employed by the cartels. The ability to inflict high degrees of violence, together with the capacity to bribe and corrupt, are essential assets for any criminal organization.
4. *Efficiency*. With gangs, cartels save resources. Outsourcing tasks to gangs is cheaper than maintaining a bloated bureaucracy of gunmen.
5. *Drug market*. Gang members are often

16. See Maps 1-11 in Appendix I show each cartel's drug trafficking routes, human smuggling networks, and oil theft points.

Table 8. Fragmentation of Mexican Cartels (2006–2011)

2006	2007-2009	2010 (1st Semester)	2010 (2nd Semester)	2011
Cártel de Sinaloa	Cártel de Sinaloa	Cártel de Sinaloa	Cártel de Sinaloa	Cártel de Sinaloa
	Cártel de los Beltrán Leyva	Cártel del Pacífico Sur	Cártel del Pacífico Sur	Cártel del Pacífico Sur
				La Mano con Ojos
				La Nueva Administración
		Cártel de la Barbie	Cártel Independiente de Acapulco	Cártel Independiente de Acapulco
			Cártel del Charro	Cártel del Charro
Cártel de Juárez	Cártel de Juárez	Cártel de Juárez	Cártel de Juárez	Cártel de Juárez
Cártel de Tijuana	Cártel de Tijuana	Cártel de Tijuana	Cártel de Tijuana	Cártel de Tijuana
	Facción de El Teo	Facción de El Teo		
Cártel del Golfo	Cártel del Golfo-Zetas	Cártel del Golfo	Cártel del Golfo	Cártel del Golfo
		Los Zetas	Los Zetas	Los Zetas
La Familia Michoacana	La Familia Michoacana	La Familia Michoacana	La Familia Michoacana	Los Caballeros Templarios
				Los Incorregibles
				La Empresa
Cártel del Milenio	Cártel del Milenio	Cártel del Milenio	La Resistencia	La Resistencia
			Cártel de Jalisco-Nueva Generación	Cártel de Jalisco- Nueva Generación
-	-	-	-	La Nueva Federación para Vivir Mejor
6	**8**	**10**	**11**	**16**

drug consumers, resulting in considerable sales and profits for the cartels.

Cooperation between gangs and cartels is maintained and assured in terms of mutual convenience. There are at least five reasons why the gangs would collaborate with the cartels.

1. *Financial gain*. The cartels have resources to pay for the gangs' services, to reward efficiency and loyalty, and to encourage future cooperation. In addition, they often give "concessions" to the gang to collect rents from retail drug dealers.
2. *Drug supply*. By allying themselves with cartels, gangs ensure regular supplies of drugs (with discounts).
3. *Protection from authorities*. The link between gangs and cartels protects the gangs from police interference, and also makes them immune to arrests or convictions.
4. *Cohesiveness*. Gang affiliation to a cartel creates a sense of solidarity and ensures their continuity.
5. *Reputation*. Through the alliance with cartels gangs receive recognition, which in turn strengthens its group identity.

In Ciudad Juárez there are between 300 and 500 gangs, of which 30 have between 500 and 1,500 members. The largest gangs, like Barrio Azteca and Mexicles, exceed 2,000 active members. These two gangs cooperate, respectively, with the Juárez and Sinaloa cartels. However, these are not the only two cartels that have developed networks with gangs in Juárez. Other large and aggressive gangs have links with the cartels of Tijuana, Golfo and Zetas.

According to reports from the U.S. Department of Justice, Barrio Azteca is a "transnational" gang that operates in both Mexican and American territory with a degree of sophistication rarely seen in groups of that nature.[17] Barrio Azteca's capacities are largely due to the financial and logistical support it received from the Juárez cartel. The degree of organization of Barrio Azteca

17. U.S. Department of Justice, March 9, 2011, *Attorney General Eric Holder Speaks at the Barrio Azteca Press Conference*, retrieved from Internet in September 5, 2011: http://goo.gl/Ax6We

is such that to avoid interception of their messages they have developed secret codes based on Náhuatl numerology and phrases.

Another place where there has been an abrupt increase in the number of gangs is Nuevo León. There are around 1,500 gangs in this state, 700 in the Monterrey metropolitan area. Information from the local police indicates that 20 of these gangs are linked with the Zetas cartel. These gangs are smaller than the Juárez gangs and drug consumption among their members is lower. Given hostile police actions towards them, gang leaders induce their members to collaborate with drug cartels as a way to protect themselves from police harassment. Local police officers frequently extort gang members, and cartels punish the police officers who assault gang members.

In sum, youth gangs are becoming an important asset for Mexican cartels. With them, drug dealers' criminal activities have multiplied and become more efficient. Furthermore, gangs that operate with cartels have become more effective in avoiding and confronting law enforcement agencies. The overwhelming presence of gangs in several parts of the country provides almost unlimited human resources for the cartels. Hence, in order to disarticulate the gang-drug cartel link, the Mexican government will have to deploy, alongside the military and police offensive, a comprehensive policy that combines social and security actions.

ORGANIZED CRIME VIOLENCE

1. VIOLENCE TRENDS

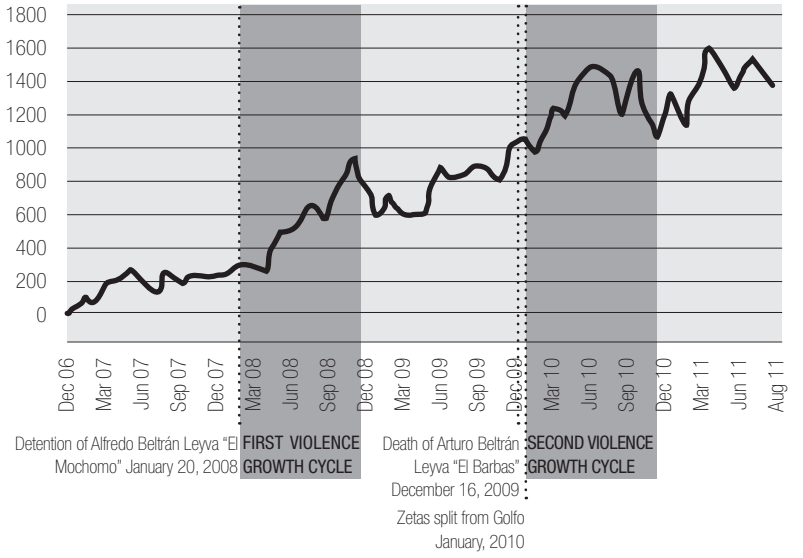
A. NATIONAL LEVEL

During the months previous to August 2011 organized crime-related violence upward trend flattened. As shown in Figure 1, a second cycle of violence growth —triggered by the death of Arturo Beltrán Leyva, "El Barbas", and the split of Los Zetas from the Golfo Cartel— brought an expansion of violence to broad areas of the Mexican territory through the first semester of 2010. Thereafter, no event has triggered a new violence growth cycle discernible at the national level.

Even though April 2011 has been the most violent month so far (an estimate of 1,600 deaths) a longer term analysis suggests that violence may have reached a stable level after peaking in mid-2010. After the third quarter of 2010, the most violent so far, deaths dropped for two consecutive quarters, an unprecedented record since December 2006 (see Figure 2). More important, the steep increase in violence observed during 2009 and the first half of 2010 (a striking 140 percent average annual increase rate for 18 months) did not continue in the following year.

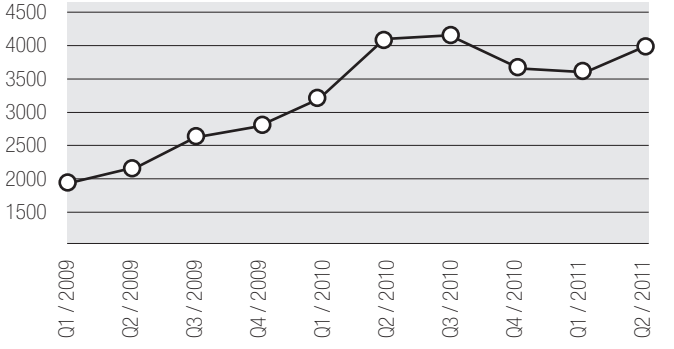
The change in the organized crime-related deaths growth rate during the previous months provides grounds to make a downward reassessment of the projection of the cumulative number of deaths occurred during President Calderón's administration (2007-2012). The new projection assumes that the annual level of deaths will remain stable at around 15 thousand for the remainder of the administration, totaling 64,000 deaths for the six-year term. The data on violence trends also allows making educated guesses on the upper and lower bounds of the cumulative number of deaths for the current administration, as shown in Figure 3. An annual growth rate of 140 percent (similar to the observed in the period from January 2009 to June 2010) was used to calculate the upper bound. This growth rate would produce a figure of 91,000 deaths by December 2012. An annual negative growth rate of 40 percent (based on the violence decline rate observed in Ciudad Juárez in 2011 first semester, the

Figure 1. Monthly Organized Crime-Related Deaths at the National Level (Dec. 2006-Aug. 2011)



Source: Own elaboration based on figures from the Base de Datos de Fallecimientos Ocurridos por Presunta Rivalidad Delincuencial. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 is based on data collected from national and local newspapers.

Figure 2. Quarterly Organized Crime-Related Deaths at the National Level (Jan. 2009-Jun. 2011)



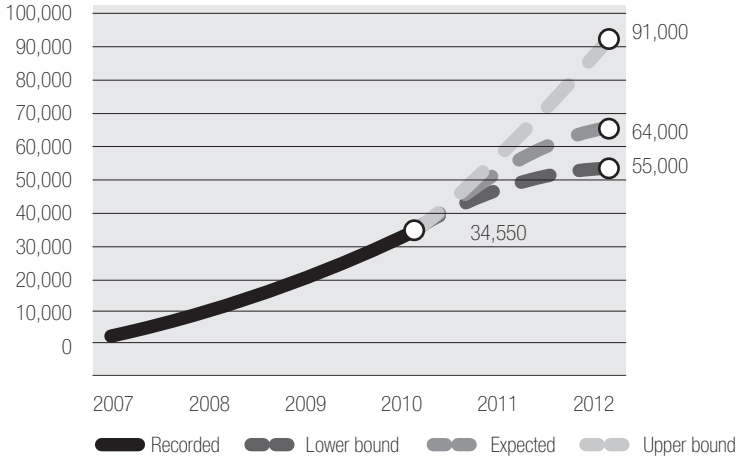
Source: Own elaboration based on figures from the *base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 is based on data collected from national and local newspapers.

most important violence decline sustained for several months in a large city) was used to calculate the lower bound, and would produce a figure of 55,000 organized crime-related deaths by December 2012.

Organized crime-related violence will remain a central challenge for Mexico during the forthcoming years for at least three reasons:

1. The current stabilization of violence does not mean that events that may trigger

Figure 3. Cumulative Organized Crime-Related Deaths Projection (2007- 2012)



Source: Author's own estimate.

new violence growth cycles are unlikely in the future. Furthermore, both the criminal organizations' fragmentation and the Federal Government's intensive punitive policy increase the likelihood of such events, as well as the uncertainty about future violence trends.

2. Unlike violence hikes —which may be large and sudden— violence decreases are typically gradual. Hence, even though a decrease in violence is a potential outcome during the following months, the rate of such decrease will not be anywhere close to the rate of the increase observed during the first four years of President Calderon´s administration (this explains why the lower bound in Figure 3 is much closer to the projection than the upper bound).

3. The nature of organized crime-related violence is changing for the worst. This violence is becoming more geographically dispersed, more intrusive into broad sectors of the economy, and is provoking a higher incidence of some criminal activities that harm citizens the most (e.g., kidnapping, extortion and vehicle theft). Therefore, even a steady level or a minor decrease of organized crime-related deaths will bring larger social and economic costs.

From December 2006 to September 2011, 174 political candidates and senior public officers have been killed by criminal organizations, a record figure. Police department chiefs account for the highest share of these assassinations (48 percent), followed by mayors (18 percent). On the other hand, five candidates for public office —including the candidate for Tamaulipas governorship, Rodolfo Torre Cantú— have been killed. These murders stress some authorities'vulnerability *vis-à-vis* criminals, and that in several jurisdictions criminal organizations are likely to be obtaining leeway from law enforcement institutions. This vulnerability is particularly acute at the municipal level, where senior officers that effectively tackle criminal organizations (or even those who are involved in conflicts among rival DTO's) cannot even warrant effective protection for themselves.

Table 1. The 20 Municipalities with the Largest Number of Organized Crime-Related Deaths in 2011

MUNICIPALITY	STATE	2009	2010	2011*	2009-11 VARIATION
Juárez	Chihuahua	2231	2737	1694	-24%
Culiacán	Sinaloa	476	583	480	1%
Chihuahua	Chihuahua	410	667	533	30%
Tijuana	Baja California	401	472	243	-39%
Gómez Palacio	Durango	230	279	163	-29%
Acapulco	Guerrero	158	370	963	510%
Torreón	Coahuila	135	316	581	330%
Durango	Durango	111	148	648	484%
Mazatlán	Sinaloa	98	322	281	187%
Morelia	Michoacán	92	83	130	42%
Ecatepec	México	60	104	141	134%
Ahome	Sinaloa	47	196	127	170%
Zapopan	Jalisco	36	97	123	243%
Monterrey	Nuevo León	22	178	483	2097%
Nuevo Laredo	Tamaulipas	12	113	168	1300%
Tepic	Nayarit	11	228	262	2284%
Guadalupe	Nuevo León	9	62	192	2033%
San Fernando	Tamaulipas	2	169	478	23814%
Apodaca	Nuevo León	1	29	123	12243%
Valle Hermoso	Tamaulipas	0	56	161	-

*The figures for 2011 are estimated based on January-July data.

Source: Own ellaboration based on figures from the *base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 is based on data collected from national and local newspapers.

B. STATE AND LOCAL LEVELS

Regarding the geographical distribution of violence, the foremost change during the previous months has been a strong geographic dispersion trend. The Federal Government has noted repeatedly that domestic organized crime-related violence is a concentrated problem; that is, a problem circumscribed to a few of municipalities along the northern border and in the Pacific coast region. Nonetheless, the progressive fragmentation of cartels in previous years —which in the short term led to conflicts located in a handful of drug trafficking strategic cities— has been followed by a process of dispersion of the violence.

Table 1 shows the evolution of organized crime-related deaths in the 20 most violent municipalities during the January-July 2011 period. As shown in the table, these municipalities may be divided in two groups: first, the five most violent municipalities in 2009 (Ciudad Juárez, Culiacán, Chihuahua, Tijuana, and Gómez Palacio) where deaths have decreased or grown moderately; second, the other 15 municipalities, which have experienced staggering hikes in violence.

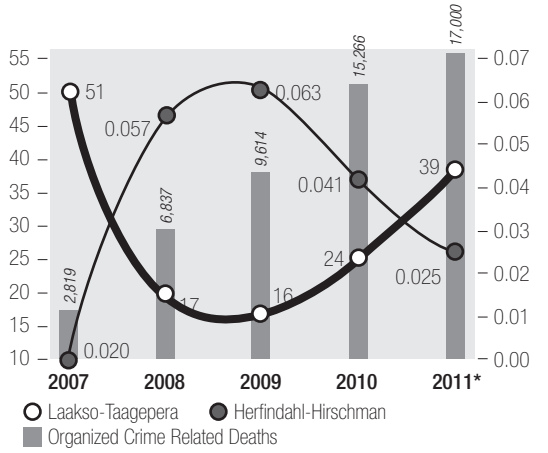
Figure 4. Municipalities with 12 or More Organized Crime-Related Deaths per Year (2007-2011)



Source: Own ellaboration based on figures from the *base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ .* Based on January to August data.

Figure 4 shows the municipalities recording at least one organized crime-related death per month on average, for each year of the current administration. In 2007, only 53 municipalities had at least one death per month on average. In 2008 the figure increased to 84, to 131 in 2009, the year 2010 ended with 200 municipalities meeting this condition. Finally, in 2011, 227 municipalities are expected to have at least one average

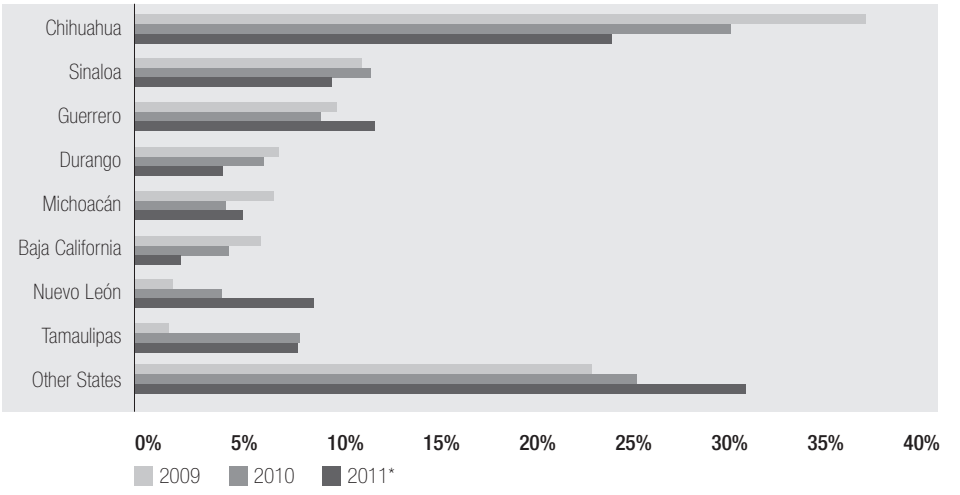
Figure 5. Violence Dispersion Metrics



* Estimation based on data for the first semester.

Source: Own ellaboration based on figures from the *base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 was estimated based on data collected from national and local newspapers.

Figure 6. Annual Organized Crime-Related Deaths Distribution by State



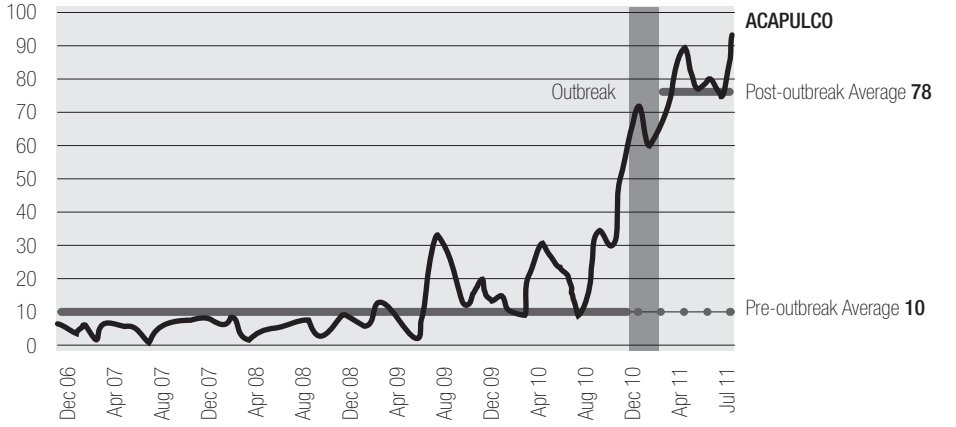
* Estimation based on data for the first semester.

Source: Own elaboration based on figures from the *base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 was estimated based on data collected from national and local newspapers.

monthly death, which means a 328 percent increase from 2007 to 2011.

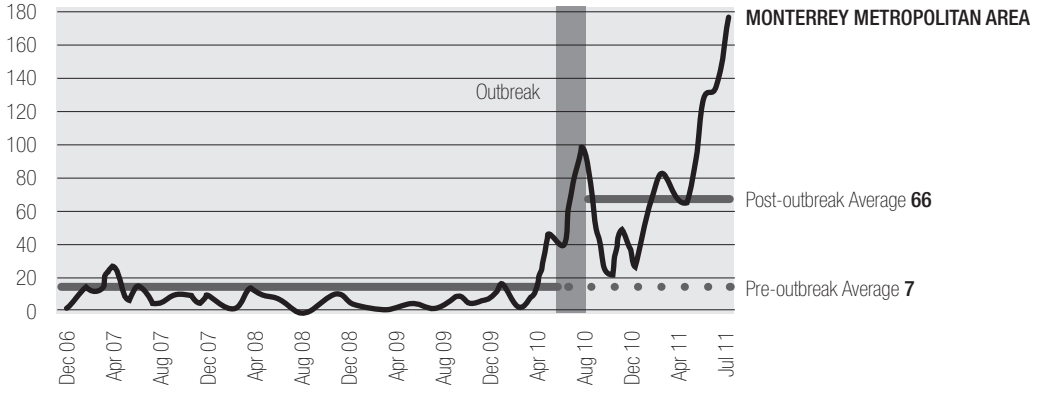
Figure 5 depicts two metrics that confirm the higher dispersion of violence in 2010 and 2011 in relation to 2008 and 2009. By using the Herfindahl-Hirschman Index (established to determine to what extent a small group of firms do or do not exercise control over large shares of a market), where 1 corresponds to total concentration in a single firm, we find that from 2008 to 2010 the concentration of violence in the municipalities dropped from 0.06 to 0.04. By using a tool from

Figure 7. Monthly Organized Crime-Related Deaths and Epidemic Violence Outbreaks (Acapulco and Monterrey Metropolitan Area)



* Estimation based on data for the first semester.

Source: Own ellaboration based on figures from the *base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 was estimated based on data collected from national and local newspapers.



Source: Own elaboration based on figures from the Base de *datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ for December 2006-December 2010. Data for 2011 is based on data collected from national and local newspapers.

Political Science, the Laakso-Taagepera Index (established to determine the number of parties that effectively compete, in contrast to the nominal number of parties), we find that the violence shifted from being concentrated in 17 municipalities in 2008 to 24 municipalities in 2010, and it gives an estimate of 39 for 2011.

As shown in Figure 6, a distinctive trend during the previous year was a sharp violence increase in the Northeastern states of Nuevo León and Tamaulipas. The increase of violence in Nuevo León and Tamaulipas was triggered by the split of Zetas from the Golfo Cartel.[18] The subsequent clash between these two organizations led to widespread violence along the municipalities in the Tamaulipas-Texas border (known as "Frontera Chica") as well as in Monterrey Metropolitan Area. It is the first time that endemic violence reaches one of the three largest metropolitan areas in the country.

18. Los Zetas were originally recruited by the Gulf leadership as a gunmen group. Los Zetas engage in a large number of criminal activities, including drug trafficking. However, they seem more inclined to engage in illegal protection provision than other large drug-trafficking cartels (i.e., the Pacífico and Golfo cartels). Los Zetas leadership has military training, and they have been depicted as a "paramilitary" group. These features allow Los Zetas to maintain an extensive but cohesive structure, which has certainly played a role in the geographical dispersion of violence.

Table 2. Violence Outbreaks 2008–2010

MUNICIPALITY / METROPOLITAN AREA	OUTBREAK	MONTHLY AVERAGE			MONTHS AFTER OUTBREAK	
		BEFORE OUTBREAK	AFTER OUTBREAK	INCREASE	TOTAL	BELOW BEFORE OUTBREAK AVG.
Chihuahua	Dec 2007	2	39	1846%	38	0
Juárez	Jan 2008	11	181	1610%	37	0
Culiacán	May 2008	20	45	121%	33	1
Mazatlán	Jul 2008	2	17	729%	30	2
Tijuana	Sep 2008	16	42	162%	29	2
Gómez Palacio	Feb 2009	2	20	1010%	29	0
MMA[19]	Mar 2010	7	50	614%	12	0
Torreón	May 2010	7	25	278%	10	0
GMA[20]	May 2010	8	39	388%	10	0
Acapulco	Oct 2010	10	75	629%	3	0

Source: Own elaboration based on figures from the *Base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/

Violence also increased in Guerrero. The fragmentation process of the former Beltrán Leyva Organization, and the subsequent struggle for extortion and local drug markets in Acapulco, explain this increase.

Other key trends in the regional distribution of violence include the rise in the category "other states" (which is related to the geographical dispersion of the phenomenon), and a sizeable reduction in Chihuahua.

An analysis at the municipal level shows that organized crime-related deaths follow "epidemic" trends. This means that once the level of violence passes a statistical threshold (an event identified as "outbreak") it may well continue growing, stabilize or even decrease marginally, but it remains well above the pre-outbreak level. Figure 7 shows this trend in Acapulco and in Monterrey Metropolitan Area (MMA)[21]. After the outbreak, these two locations have also become notorious for the widespread violence against innocent victims and frequent arson. Table 2 displays data on pre-outbreak and post-outbreak violence levels for 10 municipalities and metropolitan areas where violence passed the statistical threshold during the 2007 to 2010 period. In none of them violence has returned so far to pre-outbreak levels. Violence epidemics are explained by the fact that, once conflicts between criminal organizations burst in a community, it is very hard to reestablish the trust and strong leadership necessary for a ceasefire. The data on Table 2 supports the claim that, even if organized crime-related violence decreases, it will decrease at a rate nowhere close to the rate of the increase observed during the first four years of President Calderón's administration.

19. Monterrey Metropolitan Area encompasses the following municipalities: Apodaca, General Escobedo, Guadalupe, Juárez, Monterrey, San Nicolás de los Garza, San Pedro Garza García and Santa Catarina.
20. Guadalajara Metropolitan Area encompasses the following municipalities: El Salto, Guadalajara, Tlajomulco, Tlaquepaque, Tonalá and Zapopan.
21. Monterrey Metropolitan Area

2. TYPES OF VIOLENCE

Organized crime-related violence in Mexico may be classified in two broad categories according to the criminal activities that foster it (i.e., the type of revenues for which criminal organizations fight).

• *Drug-trafficking ridden*. Violence has been high in areas contested among cartels along the Mexico-U.S. border as well as in key harbors and distribution centers.

• *Mafia ridden*. Mafia style organizations have recently been taking over local illegal "protection" markets in several regions.

There is an observable feature of illegal protection which allows us to distinguish between drug-trafficking ridden violence and mafia ridden violence: mafia violence is propaganda intensive. Mafias need to build a reputation.[22] Hence, in order to effectively establish a monopoly of coercion mafias also require to intensively advertise their violence and to make sure that broad sectors of society (at least all potential rivals and all those who may be asked to pay for protection) identify their violence potential.

A common practice among Mexican criminal organizations in recent times has been to place messages next to the corpses of their lethal victims. These messages work as a means of propaganda and reputation building. They are usually reported by local media, they include the signature of the organization that performed the murder, and they even explain its motivation (being a member of a rival group, a thief, a rapist or a kidnapper, and not paying extortion or transit fees, are among the most frequent alleged reasons).

Using a dataset containing 1,029 messages collected through systematic searches in national and regional newspapers from December 2006 to March 2011, all 59 municipalities with more than 100 organized crime-related deaths during this period were classified in three groups:
- Those with the lower message to murder ratio (below 1 percent) were identified as drug-trafficking ridden violence municipalities.
- Those with the highest message to murder ratio were identified as mafia ridden violence (above 3 percent).
- The municipalities in between the two previous groups are those where it is not

22. Diego Gambetta. 1993. *The Sicilian Mafia. The Business of Private Protection.* Cambridge: Harvard University Press, 335 pp.

Figures 8 and 9. Drug-Trafficking Ridden Violence Municipalities and Mafia Ridden Violence Municipalities

DRUG-TRAFFICKING RIDDEN VIOLENCE MUNICIPALITIES



MAFIA RIDDEN VIOLENCE MUNICIPALITIES



Source: Own elaboration based on figures from the *Base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic http://www.presidencia.gob.mx/ and message searches on national and regional newspapers.

possible to determine a distinctive source of violence (see Appendix II, Table 1).

According to Figures 8 and 9, the municipal data on organized crime-related deaths and messages from criminal organizations shows two general trends. First, there is a geographical distribution of mafia ridden violence. While drug-trafficking ridden violence typically develops along or near the U.S. border, mafia ridden violence is more common in central Mexico. This geographical distribution may reflect the location of key drug-trafficking routes and operation centers, which include several border towns. On the other hand, while mafia ridden violence is also observed along the US border (Nuevo Laredo) and in drug entry points (such as Lázaro Cárdenas, Michoacán) it also seems to be widespread in areas with no strategic value for transnational drug-trafficking.

The second trend that stems from the data is that mafia ridden violence is a more recent phenomenon than drug trafficking violence. While violence typically escalated during 2008 and 2009 in the drug-trafficking municipalities, in most mafia ridden municipalities organized crime-related deaths did not become endemic until 2010.

Drug-trafficking ridden violence and mafia ridden violence have distinctive features and are the outcome of different phenomena. However, there may be a link between them. The increase in both types of violence has been very sharp and happened in a relatively short period. The following three mechanisms are complementary accounts of the process that leads from wars between drug cartels to the establishment of mafias (this causal direction is logical and fits the evidence that drug-trafficking ridden violence precedes mafia ridden violence).

• *Reconversion.* As a result of the government policy of non-selective cartel leader arrests since 2007, several cartels have fragmented. Some factions have been crushed and displaced from drug trafficking. However, they have a

set of assets (including weapons, gunmen and personal relations with some local authorities) that allows them to successfully engage in illegal protection provision.

• *Forced relocation.* Even though criminal organizations may not actively seek expansion, they may develop networks in new territories when circumstances lead to the relocation of some of their members.[23] As a result of conflicts between drug-trafficking organizations, this has been the case of several factions, which have been pushed out of regions currently under their rival's control.

• *Impunity.* Widespread violence raises impunity, since police departments in conflict areas may be overwhelmed or may be captured by one of the organizations in conflict. Since the probability of punishment decreases under this scenario, illegal protection becomes a more attractive activity. On the other hand, widespread violence also raises the demand for illegal protection.

Finally, it is important to notice that the absence of violence does not imply the absence of widespread illegal protection. Wherever there is a settled and hegemonic criminal organization (that does not need to build a reputation *vis-à-vis* competitors or to persuade victims of its capacity for violence) pervasive extortion may not be visible. For instance, anecdotal evidence suggests that illegal protection is widespread in Veracruz. However, Zetas may control this activity throughout the state and do not need to engage in intensive violence.

23. Varese, Federico. 2006. "How Mafias Migrate: The Case of the 'Ndrangheta in Northern Italy", in *Law & Society Review*, vol. 40, no. 2.

3. EFFECTS OF VIOLENCE ON CRIMINAL PREVALENCE

A. EXTORTION

Figure 10 shows that extortion almost tripled from 2004 to 2009. As the previous section suggests, the development of illegal protection markets, based on organizations ready to engage in intensive violence and to fight each other for control over such markets, accounts for this dramatic increase.

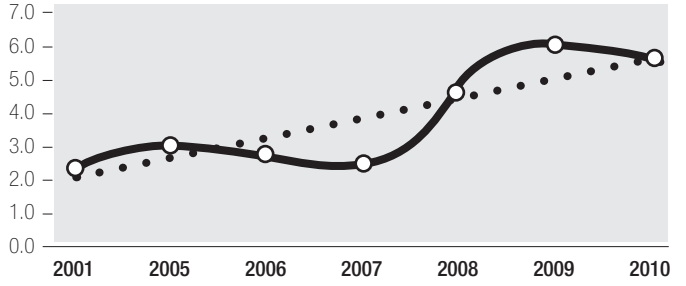
An analysis of the five main categories of violent crimes (homicide, kidnapping for ransom, extortion, violent theft and violent car-theft) shows that during the last three administrations extortion has been the only category with a sustained upward trend. According to this analysis, while in the other four categories criminal incidence declined during Vicente Fox term —and currently remains around or below the levels in Ernesto Zedillo's term— extortion in Felipe Calderón's term was 136 percent above the value in Ernesto Zedillo's term.

B. VEHICLE THEFT

An analysis of the effects of violence on criminal incidence based exclusively on official crime figures poses several shortcomings. These figures are usually published in comprehensive databases only after a long delay. Moreover, the figures account exclusively for crimes reported to authorities. Given Mexico's law enforcement institutions reputation for low performance and pervasive corruption, many citizens choose not to report crimes. Moreover, fear of retaliation from criminal organizations may increasingly prevent victims from filing reports. Due to uneven law enforcement institutions performance —as well as uneven criminal organization presence— throughout the country, these factors may also bias cross-sectional analyses based exclusively on official crime figures.

Insurance companies' data provide a valid alternative to official crime figures. For instance, companies price car insurance policies based on local vehicle-theft prevalence (which they can assess based on their own customers'

Figure 10. Extortion Reports in Mexico per 100,000 inhabitants (2004–2010)



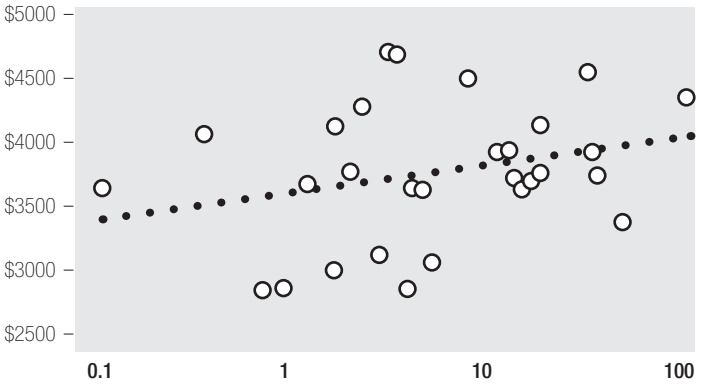
Source: National criminal incidence. Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública. http://bit.ly/qlyD3a

Table 3. Visible and Invisible Victims Index*

ADMINISTRATION	HOMICIDE	KIDNAPPING	EXTORTION	VIOLENT THEFT	VIOLENT CAR THEFT
Ernesto Zedillo (1994-2000)	1.00	1.00	**1.00**	1.00	1.00
Vicente Fox (2000-2006)	0.74	0.50	**1.18**	0.62	0.64
Felipe Calderón (2006-2011)	0.79	1.01	**2.36**	0.60	0.58

Source: México Evalúa, *Índice de víctimas visibles e invisibles de delitos graves* (http://bit.ly/pRUqhQ).
* Using data from January 1997 to May 2011. This index measures criminal incidence (the number of both visible and invisible victims) variation across time. A value of 1 is equal to average incidence during the last four years of Ernesto Zedillo's administration.

Figure 11. Organized Crime-Related Deaths per 100,000 People for 2010 (Logarithmic Scale) and Car-Insurance Quotes by State



Source: Own elaboration based on figures from the *Base de datos de fallecimientos ocurridos por presunta rivalidad delincuencial*. Presidency of the Republic. http://www.presidencia.gob.mx/ and online car insurance quotes www.axa.com.mx (quotes were based on an average price vehicle and a standard driver).

Table 4. Organized Crime-Related Arson Events Reported in National Newspapers January – June 2011)

MUNICIPALITY	EVENTS
Acapulco, Guerrero	6
Juárez, Chihuahua	3
Apodaca, Nuevo León	2
Monterrey, Nuevo León	2
Miguel Alemán, Tamaulipas	1
Guadalupe, Nuevo León	1
Ciudad Madero, Tamaulipas	1
Mezquital, Durango	1
Morelia, Michoacán	1
Guadalajara, Jalisco	1
Pueblo Nuevo, Durango	1
Mazatlán, Sinaloa	1
Durango, Durango	1

claims), among other risk factors. An analysis of insurance quotes by state shows that there is a positive and significant relationship between organized crime violence and car-insurance prices (see Figure 11). According to this analysis, an additional 100 organized crime related deaths per 100,000 people (the gap between the least and most violent states) is associated to a 25 percent increase in car-insurance prices.

C. ARSON

According to a systematic search on national newspapers, during the first semester of 2011 criminal organizations were linked to 24 arson events, i.e., roughly one event per week. Since most arson events may not be reported by national newspapers, this figure is likely to severely underestimate the prevalence of organized crime-related arson (for instance, the Fire Department at Ciudad Juárez reckons that 119 arsons in that municipality were the result of extortion attempts only in the first two months of 2011). Nevertheless, the events compiled through the search on national newspapers provide insights on the nature of this phenomenon. Table 4 shows the location of arson events reported in national newspapers.

In some cases criminals strategically set on fire vehicles or businesses during skirmishes against public security agents. This was the case in both reported events in Tamaulipas. However, arson is usually related to illegal protection markets. It is a kind of violence akin to highly visible homicides that criminal organizations deploy in order to build a reputation among potential victims. Unsurprisingly, Acapulco —a city with one of the highest levels of mafia-ridden violence— concentrates the largest number of arson events reported in national newspapers. In August 2011, a criminal group burned down a casino center in Monterrey, this attack resulted in at least 53 civilian casualties.

GOVERNMENT STRATEGY AND ACTIONS AGAINST ORGANIZED CRIME

1. STRATEGY

The Government of Mexico claims that its security policy has four central goals:

- To strengthen law enforcement institutions.
- To reduce, stop or avoid illicit-drug consumption.
- To weaken criminal organizations.
- To free public spaces from criminal control.

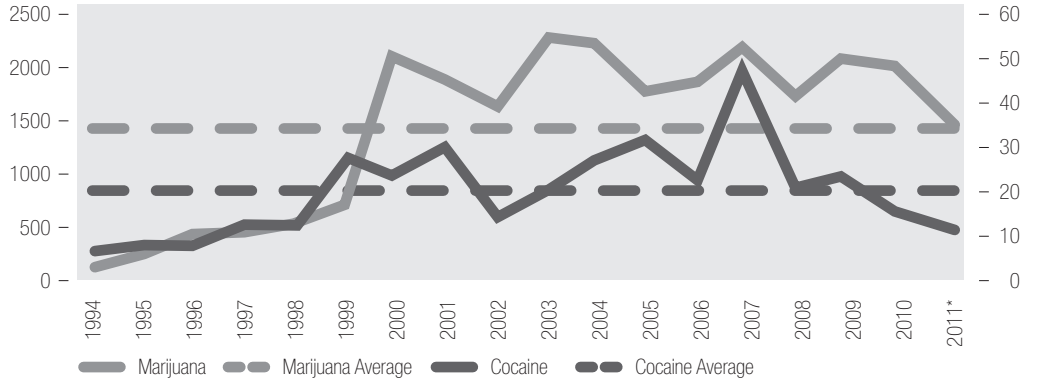
Regarding the first goal it is noteworthy that while the strengthening of law enforcement institutions may be a necessary task, it is hardly a security policy goal on its own (since citizens do not benefit directly from a better police, but from the better security levels that such police may be able to enforce).

This section starts with a description of the Federal Government public security tasks that may be linked to the second goal (i.e., illicit drug seizures and illicit crop eradication). The evidence suggests that actions on this regard were not intensive during the 2007-2010 period.

The remainder of this section will focus in an analysis of the last two goals of the Federal Government: to dismantle criminal organizations and to release public spaces from criminal control. It will be shown that, while intensive actions regarding the dismantling of criminal organizations have been taken, the relationship between the current security policy and enhanced security in public spaces remains unclear. Moreover, evidence suggests that, at least in the short run, these two goals may not be compatible.

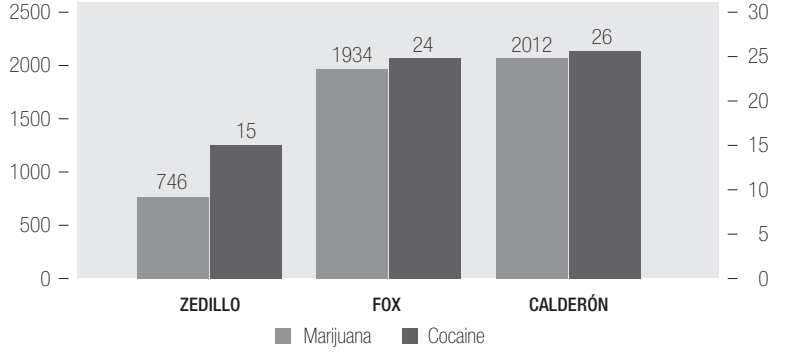
An additional analysis posits that a not avowed goal of the current security policy is to reduce the threat that large criminal organizations pose to national security. The findings described in this section suggest that —while large organizations have certainly been divided— a return to a *status quo* with two large dominant cartels (akin to the situation at the beginning of the current administration) is a potential outcome of the cartel dismantling policy.

Figure 1. Marijuana and Cocaine Seizures by Year (Tons)



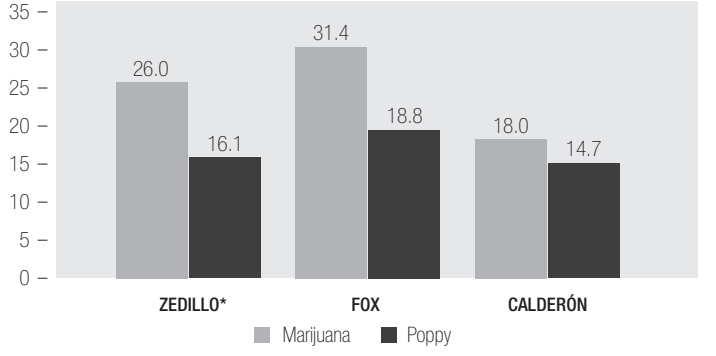
Source: Own elaboration with data from Fifth Report of the government of Felipe Calderón, 2011.

Figure 2. Average Annual Marijuana and Cocaine Seizures by Administration (Tons)



Source: Own elaboration with data from Fifth Report of the government of Felipe Calderón, 2011.

Figure 3. Average Annual Crop Eradication by Administration (1000 Hectares)



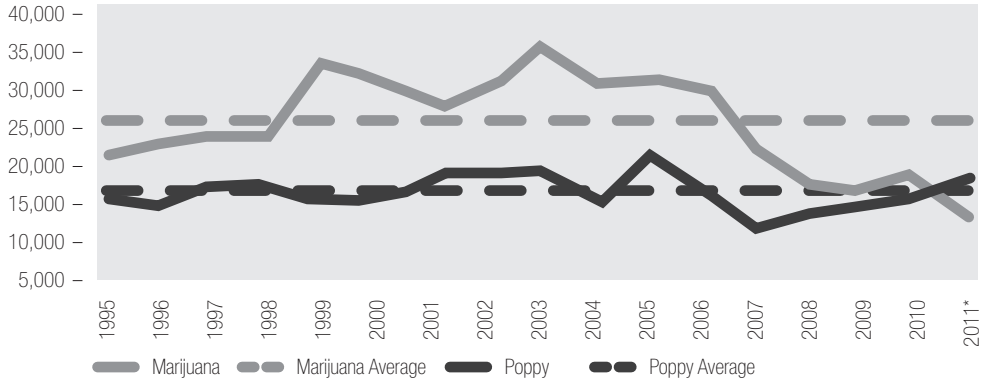
Source: Own elaboration with data from Fifth Report of the government of Felipe Calderón, 2011.

2. DRUG SEIZURES AND CROP ERADICATION

Regarding drug consumption, a sizeable reduction in the demand for illicit drugs may have a positive impact on public security (as well as public health), since domestic drug markets bring violence and may foster other criminal activities at the local level. Nevertheless any effects of this policy are to be seen in the long run (since evidence suggests that drug consumption does not drop sharply in the short run). Moreover, intensive drug interdiction efforts —allegedly a mechanism to reduce drug supply and drug consumption— have not been a trademark of the current administration. As shown in figures 1 and 2, while there was a boost in marijuana and cocaine seizures in the 1999-2000 period, seizures have remained relatively stable thereafter. During President Calderón's administration, average annual seizures have been only marginally larger than during President Fox's administration (in both cases there has been a decrease during 2011 compared to 2010).

Regarding crop eradication, the figures for the current administration do not suggest an intensive effort to reduce drug availability. As shown in Figure 3 there has been a decrease in average annual crop eradication during the 2007-2010 period, compared to the previous administration, a 40 percent decrease for marijuana and a 25 percent decrease for poppy. However, during 2010 marijuana crop eradication stop dropping and there was a recovery for poppy crop eradication (see Figure 4).

Figure 4. Crop Eradication by Year (1000 Hectares)



Source: Own elaboration with data from Fifth Report of the government of Felipe Calderón, 2011.

3. ARRESTS

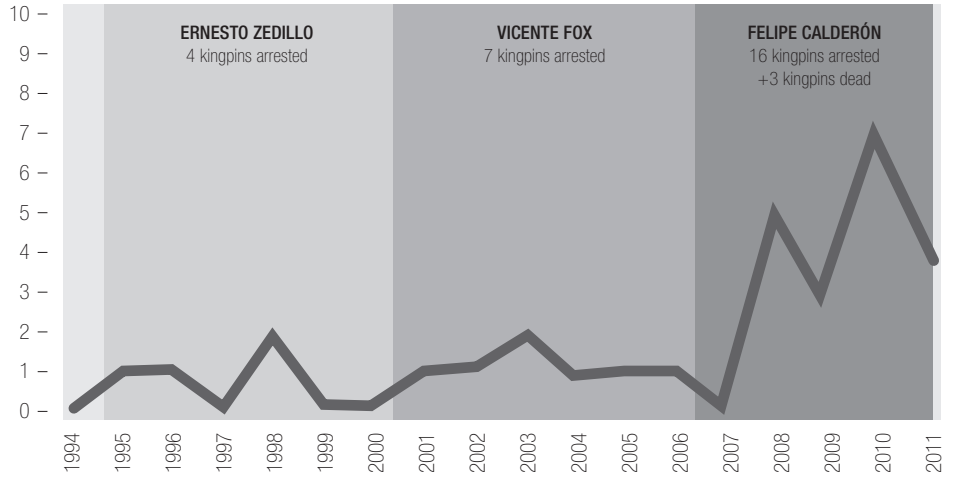
A third goal of the Federal Government is to dismantle criminal organizations. While many actions may serve this goal —including financial measures to freeze criminal organization assets— the most visible and publicized action has been an intensive kingpin, boss or leader arrest policy. As shown in Figure 5 the increase in the number of arrested drug-trafficking kingpins has been a distinctive feature of the anti-organized crime policy of the current administration (unlike drug seizures and illicit crop eradication). Table 1 provides a list of arrests and killings of criminal organization leaders.

Kingpin arrests contribute to criminal organization dismantling for a number of reasons. An effect of an intensive arrest policy is to create tensions within criminal organizations, which are related to conflicts and to organization fragmentation. One mechanism for this process is the "war of succession" prompted by the clash between two or more factions trying to attain a hegemonic position after the previous leader is captured or killed. This has been the case of the Beltrán Leyva Organization, which swiftly atomized after most of their leaders were captured or killed during 2009-2010.

Furthermore, an intensive arrest policy may lead to fragmentation of criminal organizations even in the absence of the arrest or killing of one of their leaders. Criminal organizations are inherently unstable given the absence of contracts and the institutional settings that provide certainty to all parties in a legal society. Before the current administration, Mexican kingpins had been able to maintain relatively cohesive organizations —based on their personal networks— because their partners expected them to be around in the near future to enforce agreements. By increasing the probability of a kingpin being captured in the near future, the arrest policy has reduced the ability of kingpins to maintain cohesion within the organization.

Criminal organizations fragmented at a fast pace during the 2007-2011 period. National cartels coexist with a growing number of regional cartels and local organizations. If we count the number of organizations that year after year sign messages in blogs,

Figure 5. Arrests and Killings of Cartel Kingpins by Administration



Source: Own elaboration with data from Fourth Report of the government of Felipe Calderón, 2010 and PGR Bulletins.

Table 1. Arrests and Killings of Kingpins or Top Tier Criminal Organization Members (2007–2011)

NAME	CARTEL	DATE
Sandra Ávila Beltrán	Pacífico	09/28/2007
Alfredo Beltrán Leyva "El Mochomo"	Beltrán Leyva	01/20/2008
Jesús Zambada García	Pacífico	10/22/2008
Eduardo Arellano Félix	Tijuana	10/26/2008
Jaime González Durán "El Hummer"	Zetas	11/07/2008
Alberto Espinoza Barrón "El Fresa"	La Familia Michoacana	12/30/2008
Vicente Zambada Niebla "El Vicentillo"	Pacífico	03/18/2009
Vicente Carrillo Leyva	Juárez	04/02/2009
Rafael Cedeño Hernández	La Familia Michoacana	04/20/2009
Arnoldo Rueda Medina "La Minsa"	La Familia Michoacana	07/11/2009
Arturo Beltrán Leyva "El Jefe de Jefes"*	Beltrán Leyva	12/16/2009
Carlos Beltrán Leyva	Beltrán Leyva	12/30/2009
Teodoro García Simental "El Teo"	Tijuana	01/12/2010
Manuel García Simental "El Chiquilín"	Tijuana	02/07/2010
Gerardo Álvarez Vázquez "El Indio"	Beltrán Leyva	04/21/2010
Juan Nava Valencia	Milenio	05/20/2010
Ignacio Coronel Villarreal "Nacho"	Pacífico	07/29/2010
Édgar Valdez Villareal "La Barbie"	Beltrán Leyva	08/30/2010
Enrique Villareal Barragán "El Grande"	Beltrán Leyva	09/12/2010
Margarito Soto Reyes "El Tigre"	Pacífico	09/26/2010
Ignacio López Medina	La Familia Michoacana	10/13/2010
Óscar Manuel Bernal "Spider"	Zetas	10/22/2010
Antonio Ezequiel Cárdenas Guillén "Tony Tormenta"*	Golfo	11/05/2010
Nazario Moreno "El más Loco"*	La Familia Michoacana	12/10/ 2010
Flavio Méndez Santiago "El Amarillo"	Zetas	01/17/2011
José Lozano Martínez	Acapulco Independent Cartel	01/ 24/2011
"Comandante Lino"	Zetas	01/24/2011
Miguel Gómez Vázquez	Acapulco Independent Cartel	02/01/2011

Source: Own elaboration with data from Fifth Report of the government of Felipe Calderón, 2011 and PGR Bulletins.

banners, and videos (available online) to send messages to their rivals or to the authorities, we realize how quickly they have grown. For example, in Guerrero —the state with the largest number of local organizations— in 2007 there were messages from Zetas and La Barredora organization. In 2010 four cartels and 10 local organizations signed messages in Guerrero.

A. EFFECTS OF THE GOVERNMENT'S STRATEGY ON VIOLENCE

As will be discussed in Section V, citizen's security perceptions data support the claim that there has been an overall decline in security standards throughout Mexico in the 2007-2011 period. A contested issue on this topic has been if there is a causal relationship between the governments surge against organized crime (i.e., the intensive and non-selective kingpin arrest policy) and the violence and insecurity epidemics in many regions throughout the country. In order to assess whether there is a relationship, we performed a set of analyses, using kingpins arrest or killing by the government as an explanatory variable. To perform this analysis we focused on organized crime-related deaths in each kingpin influence area. Even though organized crime-related deaths are mostly a byproduct of conflicts between criminal organizations, they do have a very large effect on public security perception (due to their very public nature as well as the increasing probability that innocent bystanders are injured or killed). In many areas, this violence is also related to the development and struggle for illegal protection markets, which also have a straightforward link to extortion and other crime levels. The following analysis encompasses three methods to measure the effect of kingpin arrests or killings (hereafter "events") on violence levels. In all the cases the impact is measured for three months after the event.

- The first method for analysis is simply to compare the figures for executions before and after the arrest or killing. The advantage of this method is that it neatly captures the "wave" of violence generated after an event, if it has taken place. One disadvantage of this method is that it may attribute a spurious effect to an event in case there was an upward trend prior to the event, and it continued to be stable after the event.
- The second method assesses whether an event accelerates or decelerates the violent dynamic.
- The third method explores the "escalation effect" following an event and indicates whether the minimum and constant level of executions increased in the period after the event.

The three methods were deployed to asses each of the 28 events listed in Table 1. The results for each case and each method are displayed in Appendix III Table 2. According to the first methods in 22 of the 28 cases analyzed there was an increase in violence, that is, in 78.5 percent of the cases the violence increased after the event. When comparing the rates of increase before and after the event (second method), we find that in 19 of the 28 cases

Table 2. Effects of Law Enforcement Actions on Violence (Results from Hurdle Data Count Test)

LAW ENFORCEMENT ACTION	EFFECT ON THE PROBABILITY THAT AT LEAST ONE DEATH IS RECORDED		EFFECT ON THE NUMBER OF DEATHS RECORDED	
	EFFECT	SIGNIFICANCE LEVEL*	EFFECT	SIGNIFICANCE LEVEL*
Seizures				
Marijuana (packed)	None	—	None	—
Marijuana (branches)	Positive	Weak	None	—
Metanphetamines	None	—	None	—
Cocaine	None	—	None	—
Heroine	None	—	None	—
Short weapons	None	—	None	—
Long weapons	Positive	Weak	Positive	Weak
Cash	None	—	Positive	Strong
Vehicles	Positive	Strong	Positive	Strong
Crop Eradication				
Poppy	None	—	None	—
Marijuana	Positive	Strong	None	—
Dismantled laboratories	None	—	None	—
Arrests[25]				
Total	Positive	Strong	Positive	Strong
Rank 1 (kingpins)	Positive	Strong	Positive	Strong
Rank 2 (managers)	Positive	Strong	None	—
Rank 3 (lieutenant or gunmen leader)	Positive	Strong	Positive	Weak

* Effects significant at the 5 percent level were identified as "strong" and effects significant only at the 10 percent level were identified as "weak".

the rate of increase climbed, that is, in 67.9 percent of the cases. Finally, in relation to the "escalation effect," that is, the change in the "minimum and constant level" of violence in the area after the event, it is seen in 15 of the 28 cases, i.e. 53.6 percent. One interesting result of the analysis is that in all those cases in which there was not an increase in the rate of growth of the violence, there was an escalation in the minimum and constant level of violence in the area.

Even though this analysis is descriptive (and does not imply on its own cause-and-effect relationships) the results suggest that arrests and killings of the leaders of the criminal organizations mostly have the effect of escalating the violence.

A Hurdle data count model was used to determine whether there is a causal relationship between a set of 16 government law enforcement actions (including seizures of different drugs, crop eradication and arrests of different tiers of criminal organization members) and violence at the municipal level.[24] The Hurdle model allows to test two different causal relationships: first, whether an explanatory variable has an effect on the probability that an event takes place (i.e., whether each of the government actions analyzed affects the probability that at least one organized crime-related death is recorded in a municipality); second, whether the explanatory variable has an effect on the magnitude of an event given that event took place (i.e., whether each of the government

24. This model is appropriate to test causal relationships in data sets with a large proportion of void observation, such as the database of organized crime-related deaths by municipality (no deaths are recorded in 1,308 municipalities, 53.3 percent of the total).
25. For ranks 1 to 3 an arrest is taken into account whenever the municipality was within the area of influence of the criminal and regardless of the place where the capture took place.

actions has an effect on the number of deaths in the municipalities where at least one death was recorded).

As shown in Table 2, according to the Hurdle model test, eight government law enforcement actions increase the probability that at least one organized crime-related death is recorded in a municipality. The table also shows that six government law enforcement actions increase the number of deaths in the municipalities where at least one death was recorded. The detailed results of the Hurdle model test are displayed in Appendix III Table 1.

It is remarkable that all types of arrests have a positive and strongly significant effect on the probability that at least one death is recorded in a municipality. Moreover, kingpin arrests also have a positive and strong effect on the number of deaths recorded in a municipality. These findings confirm the hypothesis that the Federal government intensive (and non-selective) arrest policy is one of the factors which has contributed to the increase in violence.

Seizures and crop eradication may have an effect on violence because they bring grievances within and around criminal organizations, which are frequently settled through violence. For instance, it is common that these law enforcement actions are the result of leaks or reports to the authorities. Hence, criminal organizations respond punishing whistle-blowers (or even scapegoats) in order to maintain their reputation and avoid further leaks. Finally, it is noteworthy that none of the 16 law enforcement actions were found to have a negative effect on violence.

B. EFFECTS ON NATIONAL SECURITY THREAT REDUCTION

The intensive kingpin arrest policy has yielded mixed results regarding the reduction of the threat that organized crime poses to national security, i.e., turning large cartels into small fragmented organizations that do not pose a national security threat. On the one hand, the absolute number of criminal organizations has tripled during the previous four years. In some cases, pre-existing regional organizations have split into several groups which cannot be easily tracked and which operate in a small group of municipalities (or in some cases in a single municipality). Such groups may no longer have the capacity to engage in transnational drug-trafficking.

On the other hand, it is not clear that the transnational drug-trafficking market was significantly less concentrated by mid-2011 than it was at the beginning of the current administration. While the landscape of Mexican DTO's has swiftly changed, the final outcome may resemble the original *status quo*. A single large group has hegemonic control over each of the two main drug-trafficking routes. The Pacífico Cartel seems to maintain a strong position over drug trafficking in North West Mexico, after a bloody struggle against their former allies, the Beltran Leyva Organization, which is now almost dismantled after several set-backs during 2010. On the Gulf Coast —as well as in several areas

scattered across the Mexican territory— Zetas maintain control over drug-trafficking (as well as other criminal activities ranging from extortion to fuel smuggling) after striking their former bosses, the Golfo Cartel, that have withdrawn to its stronghold along the Tamaulipas-Texas Border.

If large dominant criminal organizations pose a real national security challenge, striking the Pacífico Cartel and Los Zetas seems like a security policy priority. Nevertheless, the fragmentation of these two organizations may bring additional violence and crime to large areas of the Mexican territory: Baja California, Chihuahua, Durango, Sinaloa and Sonora, where violence stabilized during the year previous to August 2011 in the case of the Sinaloa Cartel; and Veracruz, Tabasco, and Quintana Roo, where violence have remained low, in the case of Los Zetas.

4. JOINT OPERATIONS

During the current administration the Federal Government has conducted "joint operations" which deploy members of federal security agencies (SEDENA, SEMAR and the PF) in 16 states. In eight states this joint operations have been large scale (typically involving a thousand or more agents).

The first of these operations was launched in Michoacán in December 2006, just a few days after Felipe Calderón took oath as President of Mexico (see Table 3). Requested by the Governor of Michoacán (a state where violence had reached unseen levels in the previous months), the operation in Michoacán initially involved over 6,700 agents. In the following months violence decreased in the state (from a monthly average of 45 deaths in 2006 to a monthly average of 27 in the following year). The operation was also well received by public opinion.

During 2007-2008 the Federal Government launched another seven large-scale joint operations. The results of these operations were not positive. Despite the intensive deployment of federal forces in areas with strong presence of criminal organization, violence and criminal activity reached record levels by mid-2008.[26] Moreover, joint operations have become permanent. With some changes and enhancements, operations have continued in the same states since 2008.

Having an intensive deployment of federal forces —that in some cases take over public security duties— it is easier for local authorities to avoid responsibility from organized crime activities in their jurisdictions. Even though the state governments have not been able to deliver on commitments on security policy (such as police professionalization), citizens identify security policy primarily as President Calderón's issue, and rarely consider state governments accountable for endemic violence or organized crime activities. For example, despite the dismal security situation, the incumbent party has been able to retain office in five of the six states with large scale joint operations where governor elections were held between 2008 and 2010 (Chihuahua, Nuevo León, Tamaulipas, Michoacán and Guerrero; the exception is Sinaloa).

26. Two separate studies have shown that violence increased in the states where joint operations launched. Fernando Escalante pointed out that in 2008 there was a reversion of the downward trend in the national homicide rate observed during the previous decades. While homicides increase was moderate in states where no large scale joint operations took place in 2007, the increase was dramatic in where joint operations took place (http://bit.ly/flPBnc). Another study uses a propensity scores method to estimate the effect of joint operations on homicides. The study by José Merino concludes that joint operations cause homicide rates to increase in the states where they take place. According to this analysis, joint operations brought an additional 7,000 homicides between 2008 and 2009 (http://bit.ly/iB7MXq).

Table 3. States where Large Scale Joint Operations have Taken Place*

STATE	STARTING DATE
Michoacán	December 2006
Baja California	January 2007
Guerrero	January 2007
Nuevo León	January 2008
Tamaulipas	January 2008
Chihuahua	April 2008
Durango	May 2008
Sinaloa	May 2008

Source: Own elaboration based on Quinto Informe de Gobierno. Presidency of the Republic. (http://bit.ly/ojppMr). * The Government does not provide basic information on joint operations, such as the number of agents deployed in each of them. The states with large-scale operations are those identified by Fernando Escalante (http://bit.ly/flPBnc)

Nevertheless, lack of cooperation from local authorities may be an important factor that explains the overall bad results of joint operations. State and municipal police departments account for the bulk of security agencies staff in Mexico (see Section 1). Baja California is the only state within the large-scale joint operation group where violence did not increase in 2009 and 2010. This state and its joint operation are frequently showcased as a success story by government officers. It is noteworthy that it is also the only state with a large scale joint operation where the Governor belongs to President Calderon's party.

5. STRATEGY SHIFT

During the first four years of President Calderón's administration, actions against organized crime attempted to encompass all major criminal organizations. According to the official narrative, action was taken against criminals "with no distinction". For example, during the first two years of the administration joint operations were launched in 16 states, i.e., all the six large cartels that existed back were hit by at least one joint operation. The federal forces also arrested or killed leaders from all the large organizations. Since engagement in violence or in high impact criminal activities —such as kidnapping for ransom and extortion— were not taken into account, this all-encompassing strategy did not have a dissuasive effect (cartels could not reduce the probability of government punitive action by avoiding widespread violence or high impact criminality and hence had not incentive to do so).

However, some recent events point to a change towards a strategy that focuses on those criminal organizations which engage in intensive violence and pose the higher public security challenge. First of all, no detention or killing of a kingpin from a major criminal organization has taken place since December 2010, when Nazario Moreno, aka "El más Loco", was killed. Starting 2011, government media campaigns claim that government action is geared towards the "most violent" criminals. Los Zetas, the single criminal organization that accounts for a larger increase in violence during 2010 and 2011, has been progressively identified as the top target. In July 2011, a series of clashes between federal forces and Los Zetas led to the death or capture of several top cartel members. This operation was labeled "North Lynx", and it included a massive deployment of troops (4,000 soldiers) that allegedly led to 200 detentions, as well as the seizure of 722 vehicles and 23 aircrafts.[27] On July 31st the federal Attorney General, Marisela Morales, avowed that Los Zetas were "among the priorities".

The US government has also targeted Los Zetas as the foremost security threat among Mexican criminal organizations. In July, the

27. Raymundo Riva Palacio, "Aniquilar se escribe con Z", *Eje Central*, August 19, 2011, (http://bit.ly/origVC).

Obama administration announced sanctions against four international criminal groups; Los Zetas were the only Latin American organization among them. The fact that Zetas are suspected to be responsible for the death of ICE agent Jaime Zapata in February 2011 may have contributed to this position.

However, it would be politically costly for the Mexican Federal Government to acknowledge the need of an outright change in strategy. The cost of undertaking an offensive against all major cartels during four years (particularly the death toll) has been very high. To acknowledge that the strategy was initially flawed would provide opposition parties with a strong argument to condemn the incumbent Partido Acción Nacional during the 2012 presidential race. Thus, even if the Federal Government actions effectively shift to focus on a few priority targets (following the "North Lynx" example), only subtle changes are to be expected in the security policy communication strategy. Furthermore, if the strategy shift sheds positive results (but remains unacknowledged) the Federal Government will have a stronger case to defend the performance of its security policy throughout the administration.

THE DRUG MARKET

1. PRODUCTION AND COMMERCIALIZATION

According to the *World Drug Report 2011* issued by the United Nations Office on Drugs and Crime, opium poppy cultivation in Mexico increased from 6,900 hectares in 2007 to 19,500 hectares in 2009. The same source shows that marijuana production in Mexico also increased from 15,800 metric tons in 2007 to 21,500 metric tons in 2010. The WDR also indicates that methamphetamine production has increased sharply in Mexico because of the traffickers' ability to circumvent restrictions on chemical precursors and employ alternative production methods, despite strong restrictions on ephedrine and pseudoephedrine imports on the side of the Mexican Government. Finally, the WDR points out that "large quantities of cocaine continue to be trafficked from South America to the United States, with Mexico being the key transit country", and that "the trafficking of cocaine into the United States is nowadays largely controlled by various Mexican drug cartels".[28]

Map 1 shows that marijuana production in Mexico takes place mainly in the west of the country. The marijuana crops are located mainly in the states of Guerrero, Michoacán, Sinaloa, Nayarit and Baja California, in northern and southern Jalisco, southern and eastern Oaxaca, Western side of Durango and Chihuahua, and several areas distributed throughout the south, east and north of Sonora.[29]

Map 2 shows that poppy production occurs in the states of Guerrero, Nayarit, several areas distributed throughout Sinaloa, in eastern Durango, southern and eastern parts of Chihuahua and in Oaxaca.

As for the production of amphetamine, Map 3 shows that production is concentrated in central Michoacán, southern and northern Jalisco, central Sinaloa and other areas distributed in the states of Baja California, Durango, Nayarit, Guanajuato, Aguascalientes, Chiapas, Guerrero and Morelos.

The states with the highest illegal drug production incidence are Sinaloa, Sonora, Chihuahua, Durango, Guerrero, Jalisco, Michoacán, Nayarit, Baja California, Oaxaca and Zacatecas. (See Appendix IV Table 1).

28. UNODC, 2011:106-107.
29. It is possible to identify the stage production of illicit substances through the information and methodology used (crop eradication or dismantling of laboratories).

Map 1. Illegal Marihuana Production in Mexican Municipalities (2010)



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1 Has. of crops eradicated during the year.

Map 2. Illegal Poppy Production in Mexican Municipalities (2010)



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities s with at least 1 Has. of crops eradicated during the year.

Map 3. Illegal Amphetamine Production in Mexican Municipalities (2010)



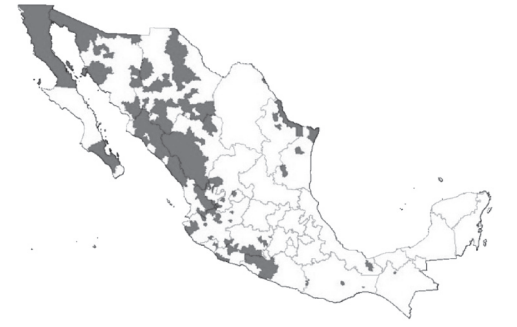
Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1 lab dismantled during the year.

Map 4. Illegal Marijuana Commercialization in Mexican Municipalities

2009



2010



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1,200 kg of seizures during the year.

Map 5. Illegal Cocaine Commercialization in Mexican Municipalities

2009



2010



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 12 kg of seizures during the year.

Map 6. Illegal Amphetamines Commercialization in Mexican Municipalities

2009

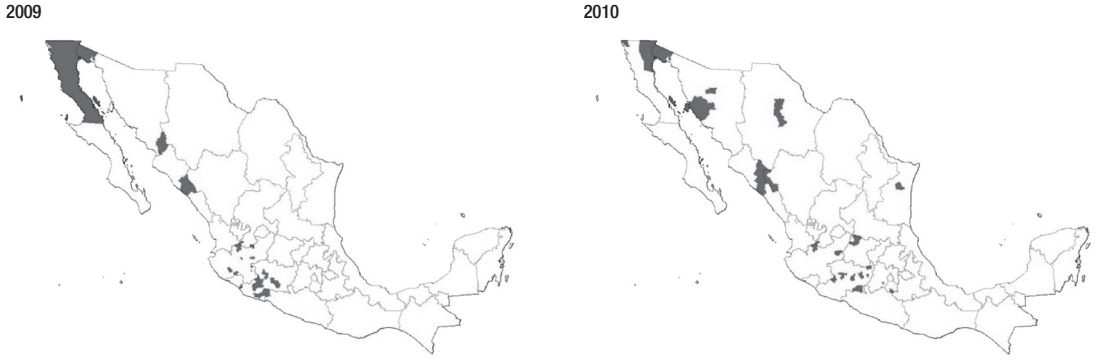


2010



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 12 kg of seizures during the year.

Map 7. Illegal Heroin Commercialization in Mexican Municipalities



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 12 kg of seizures during the year.

On one hand, in Map 4 it is possible to note that the main areas of marijuana production and distribution[30] are located mainly in the states of Tamaulipas, Baja California, Chihuahua, Durango, Nayarit and Sinaloa (these states are also among the top national cocaine consumers[31]). Sonora is also one of the states with greater availability of marijuana.

On the other hand, the production and distribution of cocaine is located in several areas comprising the states of Tamaulipas, Chihuahua, Sinaloa, Sonora, Durango and Baja California (see Map 5). These states are also among the top cocaine consumers in the country (CONADIC-SS, 2008).

In relation to the amphetamine production and distribution, these are concentrated in the states of Baja California, Chihuahua, Sonora, Sinaloa, Jalisco, Guanajuato and Michoacán (see Map 6). These states are also among the top amphetamine consumers in the country (CONADIC-SS, 2008).

Finally, the production and distribution of heroin is concentrated in the states of Chihuahua, Baja California, Sinaloa, Tamaulipas, and Jalisco (these states are also among the first places in heroin consumption[32]). Other states where there is also high availability of this substance are Sonora, Michoacán and Guanajuato.

30. The commercialization of illicit substances refers to the set of activities to make them available to the population, from production to distribution.
31. *National Addictions Survey*, México, D.F., Consejo Nacional contra las Adicciones - Secretaría de Salud, 2008, pp. 1-173.
32. *Ibid.*

2. PRICES

Figure 1 shows the wholesale prices of different drugs in the U.S., Canada and Mexico. In all cases, the lowest wholesale prices are found in Mexico. Drug prices increase according to how far they are from their place of origin. Thus, a drug produced in Mexico tends to be more expensive in Canada than in the U.S. This is because usually the producer or distributor has to pay to local personnel in order to move his illegal drug shipment.

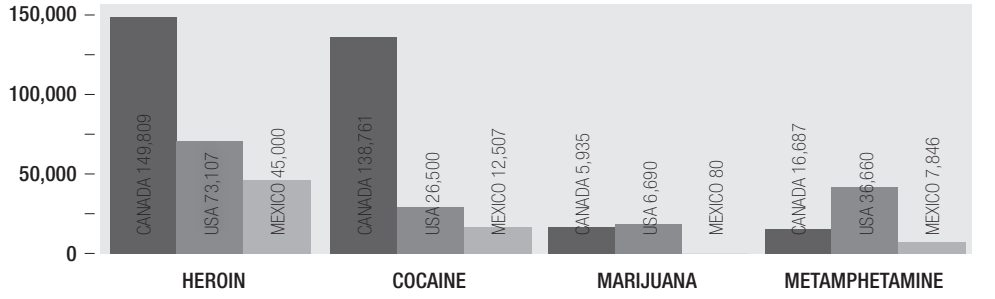
Prices at the state level

The Mexican National Addictions Survey has been conducted twice: in 2002 and 2008. The price per dose for twelve different drugs is publicly available in the 2008 survey. The available data and information regarding prices in the survey has several limitations, one of them is that the price of a drug is based on a "dose" measurement, and thus it is not clearly specified. Also, the price of an illicit substance greatly depends on its level of purity, and this factor is not considered in the answers of the survey. Finally, figures are shown for just one year and not all illicit substances have enough observations to estimate a state-level representative price for the illicit drug. This is, however, the only public and systematic available information on the matter in Mexico.

Tables 2 and 3 in Appendix IV show that drug prices differ across the country. There are states, such as Chiapas and Estado de México, where the maximum drug price for one heroin dose is 3,000 and 2,000 pesos respectively, while in states like Durango and Aguascalientes (closer to poppy cultivation areas) the highest price for the same drug dose is 100 and 50 pesos, respectively. Regarding marijuana, the minimum dose price is 50 pesos (Yucatán) and the maximum is 1,500 pesos (Tlaxcala). In the case of cocaine, the highest price is 1,000 pesos (Baja California and Tabasco) and the lowest is 200 pesos (Coahuila, Colima, Hidalgo, Morelos, Puebla, Sinaloa and San Luis Potosí). Finally, the price for an amphetamines dose varies

33. A geometric mean allows considering all the prices, nevertheless it gives less weight to extreme values, eliminating bias brought on by outliers.

Figure 1. Wholesale Price in USD per Kilogram (2008–2009)



Source: Own elaboration with data from 2011 World Drug Report (for heroin and cocaine) and 2010 World Drug Report (for cannabis herb and methamphetamine). Data for methamphetamines in Mexico taken from *Encuesta Nacional de Adicciones 2008, Secretaría de Salud*.

from 15 pesos (Oaxaca) to 1,200 pesos (Estado de México).

Using a geometric mean, the states where the cheapest illicit drug doses are found are Chihuahua, Hidalgo and Michoacán. The states with the most expensive drugs are Campeche, Estado de México, Quintana Roo and Tabasco

Based on price ranges, the cheapest drugs are opium and inhalable drugs, and the most expensive drugs are heroin, sedatives/ barbiturates, cocaine and ecstasy. It is important to note that a one peso dose is sometimes used as a means to "hook" new consumers.

3. MARKET VALUE AND ESTIMATED INCOME

Recently, the Federal Secretary of Public Security produced an estimate of the potential consumption and wholesale market in Mexico. According to these figures, it is a market of around $560 million USD (See Table 1).

The size of the Mexican wholesale market contrasts with its American equivalent, which according to SSP data has a value of $16,203.9 million USD (See Table 2).

The drug that generates the largest share of income to the Mexican drug traffickers is cocaine (60-62 percent), followed by marijuana (21-25 percent). Given the lack of reliable data about the drug market, the estimated income ranges are wide. Other studies have estimated the income of the illegal drug trade to be between $2,660 and $7,980 million USD (See Table 3).

In relation to drug-trafficking income, various American agencies offer different estimates: the National Drug Intelligence Center estimates a range between $13,600 and $48,400 million USD (for Mexico and Colombia); U.S. Immigration and Customs Enforcement estimates are between $19,000 and $29,000 million USD (Mexico only); and the Drug Enforcement Agency estimates are between $8,300 and $24,900 million USD (only Mexico). The U.N. 2010 World Drug Report states that the total income for cocaine, heroin and marijuana would be $5,300 million USD. Clearly there is no agreement regarding this information.

Table 1. Mexican Drug Wholesale Market

DRUG	POTENTIAL CONSUMPTION (TONS)	WHOLESALE MARKET (USD MILLIONS)	WHOLESALE VALUE PER TON (USD MILLIONS)
Marijuana	514.9	41.2	0.1
Cocaine	27.7	345.7	12.5
Heroin	3.9	138.2	35.4
Amphetamine	4.3	33.7	7.8
TOTAL	550.7	558.8	1.0
AVERAGE	137.7	139.7	14.0

Source: *Informe del Estado de la Seguridad Pública en México. 2010*. Centro Nacional de Atención Ciudadana de la Policía Federal (Secretaría de Seguridad Pública) http://www.insyde.org.mx/images/informe_estado_seguridad_publica.pptx.

Table 2. U.S. Drug Market Value

DRUG	POTENTIAL CONSUMPTION (TONS)	WHOLESALE MARKET (USD MILLIONS)	WHOLESALE VALUE PER TON (USD MILLIONS)
Marijuana	4,067.3	8,134.6	2.0
Cocaine	88.0	2,508.3	28.5
Heroin	43.3	3,081.5	71.2
Amphetamine	37.7	2,479.5	65.8
TOTAL	4,236.3	16,203.9	

Source: *Informe del Estado de la Seguridad Pública en México. 2010*. Centro Nacional de Atención Ciudadana de la Policía Federal (Secretaría de Seguridad Pública) http://www.insyde.org.mx/images/informe_estado_seguridad_publica.pptx.

Table 3. Estimated Income for the Illegal Drugs Trade in Mexico

DRUG	VOLUME (TONS)		VALUE PER TONS (USD MILLIONS)		ESTIMATED INCOME (USD MILLIONS)	
	Lower Limit	Upper Limit	Lower Limit	Upper Limit	Lower Limit	Upper Limit
Cocaine	165	320	10	15	1,650	4,800
Marijuana	1,000	2,000	1	1	550	2,000
Heroin	6	10	50	70	300	700
Methamphetamine	16	32	10	15	160	480
TOTAL	1,187	2,362			2,660	7,980

Source: *U.N. 2010 World Drug Report* and *Informe del Estado de la Seguridad Pública en México. 2010*. Centro Nacional de Atención Ciudadana de la Policía Federal (Secretaría de Seguridad Pública) http://www.insyde.org.mx/images/informe_estado_seguridad_publica.pptx.

Table 4. U.S.* and Mexico** Illicit Drug Consumption Comparison

PERIOD	2002		2008	
	US	MEXICO	US	MEXICO
At least once in lifetime (Millions)	108.3	2.89	117.3	3.9
Last year (Millions)	35.1	0.57	35.5	1.1
Last month (Millions)	19.5	0.34	20.1	0.7
At least once in lifetime (% of population)	46.0	4.2	47.0	5.2
Last year (% of population)	14.9	0.8	14.2	1.4
Last month (% of population)	8.3	0.5	8.0	0.9

* Source: Own elaboration with data from National Survey on Drug Use and Health, U.S. Department of Health and Human Services, 2008 and U.S. Census Bureau.
** Source: Own elaboration with data from National Addictions Survey 2008, CONADIC, Secretaría de Salud, Mexico.

4. CONSUMPTION

Levels of consumption have grown in the United States and Mexico in all cases. However, in contrast with the United States drug consumption is not yet a widespread public health problem in Mexico. In the United States almost half of the population has tried a drug at least once in a lifetime, while in Mexico this figure is 5.2 percent (See Table 4).

The most commonly used drug, in both the United States and Mexico, is marijuana by far, followed by cocaine, methamphetamines and heroin. From 2002 to 2008 the United States registered a slight decrease in the consumption of methamphetamines. This phenomenon had no equivalence in Mexico, where the levels of consumption for this drug increased during the same period (See Table 5).

The age distribution among drug users has a similar pattern in both countries. Both countries have their largest share of consumers between the ages of 35 to 65. In Mexico, cocaine use doubled from 1.2 percent to 2.4 percent between 2002 and 2008.

The following maps show the geographical distribution of drug consumption at the state level (the darker the color, the greater the incidence of drug consumption). It is important to point out that, in general, higher consumption rates match production and distribution spots.

Table 5. U.S.* and Mexico** Illicit Drugs Consumption Comparison: At least one dose in lifetime

PERIOD	2002		2008	
	US	MEXICO	US	MEXICO
Marijuana (Millions)	94.9	2.43	102.4	3.1
Cocaine (Millions)	33.9	0.86	36.8	1.8
Heroin (Millions)	3.7	0.06	3.8	0.1
Methamphetamines (Millions)	15.4	0.06	12.6	0.2
Marijuana (% of population)	40.4	3.5	41.0	4.2
Cocaine (% of population)	14.4	1.2	14.7	2.4
Heroin (% of population)	1.6	0.1	1.5	0.1
Methamphetamines (% of population)	6.5	0.1	5.0	0.3

*Source: Own elaboration with data from National Survey on Drug Use and Health, U.S. Department of Health and Human Services, 2008 and U.S. Census Bureau
** Source: Own elaboration with data from National Addictions Survey 2002 and 2008, CONADIC, Secretaría de Salud, Mexico

Map 8. Cumulative Incidence Use for:

Marijuana



Cocaine



Source: Own elaboration with data from National Addictions Survey 2008, CONADIC, Secretaría de Salud.

Amphetamine



Heroin



Source: Own elaboration with data from National Addictions Survey 2008, CONADIC, Secretaría de Salud.

PUBLIC OPINION AND THE WAR AGAINST DRUGS AND CRIME

Several surveys conducted in the previous months suggest that the steep increase of violence throughout 2010 —as well as its geographical dispersion and the expansion on crime level that hurt most common citizens— had an impact on public opinion. The approval rate of President Calderón has been declining, as well as the public assessment of the anti-drug trafficking strategy. Moreover, for the first time during the current administration, in February 2011 Mexicans identified security and justice as the main problem of the country (on top of economic issues, which had previously been the top concern for Mexicans).

Public Support over Governmental Actions

An August 2011 survey conducted by Buendía & Laredo shows that 56 percent of the population thinks that the country is less safe because of the government strategies, 16 percent thinks the country is now safer and 3 percent thinks that the current strategy has had no repercussion on security.[34] Another Buendía & Laredo survey from May 2011 ranks President Calderón's approval at 54 percent,[35] and 50 percent gives him a grade of "Very good/good" in his fight against organized crime (see Appendix V Figures 2 and 3).[36] In August 2011 Consulta Mitofsky reported a 50.3 percent of approval to Felipe Calderon's government, though it has a decreasing trend (see Appendix V Figure 4).[37]

Public Confidence over Security Forces

While trust in Mexican public institutions has historically been low, confidence in the police is particularly worrying. A national survey conducted by the Citizen's Institute for Security Studies (ICESI) in 2010, showed that 89 percent of the respondents have little or no trust on local police, and 75 percent of the population has little or

34. Buendía & Laredo, August 2011, *Encuesta Nacional. Seguridad y Narcotráfico*, p. 3.
35. Buendía & Laredo, May 2011, *Encuesta Nacional. Aprobación Presidencial*, p. 2.
36. *Ibid.*, p. 9.
37. Consulta Mitofsky, August 2011, *México. Evaluación de Gobierno*, p. 11.

no trust on the federal police either.[38] The same survey asked the respondents to grade the effectiveness of several public security agencies: 57 percent considered that the Federal Police were very or somewhat effective, 44 percent answered that the state police were little or no effective, and 63 percent considered that the municipal police were little or no effective (see Appendix V Figure 5).[39]

Consulta Mitofsky conducted in June 2011 an extensive survey over trust on public institutions. The survey showed that the most trusted public institution is the army (32.3 percent of the public trust in this institution), and police forces are among the least trusted institutions (6.5 percent), just above senators (5.8 percent) and deputies (5.3 percent).[40] The same survey reveals that since April 2011 public trust on the Army has decreased by 2.8 percent (see Appendix V Figure 9).[41]

According to a survey by the Executive Secretariat of the National Public Security the top explanation of public security institutions' poor performance are lack of resources (20 percent of the people mention this explanation) and complicity with the criminals (18 percent) (see Appendix V Figure 8).

Public Perception over Insecurity

Personal security concerns include increased crime and lawlessness, police corruption and street gangs. These concerns are apparent in available survey data. For instance, in a survey conducted by ICESI in 2010, 65 percent of respondents reported not feeling safe in the state they inhabit.[42] These ICESI surveys also reveal public perceptions about insecurity in Mexico at a municipal and state level. The states with the highest percentages of perception of insecurity are Chihuahua (88 percent), D.F. (85 percent), Sinaloa (83 percent), Nuevo León (82 percent) and Durango (80 percent).[43] In the case of D.F. where there is no strong presence of cartels, the high perception of insecurity is a result of predatory criminal activities, such as robbery. However, in states such as, Chihuahua, Sinaloa, Nuevo León or Durango the public perception of insecurity is closely related with the presence of organized crime. At the municipal level the results do not differ greatly (see Appendix V Tables 1 and 2).[44]

A survey made by Consulta Mitofsky in August 2011 shows that economic and security issues are the most worrisome topics for the Mexican people. Consistently, over the last four years economic issues have been above security issues. However, since the end of 2009 the gap between the two has been closing: in November 2009 the difference was 52 points; in November 2010 the difference was just 16. In February 2011 for the first time security issues surpassed economic issues and since then this has remained; this trend sharpened and by August 2011 security issues were 8 percent above economic issues.[45]

A survey by the Executive Secretariat of the National Public Security System shows similar results.[46] This survey showed that the principal concern of the country is crime (32 percent), followed by unemployment (16 percent) and

38. ICESI, 2010, *Análisis de la Séptima Encuesta Nacional sobre Inseguridad*, p. 114.
39. *Ibid.*, p. 117.
40. Consulta Mitofsky, June 2011, *Economía, Política y Gobierno*, pp. 13-14.
41. *Ibid.*, p.13.
42. *Ibid.*, p.103.
43. *Ibid.*, p.103.
44. *Ibid.*, p.104.

the economic crisis (14 percent). This same question was asked in relation to their state and municipality. At the national level, the percentage of people that thinks that the main concern within their respective state is crime is also 32 percent, followed by unemployment (23 percent) and the economic crisis (13 percent). However it is important to note that there are significant variations across states. For example 70 percent of respondents from Nuevo León consider that crime is the main concern of their state, while only 21 percent of the people from Yucatán think that crime is the main concern (see Appendix V Figures 12 and 13).

This same survey also shows figures about public security perception at the three levels of government. When people were asked to compare its current perception of public security with last years' in their municipality, state and the country as a whole the results show that the higher the level of government, the worst is the perception of security (see Appendix V Figures 15, 16, and 17).

GEA-ISA reported on a May 2011 survey that thinks that the government "is winning" (16 percent), meanwhile 35 percent think that the criminals are winning and 49 percent or the population does not know who is winning or losing (see Appendix V Figure 18).[47] This trend is consistent with the results of Buendía & Laredo of August 2011, which show that 29 percent of the population thinks that the army is winning, while 42 percent think that the drug traffickers are winning (See Appendix V Figure 19).[48]

Government Reaction to Public Attitudes

As a way to revert the general perception that the war against organized crime and drugs is failing, the Federal Government has implemented a communication strategy. It includes broadcasting edited interrogations of high-profile cartel members, a TV series, and continuous public announcements of the Public Security Spokesperson, Alejandro Poiré. Examples of the first are the interrogations of Édgar Valdez Villarreal, aka "La Barbie" (broadcasted in September 2, 2010), Jesús Méndez, aka "El Chango" (broadcasted in June 24, 2010) and Jesús Rejón, aka "El Mamito" (broadcasted in July 5, 2010). The three interrogations were broadcasted in national television a few days after their detention. During the interrogations the three criminals seem to be collaborative with the authorities by answering their questions and, in some cases, they praise the governmental effort. The videos are edited to skip relevant intelligence information and only reveal information that was already in the public domain.[50]

The second governmental propagandistic product is *El Equipo* (The Team) TV series. They were broadcasted from May 9 to May 27, 2011. The plot of the series was centered in a group of federal police officers belonging to an anti-organized crime team and the difficulties of a criminal organization in the face of increasing governmental pressure. The series were broadcasted nationwide in top rating hours. They were highly criticized

45. Consulta Mitofsky, August 2011, *México. Evaluación de Gobierno*, p. 10.
46. Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Op. Cit.*
47. GEA-ISA, *Segunda Encuesta Nacional GEA-ISA 2011*, p. 34.
48. Buendía & Laredo, August 2011, *Encuesta Nacional. Seguridad y Narcotráfico*, p. 6.
49. Another highly publicized interrogation was that of José Jorge Balderas, aka "El JJ". Though he was not an important cartel leader, he acquired a high-profile after shooting Salvador Cabañas, a professional soccer player, in a nightclub.
50. Stratfor, July 27, 2011. "Mexican Government Using Interrogation as Propaganda".

Table 1. Insights Related to Public Opinion and the War Against Drugs and Crime

Presidential approval	Felipe Calderon's government has a percentage of approval of 50.3 percent, though it has a decreasing trend.
Trust in public institutions	The most trusted public institution in Mexico is the army (32.3 percent); meanwhile police forces are among the least trusted institutions (6.5), just above senators (5.8) and deputies (5.3).
Approval of the strategy	56 percent of the population thinks that the country is less safe because of the government strategies against drugs and crime.
States with the highest insecurity perception	Chihuahua (88 percent), D.F. (85), Sinaloa (83), Nuevo León (82) and Durango (80).
Worrisome issues among the public	Since February 2011 security issues are considered the most worrisome; in August 2011 these were 8 points above economic issues.
Winners and losers	29 percent of the population thinks that the army is winning. 42 percent think that the drug traffickers are winning.

because there were some doubts about the origin of their funding, which apparently came primarily from the *Secretaría de Seguridad Pública* (Ministry of Public Security).[51]

The third product is the public announcement of the *10 Mitos de la Lucha por la Seguridad* (10 Myths about the Fight for Security). This effort consists in denying some ideas placed in the public domain about the federal strategy against organized crime and drugs. These myths are explained through easily understandable videos (including comics) posted in the Presidency blog. The claims discussed in these myths have included that the government has no strategy; that Mexico is one of the most violent countries in the world; the alleged governmental strategic bias in favor of the Sinaloa Cartel; that there is no support to the strategy; and that legalizing drugs would stop violence.

51. Stratfor, July 27, 2011. "Mexican Government Using Interrogation as Propaganda".

APPENDIX I

Table 1. Instability in Directive Positions in the Security Sector (December 2006–August 2010)

AGENCY	NAME OF THE PUBLIC OFFICIAL	DATE OF APPOINTMENT	DATE OF RESIGNATION
Secretaría de Gobernación	Juan Camilo Mouriño	December 2006	November 2008
	Fernando Gómez Mont	November 2008	July 2010
	José Francisco Blake Mora	July 2010	Present
Procuraduría General de la República	Eduardo Medina Mora	December 2006	September 2009
	Juan Miguel Alcantara Soria	September 7, 2009	September 24, 2009
	Arturo Chávez Chávez	September 2009	Present
Sistema Nacional de Seguridad Pública (Executive Secretary)	Roberto Campa	December 2006	September 2008
	Monte Alejandro Rubido	September 2008	March 2009
	Jorge Tello Peón	March 2009	December 2009
	Juan Miguel Alcántara Soria	January 2010	Present
Consejo de Seguridad Nacional (Technical Secretary)	Sigrid Arzt	December 2006	April 2009
	Monte Alejandro Rubido	April 2009	September 2009
	Jorge Tello Peón	January 2010	August 2010
	Alejandro Poiré	August 2010	Present
Policía Federal (Commisioner)	Ardelio Vargas Fosado	December 2006	March 2007
	Edgar Millán Gómez	March 2007	May 2008
	Gerardo Garay	May 2008	November 2008
	Rodrigo Esparza Cristerna	November 2008	June 2009
	Facundo Rosas	June 2009	Present

Table 2. Allocated Budget to Security Sector Agencies (Amounts in Millions of Mexican Pesos)

AGENCY	2007	2008	2009	2010	2011
SEGOB	6,073.9	7,762.2	10,400.7	8,687.2	14,279.6
SEGOB (CISEN)	1,331.6	1,847.7	2,722.7	2,221.6	2,353.3
SEDENA	38,475.8	40,166.3	47,291.1	45,282.6	52,596.9
SEMAR	13,085.3	15,419.5	17,409.6	16,596.7	18,415.7
PGR	11,012.5	10,724.3	13,344.9	12,227.1	10,651.8
SSP	16,327.5	22,711.4	35,684.4	33,664.6	30,184.9
TOTAL	84,975.0	96,783.7	124,130.7	116,458.2	126,128.9

Source: Presupuesto de Egresos de la Federación 2007, 2008, 2009, 2010 and 2011. A discount factor, based on the National Index of Consumer Prices of January's each year, was used to calculate the budget amount at constant prices (2011 base year).

Table 3. Expenditure Compared with the Budget of the Security Sector Agencies, 2007 (Amounts in Millions of Mexican Pesos)

AGENCY	BUDGET	EXPENDITURE	% VARIATION
SEGOB	6,073.9	7,032.4	15.8
SEDENA	38,475.8	40,813.6	6.1
SEMAR	13,085.3	14,537.2	11.1
PGR	11,012.5	11,278.9	2.4
SSP	16,327.5	21,061.8	29.0
TOTAL	84,975.0	94,723.9	11.5

Source: Presupuesto de Egresos de la Federación and Cuenta de la Hacienda Pública Federal, 2007. A discount factor, based on the National Index of Consumer Prices of January's each year, was used to calculate the budget amount at constant prices (2011 base year).

Table 4. Expenditure Compared with the Budget of the Security Sector Agencies, 2008 (Amounts in Millions of Mexican Pesos)

AGENCY	BUDGET	EXPENDITURE	% VARIATION
SEGOB	7,762.2	8,352.3	7.6
SEDENA	40,166.3	42,771.9	6.5
SEMAR	15,419.5	17,461.6	13.2
PGR	10,724.3	10,312.3	-3.8
SSP	22,711.4	24,357.6	7.2
TOTAL	96,783.7	103,255.7	6.7

Source: Presupuesto de Egresos de la Federación and Cuenta de la Hacienda Pública Federal, 2008. A discount factor, based on the National Index of Consumer Prices of January's each year, was used to calculate the budget amount at constant prices (2011 base year).

Table 5. Expenditure Compared with the Budget of the Security Sector Agencies, 2009 (Amounts in Millions of Mexican Pesos)

AGENCY	BUDGET	EXPENDITURE	% VARIATION
SEGOB	10,400.7	9,564.2	-8.0
SEDENA	47,291.1	48,736.0	3.1
SEMAR	17,409.6	17,694.3	1.6
PGR	13,344.9	11,744.3	-12.0
SSP	35,684.4	36,378.7	1.9
TOTAL	124,130.7	124,117.5	0.0

Source: Presupuesto de Egresos de la Federación and Cuenta de la Hacienda Pública Federal, 2009. A discount factor, based on the National Index of Consumer Prices of January's each year, was used to calculate the budget amount at constant prices (2011 base year).

Table 6. Expenditure Compared with the Budget of the Security Sector Agencies, 2010 (Amounts in Millions of Mexican Pesos)

AGENCY	BUDGET	EXPENDITURE	% VARIATION
SEGOB	8,687.2	14,819.7	70.6
SEDENA	45,282.6	54,586.1	20.5
SEMAR	16,596.7	19,112.2	15.2
PGR	12,227.1	11,054.7	-9.6
SSP	33,664.6	31,326.5	-6.9
TOTAL	116,458.2	130,899.1	12.4

Source: Presupuesto de Egresos de la Federación and Cuenta de la Hacienda Pública Federal, 2009. A discount factor, based on the National Index of Consumer Prices of January's each year, was used to calculate the budget amount at constant prices (2011 base year).

Table 7. Security Sector State Budgets

STATE	BUDGET SSP AND PGJ (MILLIONS OF PESOS)	% IN RELATION TO STATE BUDGET	% OF TOTAL SECURITY SECTOR BUDGET ASSIGNED BY MEXICAN STATE	FASP FEDERAL TRANSFER (MILLIONS OF PESOS) [3]	% OF SPENT FASP [3]
Aguascalientes	710.4	5.7	1.0	64.6	9.3
Baja California	2,610.3	7.9	3.6	168.8	5.9
Baja California Sur	535.7	6.2	0.7	83.4	7.9
Campeche	567.4	4.2	0.8	64.6	13.9
Chiapas	2,175.1	3.8	3.0	172.5	34.1
Chihuahua (1)	2,805.7	6.7	3.9	143.2	56.0
Coahuila (2)	1,916.1	6.1	2.7	117.2	3.6
Colima	175.3	2.4	0.2	63.1	48.5
Distrito Federal	16,018.3	11.7	22.4	260.1	8.1
Durango (1)	737.5	4.0	1.0	98	25.8
Guanajuato	2,552.0	5.8	3.6	150.5	2.8
Guerrero	1,710.0	4.6	2.4	123.5	49.4
Hidalgo	1,109.2	4.7	1.6	104.4	0.0
Jalisco	3,612.0	5.5	5.0	186.4	0.0
México (2)	6,781.4	4.6	9.5	330	50.2
Michoacán	2,483.6	5.6	3.5	149.6	28.9
Morelos	737.7	4.6	1.0	88.6	8.4
Nayarit	587.8	4.1	0.8	80	46.3
Nuevo León	4,389.4	7.7	6.1	159.1	3.9
Oaxaca (1)	2,228.5	5.3	3.1	131	2.1
Puebla	1,693.3	3.2	2.4	157.6	19.3
Querétaro	728.0	3.8	1.0	79.2	26.3
Quintana Roo	913.8	5.9	1.3	84.5	7.8
San Luis Potosí (1)	2,326.9	8.6	3.3	119.5	6.7
Sinaloa	938.3	2.9	1.3	118.1	20.9
Sonora	1,986.2	5.7	2.8	168.4	18.5
Tabasco	2,927.3	9.2	4.1	96.4	15.6
Tamaulipas	1,292.0	4.2	1.8	153.7	32.8
Tlaxcala	493.1	4.5	0.7	77.1	-
Veracruz	2,125.3	2.6	3.0	199.6	31.7
Yucatán	884.2	3.5	1.2	89.8	34.9
Zacatecas (1)	798.8	4.2	1.1	67.6	58.7
TOTAL	71,550.5			4,150.1	
AVERAGE	2,236.0	5.3	3.1	129.7	21.9

1. Figures corresponding to functional classification of budget
2. Figures corresponding to programmatic classification of budget
3. FASP figures corresponding to January-June 2010, "Evolución del Gasto Presupuestal del Ramo 36 Seguridad Pública 2001-2010", Centro de Estudios de las Finanzas Públicas, Cámara de Diputados, México, 2010. http://www.cefp.gob.mx/publicaciones/documento/2010/septiembre/cefp0152010.pdf

Table 8. State Budget *per capita* in the Fields of Public Safety (SSP) and Law Enforcement (PGJ) in 2011

STATE	BUDGET SSP (*PER CAPITA*)	BUDGET PGJ (*PER CAPITA*)	BUDGET SSP AND PGJ (*PER CAPITA*)
Aguascalientes	400.0	199.5	599.5
Baja California	476.0	351.3	827.3
Baja California Sur	611.4	229.6	841.0
Campeche	437.9	252.0	689.9
Chiapas	257.5	195.9	453.5
Chihuahua (1)	-	-	823.7
Coahuila (2)	-	-	697.2
Colima	0.0	269.5	269.5
Distrito Federal	1,293.7	516.0	1809.8
Durango (1)	196.2	255.4	451.7
Guanajuato	212.2	252.9	465.1
Guerrero	349.0	155.6	504.6
Hidalgo	343.2	73.0	416.2
Jalisco	328.0	163.4	491.4
México (2)	289.9	157.0	446.9
Michoacán	437.8	133.0	570.8
Morelos	246.2	168.9	415.1
Nayarit	326.1	215.6	541.7
Nuevo León	654.9	288.4	943.2
Oaxaca (1)	347.6	238.5	586.1
Puebla	207.2	85.8	293.0
Querétaro	166.7	231.6	398.3
Quintana Roo	413.5	275.8	689.3
San Luis Potosí (1)	423.0	477.0	900.0
Sinaloa	127.4	211.6	339.0
Sonora	488.4	257.6	746.0
Tabasco	788.3	519.4	1307.6
Tamaulipas	235.3	160.0	395.3
Tlaxcala	345.2	76.3	421.5
Veracruz	189.7	88.4	278.1
Yucatán	335.6	116.5	452.1
Zacatecas (1)	-	-	535.9
AVERAGE	376.8	228.1	612.5

Source: Figures are the administrative classification of state budget expenditures.
Note (1): Figures are the functional classification of state budget expenditures.
Note (2): Figures are the programmatic classification of state budget expenditures.

Table 9. SUBSEMUN Contributions to Each State (millions pesos)

STATE	2008		2009		2010	
	Federal Contribution	Municipal Contribution	Federal Contribution	Municipal Contribution	Federal Contribution	Municipal Contribution
Aguascalientes	87.3	29.1	86.2	28.7	75.0	22.5
Baja California	287.2	95.7	275.0	91.7	255.9	76.8
Baja California Sur	18.0	6.0	30.0	10.0	22.3	6.7
Campeche	18.0	6.0	30.0	10.0	20.0	6.0
Chiapas	66.5	22.2	108.4	36.1	90.3	27.1
Chihuahua	240.7	80.2	230.0	76.7	217.9	65.4
Coahuila	96.5	32.2	104.9	35.0	122.0	36.6
Colima	27.0	9.0	41.5	13.8	40.0	12.0
Distrito Federal	287.2	95.7	338.6	112.9	338.6	101.6
Durango	40.1	13.4	44.8	14.9	47.4	14.2
Guanajuato	152.4	50.8	182.5	60.8	228.3	68.5
Guerrero	79.1	26.4	94.9	31.6	94.1	28.3
Hidalgo	18.0	6.0	40.0	13.3	30.0	9.0
Jalisco	236.9	79.0	266.6	88.9	266.9	80.1
México	287.2	95.7	338.6	112.9	338.6	101.6
Michoacán	131.2	43.7	159.0	53.0	162.6	48.8
Morelos	27.0	9.0	56.4	18.8	74.8	22.4
Nayarit	31.4	10.5	54.6	18.2	53.9	16.2
Nuevo León	187.9	62.6	198.3	66.1	172.1	51.6
Oaxaca	23.6	7.9	36.3	12.1	35.1	10.5
Puebla	125.2	41.7	135.0	45.0	165.0	49.5
Querétaro	121.8	40.6	125.0	41.7	105.0	31.5
Quintana Roo	58.3	19.4	66.0	22.0	61.1	18.3
San Luis Potosí	118.8	39.6	136.6	45.5	133.1	39.9
Sinaloa	178.1	59.4	174.2	58.1	194.5	58.4
Sonora	146.9	49.0	152.7	50.9	192.3	57.7
Tabasco	57.6	19.2	97.5	32.5	86.4	25.9
Tamaulipas	155.4	51.8	158.8	52.9	174.3	52.3
Tlaxcala	18.0	6.0	30.0	10.0	20.0	6.0
Veracruz	126.8	42.3	200.9	67.0	198.6	59.6
Yucatán	121.1	40.4	115.0	38.3	91.9	27.6
Zacatecas	18.0	6.0	30.0	10.0	30.0	9.0
TOTAL	3,589.4	1,196.5	4,137.9	1,379.3	4,138.0	1,241.4
AVERAGE	112.2	37.4	129.3	43.1	129.3	38.8

Source: Cámara de Diputados, 2008, 2009 and 2010. http://www.cefp.gob.mx/notas/2008/notacefp0172008.pdf http://www3.diputados.gob.mx/camara/content/download/223013/576691/file/presentacion_subsemun.pdf
http://www.cefp.gob.mx/publicaciones/documento/2010/septiembre/cefp0152010.pdf

Table 10. State and Municipal Police Officers Variation

STATE	2009	2010	% VARIATION	2011	% VARIATION
Aguascalientes	2,632	3,919	48.9	3,919	0.0
Baja California	6,975	12,785	83.3	13,130	2.7
Baja California Sur	2,020	3,970	96.5	4,069	2.5
Campeche	1,859	2,910	56.5	3,030	4.1
Coahuila	4,705	6,623	40.8	6,950	4.9
Colima	1,757	3,248	84.9	3,368	3.7
Chiapas	11,688	16,229	38.9	16,229	0.0
Chihuahua	5,699	13,306	133.5	13,306	0.0
Distrito Federal	80,803	101,495	25.6	101,495	0.0
Durango	2,850	5,435	90.7	5,506	1.3
Guanajuato	10,035	17,631	75.7	18,119	2.8
Guerrero	9,280	15,038	62.0	15,038	0.0
Hidalgo	6,206	8,132	31.0	9,466	16.4
Jalisco	18,866	24,391	29.3	25,260	3.6
México	58,017	67,469	16.3	72,456	7.4
Michoacán	8,294	14,130	70.4	14,130	0.0
Morelos	5,201	8,908	71.3	8,908	0.0
Nayarit	1,876	3,825	103.9	3,825	0.0
Nuevo León	10,127	15,304	51.1	14,244	-6.9
Oaxaca	10,697	13,081	22.3	13,081	0.0
Puebla	13,170	18,165	37.9	18,165	0.0
Querétaro	3,077	4,120	33.9	4,120	0.0
Quintana Roo	3,827	6,513	70.2	6,513	0.0
San Luis Potosí	7,122	10,052	41.1	10,333	2.8
Sinaloa	7,447	8,923	19.8	11,064	24.0
Sonora	5,496	10,421	89.6	11,114	6.7
Tabasco	9,180	11,341	23.5	10,882	-4.0
Tamaulipas	7,241	10,559	45.8	10,456	-1.0
Tlaxcala	3,411	4,658	36.6	4,673	0.3
Veracruz	17,739	23,537	32.7	23,537	0.0
Yucatán	6,540	8,946	36.8	8,946	0.0
Zacatecas	2,637	4,583	73.8	4,688	2.3
TOTAL	346,474	479,647	38.4	490,020	2.2
AVERAGE	10,827	14,989	38.4	15,313	2.2

Source: Own elaboration with information from SNSP-CON 2009, Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2010.

Table 11. State Police Officers Variation

STATE	2007	2009	% VARIATION	2010	% VARIATION
Aguascalientes	469	491	4.7	1,667	239.5
Baja California	403	447	10.9	5,599	1,152.6
Baja California Sur	18	15	-16.7	1,583	10,453.3
Campeche	627	939	49.8	2,019	115.0
Coahuila	606	732	20.8	2,530	245.6
Colima	658	631	-4.1	1,858	194.5
Chiapas	4,501	4,501	0	9,042	100.9
Chihuahua	1,217	1,217	0	6,048	397.0
Distrito Federal	77,132	80,803	4.8	101,495	25.6
Durango	126	172	36.5	2,590	1,405.8
Guanajuato	870	1,187	36.4	7,454	528.0
Guerrero	2,395	2,395	0	7,200	200.6
Hidalgo	2,586	2,707	4.7	4,502	66.3
Jalisco	4,213	5,361	27.2	10,769	100.9
México	30,694	35,367	15.2	44,313	25.3
Michoacán	3,091	3,091	0	7,813	152.8
Morelos	1,597	1,623	1.6	4,811	196.4
Nayarit	185	185	0	1,960	959.5
Nuevo León	2,062	2,072	0.5	6,620	219.5
Oaxaca	5,750	6,009	4.5	8,393	39.7
Puebla	6,892	6,710	-2.6	11,705	74.4
Querétaro	775	720	-7.1	1,763	144.9
Quintana Roo	945	299	-68.4	2,727	812.0
San Luis Potosí	3,759	3,882	3.3	6,822	75.7
Sinaloa	396	1,303	229	2,779	113.3
Sonora	261	719	175.5	4,864	576.5
Tabasco	2975	5,008	68.3	7,012	40.0
Tamaulipas	1,192	1,464	22.8	4,942	237.6
Tlaxcala	2,067	1,711	-17.2	2,829	65.3
Veracruz	10,437	11,826	13.3	17,571	48.6
Yucatán	2,525	3,075	21.8	5,297	72.3
Zacatecas	295	400	35.6	2,182	445.5
TOTAL	171,719	187,062	8.9	308,759	65.1
AVERAGE	5,366	5,846	8.9	9,649	65.0

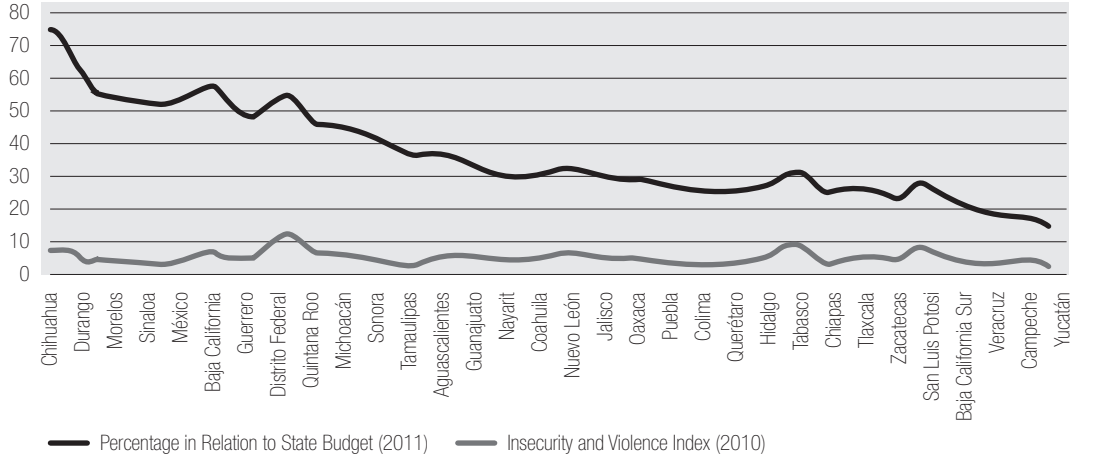
Source: Own elaboration with information from SNSP-CON, 2007, 2009 and from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2010.

Table 12. Municipal Police Officers Variation

STATE	2007	2009	% VARIATION	2010	% VARIATION
Aguascalientes	2,111	2,141	1.4	2,252	5.2
Baja California	6,697	6,528	-2.5	7,186	10.1
Baja California Sur	1,837	2,005	9.1	2,387	19.1
Campeche	957	920	-3.9	891	-3.2
Coahuila	3,528	3,973	12.6	4,093	3.0
Colima	1,186	1,126	-5.1	1,390	23.4
Chiapas	5,956	7,187	20.7	7,187	0.0
Chihuahua	4,603	4,482	-2.6	7,258	61.9
Distrito Federal	*	*	*	*	*
Durango	2,336	2,678	14.6	2,845	6.2
Guanajuato	8,061	8,848	9.8	10,177	15.0
Guerrero	6,885	6,885	0	7,838	13.8
Hidalgo	3,448	3,499	1.5	3,630	3.7
Jalisco	12,278	13,505	10	13,622	0.9
México	18,875	22,650	20	23,156	2.2
Michoacán	5,203	5,203	0	6,317	21.4
Morelos	3,546	3,578	0.9	4,097	14.5
Nayarit	1,691	1,691	0	1,865	10.3
Nuevo León	6,395	8,055	26	8,684	7.8
Oaxaca	4,299	4,688	9	4,688	0.0
Puebla	6,208	6,460	4.1	6,460	0.0
Querétaro	1,922	2,357	22.6	2,357	0.0
Quintana Roo	3,146	3,528	12.1	3,786	7.3
San Luis Potosí	3,037	3,240	6.7	3,230	-0.3
Sinaloa	6,008	6,144	2.3	6,144	0.0
Sonora	4,637	4,777	3	5,557	16.3
Tabasco	3,819	4,172	9.2	4,329	3.8
Tamaulipas	5,384	5,777	7.3	5,617	-2.8
Tlaxcala	1,540	1,700	10.4	1,829	7.6
Veracruz	7,748	5,913	-23.7	5,966	0.9
Yucatán	1,329	3,465	160.7	3,649	5.3
Zacatecas	2,115	2,237	5.8	2,401	7.3
TOTAL	146,785	159,412	8.6	170,888	7.2
AVERAGE	4,735	5,142	8.6	5,513	7.2

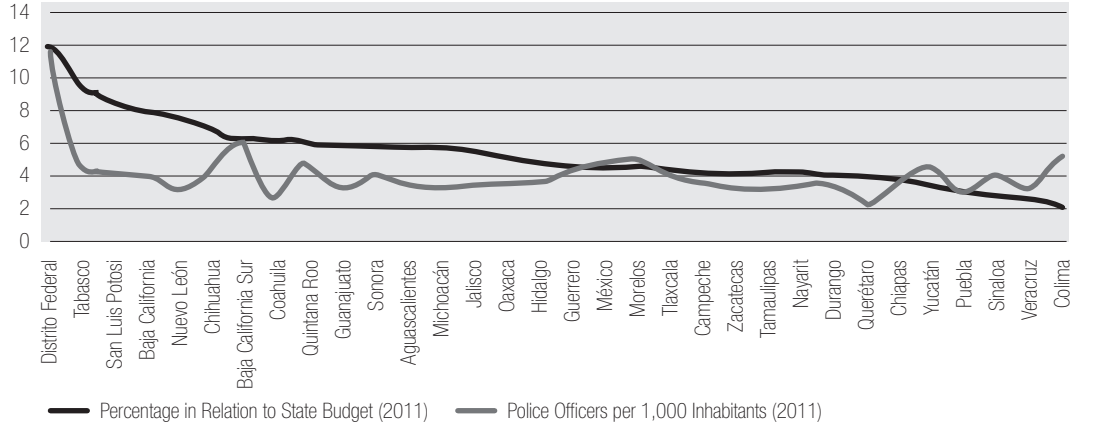
Source: Own elaboration with information from SNSP-CON, 2007, 2009 and from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, , 2010.

Figure 1. Percentage of Security and Enforcement Budget and Violence Index per State (2010–2011)



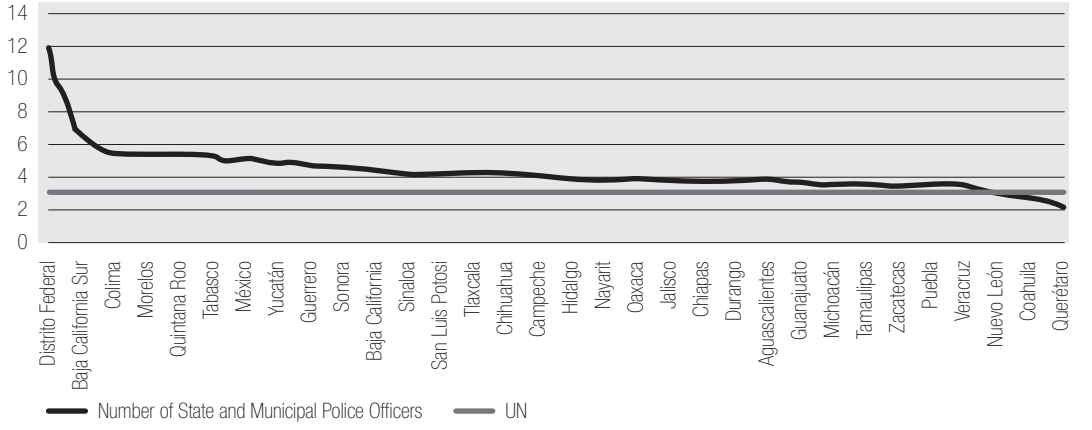
Source: Presupuestos de Egresos Estatales, 2011. Índice de Inseguridad Ciudadana y Violencia 2010, México Evalúa. http://mexicoevalua.org/descargables/551328_INDICE_INSEGURIDAD-VIOLENCIA.pdf

Figure 2. State and Municipal Police Officers per 1,000 Inhabitants and Percentage of Security and Enforcement Budget (2011)



Source: Own elaboration with State Budget Expenditures, 2011 and information from Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2011, Socilitud de Información 2210300010011.

Figure 3. Number of State and Municipal Police Officers in each State in Relation to the Minimum Number of Police Officers Recommended by the United Nations (2.8 Police Officers Per 1,000 Inhabitants) (2011)



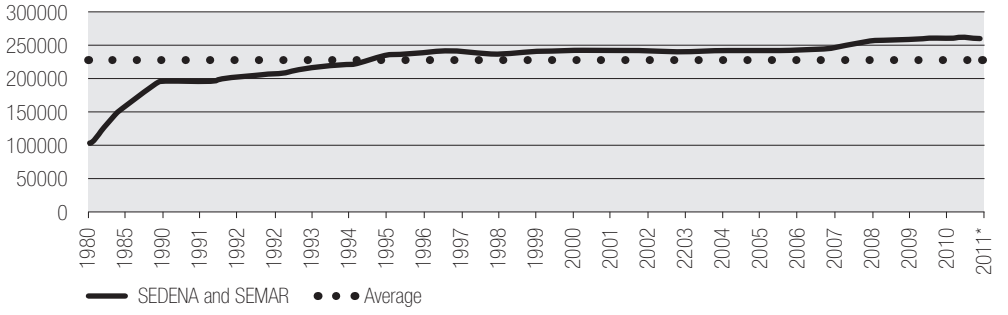
Source: Own elaboration with data from Information request 2210300010011, 2011.. Population: Census 2010, INEGI.

Table 13. Military Personnel

	SEDENA			SEMAR		
YEAR	ELEMENTS	SPECIALIZED	TRAINING	ELEMENTS	SPECIALIZED	TRAINING
1980	102,975	76	2,990		32	632
1985	124,497	216	3,044	34,164	79	512
1990	151,178	246	3,589	41,816	136	2,206
1991	155,218	214	4,145	43,737	168	1,278
1992	157,142	249	4,225	46,687	113	1,138
1993	162,169	237	5,619	48,072	95	2,535
1994	168,773	276	5,056	48,170	156	1,683
1995	171,952	242	3,642	53,128	184	2,955
1996	179,038	665	4,271	53,128	148	2,151
1997	182,328	357	9,506	54,247	141	957
1998	182,328	496	9,991	53,566	159	2,418
1999	182,329	396	9,031	54,972	124	2,044
2000	182,329	598	10,079	55,223	144	3,159
2001	185,143	4,173	10,790	49,165	186	1,550
2002	188,143	1,106	6,874	50,026	1,138	1,124
2003	191,143	740	4,705	47,304	1,043	1,410
2004	191,143	799	5,329	47,316	445	1,040
2005	191,143	402	5,618	47,644	432	1,764
2006	196,767	320	4,640	47,471	381	1,152
2007	196,710	325	5,489	50,032	387	1,125
2008	202,355	333	5,781	51,680	350	956
2009	206,013	116	6,028	52,979	384	1,238
2010	206,013	126	4,620	53,224	314	1,772
2011	206,013*	34**	4,570**	53,617*	602**	2,420**
AVERAGE	177,618	531	5,818	49,451	306	1,634

Source: Data from Felipe Calderón, *Quinto Informe de Gobierno* (Fifth Government Report). (*) Preliminary figures for June 2011. (**) Estimate based on the monthly average from January to June 2011.

Figure 4. SEDENA and SEMAR Personnel (1980–2011)



* Preliminary figures for June 2011.

Source: Data from Felipe Calderón, *Quinto Informe de Gobierno* (Fifth Government Report).

Federal laws and recent Constitutional reforms linked to security and criminal issues:

1. *Ley General del Sistema Nacional de Seguridad Pública 2009 (General Law of the National Public Security System)*. This law regulates the integration, organization and operation of the National Public Security System. It establishes the distribution of competences and coordination among the federal, state and municipal governments in this sphere.

2. *Ley Federal de Extinción de Dominio 2009 (Federal Law on Domain Extinction)*. This law regulates forfeiture of property by the State. It establishes the procedures and actions corresponding to the authorities involved, the effects that the issued decision has, and the means of intervention by third parties affected by the action.

3. *Ley de la Policía Federal Preventiva (Federal Preventive Police Law)1999* - Repealed on June 1, 2009 by the *Ley de la Policía Federal 2009 (Federal Police Law)*. This law regulates the organization and operation of the Federal Police in its respective area of competence. The Federal Police is a decentralized administrative agency of the Secretary of Public Security.

4. *Ley Orgánica de la Procuraduría General de la República 2002* - Repealed on May 29, 2009 by the new *Ley Orgánica de la Procuraduría General de la República (General Attorney Organic Law)*. This law aims to organize the General Attorney's Office. It was based on principles of certainty, legality, objectivity, impartiality and professionalism in the exercise of its functions and actions of law enforcement.

5. *Ley General que Establece las Bases de Coordinacióndel Sistema Nacional de Seguridad Pública 1995* - Repealed on January 2, 2009 *(General Law that Establishes the Basis of Coordination of the National Public Security System)*: This law establish the basis of coordination among the federation, the states, the Federal District and the municipalities for the integration and operation of the National System of Public Security.

6. *Ley Federal de Seguridad Privada 2006 (Federal Law on Public Security)*. This law aims to regulate the provision of private security services when these are provided in two or more states.

7. *Ley de Seguridad Nacional 2005 (National Security Law)*. It aims to establish the basis for institutional coordination by the authorities responsible for preserving national security in their respective areas of responsibility. It also establishes the means and terms in which the state and municipal authorities work with the federal authority in this task.

8. *Ley Federal contra la Delincuencia Organizada 1996 (Federal Law against Organized Crime)*. This law establishes rules for investigation, prosecution, punishment, and enforcement of penalties for crimes committed by organized crime members.

9. *Ley Orgánica del Ejército y Fuerza Aérea Mexicanos 1986 (Mexican Army and Air Force Organic Law)*. This law establishes that the Mexican Army and Air Force are permanent armed forces and have the following general missions:

a. Defend the integrity, independence and sovereignty of the nation;
b. Ensure internal security;
c. Assist the civilian population in cases of public necessity;
d. Perform civic actions and social work that strives for the progress of the country;
In the event of a disaster, assist in law enforcement duties, rescue of persons and property, and reconstruction of the affected areas.

10. *Ley de Extradición Internacional 1975 (International Extradition Law)*. This law establishes the cases and conditions to deliver to the requesting States indicted or convicted individuals for ordinary crimes, when there is no international treaty.

Reform to the Article 21 of the Mexican Constitution (2008)

Before the reform, this article gave the sole responsibility over criminal investigations to the public prosecutor, it did not state any principles over which police actions shall be carried out, or provided a description of public security and the principles that govern the actions of the respective agencies. The reform of the Article 21 covered three dimensions: judiciary procedures, police professionalization and public security.

Judiciary procedures.
The reform changes the situation of all participants in a criminal proceeding: the public prosecutor now shares the duties of the investigative police (Art. 21, paragraph 1), and loses exclusive control over penal action because the victims in this area receive greater guarantees, and in certain case, specified by law, these guarantees can be exercised before a judicial authority by criminal proceedings (Art. 21, paragraph 2).

Police professionalization.
Regarding police forces it recognizes their participation during the investigation of a crime (Art. 21, paragraph 1). It continues by stating that police operations shall be civil, disciplined, professional and coordinated and that these principles must guide the three levels of government in the national public security structure (Art. 21, paragraph 10).

Public security.
It introduces a description of public security "... it is a task of the Federation, the Federal District, states and municipalities, including the prevention of crimes, the investigation and prosecution to make it effective, and the penalties of administrative offenses, under the terms of the law"(Art. 21, paragraph 9). It adds to the principles that govern the actions of public security institutions (principles of legality, efficiency, professionalism and honesty) the principles of objectivity and respect for Human Rights (Art. 21, paragraph 9).

Reform to the Article 21 of the Mexican Constitution (2008)

Article 29 states the procedure to suspend civil guarantees in the whole country or in a determined place. This article was reformed in 2007. Before the reform, the article said that in case of "invasion or a grave disruption of public peace that puts the society in danger or conflict" (Art. 29, paragraph 1), the President, in accordance with the state ministers, administrative departments, PGR and with the approval of Congress, can suspend guarantees in the whole country or in certain parts.

The 2007 reform removed the administrative departments of the list of governmental agencies needed to be in accordance with the President to suspend guarantees. This reform to the article facilitates the process of suspension of civil guarantees.

Table 14. Public Security Legal Framework at the State Level (June, 2011)

STATE	PUBLIC SECURITY LAW (Date of Last Amendment)	PUBLIC SECURITY PROGRAM (Years Comprised in the Program)	POLICE PROFESSIONALIZATION REGULATION (Date Passed in Local Congress)
Aguascalientes	02/11/2009	2004-2010	No Regulation
Baja California	21/08/2009	As Part of Sexennial Plan	No Regulation
Baja California Sur	08/07/2008	2005-2011	No Regulation
Campeche	06/03/2008	As Part of Sexennial Plan	No Regulation
Chiapas	26/08/2009	2007-2012	No Regulation
Chihuahua	01/04/2009	As Part of Sexennial Plan	01/04/2009
Coahuila	19/06/2009	As Part of Sexennial Plan	14/09/1999
Colima	23/01/2010	As Part of Sexennial Plan	14/09/1999
Distrito Federal	20/05/2003	2007-2012	No Regulation
Durango	29/03/2011	2005-2010	No Regulation
Estado de México	31/12/2007	As Part of Sexennial Plan	No Regulation
Guanajuato	16/06/2009	As Part of Sexennial Plan	17/09/2007
Guerrero	25/09/2009	2005-2011	No Regulation
Hidalgo	01/12/2008	2005-2011	No Regulation
Jalisco	24/02/2007	As Part of Sexennial Plan	No Regulation
Michoacán	21/07/2009	2008-2012	No Regulation
Morelos	11/05/2005	As Part of Sexennial Plan	No Regulation
Nayarit	23/05/2009	As Part of Sexennial Plan	No Regulation
Nuevo León	23/09/2008	2009-2015	No Regulation
Oaxaca	12/09/2008	As Part of Sexennial Plan	No Regulation
Puebla	15/07/2009	2005-2011	No Regulation
Querétaro	29/02/2008	As Part of Sexennial Plan	No Regulation
Quintana Roo	25/03/2011	As Part of Sexennial Plan	No Regulation
San Luis Potosí	30/08/2003	As Part of Sexennial Plan	No Regulation
Sinaloa	14/10/2009	2005-2010	No Regulation
Sonora	18/12/2003	As Part of Sexennial Plan	No Regulation
Tabasco	13/09/2006	2007-2012	No Regulation
Tamaulipas	27/12/2007	As Part of Sexennial Plan	04/07/2000
Tlaxcala	25/09/2006	2005-2011	No Regulation
Veracruz	24/06/2009	As Part of Sexennial Plan	14/03/2008
Yucatán	31/05/2004	As Part of Sexennial Plan	26/06/1994
Zacatecas	10/07/2010	2004-2010	No Regulation

Table15. Inter Cartel Conflicts and Alliances

2010	2011
Sinaloa vs. Tijuana	Sinaloa vs. Tijuana
La Familia Michoacana vs. Zetas	Los Caballeros Templarios vs. Sinaloa
Sinaloa vs. Juárez	Sinaloa vs. Juárez-Los Zetas
Golfo vs. Zetas	Golfo-Sinaloa vs. Los Zetas
Cártel de Jalisco-Nueva Generación vs. La Resistencia	Cártel de Jalisco-Nueva Generación vs. La Resistencia vs. Los Zetas
Sinaloa vs. Beltrán Leyva	Sinaloa vs. Cártel del Pacífico Sur-Los Zetas
Cártel del Pacífico Sur vs. La Barbie	Cártel del Pacífico Sur vs. Cártel Independiente de Acapulco
	Los Caballeros Templarios vs. La Empresa vs. Los Incorregibles
	La Nueva Federación para Vivir Mejor vs. Los Zetas
	Cártel del Pacífico Sur vs. La Nueva Administración vs. La Mano con Ojos
	Cártel del Charro vs. Los Zetas vs. Sinaloa
TOTAL = 7	**TOTAL = 11**

Figure 5. Intra and Inter Cartel Confrontations

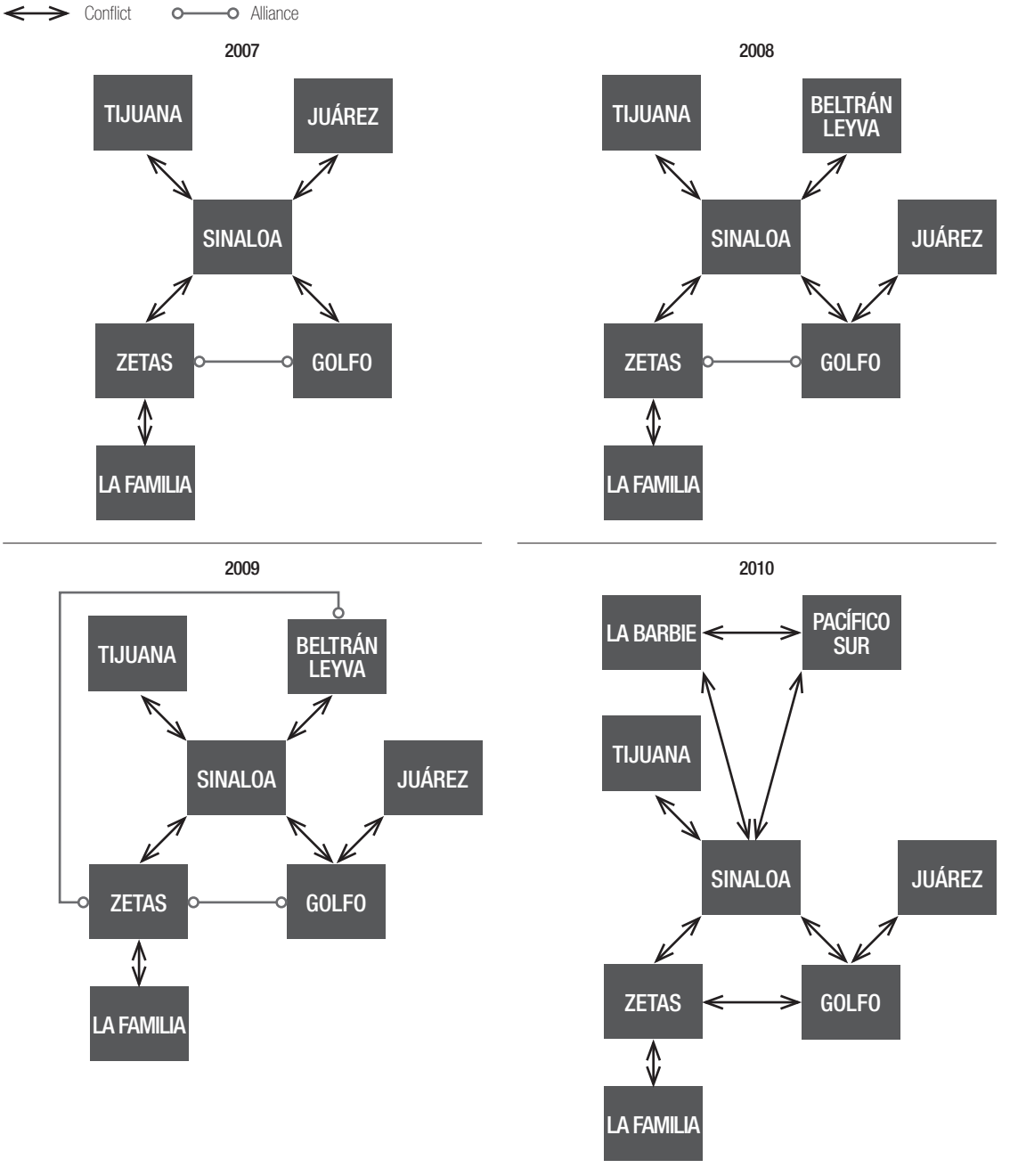


Figure 6. Inter Cartel Alliances

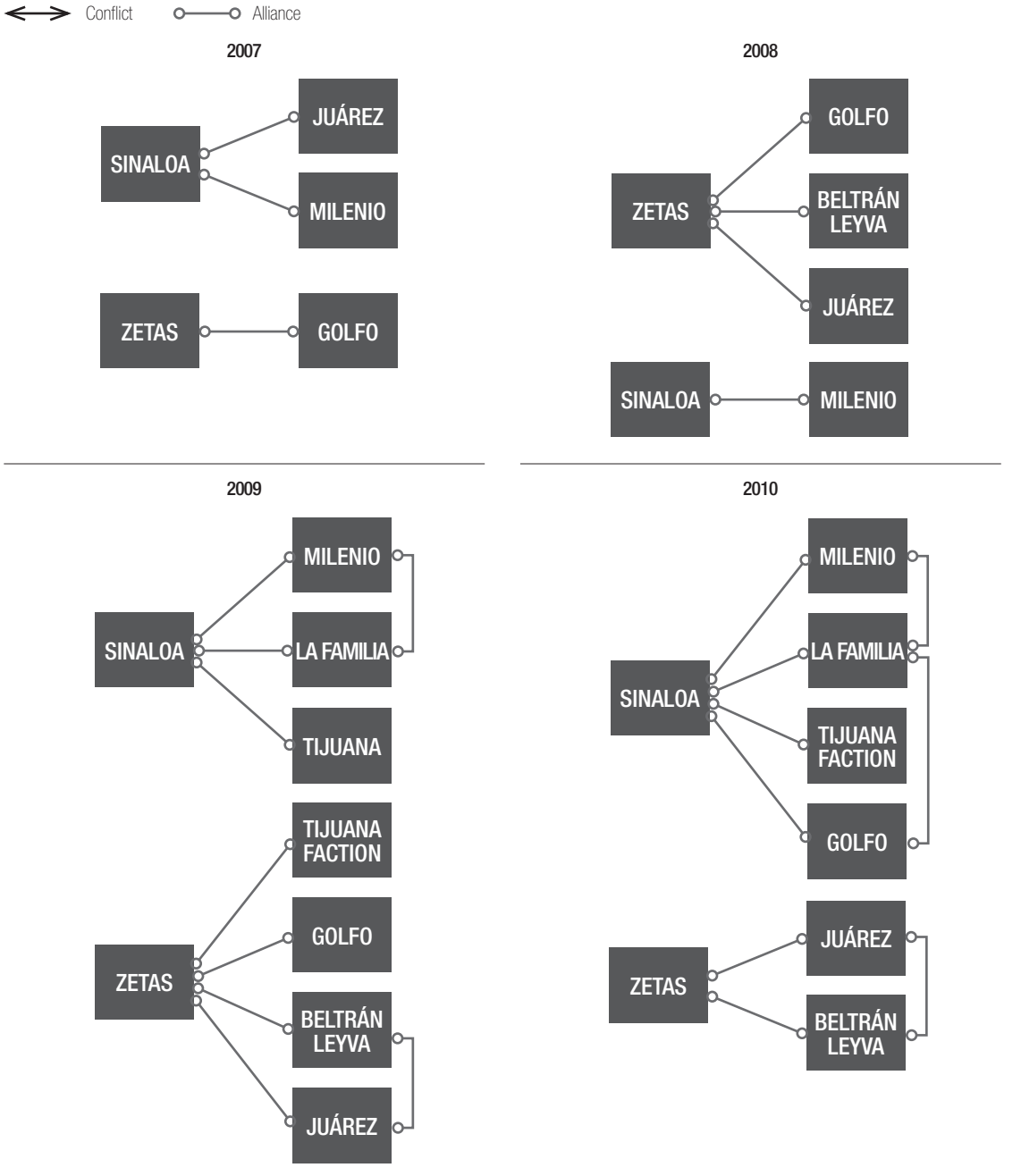
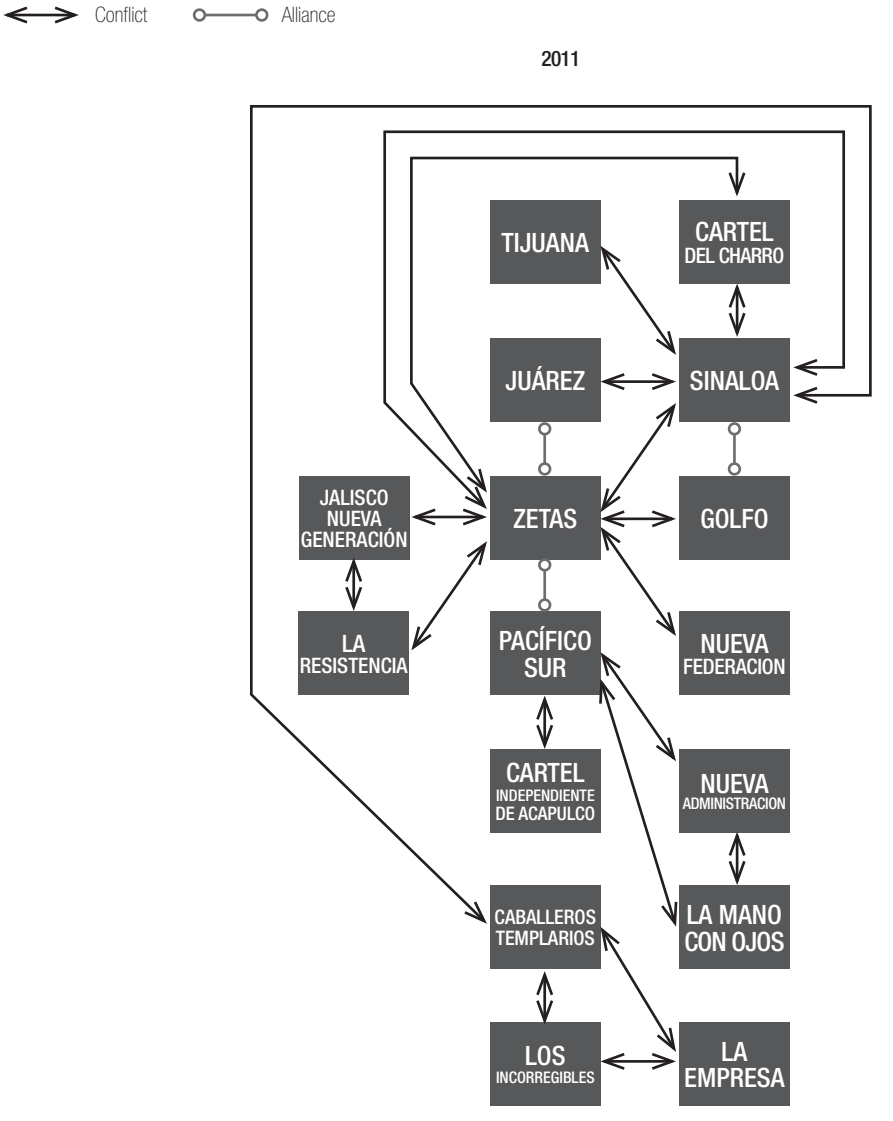


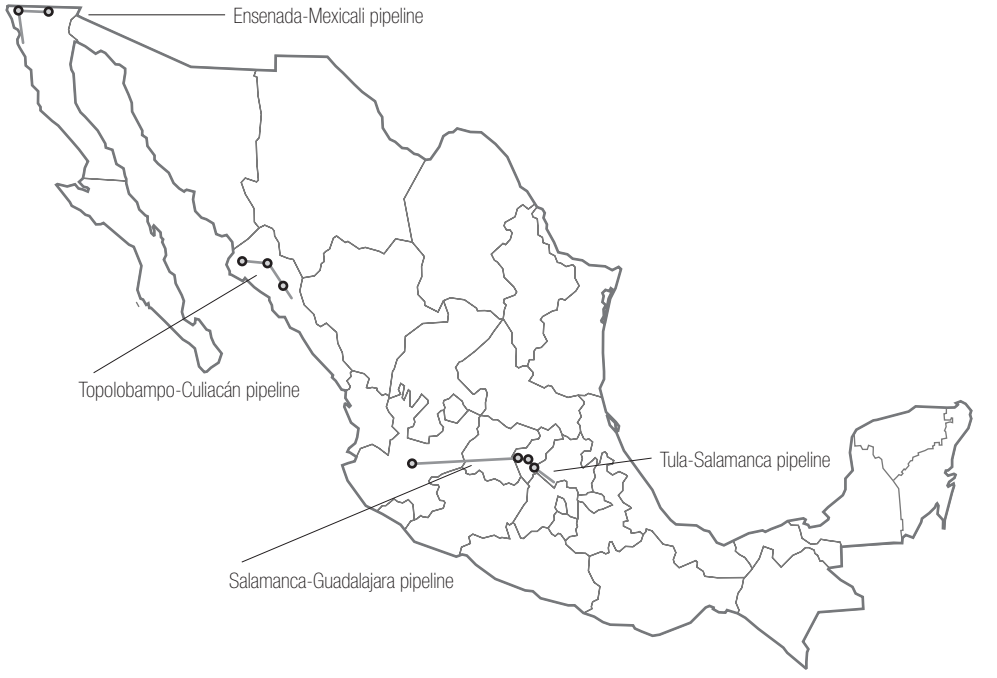
Figure 7. Intercartel Confrontations and Alliances (2011)



Map 1. Sinaloa Cartel–Controlled Municipalities with Reports of Migrant Extortion



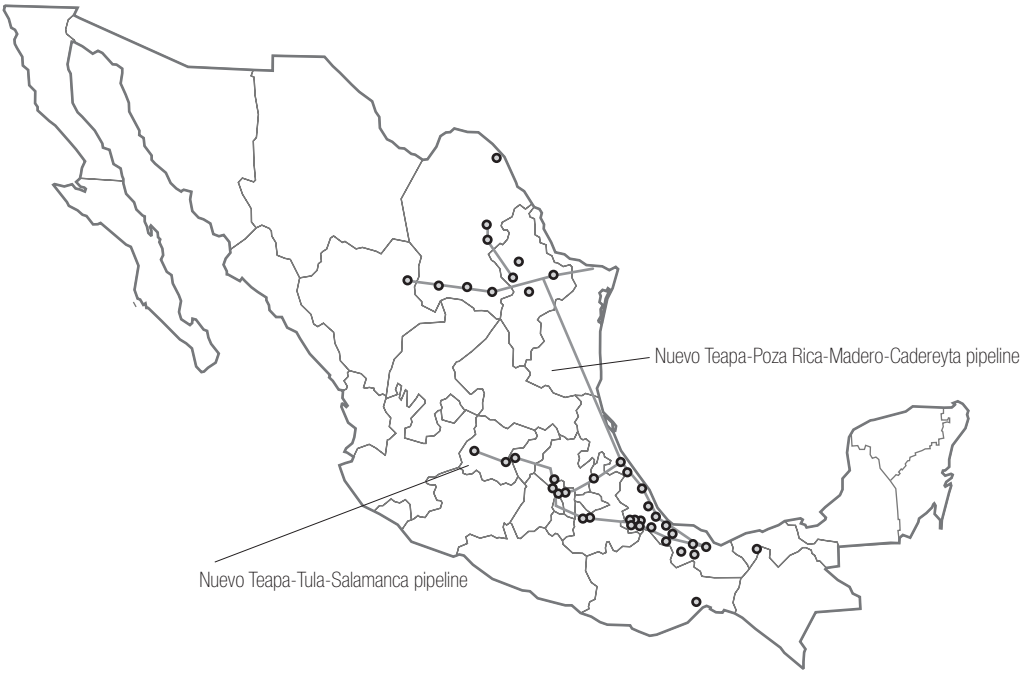
Map 2. Sinaloa Cartel–Controlled Municipalities with Reports of Illegal Pipeline Connections



Map 3. Los Zeta Migrant Extortion and Kidnapping Network



Map 4. Los Zetas–Controlled Municipalities with Reports of Illegal Pipeline Connections



Map 5. Golfo Cartel Migrant Extortion and Kidnapping Network



Map 6. Golfo Cartel–Controlled Municipalities with Reports of Illegal Pipeline Connections



Map 7. Tijuana Cartel–Controlled Municipalities with Reports of Illegal Pipeline Connections



Map 8. Juárez Cartel Drug Distribution Network in Chihuahua



Map 9. Los Caballeros Templarios Drug Trafficking Routes



Map 10. Los Caballeros Templarios–Controlled Municipalities with Reports of Illegal Pipeline Connections



Map 11. Pacífico Sur Cartel Drug Trafficking Routes

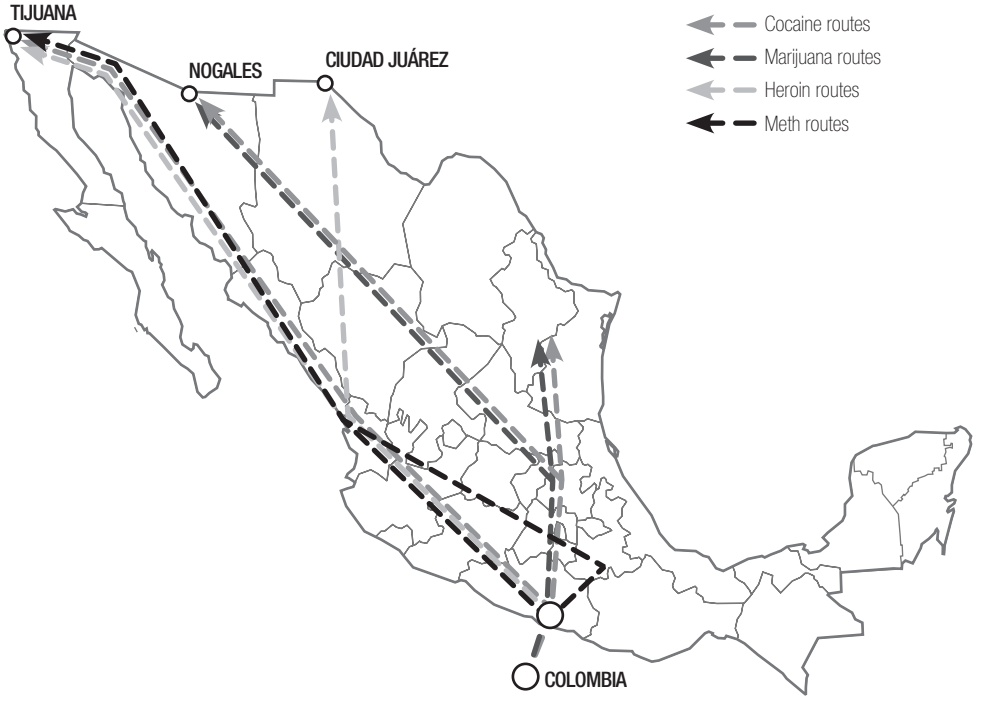


Table 16. Presence of Local Organizations

ORGANIZATION	MUNICIPALITIES
La Nueva Federación para Vivir Mejor	Monterrey, N.L.
Cártel de Jalisco-Nueva Generación	Guadalajara and Puerto Vallarta, Jal. Tepic, Nay. Colima and Manzanillo, Col.
La Resistencia	Guadalajara and Puerto Vallarta, Jal. Tepic, Nay. Colima and Mazanillo, Col.
La Mano con Ojos	Atizapán, Huixquilucan, Naucalpan, and Cuatitlán Izcalli Edomex. Iztapalapa and Gustavo A. Madero, D.F.
La Nueva Administración	Atizapán, Huixquilucan, Naucalpan, and Cuatitlán Izcalli Edomex. Iztapalapa and Gustavo A. Madero, D.F.
Cártel Independiente de Acapulco	Acapulco, Gro.
Cártel del Charro	Cuernavaca, Mor. Magdalena Contreras, D.F. Huixquilucan, Edomex.
Los Incorregibles	Los Reyes Acaquilpan, Edomex. Iztacalco, D.F.
La Empresa	Ecatepec and Tecamac, Edomex. Gustavo A. Madero, D.F.

Map 12. Presence of Local Organizations

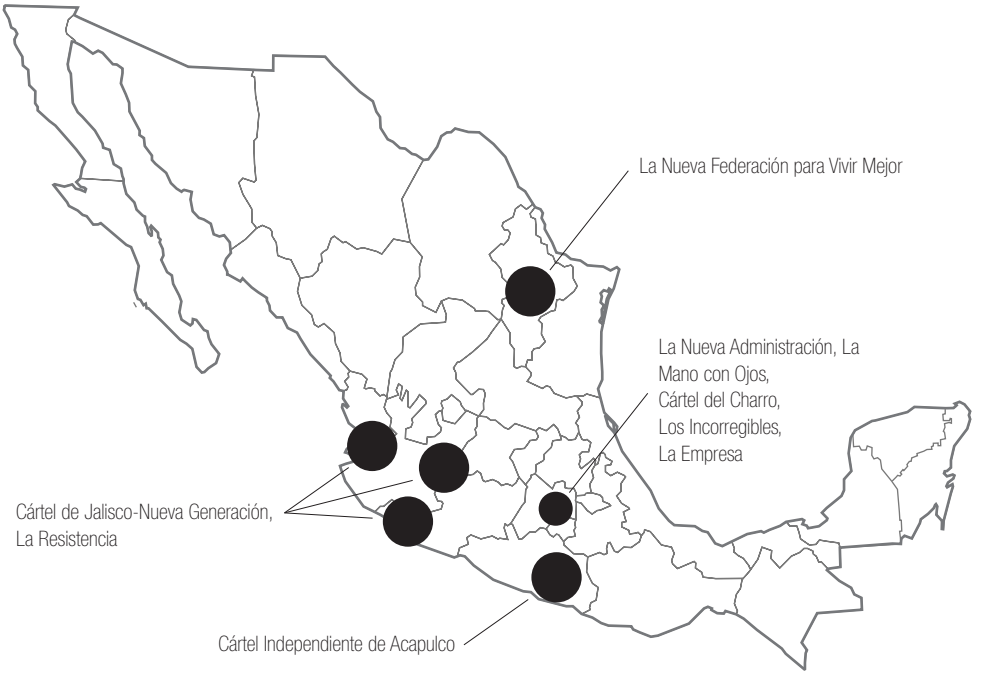


Table 17. Kidnapping Preliminary Investigations per State (2007–2010)

STATE	2007	2008	2009	2010
Aguascalientes	17	22	16	10
Baja California	20	115	103	79
Baja California Sur	0	5	3	1
Campeche	3	0	0	3
Chiapas	2	9	12	24
Chihuahua	0	38	204	190
Coahuila	15	5	17	91
Colima	13	4	1	3
Distrito Federal	118	139	85	60
Durango	3	5	37	79
Guanajuato	12	14	78	59
Guerrero	28	38	51	43
Hidalgo	5	16	15	35
Jalisco	15	13	17	25
México	52	136	127	172
Michoacán	35	88	98	137
Morelos	5	0	33	28
Nayarit	3	3	4	1
Nuevo León	1	19	13	18
Oaxaca	9	27	33	26
Puebla	5	8	27	29
Querétaro	0	2	3	9
Quintana Roo	7	10	6	24
San Luis Potosí	3	1	21	11
Sinaloa	15	12	18	13
Sonora	5	8	4	6
Tabasco	10	34	16	26
Tamaulipas	20	21	52	43
Tlaxcala	0	0	3	0
Veracruz	13	10	0	0
Yucatán	0	0	0	0
Zacatecas	4	23	31	17
TOTAL	438	825	1128	1262

Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2011

Table 18. Extortion Preliminary Investigations per State (2007–2010)

STATE	2007	2008	2009	2010
Aguascalientes	38	51	55	42
Baja California	216	327	437	508
Baja California Sur	45	56	87	61
Campeche	0	0	0	0
Chiapas	0	80	60	94
Chihuahua	0	169	335	441
Coahuila	122	0	89	64
Colima	39	0	0	0
Distrito Federal	424	874	906	1117
Durango	65	96	91	284
Guanajuato	116	186	340	262
Guerrero	44	57	69	53
Hidalgo	62	140	155	123
Jalisco	406	609	659	937
México	0	0	0	0
Michoacán	183	293	358	173
Morelos	194	245	644	612
Nayarit	1	1	1	1
Nuevo León	36	40	57	50
Oaxaca	381	326	557	351
Puebla	0	0	0	0
Querétaro	35	34	37	37
Quintana Roo	40	107	112	159
San Luis Potosí	226	334	284	214
Sinaloa	48	64	74	94
Sonora	46	40	26	30
Tabasco	60	141	274	194
Tamaulipas	55	88	153	107
Tlaxcala	0	0	0	4
Veracruz	219	387	370	196
Yucatán	0	0	0	1
Zacatecas	22	35	16	26
TOTAL	3123	4780	6246	6235

Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, 2011.

APPENDIX II

ORGANIZED CRIME VIOLENCE

Table 1. Municipalities with More than 100 Organized Crime-Related Deaths 2007-2010 by Type of Violence

MUNICIPALITY	STATE	MURDERS	MESSAGES	RATIO	CATEGORY
Cuernavaca	Morelos	180	34	18.9%	
Chilpancingo	Guerrero	168	22	13.1%	
Acapulco	Guerrero	669	81	12.1%	
Ecatepec	México	218	24	11.0%	
Lázaro Cárdenas	Michoacán	128	12	9.4%	
Benito Juárez	Quintana Roo	109	10	9.2%	
Morelia	Michoacán	260	22	8.5%	
Petatlán	Guerrero	136	11	8.1%	
Iztapalapa	Distrito Federal	131	9	6.9%	Mafia ridden violence
Nezahualcóyotl	México	165	10	6.1%	
Nuevo Laredo	Tamaulipas	158	9	5.7%	
Apatzingán	Michoacán	146	8	5.5%	
Aguascalientes	Aguascalientes	113	6	5.3%	
Pungarabato	Guerrero	133	7	5.3%	
Guadalajara	Jalisco	145	7	4.8%	
Uruapan	Michoacán	207	9	4.3%	
Culiacán	Sinaloa	1887	73	3.9%	
Gustavo A. Madero	Distrito Federal	100	3	3.0%	
Mocorito	Sinaloa	111	3	2.7%	
Técpan de Galeana	Guerrero	111	3	2.7%	
Ahome	Sinaloa	266	7	2.6%	
Coyuca de Catalán	Guerrero	117	3	2.6%	
Zapopan	Jalisco	166	4	2.4%	
Monterrey	Nuevo León	296	7	2.4%	
Tijuana	Baja California	1669	39	2.3%	
Mazatlán	Sinaloa	521	12	2.3%	
Matamoros	Tamaulipas	131	3	2.3%	
Reynosa	Tamaulipas	230	5	2.2%	Undefined
Navolato	Sinaloa	384	8	2.1%	
Cuauhtémoc	Chihuahua	101	2	2.0%	
Guasave	Sinaloa	219	4	1.8%	
Hermosillo	Sonora	111	2	1.8%	
Lerdo	Durango	189	3	1.6%	
Nogales	Sonora	442	6	1.4%	
Chihuahua	Chihuahua	1409	18	1.3%	
Tepic	Nayarit	256	3	1.2%	
San Fernando	Tamaulipas	173	2	1.2%	
Taxco de Alarcón	Guerrero	105	1	1.0%	

Municipalities with More than 100 Organized Crime–Related Deaths 2007–2010 by Type of Violence (Contd.)

MUNICIPALITY	STATE	MURDERS	MESSAGES	RATIO	CATEGORY
Miguel Alemán	Tamaulipas	113	1	0.9%	
Delicias	Chihuahua	124	1	0.8%	
Mexicali	Baja California	127	1	0.8%	
Nuevo Casas Grandes	Chihuahua	128	1	0.8%	
Santiago Papasquiaro	Durango	133	1	0.8%	
Juárez	Chihuahua	6436	44	0.7%	
Salvador Alvarado	Sinaloa	173	1	0.6%	
Durango	Durango	382	2	0.5%	
Torreón	Coahuila	524	1	0.2%	
Ascensión	Chihuahua	111	0	0.0%	
Badiraguato	Sinaloa	104	0	0.0%	Drug- trafficking ridden violence
Cajeme	Sonora	129	0	0.0%	
Camargo	Chihuahua	119	0	0.0%	
Gómez Palacio	Durango	556	0	0.0%	
Guadalupe	Chihuahua	142	0	0.0%	
Guadalupe y Calvo	Chihuahua	119	0	0.0%	
Hidalgo del Parral	Chihuahua	213	0	0.0%	
Juárez	Nuevo León	103	0	0.0%	
Playas de Rosarito	Baja California	100	0	0.0%	
Pueblo Nuevo	Durango	136	0	0.0%	
Sinaloa	Sinaloa	176	0	0.0%	

Table 2. Car-Insurance Prices by State

STATE	PRICE	DEATHS PER 100,000 PEOPLE	ANNUAL RAINFALL (MM)
Aguascalientes	$ 2,852	4	456
Baja California	$ 3,682	17	204
Baja California Sur	$ 2,980	2	176
Campeche	$ 3,639	1	1169
Chiapas	$ 4,110	2	1969
Chihuahua	$ 4,320	129	423
Coahuila	$ 3,691	14	327
Colima	$ 3,639	16	883
Distrito Federal	$ 4,687	2	719
Durango	$ 3,377	51	499
Guanajuato	$ 3,115	3	605
Guerrero	$ 4,530	33	1105
Hidalgo	$ 3,743	2	803
Jalisco	$ 4,480	8	821
México	$ 4,687	4	877
Michoacán	$ 3,901	12	807
Morelos	$ 4,110	19	884
Nayarit	$ 3,901	35	1069
Nuevo León	$ 3,901	13	602
Oaxaca	$ 3,639	4	1519
Puebla	$ 2,852	1	1271
Querétaro	$ 2,852	1	558
Quintana Roo	$,632	5	1263
San Luis Potosí	$ 3,062	5	946
Sinaloa	N.A.	66	770
Sonora	$ 3,743	19	422
Tabasco	$ 4,687	3	2406
Tamaulipas	$ 3,733	37	767
Tlaxcala	$ 4,058	0	705
Veracruz	$ 4,268	2	1492
Yucatán	$ 3,639	0	1091
Zacatecas	N.A.	2	518

Table 3. Organized Crime–Related Deaths and Car-Insurance Price Regression Analysis

Independent variable	precios	Annual car-insurance price by state, for an average priced car and a standard driver.
Explanatory variable	tasah	Organized crime-related deaths by 100´000 people.
Control variable	lluvia	Annual average rainfall measured in millimeters (as a proxy of flood risk, a large component of car-insurance cost in some states).

Source	**SS**	**df**	**MS**		
Model	1941685.94	2	970842.971	Number of obs	= 30
Residual	6910653.11	27	255950.115	F(2, 27)	= 3.79
				Prob> F	= 0.0353
				R-squared	= 0.2193
				Adj R-squared	= 0.1615
TOTAL	8852339.05	29	305253.071	Root MSE	= 505.92

precios	**Coef.**	**Std. Err.**	**t**	**P>t**	**[95% Conf.**	**Interval]**
lluvia	.4891663	.1965568	2.49	0.019	.0858651	.8924675
tasah	7.042259	3.888757	1.81	0.081	-.936812	15.02133
_cons	3241.984	219.6182	14.76	0.000	2791.364	3692.603

APPENDIX III

GOVERNMENT STRATEGY AND ACTIONS AGAINST ORGANIZED CRIME

Table 1. Hurdle Data Count Model (Negative Binomial–Logit)

VARIABLES	EFFECT ON THE PROBABILITY THAT AT LEAST ONE DEATH IS RECORDED	EFFECT ON THE NUMBER OF DEATHS RECORDED
Packed Marijuana (Kgs.)	-0.000 (0.64)	0.000 (0.05)
Unpacked Marijuana (Kgs.)	0.000 (2.15)*	-0.000 (0.37)
Metanphetamines (Kgs.)	-0.001 (1.15)	-0.000 (0.72)
Cocaine (Kgs.)	-0.000 (0.70)	-0.000 (0.29)
Heroine (Kgs.)	0.003 (0.09)	-0.003 (0.08)
Poppy crop eradication (Has.)	-0.000 (0.05)	0.002 (0.93)
Marijuana crop eradication (Has.)	0.026 (3.21)**	0.000 (0.26)
Dismantled laboratories	0.175 (1.39)	0.030 (0.54)
Short weapons seized	-0.003 (0.49)	-0.005 (1.49)
Long weapons seized	0.017 (2.57)*	0.008 (2.30)*
Land vehicles seized	0.150 (5.33)**	0.033 (3.60)**
Cash seized	0.000 (0.27)	-0.000 (4.63)**
Total arrests	0.143 (18.07)**	0.049 (9.49)**
Rank 1 (kingpin) arrests	1.121 (17.76)**	0.418 (4.67)**
Rank 2 (manager) arrests	0.584 (4.22)**	0.157 (0.87)
Rank 3 (lieutenant or gunmen leader) arrests	0.919 (8.58)**	0.265 (2.13)*
Constant	-1.762 (53.28)**	-0.842 (1.86)
Observations	9816	9816

Standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

For ranks 1 to 3 an arrest is taken into account whenever the municipality was within the criminal area of influence and regardless of the place where the capture took place.

Table 2. Impact of Arrests and Killings of Kingpins on the Levels of Violence in their Areas of Influence

CARTEL	NAME	POSITION	DATE	AREA OF INFLUENCE	METHODS OF COMPARISON(3)			
					ABSOLUTE FIGURES		VARIATION IN THE RATE OF INCREASE(4)	ESCALATION EFFECT
					INCREASE/ DECREASE	RATE (%)		
Pacífico	Sandra Ávila Beltrán	Financial operator	Sept 28, 07	Chihuahua, Durango, Sinaloa, Sonora	▲	<50	▲	No
Beltrán Leyva	Alfredo Beltrán Leyva "El Mochomo"	Kingpin	Jan 20, 08	Sonora, Sinaloa, Durango, Nayarit	▲	<50	▲	No
Pacífico	Jesús Zambada García	Kingpin	Oct 22, 08	Chihuahua, Durango, Sinaloa, Sonora	▲	<50	▼	Yes
Tijuana	Eduardo Arellano Félix	Kingpin	Oct 26, 08	Baja California and Baja California Sur	▲	>300	▼	Yes
Zetas	Jaime González Durán "El Hummer"	Kingpin	Nov 7, 08	Tamaulipas	▼	<20	▲	No
La Familia Michoacana	Alberto Espinoza Barrón "El Fresa"	Kingpin	Dec 30, 08	Michoacán	▲	<50	▲	No
Pacífico	Vicente Zambada Niebla "El Vicentillo"	Son of Mayo Zambada	Mar 18, 09	DF, state of México and Morelos	▲	<50	▼	Yes
Juárez	Vicente Carrillo Leyva	Financial operator	Apr 2, 09	Chihuahua	▲	<50	▼	No
La Familia Michoacana	Rafael Cedeño Hernández	Area leader	Apr 20, 09	Michoacán and Guerrero	▲	<100	▼	Yes
La Familia Michoacana	Arnoldo Rueda Medina "La Minsa"	Kingpin	Jul 11, 09	Michoacán, México, Guanajuato	▼	<50	▲	No
Beltrán Leyva	Arturo Beltrán Leyva "El Jefe de Jefes"*	Kingpin	Dec 6, 09	Sonora, Sinaloa, Durango, Nayarit	▲	<100	▼	Yes
				DF, Guerrero, México and Morelos	▲	<50	▲	No
Beltrán Leyva	Carlos Beltrán Leyva	Kingpin	Dec 30, 09	Sonora, Sinaloa, Durango, Nayarit	▲	<100	▼	Yes
				DF, Guerrero, México and Morelos	▲	<50	▲	No
Tijuana	Teodoro García Simental "El Teo"	Chief of hitmen	Jan 12, 10	Baja California and Baja California Sur	▼	<20	▼	Yes
Tijuana	Manuel García Simental "El Chiquilín"	Succ. to "El Teo"	Feb 7, 10	Baja California and Baja California Sur	▼	<50	▼	Yes

Impact of Arrests and Killings of Kingpins on the Levels of Violence in their Areas of Influence (Contd.)

Beltrán Leyva	Gerardo Álvarez Vázquez "El Indio"	Kingpin	Apr 21, 10	Guerrero, state of México	▲	<50	▼	Yes
Milenio	Juan Nava Valencia	Kingpin	May 10, 10	Colima, Jalisco and Nayarit	▲	>100	▲	Yes
Pacífico	Ignacio Coronel Villarreal "Nacho"	Kingpin	July 29, 10	Colima, Jalisco and Nayarit	▲	<50	▼	Yes
Beltrán Leyva	Édgar Valdez Villareal "La Barbie"	Kingpin	Aug 30, 10	DF, Guerrero, México and Morelos	▲	<50	▲	No
				Acapulco	▲	>300	▲	No
Beltrán Leyva	Enrique Villareal Barragán "El Grande"	Kingpin	Sept 12, 10	DF, Guerrero, México and Morelos	▲	<50	▲	No
				Acapulco	▲	>200	▲	No
Pacífico	Margarito Soto Reyes "El Tigre"	Succ. to Nacho Coronel	Sept 26, 10	Colima and Jalisco	▲	<10	▼	Yes
La Familia Michoacana	Ignacio López Medina	Principal financial operator	Oct 13, 10	Michoacán	▲	<50	▼	Yes
Zetas	Óscar Manuel Bernal "Spider"	Chief of hitmen and area leader	Oct 22, 10	Nuevo León	▼	<50	▲	No
Golfo	Antonio Ezequiel Cárdenas Guillén "Tony Tormenta"*	Kingpin	Nov 5, 10	Tamaulipas	▼	<50	▲	No
La Familia Michoacana	Nazario Moreno "El más Loco"*	Kingpin	Dec 10, 10	Michoacán, México, Guerrero	▲	<50	▲	No
Zetas	Flavio Méndez Santiago "El Amarillo"	Founder of Los Zetas and area leader	Jan 17, 11	Oaxaca, Chiapas, Veracruz	▲	<50	▲	Yes
Acapulco Ind. Cartel	José Lozano Martínez	Kingpin	Jan 24, 11	Acapulco	▲	<50	▲	No
Zetas	"Comandante Lino"	Chief of hitmen and area leader	Jan 24, 11	Nuevo León	▲	>100	▼	Yes
Acapulco Ind. Cartel	Miguel Gómez Vázquez	Kingpin	Feb 1, 11	Acapulco	▲	<50	▲	No

Source: Compiled by the author, with figures from the Base de Datos de FallecimientosOcurridosporPresuntaRivalidadDelincuencial. (December 2006 to December 2010). Presidency of the Republic.http://www.presidencia.gob.mx/. Figures from January 2011 to March 2011 were collected from 19 national and state daily newspapers.

Note 1: *Killings. Note 2: The calculation of the rate of increase or decrease was done based on the sum of the number of homicides related to organized crime on record in the three months prior to the month in which the arrest or killing occurred and the sum of the three months subsequent to that event. Note 3: The trends are calculated for the number of homicides in each of the three months prior to the month in which the arrest or killing occurred and for the number of homicides of each of the three months subsequent to that event. The trends are linear and use the least squares method. Note 4: The rate of increase is the slope of the linear trend, that is, the extent to which there is an increase in homicides as the number of months of increases. Note 5: The "escalation effect" refers to an increase observed in the minimum level of homicides from one period to the next.

APPENDIX IV

DRUG MARKET

Table 1. Illegal Drug Production and Commercialization in the Mexican States (January 2010 – April 2011)

STATE	MARIJUANA	POPPY	HEROIN	AMPHETAMINES	COCAINE
Aguascalientes					
Baja California	X		X	X	X
Baja California Sur					
Campeche					
Chiapas					X
Chihuahua	X	X		X	X
Coahuila					
Colima					X
Distrito Federal					
Durango	X	X		X	X
Estado de México		X		X	
Guanajuato	X	X		X	
Guerrero	X	X	X		
Hidalgo					
Jalisco	X	X	X	X	
Michoacán	X	X		X	
Morelos				X	
Nayarit	X	X	X		
Nuevo León					
Oaxaca	X	X			X
Puebla					
Querétaro					
Quintana Roo					X
San Luis Potosí					
Sinaloa	X	X	X	X	X
Sonora	X	X	X	X	X
Tabasco					
Tamaulipas				X	X
Tlaxcala					
Veracruz					X
Yucatán					
Zacatecas	X	X			

Source: Own elaboration with data of seizures and eradication from SEDENA.

DRUG MARKET / 1. PRICES

Table 2. Drug Price Variation per State (Maximum and Minimum Price)

State	Do you know the average price per dose (maximum and minimum) of these drugs on the street?											
	Opiates	Tranquilizers	Sedatives and Barbiturates	Amphetamines	Marijuana	Cocaine	Crack	Hallucinogens	Inhalables	Heroin	Ecstasy	Others
Aguascalientes	3-15	2-350	15-350	3-400	10-200	15-500	50-100	50-200	5-50	50-50	50-500	100-100
Baja California	20-200	4-120	20-70	20-100	10-150	20-300	45-200	20-300	15-200	40-330	20-300	45-350
Baja California Sur	100-870	12-300	100-200	100-200	5-150	50-1000	20-200	200-250	13-250	100-400	25-300	100-100
Campeche	100-300	10-550	200-200	30-500	10-200	50-250	50-350	180-300	8-150	350-350	250-500	300-300
Coahuila	79-300	10-130	10-120	50-150	10-150	50-200	50-250	50-100	5-50	100-250	30-300	100-350
Colima	100-100	-	2-2	-	10-200	100-200	100-200	-	10-30	200-200	100-100	100-100
Chihuahua	10-100	10-300	10-200	5-320	5-250	25-600	25-250	50-250	5-60	40-150	20-200	-
Chiapas	2-230	34-1550	25-900	23-1100	23-300	100-300	20-345	50-345	10-234	23-3000	23-300	23-100
Distrito Federal	20-300	10-200	8-100	15-120	5-250	20-600	20-350	20-500	1-30	100-1000	25-300	50-320
Durango	50-250	2-350	10-150	15-400	5-100	50-600	50-300	20-300	5-30	50-100	20-200	20-20
Guerrero	3-150	80-100	100-150	100-550	10-150	50-300	50-260	100-150	10-100	80-150	100-150	100-100
Guanajuato	100-250	50-400	100-500	50-250	20-1000	50-350	50-180	50-130	15-50	-	100-150	50-300
Hidalgo	1-100	4-200	30-200	7-150	20-650	40-200	30-350	20-150	4-50	20-1000	30-100	50-100
Jalisco	20-150	10-100	5-70	10-200	10-100	50-250	30-200	10-100	5-50	100-200	30-300	100-200
México	4-800	10-800	10-550	15-1200	10-500	15-500	15-500	30-800	1-300	50-2000	15-1000	100-500
Michoacán	30-150	4-289	20-50	8-350	8-300	20-300	50-300	20-250	5-40	100-250	20-250	60-60
Morelos	1-200	200-1500	30-60	45-300	30-150	35-200	100-300	30-100	15-100	100-400	100-180	100-100
Nayarit	50-700	25-200	20-200	13-500	5-200	25-500	10-150	20-50	10-50	50-600	15-200	50-50
Nuevo León	12-200	20-150	50-150	20-500	20-250	15-500	50-300	50-100	5-90	120-500	50-350	-
Oaxaca	3-370	100-100	25-25	15-15	5-100	50-250	100-300	25-50	10-50	150-150	-	-
Puebla	5-300	70-150	150-150	80-300	25-100	30-200	60-500	50-50	13-50	200-250	50-200	-
Querétaro	5-250	15-150	10-350	150-400	10-300	20-500	50-250	25-100	5-200	300-300	60-250	300-300
Quintana Roo	2-250	10-600	10-500	75-700	10-500	50-500	40-250	50-250	5-500	100-500	50-300	100-750
Sinaloa	-	50-140	-	50-200	10-150	50-200	40-200	200-200	5-50	60-200	50-200	200-200
San Luis Potosí	5-50	20-190	20-50	30-30	5-200	100-200	100-150	20-70	10-50	-	-	-
Sonora	20-100	10-100	100-100	5-700	5-100	50-300	100-200	200-200	-	-	100-100	-
Tabasco	50-100	20-350	50-350	20-200	5-500	30-1000	50-600	81-250	10-100	21-200	200-200	40-40
Tamaulipas	50-120	15-300	30-200	20-500	8-180	40-250	20-200	40-150	10-100	250-300	20-300	-
Tlaxcala	15-140	3-679	20-2000	45-45	15-1500	50-350	50-150	30-300	10-120	-	30-50	-
Veracruz	30-30	60-100	40-150	-	10-100	20-250	150-200	200-200	100-100	350-350	-	-
Yucatán	2-300	30-300	40-180	50-550	2-50	60-500	50-400	70-70	5-80	60-300	70-250	60-500
Zacatecas	50-500	100-170	-	50-100	10-150	100-300	100-200	300-300	5-120	-	100-180	100-100
Maximum	**870**	**1550**	**2000**	**1200**	**1500**	**1000**	**600**	**800**	**500**	**3000**	**1000**	**750**
Minimum	**1**	**2**	**2**	**3**	**2**	**15**	**10**	**10**	**1**	**20**	**15**	**20**

Source: Own elaboration with data retrieved from the National Addictions Survey 2008 database

Table 3. Drug Price Variation per State (Geometric Mean)

State	Do you know the average price per dose of these drugs on the street?											
	Hallucinogens	Amphetamines	Cocaine	Crack	Ecstasy	Heroin	Inhalables	Marijuana	Opiates	Sedatives and Barbiturates	Tranquilizers	Others
Aguascalientes	100.0	15.5	104.4	70.7	135.7	50.0	15.0	38.9	7.0	64.0	45.9	100.0
Baja California	92.7	51.6	90.4	77.5	70.0	108.6	44.9	39.0	53.1	41.4	36.1	79.9
Baja California Sur	223.6	144.2	184.6	93.6	94.1	195.8	42.8	36.8	268.8	141.4	69.4	100.0
Campeche	232.4	198.2	130.3	127.3	353.6	350.0	30.3	53.9	173.2	200.0	113.8	300.0
Chiapas	136.3	120.4	180.8	76.6	67.5	179.4	47.2	88.7	27.3	103.0	127.4	48.0
Chihuahua	111.0	28.5	89.2	88.5	76.2	73.2	22.1	29.3	37.6	34.9	54.8	
Coahuila	69.1	90.9	96.2	99.9	92.1	171.0	18.3	36.0	137.3	49.3	50.5	187.1
Colima			141.4	144.2	100.0	200.0	18.3	41.4	100.0	2.0		100.0
D.F.	123.6	51.2	89.0	90.1	81.4	342.4	11.1	29.3	65.7	31.4	35.3	141.4
Durango	53.1	66.9	170.5	135.1	66.9	70.7	11.4	23.9	128.5	29.6	46.6	20.0
Estado de México	147.2	118.5	106.8	112.8	122.6	296.4	19.2	64.4	62.5	71.2	85.9	220.8
Guanajuato	80.6	107.7	117.5	99.7	122.5		27.7	88.0	155.4	202.1	181.1	122.5
Guerrero	122.5	250.7	123.2	121.1	122.5	106.3	28.6	42.6	25.4	122.5	89.4	100.0
Hidalgo	43.5	37.5	89.2	74.3	57.3	127.2	15.2	62.3	9.3	71.1	29.2	70.7
Jalisco	26.6	58.7	130.3	74.3	90.6	144.2	16.6	33.5	53.8	24.3	30.5	141.4
Michoacán	44.4	58.9	104.2	114.5	61.2	171.0	15.5	59.4	59.1	31.3	46.2	60.0
Morelos	49.5	116.2	111.3	162.4	134.2	200.0	27.7	69.1	25.9	42.4	547.7	100.0
Nayarit	32.7	107.1	88.6	46.8	66.9	141.7	23.2	27.5	187.1	58.9	58.5	50.0
Nuevo León	70.7	126.0	97.3	123.8	108.8	262.1	25.2	48.8	81.9	90.9	66.2	
Oaxaca	35.4	15.0	115.2	173.2		150.0	22.4	27.7	47.3	25.0	100.0	
Puebla	50.0	154.9	82.5	173.2	99.2	223.6	27.5	46.8	70.0	150.0	101.6	
Querétaro	57.1	244.9	131.2	122.5	135.1	300.0	28.6	46.5	39.4	73.6	42.9	300.0
Quintana Roo	139.2	246.5	143.5	101.0	145.0	206.4	25.6	58.6	31.9	74.5	128.5	223.9
San Luis Potosí	34.8	30.0	144.2	122.5			22.1	38.0	23.4	29.2	58.1	
Sinaloa	200.0	100.0	110.7	75.2	100.0	109.5	16.5	26.4			83.7	200.0
Sonora	200.0	54.1	131.6	141.4	100.0			23.1	50.1	100.0	29.4	
Tabasco	142.3	77.5	182.5	165.3	200.0	64.8	31.1	82.0	70.7	132.3	106.3	40.0
Tamaulipas	77.5	89.2	108.8	60.4	97.4	273.9	29.3	30.4	84.3	77.5	56.7	
Tlaxcala	89.6	45.0	122.9	85.1	38.7		32.0	55.8	58.6	137.7	82.3	
Veracruz	200.0		110.3	173.2		350.0	100.0	33.8	30.0	71.1	77.5	
Yucatán	70.0	195.4	151.1	151.0	127.3	153.3	16.8	21.8	24.5	89.6	112.9	173.2
Zacatecas	300.0	70.7	160.9	133.9	139.2		26.7	45.6	171.0		130.4	100.0
Average	**108.2**	**102.4**	**123.1**	**112.8**	**110.5**	**186.0**	**27.1**	**45.3**	**76.1**	**79.1**	**91.1**	**129.5**

Source: Own elaboration with data retrieved from the National Addictions Survey 2008 database

Map 1. Illegal Production of Marijuana and Consumption

ILLEGAL PRODUCTION (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1 Has. of crops eradicated during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 2. Illegal Production of Poppy and Heroin Consumption

ILLEGAL PRODUCTION (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1 Has. of crops eradicated during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 3. Illegal Labs and Amphetamine Consumption

ILLEGAL LABS (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1 lab dismantled during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 4. Illegal Commercialization and Distribution of Marijuana and Consumption

ILLEGAL COMMERCIALIZATION AND DISTRIBUTION (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 1,200 kg of seizures during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 5. Illegal Commercialization and Distribution of Cocaine and Consumption

ILLEGAL COMMERCIALIZATION AND DISTRIBUTION (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 12 kg of seizures during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 6. Illegal Commercialization and Distribution of Amphetamine and Consumption

ILLEGAL COMMERCIALIZATION AND DISTRIBUTION (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 12 kg of seizures during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 7. Illegal Commercialization and Distribution of Heroin and Consumption

ILLEGAL COMMERCIALIZATION AND DISTRIBUTION (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 12 kg of seizures during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Map 8. Detentions and Drug Consumption

DETENTIONS (2010)



CONSUMPTION (2008)*



Source: Own elaboration with data from seizures of SEDENA. Note: Municipalities with at least 24 detentions during the year. Consumption data from National Addictions Survey 2008, CONADIC-Secretaría de Salud. (*) The darker the color the higher the consumption of drugs.

Table 4. U.S.* and México** Illicit Drugs Consumption Comparison by Ages 2008)

	AT LEAST ONE DOSE IN LIFETIME			LAST MONTH		LAST YEAR	
AGE	U.S.	MEXICO		U.S.	MEXICO	U.S.	MEXICO
MILLIONS							
12-17	6.7	1.4	4.9	0.2	2.4	0.1	
18-34	19.3	1.1	11.4	0.6	6.7	0.4	
35-65	93.8	1.4	20.1	0.2	11.5	0.2	
TOTAL	117.3	3.9	35.5	1.1	20.1	0.7	
PERCENTAGE OF POPULATION							
12-17	26.2	4.8	19.0	1.5	9.3	0.8	
18-34	56.6	7.4	33.5	2.0	19.6	1.3	
35-65	48.0	4.5	10.3	0.6	5.9	0.6	
TOTAL	47.0	5.2	14.2	1.4	8.0	0.9	

* Source: National Survey on Drug Use and Health, U.S. Department of Health and Human Services, 2008 and U.S. Census Bureau

** Source: National Addictions Survey 2002 and 2008, CONADIC, Secretaría de Salud, Mexico

Table 5. Cumulative Drug Use Incidence by State

STATE	% MARIJUANA	% COCAINE	% AMPHETAMINE-TYPE STIMULANTS	% HEROIN	% ILLEGAL DRUGS
Aguascalientes	3.3	2.6	0.1	0.1	4.8
Baja California	7.5	3.9	2.7	0.4	9.3
Baja California Sur	6.0	3.8	1.6	0.0	7.2
Campeche	4.6	1.7	0.2	0.0	5.0
Coahuila	2.5	1.7	0.2	0.2	3.1
Colima	1.7	1.5	0.3	0.1	2.4
Chiapas	0.8	1.0	0.0	0.0	1.7
Chihuahua	6.2	4.8	1.0	1.0	7.5
Distrito Federal	6.6	3.1	0.8	0.5	7.8
Durango	5.8	4.0	0.8	0.1	7.8
Guanajuato	3.1	2.1	0.4	0.0	5.7
Guerrero	3.4	3.4	0.3	0.0	4.7
Hidalgo	6.7	4.0	0.9	0.1	8.3
Jalisco	4.1	1.9	0.7	0.1	5.0
México	3.9	1.8	0.4	0.3	4.6
Michoacán	3.2	2.4	0.6	0.0	4.3
Morelos	3.5	2.0	0.1	0.1	4.1
Nayarit	4.8	3.9	0.5	0.0	6.6
Nuevo León	3.2	1.9	0.5	0.2	4.1
Oaxaca	2.7	1.4	0.0	0.0	3.4
Puebla	2.8	0.9	0.4	0.0	3.4
Querétaro	6.2	2.3	0.4	0.1	6.7
Quintana Roo	8.6	6.0	0.4	0.1	10.1
San Luis Potosí	2.7	0.6	0.1	0.1	3.0
Sinaloa	3.8	3.7	0.7	0.1	6.3
Sonora	3.6	2.9	0.6	0.0	5.1
Tabasco	5.5	2.2	0.3	0.0	5.9
Tamaulipas	8.3	6.0	0.3	0.1	10.3
Tlaxcala	1.6	0.8	0.0	0.0	2.2
Veracruz	2.6	0.9	0.1	0.1	2.7
Yucatán	3.8	0.7	0.3	0.1	3.9
Zacatecas	4.9	3.3	0.5	0.0	6.0
AVERAGE	4.3	2.6	0.5	0.1	5.4

Source: National Addictions Survey 2008.

APPENDIX V

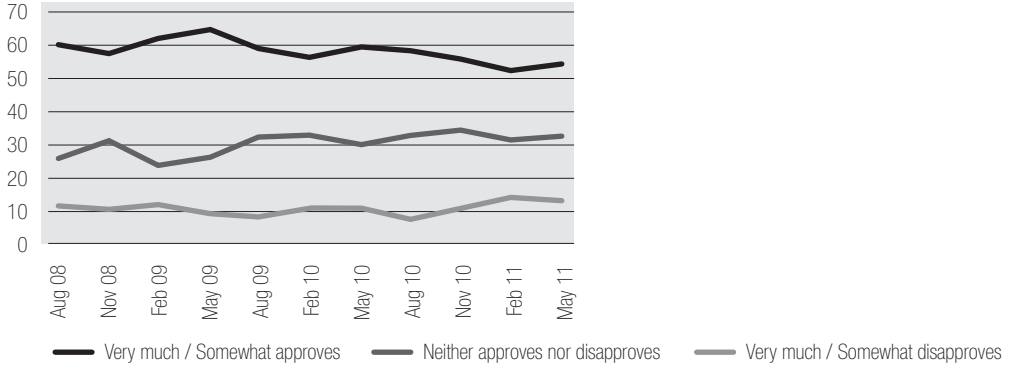
PUBLIC OPINION AND THE WAR AGAINST DRUGS AND CRIME

Figure 1. In Your opinion, President Calderon's Anti-Drug Trafficking Strategy Has Made Mexico Safer, Less Safe or it Hasn't Affected the Security Level of the Country?



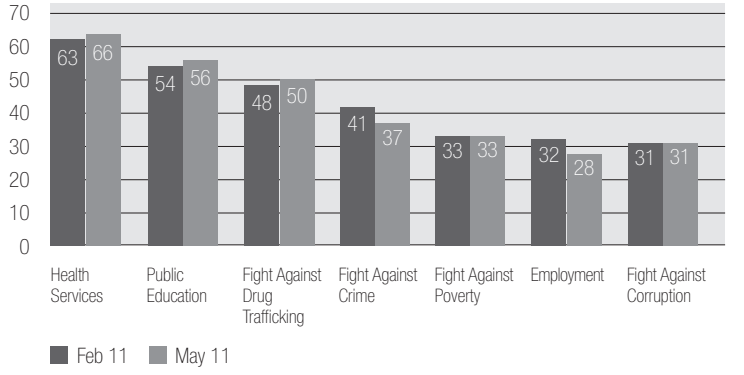
Source: Own elaboration with data from Buendía & Laredo, August 2011, *Encuesta Nacional. Seguridad y Narcotráfico*, p. 3.

Figure 2. In General, Do you Approve or Disapprove the Work of Felipe Calderón as President?



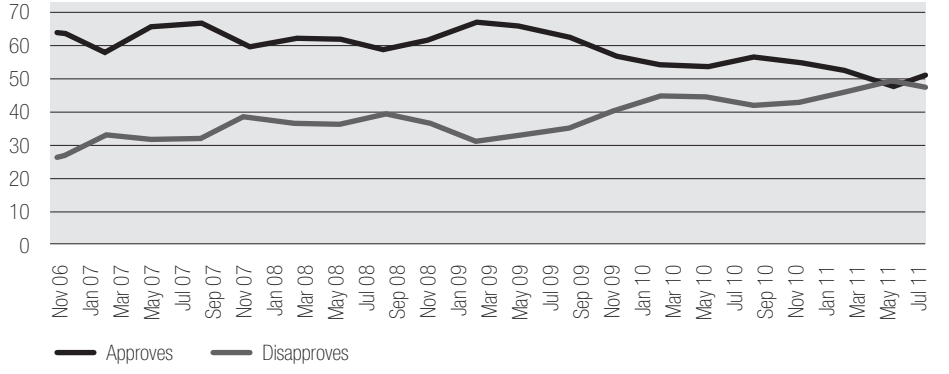
Source: Own elaboration with data from Buendía & Laredo, May 2011, *Encuesta Nacional. Aprobación Presidencial*, p. 2.

Figure 3. In the Last Year, How Do you Qualify Felipe Calderón's Government in Relation to…?



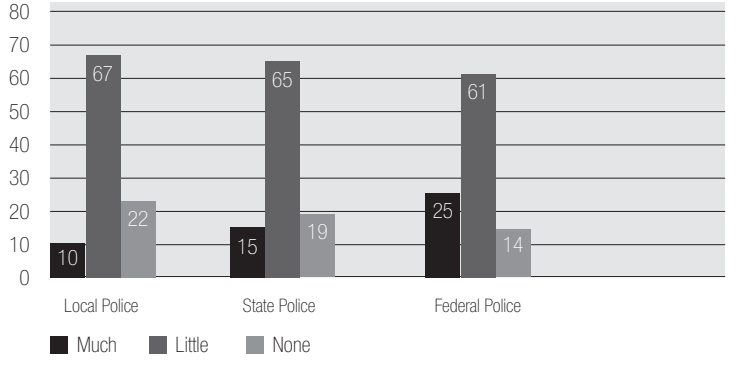
Note: Doesn't show the percentage of Doesn't know/Doesn't answer.
Source: Own elaboration with data from Buendía & Laredo, May 2011, *Encuesta Nacional. Aprobación Presidencial*, p. 9.

Figure 4. Approval of Felipe Calderón's Government



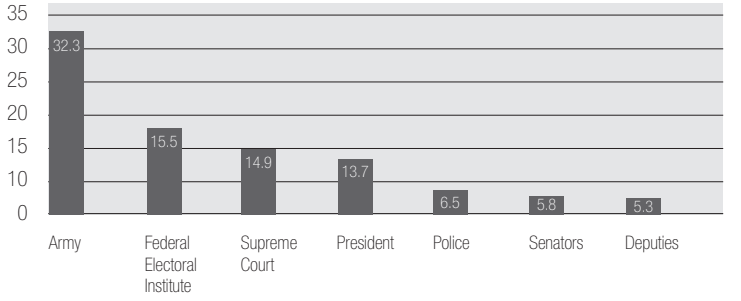
Source: Own elaboration with data from Consulta Mitofsky, August 2011, *México. Evaluación de Gobierno*, p. 11.

Figure 5. How Much Do you Trust in…?



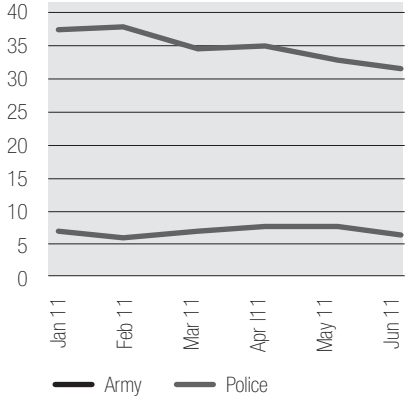
Source: Own elaboration with data from ICESI, 2010, *Análisis de la Séptima Encuesta Nacional sobre Inseguridad*, p. 114.

Figure 6. Percentage of Trust in Public Institutions



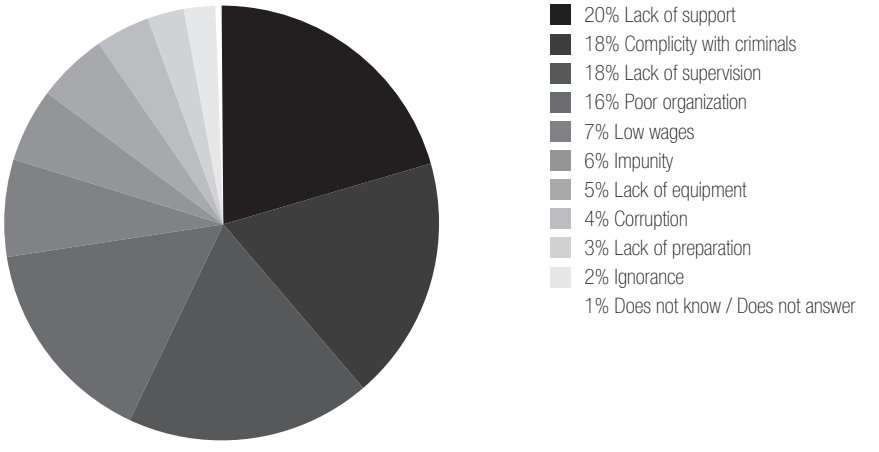
Source: Own elaboration with data from Consulta Mitofsky, June 2011, Economía, Política y Gobierno, pp. 13-14.

Figure 7. Percentage of Trust in the Army and the Police



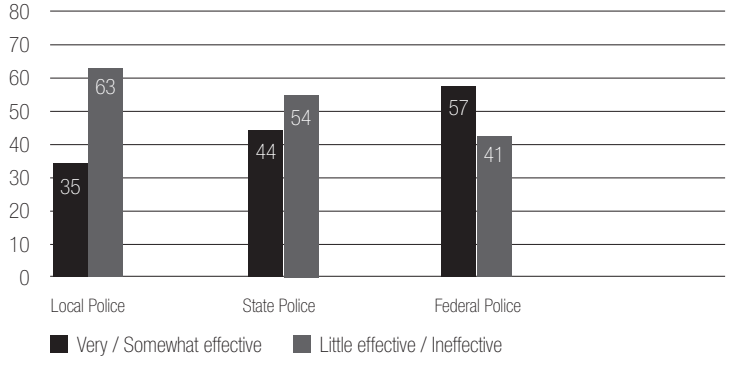
Source: Own elaboration with data from Consulta Mitofsky, June 2011, *Economía, Política y Gobierno*, pp. 13-14.

Figure 8. What Do you Think are the Reasons Behind the Poor Performance of the Police in the Fight against Organized Crime?



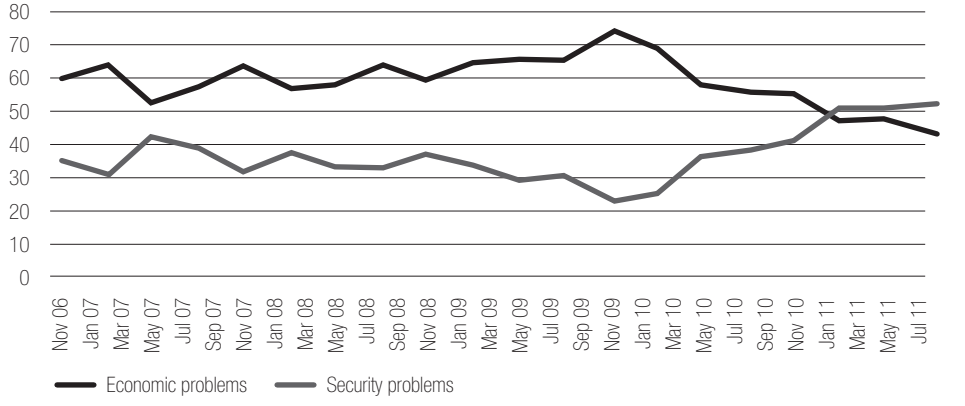
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 9. How Do you Grade the Performance of… against Crime?



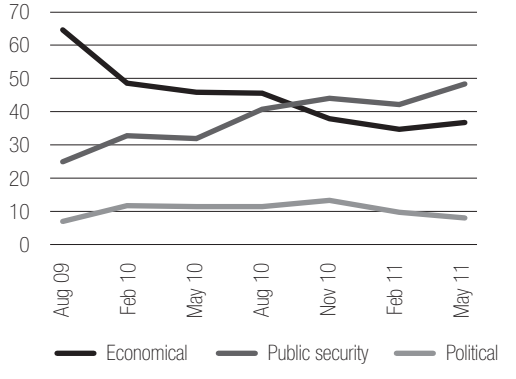
Source: Own elaboration with data from ICESI, 2010, *Análisis de la Séptima Encuesta Nacional sobre Inseguridad*, p. 117.

Figure 10. What are the Main Problems of Mexico?



Source: Own elaboration with data from Consulta Mitofsky, August 2011, *México. Evaluación de Gobierno*, p. 10.

Figure 11. What is the Main Problem that the Government Must Attend?



Source: Buendía & Laredo, May 2011, *Encuesta Nacional. Aprobación Presidencial*, p. 15.

Table 1. Percentage of Population that Considers its State Unsafe (2010)

STATE	%
Chihuahua	88
Distrito Federal	85
Sinaloa	83
Nuevo León	82
Durango	80
Guerrero	78
Morelos	78
Estado de México	78
Tabasco	71
Tamaulipas	69
Zacatecas	69
Nayarit	68
San Luis Potosí	65
Colima	63
Michoacán	63
Coahuila	62
Aguascalientes	61
Sonora	60
Jalisco	60
Baja California	60
Oaxaca	59
Puebla	59
Quintana Roo	56
Guanajuato	50
Hidalgo	46
Veracruz	43
Tlaxcala	42
Chiapas	40
Querétaro	37
Campeche	35
Yucatán	30
Baja California Sur	29
AVERAGE	**65**

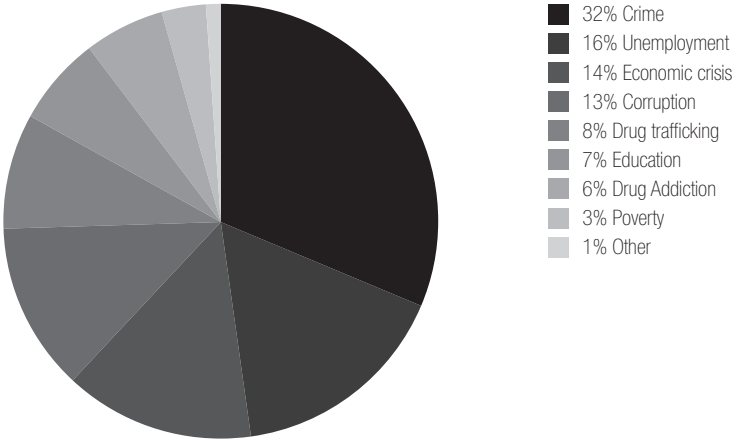
Source: Own elaboration with data from ICESI, 2010, *Análisis de la Séptima Encuesta Nacional sobre Inseguridad*, p. 103.

Table 2. Percentage of Population that Considers its Municipality Unsafe (2010)

STATE	%
Chihuahua	81
Distrito Federal	73
Sinaloa	72
Nuevo León	72
Durango	68
Guerrero	67
Morelos	65
Estado de México	64
Tabasco	62
Tamaulipas	59
Zacatecas	58
Nayarit	56
San Luis Potosí	56
Colima	52
Michoacán	52
Coahuila	52
Aguascalientes	50
Sonora	49
Jalisco	48
Baja California	48
Oaxaca	47
Puebla	46
Quintana Roo	46
Guanajuato	42
Hidalgo	38
Veracruz	35
Tlaxcala	34
Chiapas	33
Querétaro	30
Campeche	30
Yucatán	29
Baja California Sur	23
AVERAGE	**54**

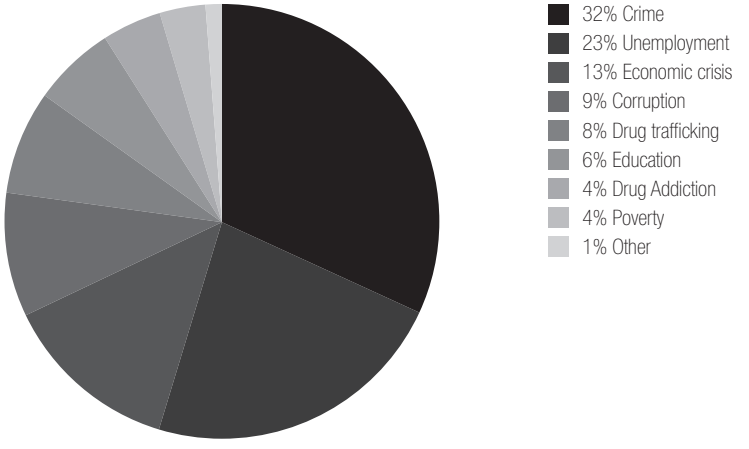
Source: Own elaboration with data from ICESI, 2010, *Análisis de la Séptima Encuesta Nacional sobre Inseguridad*, p. 103.

Figure 12. Which Do you Think is the Main Concern of the Country at this Moment?



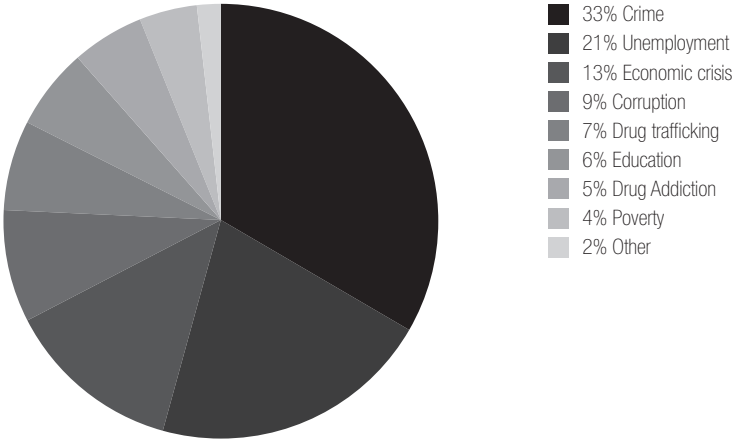
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 13. Which Do you Think is the Main Concern of your State at this Moment?



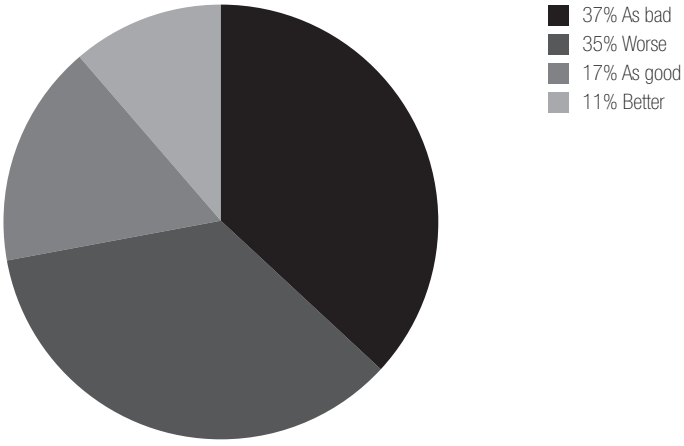
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 14. Which Do you Think is the Main Concern of your Municipality at this Moment?



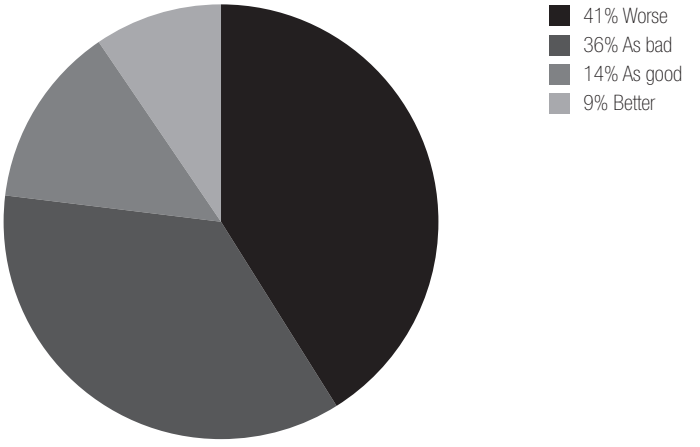
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 15. In Relation to the Previous Year, How is Public Security in your Municipality?



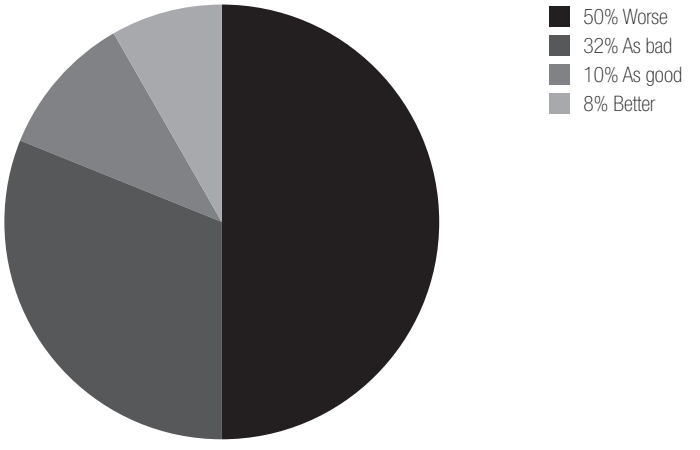
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 16. In Relation to the Previous Year, How is Public Security in your



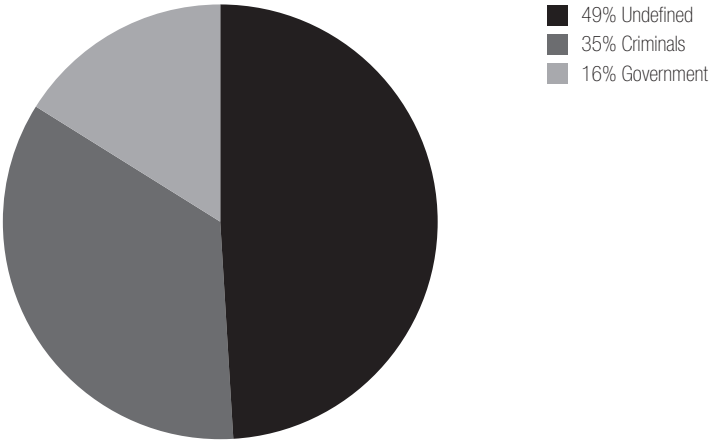
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 17. In Relation to the Previous Year, How is Public Security in the Coun-



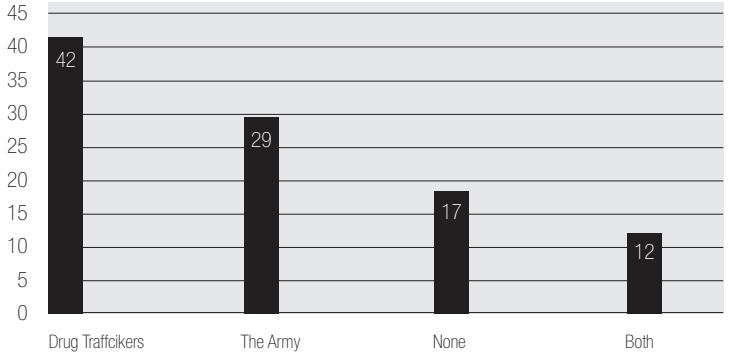
Source: Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública, *Encuestas estatales de opinión pública sobre temas de seguridad pública*, 2010.

Figure 18. In your Opinion, Who is Winning in the Fight against Crime: Government or Criminals?



Source: GEA-ISA, *Segunda Encuesta Nacional GEA-ISA 2011*, p. 34.

Figure 19. In your Opinion, Who is Winning in the Fight against Organized Crime, the Army or Drug Traffickers?



Source: Buendía & Laredo, August 2011, *Encuesta Nacional. Seguridad y Narcotráfico*, p. 6.

