MEXICO PEACE INDEX

2017

**MAPPING THE EVOLUTION
OF PEACE AND ITS DRIVERS**

INSTITUTE FOR
ECONOMICS
& PEACE

INSTITUTE FOR ECONOMICS & PEACE

Quantifying Peace and its Benefits

The Institute for Economics and Peace (IEP) is an independent, non-partisan, non-profit think tank dedicated to shifting the world's focus to peace as a positive, achievable, and tangible measure of human well-being and progress.

IEP achieves its goals by developing new conceptual frameworks to define peacefulness; providing metrics for measuring peace; and uncovering the relationships between business, peace and prosperity as well as promoting a better understanding of the cultural, economic and political factors that create peace.

IEP has offices in Sydney, New York, The Hague and Mexico City. It works with a wide range of partners internationally and collaborates with intergovernmental organizations on measuring and communicating the economic value of peace.

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EXECUTIVE SUMMARY

The 2017 Mexico Peace Index (MPI), produced by the Institute for Economics and Peace (IEP), provides a comprehensive measure of peacefulness in Mexico. The MPI is based on the work of the Global Peace Index, the leading measure of global peacefulness that has been produced by IEP every year since 2007. It is part of a series of national peace indices, which includes the United States Peace Index and the United Kingdom Peace Index.

This research, now in its fifth year, aims to identify the key trends, patterns and drivers of peace while highlighting policy opportunities. The MPI report includes an analysis of the economic benefits that will flow from a more peaceful society and provides a backdrop for strategic discussions among policymakers, researchers, business leaders and the general public on building peace in Mexico.

Mexico's peacefulness deteriorated by 4.3 percent in 2016. Last year marks both the ten-year anniversary of the declaration of the war on drugs and the first deterioration in peacefulness since the recovery began in 2012. Mexico's most violent year was 2011, when domestic military deployments peaked and the homicide rate rose to double that of 2006. In 2012, the country began to recover — an improving trend that was maintained for the next four years. However, in 2016, the homicide rate rose 18 percent and the use and availability of firearms increased, resulting in a less peaceful overall MPI score.

Yucatán was the most peaceful state in Mexico in 2016, followed by Nayarit, Tlaxcala, Hidalgo and Coahuila. Guerrero was Mexico's least peaceful state for the fourth year in a row, followed by Colima, Sinaloa, Baja California and Baja California Sur.

Mexico's northern region, along the border with the United States, is the least peaceful of the five regions. Violence is also escalating in a number of states along the Pacific coast, especially Baja California Sur, Colima and Guerrero.

The 2016 deterioration in peacefulness led to an estimated additional economic impact of 79 billion pesos, driving the yearly total to 3.07 trillion pesos. This is equivalent to 17.6 percent of Mexico's GDP or 25,130 pesos per capita, which is more than one month of income for the average Mexican worker. In some states, the impact is much higher; in Colima, for instance, it is nearly 66,500 pesos. Furthermore, businesses in Mexico identified insecurity and crime as their most pressing concern, well above other issues such as taxation or corruption.

The full analysis of Mexico's peacefulness shows mixed results. On the one hand, the nationwide peace score deteriorated in 2016, mainly because of the increase in homicides. On the other hand progress has been made in structural reform.

Despite the deterioration in the 2016 score, Mexico remained nearly 14 percent more peaceful in 2016 than in 2011, with improvements being recorded in 21 out of 32 states in 2016. The violent crime rate is at a 14-year low and the homicide rate is 16 percent lower than in 2011. Organized crime related offenses reached a ten year low, having returned to pre-drug war levels. The rate of crimes committed with a firearm was 10 percent lower than in 2011, although recent trends show an increase in the purchase of guns.

Nayarit, Durango, Coahuila, Quintana Roo and Chihuahua have had the largest improvements in peacefulness over the last six years while Colima, Baja California Sur, Zacatecas, Oaxaca and Michoacán have shown the largest deteriorations. These five states all have rising homicide rates, especially Colima, which had a 2016 homicide rate three times higher than its 2011 levels.

It is too early to determine whether the deterioration recorded in 2016 constitutes the start of a new trend.

The 2017 MPI report details four important policy areas instrumental to building high levels of peacefulness: impunity, policing, strategies to reduce homicide rates, and the role of local governments. Improvements have been recorded in these areas. For example, the percentage of citizens that trust

the police rose by 13 percentage points to reach 50 percent, while the overall perception of corruption in local police forces fell by six percentage points. Nonetheless, local governments still stand to improve the most: the local forces are perceived as the most corrupt and the least trusted.

States have been making investments in professionalizing and strengthening their police forces. Coahuila and Chihuahua have had the largest increases in the size of their forces, at 270 and 47 percent, respectively, from 2015 to 2016. However, increases in the numbers of police need to coincide with professional development to fully gain the benefits of the increased capacity. States that pay higher salaries also tend to spend more on professional training for their officers. Given the high risks associated with the job and the larger payouts often offered by organized crime, salaries need to adequately compensate officers.

Impunity is also a major challenge for Mexico. On average, nine percent of crimes committed are punished. Impunity is a widespread issue across multiple states and law enforcement and justice agencies, including impunity for violence committed by some state actors. There is also a high level of impunity for violence against journalists, with 76 media professionals being murdered in 2016.

Mexico needs to improve the overall capacity of its judicial and law enforcement systems. The average rate of justice officials is 3.5 per 100,000 people, roughly four times lower than the global average. However, recent improvements are substantial, with the expenditure on the justice system increasing by 41 percent from 2011 to 2016, to 213 billion pesos.

There have been improvements in the collection and accuracy of crime data, although official data quality remains poor. IEP uses a variety of methods to develop an accurate picture of peacefulness in Mexico overall and by state. A composite index of peace directly addresses some of the deficits in measuring violence. In addition, the MPI report includes an annual review of data quality in Mexico.

In 2015 law enforcement agencies undercounted homicide victims by roughly ten percent, but this is an improvement on a year earlier when it was 15 percent. Similarly, more local governments appear to be correctly reporting the number of crimes committed with a weapon. However four states still report that no assaults are committed with a firearm: Baja California, Morelos, Sonora and Tabasco. Mexico's official law enforcement homicide dataset currently includes only eight out of the 37 pieces of information in the Bogota protocol for international data quality standards.

One method of understanding possible future trends in peace is through tracking progress in Positive Peace — *the attitudes, institutions and structures* that create and sustain peaceful societies. Positive Peace consists of eight pillars or domains that describe the factors most closely associated with highly peaceful societies.

Positive Peace in Mexico is improving, although progress is uneven. Solid improvements are evident in the *sound business environment* and *high levels of human capital* pillars. The indicators that improved the most within these pillars were the cost of starting a business, which fell by 14 percent from 2011 to 2016 and high school enrollment, which rose by eight percentage points from 2011 to 2015. There were also improvements in *free-flow of information, equitable distribution of resources* and *acceptance of the rights of others* across a variety of indicators. However, violence against journalists remains a risk to *free flow of information.*

There has been progress in *well-functioning government* and *low levels of corruption,* but the pace of improvement is more moderate. An average of 13 percent more citizens reported lower levels of perceived corruption across all law enforcement and justice entities in 2016 compared to 2011. However, this is coming off a high base and levels of corruption are still too high, well above Mexico's international peers. *Good relations with neighbors* has deteriorated, most notably for the indicator measuring citizens' perceptions of safety in their neighborhood, which fell from 60 percent in 2011 to 54 percent in 2016.

Taken all together, the 2017 MPI findings highlight the need to maintain the pace of judicial reform and improve accountability. Mexico has made and continues to make significant strides in improving the rule of law and the quality of governance and law enforcement, but the challenges are formidable and the recent increases in homicides very concerning.

KEY FINDINGS

RESULTS & FINDINGS

> Mexico was 4.3 percent less peaceful in 2016 compared to the prior year. The 'inequality in peacefulness' between the least and most peaceful states continued to increase.

> The intentional homicide rate rose 18.4 percent in 2016, with 61 percent of deaths involving a firearm.

> The rate of violent crime continued to fall for the fifth year in a row, dropping 9.2 percent last year.

> The nationwide score for *detention without a sentence* improved by 3.2 percent, for the first time in the last six years, likely reflecting the implementation of Mexico's newly reformed judicial system.

> IEP's review of the quality of official crime data shows that it has improved, but there are still widespread discrepancies. Given the inherent challenges in measuring violence, a peace index scores provide a more comprehensive assessment.

TRENDS

> Mexico was nearly 14 percent more peaceful in 2016 than in 2011, despite recent setbacks.

> At the end of 2016, the nationwide homicide rate was 16 percent lower than in 2011, but an upward trend has returned in the last two years.

> Rates of violent crime and organized-crime related offenses have returned to pre-drug war levels.

> The violent crime rate reached a 14-year low in 2016, showing a 34 percent improvement from its peak in 2011.

> Detention without a sentence is the only MPI indicator that has not improved since 2011, but rather has deteriorated 16 percent since 2011.

POSITIVE PEACE

> Positive peace in Mexico is improving, but progress is uneven.

> The Pillars that have improved the most are sound business environment and high levels of human capital.

> Improvements in *free-flow of information, equitable distribution of resources* and *acceptance of the rights of others* are broad-

based, across a variety of indicators. However, violence against journalists remains a risk to *free flow of information.*

> There has also been progress in *well-functioning government* and *low levels of corruption,* but both pillars are still weaker than the global average.

> *Good relations with neighbors* has deteriorated, most notably for the indicator relating to citizens' perceptions of safety in their neighborhood, which fell from 60 percent in 2011 to 54 percent in 2016.

CHALLENGES & OPPORTUNITIES FOR PEACEBUILDING IN MEXICO

> On average, 91 percent of crimes committed in Mexico go unpunished.

> Just five percent of Mexicans believe that criminals are always penalized for their crimes, while 11 percent of the population perceive that criminals are never punished.

> The percentage of people reporting impunity as their main issue of concern more than doubled from 2012 to 2016, overtaking the percentage of people that see narcotrafficking as the most worrisome issue.

> The traffic and municipal police forces are perceived to be the most distrusted and corrupt of all law enforcement entities, highlighting the work needed in local governance.

> Operationalizing the Positive Peace framework at the local level can help improve peacefulness and reduce homicide rates.

ECONOMIC VALUE OF PEACE IN MEXICO

> The economic impact of violence in Mexico totalled 3.07 trillion pesos in 2016. This is equivalent to 18 percent of the country's GDP and represents 25,130 pesos per person; equivalent to more than one month's salary for the average Mexican worker.

> The economic impact of violence increased by three percent, or 79 billion pesos, when compared to 2015.

> Violent crime, which includes robbery, assault and rape, was the largest component, accounting for 47 percent of the total impact from violence.

> From 2003 to 2016, federal government expenditure on all violence containment expenditure increased by 120 percent.

> Businesses identified insecurity and crime as their most pressing concern, well above other issues such as taxation or corruption.

RESULTS & FINDINGS

- 2016 marks the first year that Mexico's MPI score deteriorated since the country began recovering from the drug war in 2012.

- Mexico's peacefulness deteriorated by 4.3 percent in 2016 when compared to the prior year. The 'inequality in peacefulness' between the least and most peaceful states continued to increase.

- The intentional homicide rate rose 18.4 percent in 2016, with 61 percent of deaths involving a firearm.

- The rate of violent crime continued to fall for the fifth year in a row, dropping 9.2 percent last year.

- The nationwide score for *detention without a sentence* improved by 3.2 percent, for the first time in the last six years, likely reflecting the implementation of Mexico's newly reformed judicial system.

- Yucatán is now the most peaceful state in Mexico, followed by Nayarit, Tlaxcala, Hidalgo and Coahuila.

- Guerrero remains the least peaceful state, for the fourth year in a row, followed by Colima, Sinaloa, Baja California Sur and Baja California.

VERIFYING
THE RESULTS

> Official crime data in Mexico is imperfect, and that does affect peace scores. A composite index of peace directly corrects for some of the inherent problems in measuring violence. Each year IEP includes a review of Mexico's official data quality in order to verify the MPI findings.

> The full analysis of data veracity is available in Appendix A, including pertinent state-level data results.

VISION *of* HUMANITY
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Explore the data on the interactive Mexico Peace Index map: see how peace changes over time, compare levels of peace between states and discover how the states fare according to each indicator of peace.

2017

MEXICO PEACE INDEX

A SNAPSHOT OF THE STATE OF PEACE IN MEXICO

MORE PEACEFUL ◀ ▶ LESS PEACEFUL
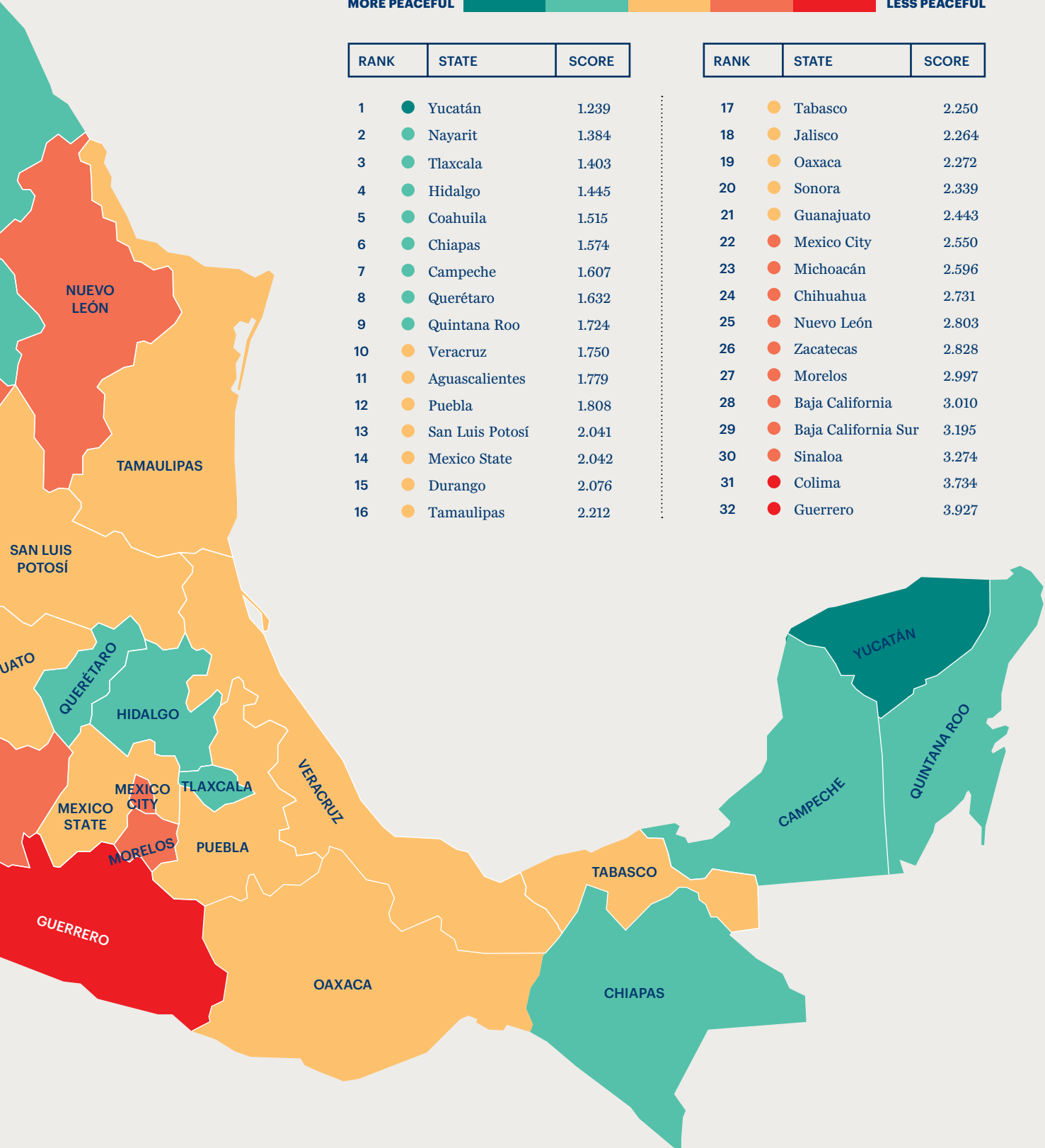
RANK	STATE	SCORE
1	● Yucatán	1.239
2	● Nayarit	1.384
3	● Tlaxcala	1.403
4	● Hidalgo	1.445
5	● Coahuila	1.515
6	● Chiapas	1.574
7	● Campeche	1.607
8	● Querétaro	1.632
9	● Quintana Roo	1.724
10	● Veracruz	1.750
11	● Aguascalientes	1.779
12	● Puebla	1.808
13	● San Luis Potosí	2.041
14	● Mexico State	2.042
15	● Durango	2.076
16	● Tamaulipas	2.212

RANK	STATE	SCORE
17	● Tabasco	2.250
18	● Jalisco	2.264
19	● Oaxaca	2.272
20	● Sonora	2.339
21	● Guanajuato	2.443
22	● Mexico City	2.550
23	● Michoacán	2.596
24	● Chihuahua	2.731
25	● Nuevo León	2.803
26	● Zacatecas	2.828
27	● Morelos	2.997
28	● Baja California	3.010
29	● Baja California Sur	3.195
30	● Sinaloa	3.274
31	● Colima	3.734
32	● Guerrero	3.927

2017 MEXICO PEACE INDEX RESULTS

Peace in Mexico deteriorated by 4.3 percent in 2016, mainly driven by an 18.4 percent increase in the homicide rate[1]. Mexico's homicide rate was 16.7 per 100,000 in 2016, well above the global average of 7.3. The gap between the most and least peaceful states continued to grow, highlighting the rising inequality in peace in Mexico. Crimes committed with a firearm also increased, rising 20.3 percent, with roughly one out of three intentional or negligent homicides committed with a firearm[2]. Two-thirds of intentional homicides involved a gun.

On a more positive note, the violent crime rate continued to fall for the fifth year in a row, dropping 9.2 percent last year and the nationwide score for *detention without a sentence* improved by 3.2 percent, for the first time in the last six years, likely reflecting progress in the implementation of Mexico's newly reformed judicial system.

The organized crime rate stayed roughly the same, after three years of substantial improvement.

However, the gains in violent crime, organized crime and detention were not enough to prevent a decline in the overall peace score. 2016 marks the first year that Mexico has backslid since the country began to recover from the drug war in 2012.

Yucatán was the most peaceful state in Mexico in 2016, followed by Nayarit, Tlaxcala, Hidalgo and Coahuila. The southern region of Mexico has typically been more peaceful than the northern border and the Pacific coast, but Yucatán stands out for being twice as peaceful as the regional average. In 2016, the state scored particularly well on the *homicide* and *weapons crime* indicators, with the lowest homicide rate in the country. While the national homicide rate has now reached 16.8 deaths per 100,000 people, Yucatán's rate is 2.8.

Nayarit earned its second place ranking by being the most improved state for two years in a row. However, concerns about the veracity of official crime data in this state, discussed in detail on page 103 of this report, question its position on the index.

Guerrero is Mexico's least peaceful state for the fourth year in a row, having fallen from 30th position in 2011 to 32nd in 2013, where it has remained since. Peacefulness in Guerrero continues to deteriorate, with the homicide rate rising to 62 — on par with its 2011 level.

Colima ranks just behind Guerrero as the second least peaceful state and now has the highest homicide rate in the country, at 77 per 100,000 people. Following Guerrero and Colima are Sinaloa, Baja California and Baja California Sur. Mexico's northern region, along the border with the United States, is the least peaceful of the five regions, but violence appears to be escalating all along the Pacific coast, affecting Baja California Sur, Colima and Guerrero.

Table 1.1 gives the full results of the 2017 MPI, with each state's overall score and individual indicator scores. The MPI is composed of five indicators, each scored between 1 and 5, where 1 represents the highest level of peace recorded over the time period and 5 represents the least peaceful. Refer to Section Five for the full methodology.

Consistent with the national trend, 21 out of 32 states recorded a deterioration in peacefulness from 2015 to 2016 while eleven states improved. Of note is the fact that only eight states improved their homicide rate.

Quintana Roo recorded both the largest overall improvement and the largest reduction in the homicide rate last year, at 23 and 26 percent respectively. Quintana Roo had been slow to join the rest of Mexico in making the improvements seen in most other states from 2011 to 2015. The state had been stuck in the bottom half of the index until 2016, when it rose 11 places to rank 9th.

Coahuila, Tamaulipas, Durango and Nayarit followed Quintana Roo with improvements in their overall scores,

TABLE 1.1 2017 MEXICO PEACE INDEX RESULTS
A lower score indicates a better level of peacefulness.

MPI RANK	STATE	OVERALL SCORE	HOMICIDE	VIOLENT CRIME	WEAPONS CRIME	ORGANIZED CRIME	DETENTION WITHOUT A SENTENCE	DIFFERENCE IN OVERALL SCORE (2016-2015)
1	Yucatán	1.239	1.085	4.235	5	3.693	3.544	-0.071 ⬆
2	Nayarit	1.384	1.143	2.308	2.230	1.702	2.592	-0.156 ⬆
3	Tlaxcala	1.403	1.404	3.843	3.978	2.391	2.757	0.055 ⬇
4	Hidalgo	1.445	1.306	2.102	2.002	1.233	1.078	0.061 ⬇
5	Coahuila	1.515	1.567	1.736	1.367	1.050	1	-0.202 ⬆
6	Chiapas	1.574	1.650	1.417	1.285	1	1.180	-0.074 ⬆
7	Campeche	1.607	1.669	1.382	1.250	1	1.163	0.048 ⬇
8	Querétaro	1.632	1.365	2.505	3.146	2.003	1.505	0.041 ⬇
9	Quintana Roo	1.724	1.612	2.511	3.248	2.013	2.095	-0.518 ⬆
10	Veracruz	1.750	2.194	4.019	5	3.334	5	0.314 ⬇
11	Aguascalientes	1.779	1.100	1	1.105	1	1.049	0.041 ⬇
12	Puebla	1.808	1.725	2.460	3.054	1.980	3.850	-0.105 ⬆
13	San Luis Potosí	2.041	1.856	2.577	3.268	2.063	1.166	0.304 ⬇
14	México State	2.042	1.951	2.177	2.020	1.340	1.682	-0.080 ⬆
15	Durango	2.076	2.054	1.937	1.472	1.140	1.488	-0.164 ⬆
16	Tamaulipas	2.212	2.339	3.525	3.972	2.340	3.248	-0.184 ⬆
17	Tabasco	2.250	1.824	3.458	3.932	2.221	2.261	0.095 ⬇
18	Jalisco	2.264	2.148	2.140	2.016	1.318	1.572	-0.011 ⬆
19	Oaxaca	2.272	2.784	2.329	3.046	1.836	1.706	0.157 ⬇
20	Sonora	2.339	2.558	3.319	3.606	2.177	1.831	0.160 ⬇
21	Guanajuato	2.443	2.339	1.978	1.477	1.148	2.608	0.013 ⬇
22	Mexico City	2.550	1.800	1.916	1.457	1.098	1.204	-0.066 ⬆
23	Michoacán	2.596	3.361	2.302	2.089	1.390	1.476	0.529 ⬇
24	Chihuahua	2.731	3.780	1.631	1.299	1.035	1.562	0.282 ⬇
25	Nuevo León	2.803	1.983	2.317	2.476	1.831	1.007	0.355 ⬇
26	Zacatecas	2.828	3.384	4.461	5	4.613	4.460	0.598 ⬇
27	Morelos	2.997	3.720	2.304	2.109	1.440	1.960	0.120 ⬇
28	Baja California	3.010	3.764	1.128	1.147	1	1.293	0.196 ⬇
29	Baja California Sur	3.195	2.916	1.365	1.185	1	1.672	0.537 ⬇
30	Sinaloa	3.274	4.385	3.316	3.281	2.138	2.026	0.055 ⬇
31	Colima	3.734	5	1.830	1.436	1.052	1.730	1.236 ⬇
32	Guerrero	3.927	5	2.064	1.950	1.204	2.568	0.126 ⬇
NATIONAL		**2.264**	**2.399**	**2.425**	**2.528**	**1.743**	**2.042**	

with Coahuila recording the second largest improvement, at 12 percent. Coahuila, Durango and Nayarit, have now recorded some of the largest improvements since 2011. Tamaulipas has had more mixed results, but has improved for the last two years.

Colima showed the largest deterioration last year, with its overall score deteriorating by nearly 50 percent. The homicide rate there more than tripled in 2016, while the level of violent crime and organized crime related offenses doubled. Colima is also the state to show the largest deterioration since 2011, meaning that levels of violence in Colima are now worse than at the height of the drug war.

Zacatecas, Baja California Sur, Michoacán and Nuevo León followed Colima with the largest one-year deteriorations, although none are as large. Deteriorations in overall MPI scores in these states range from 20 to 27 percent, highlighting that breakdowns in peacefulness are often swifter and larger than improvements. Violence has significantly escalated in all these states, along with Veracruz and Baja California, which are among the five states with the largest rises in homicide rates.

METHODOLOGY AT A GLANCE

The MPI is based on the work of the Global Peace Index, the leading global measure of peacefulness, produced by IEP annually since 2007. The MPI follows a similar methodology to the United Kingdom Peace Index (UKPI) and the United States Peace Index (USPI), also produced by IEP, and measures negative peace, defined as 'the absence of violence or fear of violence'. This is the fourth iteration of the MPI and includes a time series from 2003 to 2016.

The MPI measures peacefulness at the state level in Mexico. A key reason for choosing this unit of analysis is that Mexico's state governments have a certain amount of latitude in their governance structures, such that policy responses to violence may differ significantly from state to state.

The MPI is composed of the following five indicators:

Homicide

The number of homicides per 100,000 people, measured as the number of investigations opened by the state prosecution authorities.

Source: Executive Secretary of the National System for Public Security / *Secretariado Ejecutivo de Sistema Nacional de Seguridad Pública* (SESNSP)

Weapons Crime

The number of crimes committed with a firearm per 100,000 people. Includes intentional and negligent homicides and assaults committed with a firearm.

Source: SESNSP

Violent Crime

The number of violent crimes per 100,000 people, adjusted for underreporting. Violent crimes include robbery, rape and assault.

Source: SESNSP

Detention without a Sentence

The number of people in prison without a sentence proportional to the level of violent crime.

Source: Secretariat of Public Security / *Secretaría de Seguridad Pública* (2006-2012) and the National Security Commission / *Comisión Nacional de Seguridad* (CNS) (2013-2016), data provided by Guillermo Zepeda and Paola Jiménez, *Jurimetria*.

Organized Crime

The number of extortions, drug-trade related crimes, and kidnappings per 100,000 people. Extortion and kidnapping rates are adjusted for underreporting. Drug-trade related crimes include production, transport, trafficking, trade, supply, or possession of drugs or other "crimes against public health," as they are termed in Mexican law. Drug-trade related crimes for 2016 reflect 2015 values because SESNSP did not publish the data in 2016.

Source: SESNSP

Each of the indicators is scored between 1 and 5, with 1 being the most peaceful score and 5 the least peaceful. These scores are calculated for each year covered by the study. After the score for each indicator has been calculated, a weighting methodology is applied to arrive at the final MPI score. Refer to table 7.1 in the full methodology for the weights applied to each indicator.

Two of the indicators — *violent crime* and *organized crime* — are adjusted for underreporting. In 2015, 93.7 percent of crimes in Mexico did not make it into the official statistics because they were either not reported to the authorities or because no investigation was opened[3]. IEP uses INEGI's National Survey of Victimization and Perceptions of Public Security / *Encuesta Nacional de Victimización y Percepción sobre Seguridad Publica* (ENVIPE) to calculate underreporting rates for each state and adjusts the official statistics for rape, robbery, assault, extortion and kidnapping to better reflect actual rates of violence. This approach helps to counter balance the high rates of underreporting, known as the *cifra negra*.

The 2017 MPI uses two fewer indicators than previous iterations of the index. In 2017, IEP has removed the *police funding* and *justice system efficiency* indicators from the MPI. This report publishes the full time series of state results based on the updated methodology.

Most IEP peace indices take into account the resources used to counter criminality, as they are part of the overall government response to violence. The most peaceful states or countries will have low levels of crime and at the same time have lower levels of policing and incarceration than other states, therefore measuring the combination is important.

Two indicators were dropped because:

> Official datasets are inconsistent over time: there is no longer a uniform dataset that can be used to calculate the full time series for the *justice system efficiency* score, which was based on the ratio of sentences for homicide to homicide cases. The publication of the source data for the *justice system efficiency* indicator was discontinued by INEGI in 2013. The issue of impunity in Mexico is discussed more fully on page 52 of this report, but is no longer part of the index score.

> The only available data for the previous police funding indicator does not represent the full investment of resources in law enforcement. Previous indices used the federal government subsidies for state security from the Public Security Contribution Fund (FASP) per 100,000 people. Given the incompleteness of the data it was decided to drop the indicator.

> A more holistic analysis of policing and justice, as is presented on page 56 of this report, is more appropriate.

Mexico Peace Index Expert Panel

An Expert Panel was established to provide independent advice and technical guidance to IEP researchers in developing the index methodology. The Panel is composed of experts from independent, nonpartisan civil society and academic organizations. For the 2017 MPI it included:

> Carlos J. Vilalta Perdomo, Professor, Centro de Investigación y Docencia Económicas, A.C. (CIDE)

> Edgar Guerrero Centeno, Deputy Director General of Government Information Policies and National Government Censuses, Instituto Nacional de Estadística y Geografía (INEGI)

> Guillermo Zepeda Lecuona, Director, Jurimetría, Iniciativas para el Estado de Derecho, A.C.

> Leonel Fernández Novelo, Local Observatories Coordinator, Observatorio Nacional Ciudadano

> Juan Pablo Arango Orozco, Researcher, Causa en Común

> Alberto Díaz-Cayeros, Senior Fellow, Center for Democracy Development and Rule of Law, Freeman Spogli Institute of International Affairs, Stanford University

> Jonathan Furszyfer del Río, Director of Security, México Evalúa.

For a full explanation of the methodology refer to Section Five.

VERIFYING MEXICO'S OFFICIAL CRIME DATA

> ❯ A review of the data for homicides, extortion and crimes committed with a firearm shows that inconsistencies and gaps in official data are widespread.

> ❯ As many as 10 percent of homicide deaths in Mexico were not investigated by law enforcement in 2015, down from 15 percent in 2014.

> ❯ Nayarit, Veracruz, Tabasco, Hidalgo and Quintana Roo have the largest discrepancies in their homicide data, measured by the disparity between the number of homicide deaths counted by death certificates and those investigated by law enforcement.

> ❯ Nayarit, Veracruz and Hidalgo have been among the five states with largest discrepancies in homicide victim counts for two years in a row, and the discrepancies in Nayarit and Veracruz have grown.

> ❯ A total of 14 states have some anomaly in their weapons crimes data, failing to record either assaults committed with a firearm, homicides committed with a firearm, or some portion of both.

> ❯ Tabasco, Baja California, Baja California Sur, Oaxaca and Morelos have the largest gaps in data for the MPI weapons crime indicator.

> ❯ Tlaxcala had the largest number of identified data discrepancies, with gaps in weapons crime data, inconsistent ranks for extortion and one of the five largest gaps between homicide victim counts.

> ❯ Tlaxcala, Veracruz and Chihuahua show significant discrepancies in both homicide and extortion data, suggesting a pattern of poor quality official crime data in these three states.

The quality of official crime data in Mexico varies by state, making it difficult, although not impossible, to harmonize measures of violence. Recognizing this, the MPI adjusts for underreporting using data from Mexico's victimization survey (ENVIPE). However, underreporting is only one of the dynamics that affects the accuracy of official statistics. Further improvements in the collection of crime data would enable more accurate analyses by the government, IEP and other institutions in understanding the extent and causes of violence in Mexico.

IEP uses a variety of methods to develop an accurate picture of peacefulness at the national and sub-national levels. The development of a composite index of peace directly addresses some of the deficits in measuring violence. Assembling, normalizing and weighting various datasets produces *relative* scores, which are a good assessment of levels of peacefulness and changes within the country and its states.

At present, the most comprehensive data on violence in Mexico is the dataset on preliminary investigations published by SESNSP. Ideally, this data reflects the number of investigations opened by each state's Public Ministry offices, based on the crimes reported to the Public Ministry and to law enforcement. However, official datasets in Mexico are assembled from the local levels up, and the quality and accuracy of the investigations data varies by state.

IEP produces an annual analysis on the veracity of data in order to provide context for the index results and highlight progress in transparency. IEP undertook three analyses to

verify the state-level official violence data used in the 2017 MPI:

1) Compared homicide data from law enforcement and judicial data and health data based on death certificates, to highlight discrepancies.

2) Compared data from the national victimization survey to the estimates for violent crime and organized crime. For the most part, the various datasets proved incomparable, but the extortion statistics offer some clues toward the veracity of state data.

3) Identified anomalies in the weapons crime data. Several states report 0 assaults and homicides committed with a firearm, but local crime data and data on firearms purchases suggest that these zeros represent missing data more so than the absence of crime.

The full analysis is presented in Appendix A.

Comparing hospital registered deaths to law enforcement registered deaths from homicide is the most straightforward way to assess the veracity of official data by state. The discrepancy between deaths and investigations has declined from 2014 to 2015, suggesting improvements in justice and transparency. This improvement has coincided with the implementation of Mexico's new criminal justice system in 30 states across the country. However, discrepancies in individual states remain.

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1   Roughly three percent of this increase can be attributed to better law enforcement practices and record keeping, with the remainder representing a true increase in violence.

2   See Appendix A on Verifying Mexico's Official Crime Data for discussion of the completeness of homicides and firearms data.

3   Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2016, http://www.beta.inegi.org.mx/proyectos/enchogares/regulares/envipe/2016/ (Accessed 27 January 2017)

TRENDS

> Mexico was nearly 14 percent more peaceful in 2016 than in 2011, despite recent setbacks.

> At the end of 2016, the nationwide homicide rate was 16 percent lower than in 2011, but an upward trend has returned in the last two years.

> However, while improvements still largely outweigh recent deteriorations, 19 states now have homicide rates higher than their 2011 levels.

> Rates of violent crime and organized-crime related offenses have returned to pre-drug war levels.

> The violent crime rate reached a 14-year low in 2016, showing a 34 percent improvement from its peak in 2011.

> Rape, robbery and assault fell to less than 75 percent of their 2011 levels in 2015. However, while the national rates of assault and robbery continued to decline into 2016, the rate of rape increased 4.5 percent last year.

> The rate of organized crime related offenses has also continued to fall for the past five years, with a 26 percent reduction since 2011.

> All three components of the organized crime indicator have improved since 2011, but the trend in extortion has been erratic and the national rate remains high, at 52 per 100,000 people.

> The rate of crimes committed with a firearm is 10.2 percent lower than 2011 levels, but recent trends show an increase in the purchase and use of guns.

> Detention without a sentence is the only MPI indicator that has not improved since 2011, but rather has deteriorated 16 percent since 2011.

TRENDS IN PEACEFULNESS:
CHANGES FROM 2011 TO 2016

Peace in Mexico has improved by almost 14 percent compared to the height of violence in 2011. However, after four consecutive years of improvement, progress faltered in 2016, with the homicide rate rising for the second year in a row.

The homicide rate had peaked in 2011 at nearly 20 deaths per 100,000 people, four years after the government declared its war on drugs and organized crime. Since 2011, substantial progress has been made and the country has implemented significant reforms to transparency, policing and the justice system — but is now facing setbacks. This section of the report explores the national and state level trends from 2011 to 2016 in detail.

FIGURE 2.1 PEACEFULNESS IN MEXICO, 2003–2016

Despite recent setbacks, Mexico was nearly 14 percent more peaceful in 2016 than in 2011.

Source: IEP

HOMICIDE

The recent rise in homicide rates is the most concerning indicator trend. After three years of significant declines, progress was reversed in 2015 and 2016, with the homicide rate reaching nearly 17 per 100,000 people. In 2014, that rate had fallen to 13 from its 2011 high of 20 deaths per 100,000 people. Figure 2.2 shows the national trend. At the end of 2016, the nationwide rate remained 15.6 percent lower than 2011 levels, but the annual improvements have not continued.

In the first year of improvement, 19 states saw a decline in homicide rates from 2011 to 2012. In 2016, only eight states were able to reduce their homicide rates from 2015, suggesting that the recent rise in violence has affected a large part of the country. Furthermore, escalations in homicide have been more severe in some places than others. Figure 2.3 shows the change in the homicide rate since 2011 for each

state. The largest improvement, in Chihuahua, still outpaces the largest deterioration, in Colima. But Colima's state-level homicide rate of 76.6 per 100,000 is nearing the levels Chihuahua experienced in 2011. That year, homicides were estimated at nearly 87 deaths per 100,000 people and in 2012, the state's largest city, Ciudad Juárez, was dubbed "murder capital of the world."

Although the magnitude of improvements still largely outweighs recent deteriorations, 19 states now have homicide rates higher than their 2011 levels. Shaded bars indicate the states with the largest rises in organized-crime related offenses over the same time period, suggesting organized crime is a factor in the rise in homicides in Colima, the State of Mexico, Campeche, Baja California Sur, Guerrero and Tlaxcala.

FIGURE 2.2 HOMICIDE RATE IN MEXICO, 2003–2016

At the end of 2016, the nationwide rate of 16.7 homicides per 100,000 people remained 15.6 percent lower than its height of 19.8 in 2011, but the upward trend has returned in the last two years.
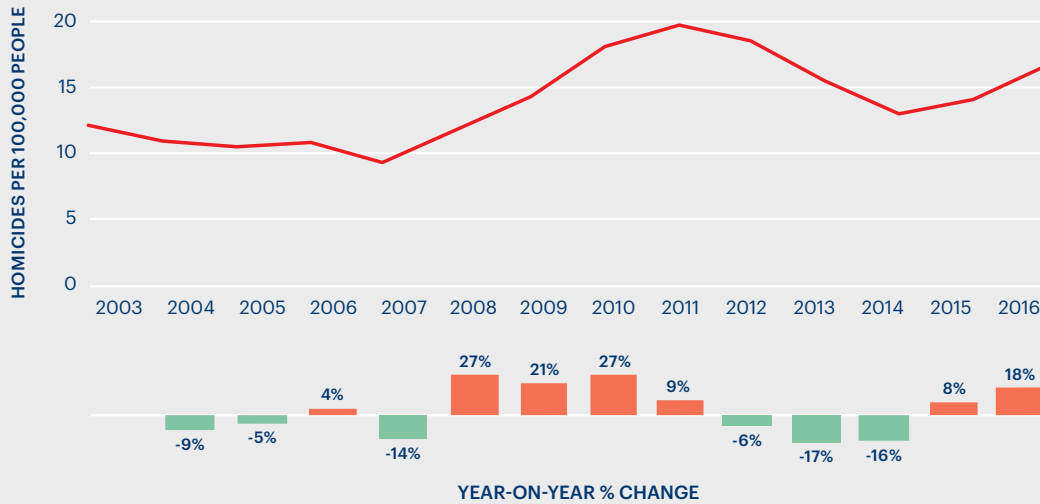
Source: SESNSP, IEP calculations

FIGURE 2.3 DIFFERENCE IN HOMICIDE RATE BY STATE, 2011–2016

Although the magnitude of improvements still largely outweighs recent deteriorations, 19 states now have homicide rates higher than their 2011 levels. On the other hand, Chihuahua's homicide rate is now 55 points lower than 2011, while Colima's is 52 points higher.

Shaded bars indicate states where both the homicide and organized crime rates increased.
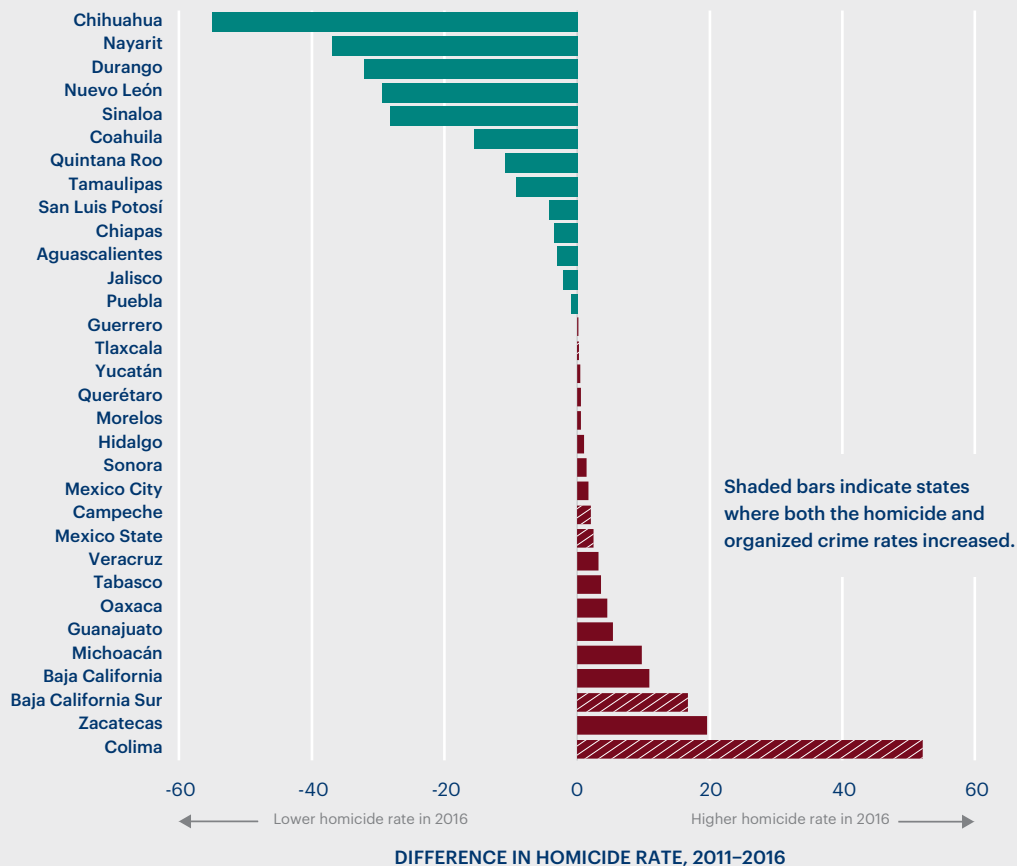
Source: SESNSP, IEP calculations

VIOLENT CRIME

Mexico's violent crime rate reached a 14-year low in 2016, with long term declines in all three categories: rape, robbery and assault. The violent crime rate has improved by an average of eight percent every year for the past five years, falling below 2003 levels in 2014 and continuing to decline thereafter. The 2016 rate was 34 percent lower than its peak in 2011 and 23 percent lower than its 2003 level. Improvements have been widespread as well, with 26 states reducing their violent crime rates over the past five years. Figure 2.4 shows the national trend in the total violent crime rate and its year-on-year change.

Six states have improved their violent crime rates by more than 50 percent since 2011: Nayarit, Quintana Roo, Yucatán, Sinaloa, Mexico State and Nuevo León. The falls were particularly significant for Nuevo León, Quintana Roo and México State, which had some of the highest violent crime rates in the country in 2011. Of these six states, Sinaloa and Nuevo León were the only ones that did not record improvements in all three components of the violent crime rate. While rates of assault and robbery have fallen significantly in both states, the rates of rape are more than 30 percent higher than 2011 levels.
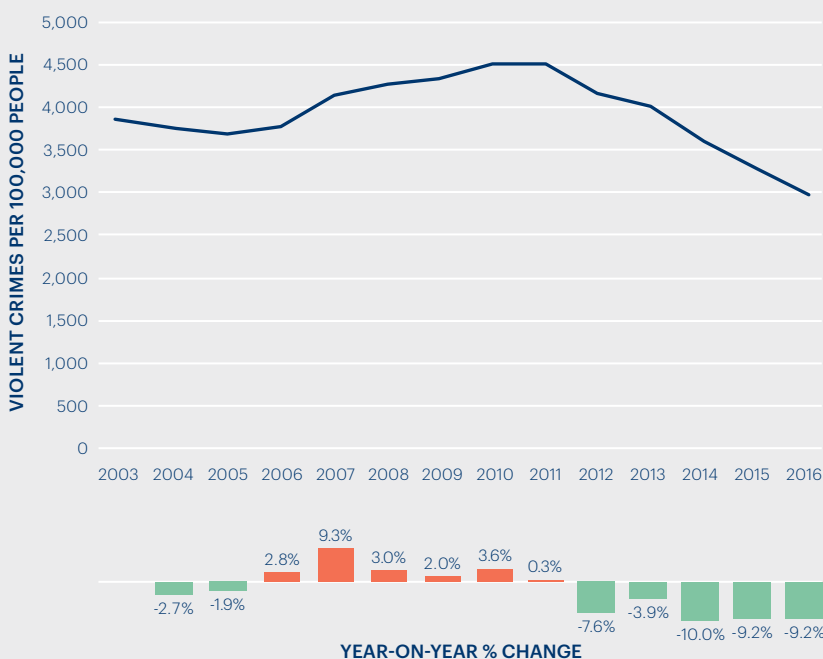
Nationally, the rate of rape is the only component of violent crime to show an uptick in 2016. As seen in figure 2.5, in 2015 the rates of all three crimes fell to less than 75 percent of their 2011 levels. However, while the national rates of assault and robbery continued to decline into 2016, the rate of rape increased 4.5 percent in the last year.

There are many more incidents of robbery than incidents of rape or assault. Six states recorded a rise in the total violent crime rate in the last five years, while all of them recording increases in robbery of more than 10 percent.

Querétaro recorded the largest rise in violent crime, with a total rate that went from about 3,100 incidents per 100,000 people in 2011 to more than 4,500 in 2016 — a 46 percent increase. The rate of robberies has risen by 48 percent and the rate of rape by 46 percent. Campeche, Baja California Sur, Tabasco, Sonora, and Colima followed with the next largest rises. Over the five year period, rates of rape fell in four of these states and assault in two. But the number of robberies is so much larger than the other crimes that changes in the robbery rate typically dominate the trend in violent crime overall. Only nine states have experienced a rise in robbery over the past five years, as most of the country has improved. But Tabasco, Querétaro and Campeche have faced 27, 48 and 64 percent increases, respectively.

**FIGURE 2.4** VIOLENT CRIME RATE, 2003–2016

The violent crime rate reached a 14-year low in 2016, showing a 34 percent improvement from its peak in 2011.

Source: SESNSP, IEP calculations

FIGURE 2.5 CHANGE IN THE COMPONENTS OF VIOLENT CRIME, 2011–2016

All three components of the violent crime indicator fell to less than 75 percent of their 2011 levels in 2015. However, the rate of rape increased 4.5 percent in the last year.
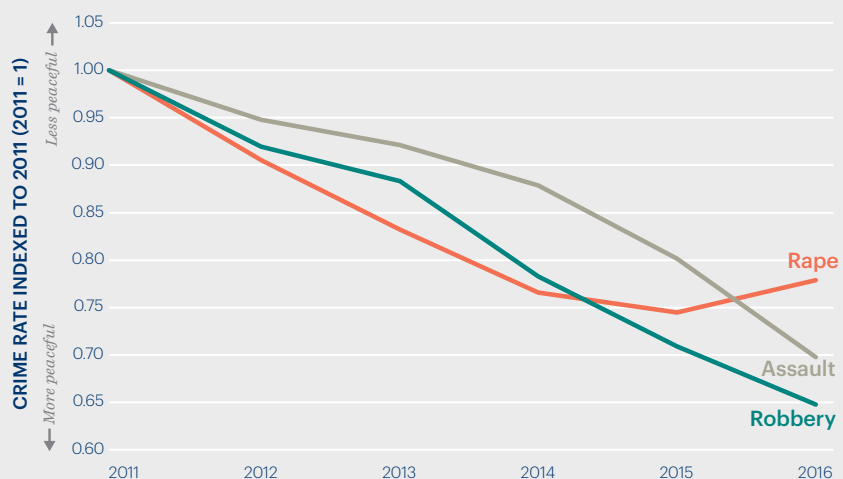
> **"** Nationally, the rate of rape is the only component of violent crime to show an uptick in 2016.

Source: SESNSP, ENVIPE, IEP calculations

🔫 WEAPONS CRIME

The MPI weapons crime indicator serves as a proxy for the spread and use of firearms, based on the rate of homicides and assaults committed with a firearm.

Mexico's weapons crime rate was 10 percent lower in 2016 than in 2011, the trend was not a consistent decline. After three years of improvement, the weapons crime rate rose in 2015 and again in 2016, consistent with the rise in the overall homicide rate.

The rate of assaults committed with a firearm increased in 2015 as well as in 2016. This likely reflects at least three dynamics:

1) Improvements in transparency and data collection in recent years mean that more states are correctly coding homicides and assaults as committed with or without a firearm.

2) Increases in weapons crimes suggest a shift in the dynamics of violence, with a fall in petty crime but a rise in interpersonal and/or organized violence.

3) Years of violent conflict have increased both the number of available weapons and the propensity to use a weapon. Civilian firearms are illegal in Mexico, but weapons are either trafficked from the US and Central America or leak from the military into the civilian black market.

Figure 2.6 shows a rise in the demand for firearms between 2012 and 2014, when the rate of household firearms purchases more than doubled. More than 300,000 households reported purchasing a firearm in 2014. In the following two years, the rate of crimes committed with a firearm rose, first by eight percent in 2015 and then another 20 percent in 2016.

Half of the states (16) had higher weapons crime rates in 2016 than in 2011. Eight states saw their rates more than double over this period. Zacatecas, Querétaro, Baja California Sur, Colima and Oaxaca recorded the largest percentage increases. Although the percentage increase was high for Querétaro it had the second lowest rate in 2016. The absolute change was significantly larger in the other four states, as well as Michoacán, where rates rose from below 11 to above 20.

On the other hand, the largest improvements have come in some of the worst-affected places. Nayarit, Coahuila, Durango, Chihuahua and Sinaloa have recorded the largest improvements since 2011. All of these five states were among the ten entities with the highest weapons crime rates in the country in 2011, and four (all but Coahuila) were in the worst five.

These five states are also among the ten most improved states in the overall MPI score. Chihuahua and Sinaloa still have two of the highest weapons crime rates in Mexico, but Chihuahua has more than halved its rate in the past five years and Sinaloa has reduced it by a third.

FIGURE 2.6 HOUSEHOLD FIREARM PURCHASE RATE, 2011–2015

The rate of household firearm purchases more than doubled in two years' time, from 476 per 100,000 people in 2012 to 984 in 2014.

FIREARMS PURCHASES PER 100,000 PEOPLE
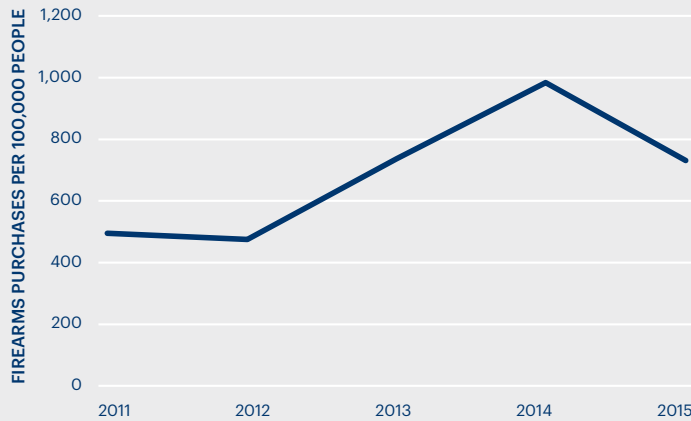
Source: ENVIPE, Provided by Mexico Evalua

> " Years of violent conflict have increased both the number of available weapons and the propensity to use a weapon. Civilian firearms are illegal in Mexico, but weapons are either trafficked from the US and Central America or leak from the military into the civilian black market.

ORGANIZED CRIME

The rate of organized crime related offenses has also continued to fall for the past five years, with a 26 percent reduction since 2011. The organized crime rate peaked earlier than other indicators, reaching 120 offenses per 100,000 people in 2009. After a 10 percent and then a 21 percent drop in 2010 and 2011, the rate of organized crime resurged by 18 percent in 2012. Since then, the national organized crime rate declined to levels not seen since 2005. But the trend has flattened, with only a 0.4 reduction between 2015 and 2016. The positive trend has tapered off in recent years and is visible in all three measures of the organized crime indicator, as seen in figure 2.8. Reductions in extortion, kidnapping and narcotics crimes have all slowed in recent years. However, the long term dynamics differ between the three. The extortion rate remains highest of the three crimes, and has shown an erratic trend over the period. The kidnapping rate has hovered around an estimated four kidnappings per 100,000 people since 2011. The rate of narcotics crimes has fallen to about seven crimes per 100,000 people, from 37 in 2011 and 74 at its peak in 2007.

Similarly to violent crime, rates of organized crime related offenses have fallen across most of the county for the past five years, or in some places longer. Guanajuato, Chihuahua, Quintana Roo, Baja California and Michoacán have recorded the largest percentage improvements since

2011. All five states saw their organized crime rate fall by more than 75 percent.

Conversely, Mexico State, Puebla, Nuevo León, Campeche and Colima have shown the largest percentage increases. Eleven states had higher organized crime rates in 2016 than 2011. Despite the large percentage deteriorations, Mexico State and Puebla both had relatively low rates in 2011 — below eight per 100,000. Although the rates are low, Puebla's organized crime rate has quintupled and has risen by a factor of 13 in Mexico State.

Nuevo León already had an organized crime rate of just above 60 and it has quadrupled since, driven by an eleven-fold increase in the rate of extortion since 2011.

Campeche still has a moderate organized crime rate relative to the rest of the country — ranking 12th with a rate of 28 — but the state has seen that number more than double in five years' time.

Colima, a state that recorded a deterioration in every MPI indicator in the last year, has seen the rate of organized crime offenses nearly double, from 42 to 80 crimes per 100,000 people.

FIGURE 2.7 ORGANIZED CRIME RATE, 2003–2016

The rate of organized crime related offenses has fallen for the past five years, with a 26 percent reduction since 2011.
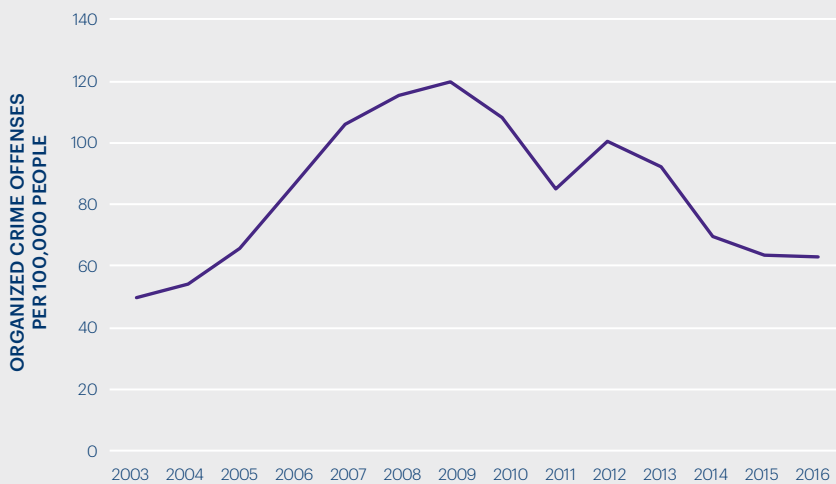
Source: SESNSP, ENVIPE, IEP calculations

FIGURE 2.8 TREND IN EXTORTION, NARCOTICS CRIMES AND KIDNAPPING, 2003–2016

All three components of the organized crime indicator have improved since 2011, but the trend in extortion has been erratic and the national rate remains high.
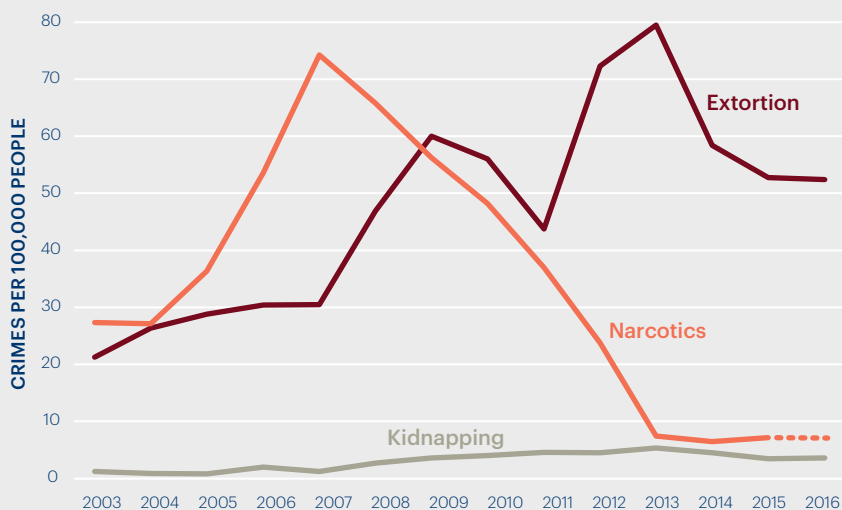
Note: 2016 estimates for narcotics crimes are held constant from 2015 due to a late release of data from SESNSP.
Source: SESNSP, ENVIPE, IEP calculations

⛓ DETENTION WITHOUT A SENTENCE

Detention without a sentence is the only MPI indicator that has not improved over 2011 levels. The 2016 score indicates a 16 percent deterioration since 2011. This indicator captures the number of people held in prison awaiting trial. Unsentenced detention is unconstitutional in most cases in Mexico, but it has been widely used in practice. In 2016, over 70,000 people were incarcerated without a sentence.

Unsentenced detention in Mexico has been shown to cost more than $10 billion pesos (US$500 million) and can have detrimental effects on the rule of law.[1] There are risks associated with higher incarceration; for example, criminal networks can proliferate inside prisons.[2]

As of July 2016, Mexico's prisons had exceeded their capacity by 12 percent, with some states recording much higher rates. Nayarit and the Mexico State, for example, each have more than twice as many prisoners as spaces in prison.[3]

While a certain amount of pre-trial detention is necessary, excess incarceration may increase the risk of crime and violence in the future.[4] As such, reducing the rates of unnecessary pre-trial detention was a key tenet of the nationwide justice reforms that begun in 2008. The MPI indicator *detention without a sentence* scores the level of excess pre-trial detention based on the ratio of people incarcerated without a sentence relative to the level of homicide and violent crime in each state. Figure 2.9 depicts that the *detention without a sentence* indicator, which has deteriorated 16 percent since 2011, despite a modest improvement in the last year.

A total of 21 states had higher rates of detention without a sentence in 2016 than in 2011. Notable among them are Nayarit, Sinaloa, Quintana Roo, Mexico State, Durango and Coahuila — as their rates more than tripled during this period. Out of the states who saw their rates go down, the largest drops were recorded in Mexico City and Tabasco, at 74 and 57 percent, respectively.

> ❝ Detention without a sentence is the only MPI indicator that has not improved over 2011 levels. 21 states had higher rates of detention without a sentence in 2016 than in 2011.

FIGURE 2.9 DETENTION WITHOUT A SENTENCE SCORE, 2003–2016

The score for detention without a sentence deteriorated 16 percent from 2011 to 2016.
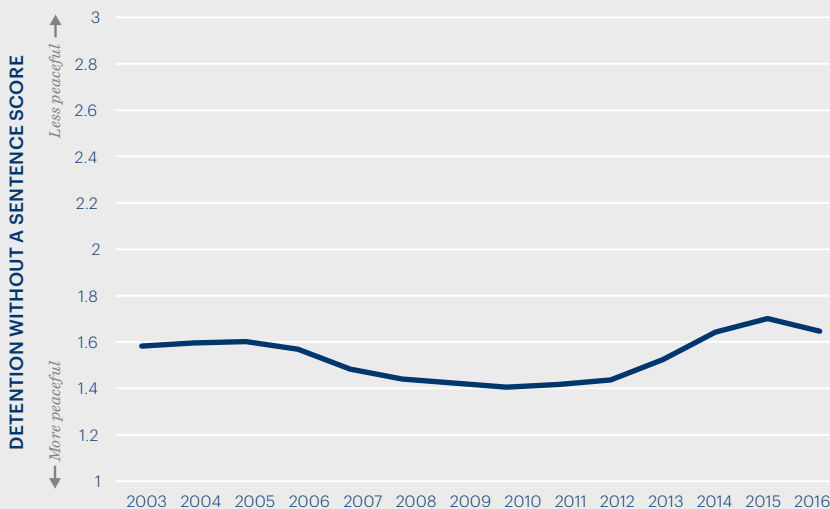
Source: IEP

RISERS & FALLERS:
STATE-BY-STATE TRENDS

Twenty-one out of 32 states in Mexico were more peaceful in 2016 compared to 2011. The following section details state-by-state progress and the drivers of change in the states that have shown the largest improvements and deteriorations in the MPI since the height of the drug war. Figure 2.10 shows where Mexico is becoming more peaceful.

FIGURE 2.10 CHANGE IN MPI SCORE, 2011-2016
21 out of 32 Mexican states improved their overall MPI score vis-à-vis 2011. A negative change indicates an improvement in peacefulness.
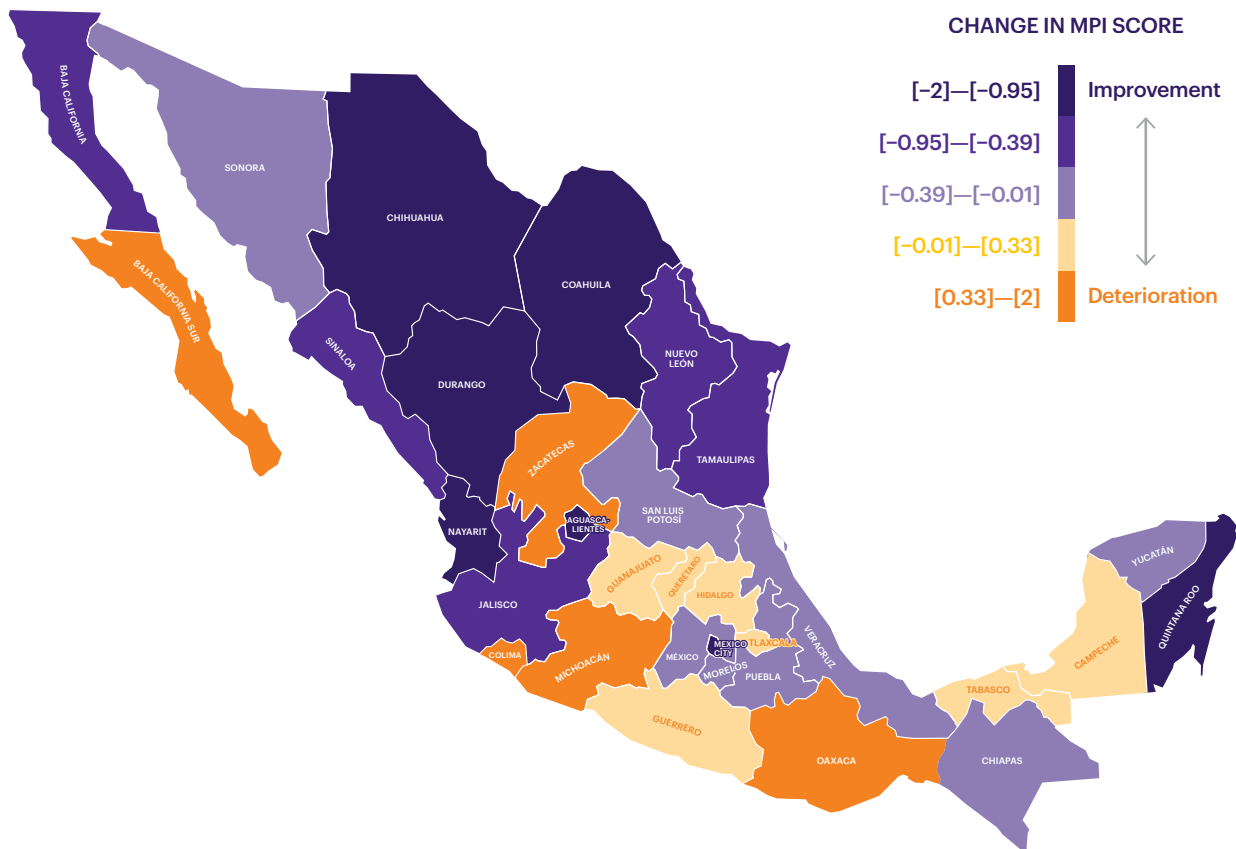

CHANGE IN MPI SCORE

[–2]—[–0.95]   Improvement
[–0.95]—[–0.39]
[–0.39]—[–0.01]
[–0.01]—[0.33]
[0.33]—[2]   Deterioration

Table 2.1 shows the change in the overall score for each state from 2011 to 2016, as well as the trend in peacefulness over the period.

TABLE 2.1 CHANGES IN PEACEFULNESS FROM 2011 TO 2016

Twenty-one out of 32 states in Mexico are more peaceful in 2016 than in 2011. Red dots in the trend line indicate the most peaceful year. A negative change indicates an improvement in score.

RANKING BY CHANGE IN SCORE	STATE	2011 SCORE	2016 SCORE	DIFFERENCE IN SCORE
1	Nayarit	3.16	1.38	-1.77
2	Durango	3.83	2.08	-1.76
3	Coahuila	2.53	1.52	-1.01
4	Quintana Roo	2.71	1.72	-0.99
5	Chihuahua	3.69	2.73	-0.96
6	Nuevo León	3.62	2.80	-0.82
7	Baja California	3.72	3.01	-0.71
8	Tamaulipas	2.84	2.21	-0.63
9	Sinaloa	3.84	3.27	-0.57
10	Mexico City	3.10	2.55	-0.55
11	Jalisco	2.75	2.26	-0.49
12	Aguascalientes	2.23	1.78	-0.45
13	San Luis Potosí	2.43	2.04	-0.39
14	Mexico State	2.29	2.04	-0.25
15	Morelos	3.22	3.00	-0.22
16	Yucatán	1.45	1.24	-0.21
17	Chiapas	1.70	1.57	-0.13
18	Sonora	2.44	2.34	-0.10
19	Puebla	1.89	1.81	-0.08
20	Veracruz	1.80	1.75	-0.05
21	Hidalgo	1.46	1.45	-0.01
22	Tlaxcala	1.32	1.40	0.08
23	Tabasco	2.15	2.25	0.10
24	Campeche	1.48	1.61	0.12
25	Guerrero	3.79	3.93	0.14
26	Guanajuato	2.29	2.44	0.15
27	Querétaro	1.44	1.63	0.19
28	Michoacán	2.26	2.60	0.34
29	Oaxaca	1.79	2.27	0.48
30	Zacatecas	1.78	2.83	1.05
31	Baja California Sur	1.99	3.20	1.20
32	Colima	2.22	3.73	1.51

Source: IEP

Twenty-one out of 32 states in Mexico were more peaceful in 2016 than in 2011. The long-term improvements in violent crime and organized crime have been widespread across the country. As shown in figure 2.11, 26 states improved their violent crime score and 22 improved in organized crime.

As a result of the rise in lethal violence across much of the country, 18 states have deteriorating homicide scores. In Guerrero, the homicide rate has returned to its 2011 level, at 62 per 100,000, and the state has scored the highest score possible at 5 for the homicide indicator for five of the last six years.

Improvements in the other 13 states have been large enough to keep the nationwide homicide rate lower than 2011. This was partly driven by improvements in the states that were those most severely affected by violence at the start of the decade. In 2011, Chihuahua, Sinaloa, Guerrero, Durango and Nuevo León had the highest homicide rates in Mexico. These states have kept violence at or below 2011 levels since. But many of these states are still vulnerable to flare ups in violence.

Despite the overall deterioration in *detention without a sentence* there have been some states that improved. In 2015, four states had better scores for *detention without a sentence* than in 2011. By 2016, that number had risen to 11, or one third of the country.

FIGURE 2.11 STATE IMPROVEMENTS AND DETERIORATIONS BY INDICATOR, 2011–2016

Most states in Mexico improved in peacefulness from 2011 to 2016, especially in violent crime.
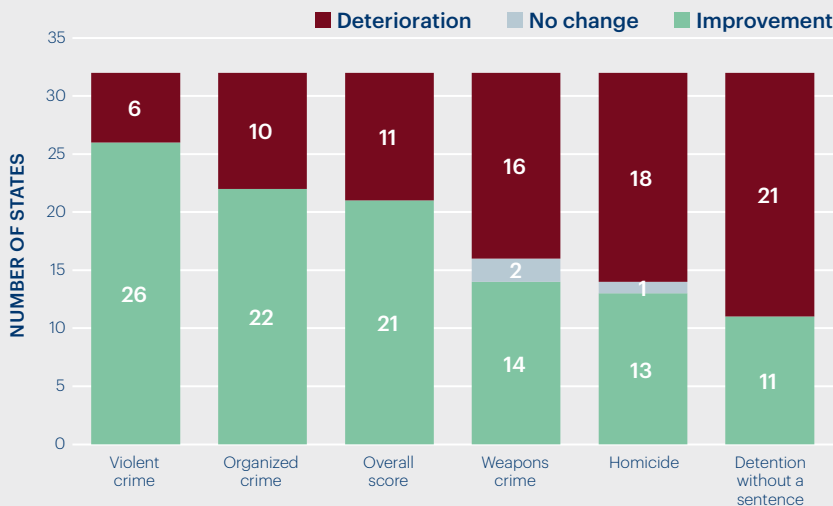
Source: IEP

> Twenty-one out of 32 states in Mexico were more peaceful in 2016 than in 2011. The long-term improvements in violent crime and organized crime have been widespread across the country.

↖ TOP FIVE
STATE IMPROVEMENTS IN PEACEFULNESS

TABLE 2.2 TOP FIVE STATE IMPROVEMENTS IN PEACEFULNESS, 2011-2016
A negative change indicates an improvement.

RANK		STATE	CHANGE IN SCORE (2011-2016)	CHANGE IN RANKING
2016	2011			
2 ‹	25	**NAYARIT**	-1.77	↑ 23
15 ‹	31	**DURANGO**	-1.76	↑ 16
5 ‹	20	**COAHUILA**	-1.01	↑ 15
9 ‹	21	**QUINTANA ROO**	-0.99	↑ 12
24 ‹	28	**CHIHUAHUA**	-0.96	↑ 4

1 NAYARIT

Nayarit has recorded the largest improvement in peacefulness between 2011 and 2016. With a 56 percent improvement in its overall MPI score, the state rose 23 positions in the rankings, from 25th in 2011 to second in 2016.

The homicide rate in Nayarit has come down 92 percent in the last six years, from 40 to 3, and the rate of crimes committed with a firearm has declined by 94 percent.

Overall, the total violent crime rate has fallen by 67 percent vis-à-vis 2011, resulting in the lowest violent crime rate in Mexico. The rates of robbery, assault and rape declined 72, 55 and 19 percent, respectively.

The organized crime indicator has also improved significantly, with marked declines in the rates of extortion, kidnapping and narcotics crimes. However, there are concerns about the accuracy and completeness of official extortion data in recent years.

Improvements in the recorded levels of violence have moved Nayarit to the top of the index, but this small state still faces challenges in the justice system. Nayarit had the highest rate of unsentenced detention in the country in 2016, with the state scoring a 5 out of 5 for *detention without a sentence* every year for the past five years.

This poor score is the result of two dynamics:

› Homicide and violent crime have been declining. Pre-trial detention is legal for so-called "grave crimes," which include homicide and rape. But the rates of violence have subsided, while unsentenced detention has not shown a corresponding decline.

› At the same time, the number of people in prison without a sentence rose 52 percent from 2011 to 2014, from 930 to 1,926. The total number fell back to 1,301 in 2016, the violent crime rate was nearly halved in the same year.

The number of people in prison without a sentence occupies nearly the entire prison capacity of the state of Nayarit. As of July 2016, Nayarit had a total of 1,392 total spaces in prison, with 3,119 people in prison, and 1,301 of them unsentenced. It is typical to see changes in the rate of violence faster than institutional variables such as detention without a sentence. If violence falls quickly, the trend in detention relative to violence may deteriorate in the short term. However, these raw numbers suggest that the criminal justice system faces significant backlogs and/or inefficiencies.

> " The homicide rate in Nayarit has come down 92 percent in the last six years, and the rate of crimes committed with a firearm has declined by 94 percent.

2 DURANGO

Durango has made important strides since 2011, when it was the second least peaceful state.. Durango was the second least peaceful state in 2011. In the past six years the state's overall score has improved 46 percent and it has risen 16 places to 15th in 2016.

This improvement in peacefulness is reflected across the homicide, weapons crime and organized crime rates, which fell by 71, 67 and 67 percent, respectively. Moreover, Durango outperformed the national score across these indicators in 2016, which wasn't the case back in 2011.

Although improvements have also been made in lowering the levels of violent crime, they have shown more moderate declines. The total violent crime rate fell 23 percent, supported by falls in the rates of robbery, rape and assault of 32, 41 and 23 respectively.

Like Nayarit, Durango performed poorly on the *detention without a sentence* indicator. Falling from 12th position in 2011 to 24th in 2016, the rate of unsentenced detention relative to violence more than tripled during this period. Durango has a similar prison overcrowding problem, with nearly as many unsentenced prisoners as total spaces. But this state was an early adopter of reforms to the justice system[5] and ranks seventh and eighth on *well-functioning government* and Positive Peace overall, suggesting that the capacity for continued improvement exists.

> " Durango was the second least peaceful state in 2011. In the past six years the state's overall score has improved by 46 percent.

3 COAHUILA

Coahuila improved in peacefulness by 40 percent from 2011 to 2016. Further, Coahuila now outperforms the national score across all MPI indicators.

Typically, large improvements in peacefulness come in places that have had very low levels of peace to begin with. Coahuila did experience an escalation in violence that dropped its ranking to 21st in the index in 2012, with the homicide rate nearly doubling from 2010 to 2012.

However, the state has seen a 45 percent decline in violent crime and a 66 percent decline in the homicide rate in the

past six years. Weapons crimes also fell by 71 percent, from a rate of 17 per 100,000 down to five.

Coahuila is another state that has not improved detention without a sentence at the same pace as the improvement in its overall peacefulness. This is typical of places where violence falls rapidly — improvements in institutions often take longer. The ratio of detention to violence tripled from 2011 to 2016 and the state fell to ninth place on this indicator, down from second in 2011. However, 664 fewer people were in prison without a sentence last year, suggesting that an improving trend will follow.

4 QUINTANA ROO

Ranked ninth, Quintana Roo is up 12 positions from its 2011 ranking due to a 37 percent improvement in peacefulness. Although it witnessed the smallest decline in homicide rates amid the top five risers, at 56.4 percent, it is — alongside Chihuahua — the state with the largest drop in organized crime rates. This is primarily driven by the significant drops in the rates of narcotics-related crimes and extortion, which fell by 86 and 84 percent, respectively.

Quintana Roo has also made significant improvements in reducing violent crime. It recorded the largest declines in the rates of assault and rape out of all the biggest risers, at 60 and 62 percent, respectively, and the fall in the level of robbery was 66 percent.

The rate of rape has halved in just the last year, without a preceding downward trend. This sudden change raises questions about the veracity of official data, as rates of sexual violence are particularly sensitive to fluctuations in reporting levels and trust in police. Further, Quintana Roo is among the five states with the largest discrepancies in homicide data. Rape data for 2016 cannot be verified until the 2017 victimization survey is released, however the forthcoming results will help to clarify the trend that appears in the official data. If the trend proves consistent, Quintana Roo will stand as a notable success story for across-the-board reductions in violent crime.

However, the state is second only to Nayarit in its increasing levels of detention without a sentence. Ranked 30th out of 32 in 2016, Quintana Roo saw the rate of detention without a sentence triple from 2011 to 2016.

5 CHIHUAHUA

Chihuahua is the fifth most improved state in the MPI, but results in this state are more mixed. Sharing a large border with the US, Chihuahua was severely affected by the conflict between the Sinaloa Cartel and the Juarez Cartel and the subsequent military deployments in 2011 and 2012.

But in the last six years the homicide rate has fallen by 64 percent. Having had the fifth highest kidnapping rate in 2011, the state's 86 percent improvement in the rate of organized crime related offenses is the second largest recorded decline. Chihuahua now outperforms the national score for both the violent crime and organized crime indicators, ranking eighth and fourth out of the 32 states, respectively.

The improvements in Chihuahua are notable given the severity of violence there. In 2011, Ciudad Juarez, the largest city, had the highest municipal homicide rate in the world. However, there is still much progress to be made.

Chihuahua's total violent crime rate has fallen 49 percent between 2011 and 2016, driven by a more than 50 percent reduction in the robbery rate. But, the rates of both assault and rape rose roughly 20 percent.

Although Chihuahua had the smallest increase in its detention without a sentence rate of all five risers, this rate deteriorated by 86 percent.

With a rising trend in rape and assault and the country's fourth highest homicide rate, the state still faces challenges to peacefulness. Violence has escalated in 2016, with the homicide rate rising from 25 to 31 deaths per 100,000 people year-on-year.

66 Chihuahua is the fifth most improved state in the MPI, but results in this state are more mixed. Sharing a large border with the US, Chihuahua was severely affected by the conflict between the Sinaloa Cartel and the Juarez Cartel and the subsequent military deployments in 2011 and 2012.

BOX 2.1 DETENTION WITHOUT A SENTENCE AND IMPROVEMENTS IN PEACE

All of the top five risers in peace have seen a similar trend in the number of people incarcerated without a sentence: a sharp rise after 2012 and then declines in 2016. Figure 2.12 shows the trend for all five states. It appears that the deterioration and then the improvement in detention without a sentence has lagged behind the trend in crime.

As Mexico continues to implement its new criminal justice system, trends in unsentenced detention can be expected to catch up as processes are reformed and judicial backlog is alleviated. Improvements in justice will contribute to the crucial *well-functioning government* pillar of Positive Peace, which will yield even further improvements in the MPI.

FIGURE 2.12 DETENTION WITHOUT A SENTENCE IN THE FIVE MOST IMPROVED STATES, 2007–2016

All of Mexico's most improved states have seen a similar trend in detention without a sentence: a rising number of people incarcerated until 2014 and 2015 and then a reduction in levels.
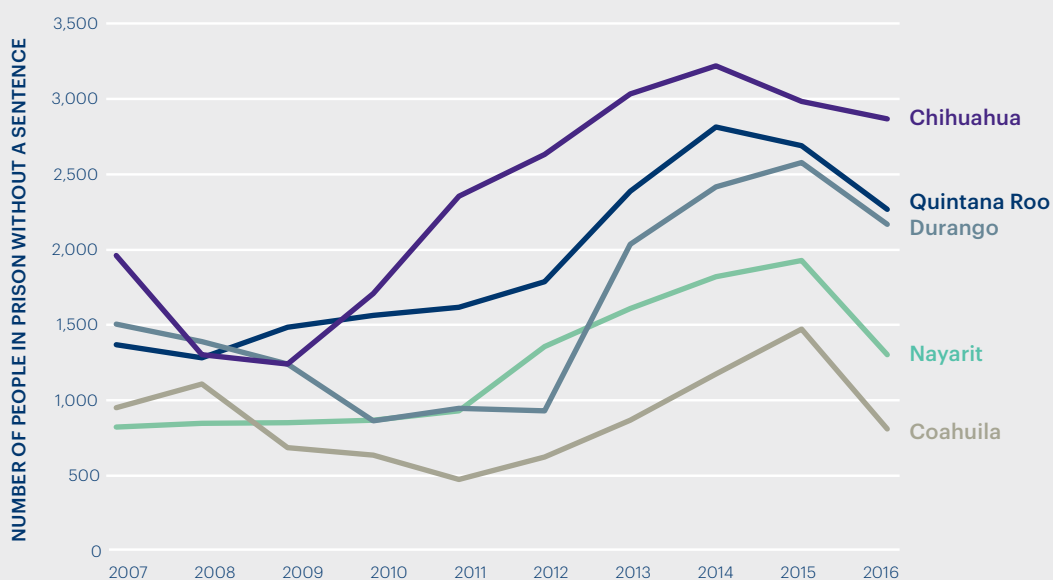
Source: CNG

TOP FIVE
STATE DETERIORATIONS IN PEACEFULNESS

TABLE 2.3 TOP FIVE STATE DETERIORATION IN PEACEFULNESS, 2011-2016
A positive change indicates a deterioration.

RANK		STATE	CHANGE IN SCORE (2011-2016)	CHANGE IN RANKING
2016	2011			
31	13	COLIMA	1.51	↓ 18
29	11	BAJA CALIFORNIA SUR	1.20	↓ 18
26	7	ZACATECAS	1.05	↓ 19
19	8	OAXACA	0.48	↓ 11
23	15	MICHOACÁN	0.34	↓ 8

1 COLIMA

Colima, a small state of nearly 736,000 people on the southern Pacific coast, has recorded the largest deterioration in MPI score from 2011 to 2016. The state's overall MPI score deteriorated 68 percent, dropping it eight places in the rankings to 31st — to become the second least peaceful state.

The homicide rate has more than tripled compared to 2011, with most of the escalation recorded in the last year. In 2016, Colima had the highest homicide rate in the country. Weapons crimes have followed a similar trend, rising sharply in 2012, falling again in 2013 and 2014 and then escalating first in 2015 and again increasing sharply in 2016.

> 66 The homicide rate has more than tripled compared to 2011, with most of the escalation recorded in the last year. In 2016, Colima had the highest homicide rate in the country.

The organized crime rate nearly doubled from 2011 to 2016. This is primarily the result of a surge in the rate of extortion, which increased by four-fold or 319 percent. In the other organized crime domains, however, Colima witnessed falls of 50 and 43 percent for rates of narcotics-related crimes and kidnapping, respectively.

Violent crime rates rose slightly by six percent, from 3,052 per 100,000 people in 2011 to 3,248 in 2016. The rates of rape and assault fell by 54 and 95 percent, respectively, but robbery rates increased by 13 percent. This may indicate some abnormalities in the way police are recording these crimes given the trend in the other indicators.

The number of people incarcerated without a sentence tripled from 2011 to 2014. At the time, crime had been falling, resulting in a deterioration in the rate of incarceration relative to the level of violence. Nearly 300 fewer people were detained without a sentence in 2016 compared to 2015.

Funding rehabilitative programs and improved justice processes can help prevent a vicious cycle of deteriorations in peace indicators, such as increases in excess incarceration following the increases in violence.

FIGURE 2.13 HOMICIDE TREND IN THE FIVE MOST DETERIORATED STATES, 2007–2016

Homicide rates have risen in all five of the states with the largest deterioration in peacefulness, especially in Colima, which had a 2016 homicide rate three times higher than 2011 levels.
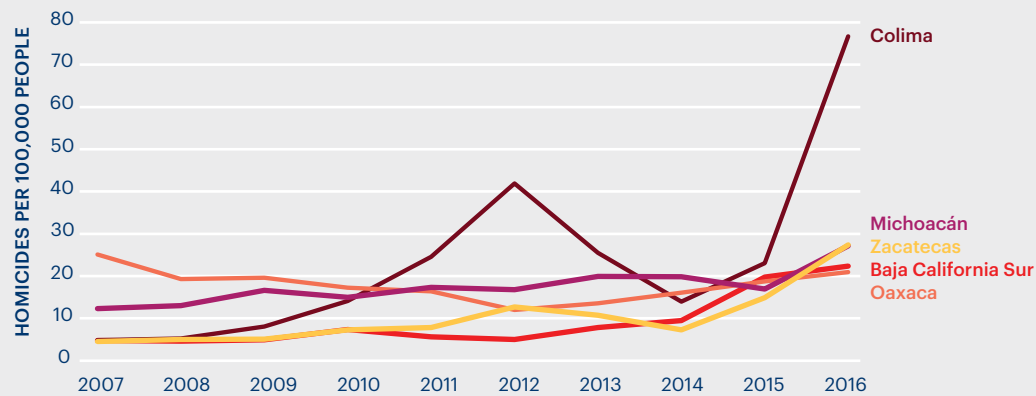
Source: SESNSP, IEP Calculations

2 BAJA CALIFORNIA SUR

Baja California Sur has fallen from 11th in 2011 to be the fourth least peaceful state in 2016. The state has recorded a 60 percent deterioration in peacefulness in the last six years, the second largest fall in the index.

The homicide rate recorded the highest relative increase of the five largest fallers, increasing by more than four-fold, or 295 percent. Baja California Sur fell from having the fourth lowest homicide rate to ranking 24th on this indicator. The state also saw a particular deterioration in its rates of organized crime. Extortions nearly doubled from 2011 to 2016 and rates of kidnapping and narcotics-related crimes increased by 83 and 32 percent, respectively.

The rate of violent crime in Baja California Sur increased by 18 percent from 2011 to 2016, with rises in all three components. The assault rate was up 41 percent in 2016, and robbery and rape had risen 14 and eight percent respectively.

Baja California Sur the only state of the risers and fallers that saw a fall in its rates of detention without sentence, albeit at a low four percent. Yet over 4,000 people remain incarcerated without a sentence in this state of less than 800,000 people.

3 ZACATECAS

Zacatecas' levels of violence deteriorated significantly from 2011 to 2016. Driven by large increases in the homicide, weapons crime and organized crime rates, its MPI score fell by 59 percent. This has taken Zacatecas from a ranking of seventh in 2011 to 26th in 2016.

The only indicator in which the state showed some progress is in violent crime, recording a moderate nine percent decline. The impact was limited by a 49 percent increase in rapes. Zacatecas, along with Oaxaca, has one of the five highest recorded rates of rape in Mexico.

Additionally, both the homicide and weapons crime rates more than tripled. For the latter, this was largely driven by the 374 percent increase in homicides with a firearm. The rate of organized crime related offenses fell by 58 percent,

with an equal drop in narcotics-related crimes and a small decline of seven percent for cases of extortion. Their effect was moderated, however, by a close to two-fold or 90 percent increase in the number of kidnappings.

> **Zacatecas has one of the five highest recorded rates of rape in Mexico.**

In contrast Zacatecas was still as one of five states with the best scores for detention without a sentence, but rates of unsentenced detention relative to violence increased by 50 percent from 2011 to 2016. Zacatecas is one of only four states in which the number of people detained without a sentence increased in the last year of the study period, 2016.

4 OAXACA

Oaxaca saw a 27 percent deterioration in peacefulness from 2011 to 2016, driven by rises in the rates of homicide, weapons crimes and detention without a sentence. In 2011, Oaxaca ranked eighth overall. In the 2016 index, it has fallen to 24th. The state's change in score is a reflection of deterioration in certain indicators, although partially offset by improvements in others.

Rates of violent crime and organized crime related offenses recorded declines, with the former falling by 19 percent while the later by 54 percent. All three types of organized crime offenses fell, by roughly 50 percent each. However, the violent crime indicator showed mixed trends. Robbery and assault rates fell by 20 and 83 percent, while the rate of rape tripled between 2011 and 2016, to 147 per 100,000 people. Oaxaca, along with Zacatecas, has one of the five highest recorded rates of rape in Mexico.

The homicide rate in Oaxaca has risen for the past five out of six years, after a nine year decline. In 2016, homicides were 28 percent higher than 2011 and 75 percent higher than their low in 2012.

Weapons crime — assaults and homicides committed with a firearm — also had a dramatic increase of 129 percent in the last six years. However, the trend seems to be driven by improvements in coding the data, which is a good sign for *well-functioning government,* a crucial factor for Positive Peace.

Prior to 2011, Oaxaca reported zero homicides or assaults committed with a firearm. After 2011, the number of homicides and assaults known to involve a firearm began to rise gradually, until escalating sharply in 2016. There have only been five years of assault-with-a-firearm data that has not been zero out of the last 14 years.

In 2011, data for Oaxaca finds that just 0.13 percent of all homicides (intentional and unintentional) were committed with a firearm, well below the national average for that year. By 2016, Oaxaca's ratio was 36.2 percent. Federal crime data is compiled from the municipal level up, so an increase in crimes coded as involving a gun can be an indication that more municipalities are correctly coding their case files.

The overall rates of homicide and assault and the rate of household purchases of firearms all rose in tandem from 2011 to 2016, suggesting that greater access to and use of firearms did contribute to Oaxaca's deterioration in peacefulness over the period. The trend in the weapon's crime indicator is most likely the result of a true increase in weapons crimes as well as an improvement in data quality.

Detention without a sentence has risen relative to violence, deteriorating 21 percent. Oaxaca has ranked in the bottom half of this indicator for all but two years of the 14-year study period, indicating a long-term overreliance on pre-trial detention.

5 MICHOACÁN

Michoacán's MPI score has deteriorated by 15 percent from 2011 to 2016. Falling nine positions in the ranking — from 15th to 24th — the state's performance is not clear-cut. On the one hand, it recorded declines in rates of violent crime and organized crime, the former by a moderate nine percent and the latter by a significant 78 percent.

The improvement in violent crime was driven by reductions in rates of rape and robbery. Michoacán has the second lowest rate of rape in Mexico, at roughly 18 incidents per 100,000 people, and has improved 27 percent since 2011. Robbery has also improved, by ten percent, and all three organized crime related offenses improved over the last six years.

Despite the improvements, however, the correspondingly larger rises in homicide, weapons crime and detention without a sentence amounted to the fifth largest deterioration in the index over this period. Michoacán's homicide rate rose 62 percent and the rate of assaults and homicides committed with a firearm more than doubled, recording a rise of 179 percent. Rates of excess detention without sentence increased by 33 percent, even after accounting for the rise in homicides, which warrant pre-trial detention.

1   Open Society Justice Initiative and UNDP, "The Socioeconomic Impact of Pre-trial Detention," 2010, https://www.opensocietyfoundations.org/reports/socioeconomic-impact-pretrial-detention (Accessed 27 January 2017)

2   México Evalúa, 'La cárcel en México: ¿Para qué?', Mexico Evalua, 2012, http://mexicoevalua.org/wp-content/uploads/2016/05/MEX-EVA_INDX-CARCEL-MEXICO_10142013.pdf (Accessed 9 March 2017)

3   Comision Nacional de Seguridad, data as of July 2016, http://www.ssp.gob.mx/portalWebApp/wlp.c?__c=7d1 (Accessed 26 January 2017)

4   Ferreira R.O and Shirk, David A., Mexico, 2008-2016: The Final Countdown for Implementation, Justice in Mexico, University of San Diego, https://justiceinmexico.org/wp-content/uploads/2015/10/151008_FINALCOUNTDOWN_Full-Finallow-res.pdf (Accessed 27 January 2017)

5   Ferreira R.O and Shirk, David A., Mexico, 2008-2016: The Final Countdown for Implementation, Justice in Mexico, University of San Diego, https://justiceinmexico.org/wp-content/uploads/2015/10/151008_FINALCOUNTDOWN_Full-Finallow-res.pdf (Accessed 27 January 2017)

POSITIVE PEACE

> Positive peace in Mexico is improving, but progress is uneven.

> The pillars that have improved the most are *sound business environment* and *high levels of human capital*.

> The cost of starting a business fell by 14 percent from 2011 to 2016, indicating a more favorable regulatory environment.

> High school enrollment rose by eight percentage points from 2011 to 2015, marking an improvement in human capital.

> Improvements in *free-flow of information, equitable distribution of resources* and *acceptance of the rights of others* are broad-based, across a variety of indicators. However, violence against journalists remains a risk to *free flow of information*.

> There has also been progress in *well-functioning government* and *low levels of corruption*, but both pillars are still weaker than the global average.

> Trust in law enforcement and justice entities improved by 13 percentage points, on average, in the last six years to 52 percent.

> *Good relations with neighbors* has deteriorated, most notably for the indicator relating to citizens' perceptions of safety in their neighborhood, which fell from 60 percent in 2011 to 54 percent in 2016.

> The states with the five strongest Positive Peace scores are Aguascalientes, Yucatán, Nuevo León, Baja California Sur and Campeche.

> The five states with the weakest Positive Peace scores are Morelos, Tabasco, Oaxaca, Veracruz and Guerrero.

> Aguascalientes, Nuevo León, Baja California Sur, Campeche and Sinaloa outperformed the national average in seven out of the eight Positive Peace pillars.

> Except for the state of Mexico, all other states performed well on one or more Positive Peace pillars.

ABOUT POSITIVE PEACE

Positive Peace is defined as the *attitudes, institutions* and *structures* that create and sustain peaceful societies. Positive Peace acts as the counterpart to negative peace, which is the absence of violence or the fear of violence and is measured by the MPI. Well-developed Positive Peace represents the capacity for a society to meet the needs of citizens, reduce the number of grievances that arise and resolve remaining disagreements without the use of violence.

FIGURE 3.1 THE PILLARS OF POSITIVE PEACE
The pillars of Positive Peace describe the *attitudes, institutions* and *structures* that underpin peaceful societies.

> IEP's research has shown that Positive Peace works as a system and can be best understood through systems thinking.

IEP's Positive Peace framework is a comprehensive taxonomy that describes the *attitudes, institutions and structures* associated with peaceful societies. Viewing violence in Mexico through the lens of Positive Peace allows for a better understanding of the structural factors needed to build higher levels of peace.

The eight pillars of Positive Peace, also referred to as domains, were derived by IEP from a rigorous assessment comparing over 4,700 variables with the internal peace measure of the Global Peace Index. As such, they represent a uniquely holistic study based on empirical techniques, to arrive at a framework for describing the aspects of Positive Peace.

Positive Peace can also be used to assess how supportive the underlying conditions are towards development, as the pillars are positively associated with many desirable development outcomes, such as stronger economic performance, better measures of inclusion and gender equality, and better performance in sustainability. Therefore, Positive Peace describes an optimal framework under which human potential can flourish. Furthermore, Positive Peace provides a benchmark against which to measure the performance of overall resilience and social development.

IEP's research has shown that Positive Peace works as a system and can be best understood throughsystems thinking. Systems thinking looks at how social systems self-regulate, with built-in norms that respond to inputs, like changes or shocks, to bring the system back to homeostasis (equilibrium). Relationships between peace factors are not linear, where one thing leads directly to another. Rather, they are interconnected and interdependent and social dynamics take the form of complex feedback loops. Understanding patterns and relations of the system is more important than understanding direct causal factors. Findings throughout this section highlight how the systemic nature of Positive Peace manifests in Mexico.

THE EIGHT PILLARS OF POSITIVE PEACE

Well-Functioning Government
A well-functioning government delivers high-quality public and civil services, engenders trust and participation, demonstrates political stability, and upholds the rule of law.

Sound Business Environment
The strength of economic conditions as well as the formal institutions that support the operation of the private sector determine the soundness of the business environment. Business competitiveness and economic productivity are both associated with the most peaceful countries, as is the presence of regulatory systems which are conducive to business operations.

Low Levels of Corruption
In societies with high corruption, resources are inefficiently allocated, often leading to a lack of funding for essential services. The resulting inequities can lead to civil unrest and in extreme situations can be the catalyst for more serious violence. Low corruption, by contrast, can enhance confidence and trust in institutions.

High Levels of Human Capital
A skilled human capital base reflects the extent to which societies educate citizens and promote the development of knowledge, thereby improving economic productivity, care for the young, enabling political participation and increasing social capital. Education is a fundamental building block through which societies can build resilience and develop mechanisms to learn and adapt.

> 66 Systems thinking looks at how social systems self-regulate, with built-in norms that respond to inputs, like changes or shocks, to bring the system back to equilibrium.

Good Relations with Neighbors
Having peaceful relations with other countries is as important as good relations between groups within a country. Countries with positive external relations are more peaceful and tend to be more politically stable, have better functioning governments, are regionally integrated and have lower levels of organized internal conflict. This factor is also beneficial for business and supports foreign direct investment, tourism and human capital inflows. At the state level this Pillar is mainly based on measuring social capital, reflecting the degree to which citizens interact as a community and the levels of trust and safety that it engenders.

Free Flow of Information
Peaceful countries tend to have free and independent media that disseminates information in a way that leads to greater openness and helps individuals and civil society work together. This is reflected in the extent to which citizens can gain access to information, whether the media is free and independent and how well-informed citizens are. This leads to better decision-making and more rational responses in times of crisis.

Equitable Distribution of Resources
Peaceful countries tend to ensure equity in access to resources like education, nutrition and health, as well as, although to a lesser extent, equity in income distribution.

Acceptance of the Rights of Others
A country's formal laws that guarantee basic human rights and freedoms and the informal social and cultural norms that relate to behaviors of citizens serve as proxies for the level of tolerance between different ethnic, linguistic, religious and socio-economic groups within the country. Similarly, gender equality and worker's rights are important components of societies that uphold acceptance of the rights of others.

POSITIVE PEACE
IN MEXICO

Mexico ranks 65th out of 162 countries and independent states on the 2016 global Positive Peace Index, a significantly better position than its 2016 Global Peace Index rank of 140th.

When a country's Positive Peace scores are better than its actual peace score, it is referred to as a Positive Peace surplus. A Positive Peace surplus indicates that a country has the capacity to reduce its levels of violence. This indicates that Mexico has the capabilities to substantially improve its peacefulness.

The country fares well across the Positive Peace pillars, with better scores than the global average for the index as a whole and for four of the eight factors. Mexico outperforms the global average for *sound business environment, good relations with neighbors, equitable distribution of resources* and *acceptance of the rights of others*. The country scores more poorly than the global average on *free flow of information, high levels of human capital, well-functioning government* and *low levels of corruption*. Fortunately, the

country has made significant gains in many of its Positive Peace factors. However, weaknesses in *well-functioning government*, *low levels of corruption* and *free flow of information* have so far acted as barriers to improvements in peacefulness.

This section presents indicator trends for each pillar of Positive Peace as well as the results for the Mexico Positive Peace Index (MPPI). Tracking Positive Peace trends in Mexico is difficult because of limited data availability. The country has recently begun tracking several crucial Positive Peace indicators making the analysis easier, but it will take many more years of data collection to develop a complete picture of progress in the eight pillars.

TRENDS
IN POSITIVE PEACE

WELL-FUNCTIONING GOVERNMENT

Confidence in the authorities is improving, albeit at a moderate pace. The share of citizens perceiving the work of law enforcement and justice entities (judges, police, etc.) to be highly or relatively effective went from 43 percent in 2011 to 52 percent in 2016. In addition, the share of citizens reporting high or moderate degrees of trust in law enforcement increased by 14 percentage points during the same time period.

SOUND BUSINESS ENVIRONMENT

The cost of starting a business fell by 14 percent between 2011 and 2016, while the time it takes to process construction permits fell by 41 percent in that five-year time frame.

$ LOW LEVELS OF CORRUPTION

63 percent of citizens perceived law enforcement entities to be corrupt in 2016. Although very moderate, the trend in corruption is improving.

💡 HIGH LEVELS OF HUMAN CAPITAL

the percentage of the population enrolled in high school and university has been trending upwards in the last five years. When compared to the year 2011, the share of 14-17 year olds enrolled in high school was eight percentage points higher in 2015. For 18-22 year olds, the number enrolled in university during the same time period increased by five percentage points. Although enrolments have increased at similar rates, high school matriculations have consistently been higher than university ones, by an average of 22 percentage points between 2011 and 2015.

💬 GOOD RELATIONS WITH NEIGHBOURS

The share of Mexicans feeling safe in their neighborhood fell by six percentage points, from 60 percent in 2011 to 54 percent in 2016. At the municipal and state levels, the percentage of citizens feeling safe has also gone down during this time period, but starting from a much lower base. At the municipal level, it went from 38 percent in 2011 to 33 percent in 2016. For the state level, it dropped from 28 to 25 percent.

📶 FREE FLOW OF INFORMATION

The share of households with access to broadband internet at the national level increased by 13 percentage points to 34 percent between 2011 and 2014. However, violence against journalists was still high, with 76 media professionals killed in 2016. Even though this represents an improvement from the 2012 peak of 143, it is still close to three times the number of casualties in 2002.

= EQUITABLE DISTRIBUTION OF RESOURCES

For equitable distribution of resources, the share of the population with access to health services increased by 20 percentage points between 2008 and 2014, from 62 to 82 percent. The number with accessibility to basic services (water and electricity) increased by a more moderate 5 percentage points in the same time period. This is mainly due to the fact that the share of the population with access to basic services was already at a high 83 percent in 2008.

👥 ACCEPTANCE OF THE RIGHTS OF OTHERS

Progress on gender equality has been significant, particularly in the labor market. The share of women as a proportion of the economically active population went from 36 percent in 2010 to 58 percent in 2016.

🏛 WELL-FUNCTIONING GOVERNMENT

Perceptions of law enforcement and justice performance are good ways of gauging whether a government is well-functioning. IEP research on Positive Peace shows that service delivery, including the rule of law, is an important aspect of a well-functioning government, and thus high levels of peacefulness.[1] The national victimization survey (ENVIPE) shows a positive trend in citizen perceptions of law enforcement and justice effectiveness. However, citizens do view the work of each law enforcement entity differently, as seen in figure 3.2, overleaf.

The federal police had the highest rating from citizens in 2016; 63 percent reported feeling that the federal police's work is relatively or highly effective, outpacing the state and municipal agencies by ten and eighteen percentage points, respectively. Overall, the trend in perceptions of effectiveness is improving for all five of Mexico's law enforcement and justice entities. On average, the share of citizens perceiving these entities to be relatively or highly effective increased from 43 percent in 2011 to 52 percent in 2016.

Trust in the authorities is also improving. On average, the share of the population reporting high or moderate degrees of trust in law enforcement and justice entities increased from 39 percent in 2012 to 52 percent in 2016. Trust is highest in the federal police and judges, with respectively 63 and 54 percent of citizens reporting moderate or high degree of trust in 2016, followed by the state police at 52 percent. The municipal police and the Public Ministry and State Attorney General are the entities that citizens trust the least, at levels of less than fifty percent, as shown in figure 3.2.

FIGURE 3.2 EFFECTIVENESS OF WORK CARRIED OUT BY LAW ENFORCEMENT ENTITIES, 2011–2016

The number of citizens perceiving the work of law enforcement to be highly or relatively effective increased from 43 percent in 2011 to 52 percent in 2016, an improvement of nine percentage points.

- ● Federal Police
- ● Judges
- ● State Police
- ● Public Ministry & State Attorney General
- ● Municipal Police

PERCENTAGE OF RESPONDENTS ANSWERING 'VERY' OR 'RELATIVELY' EFFECTIVE
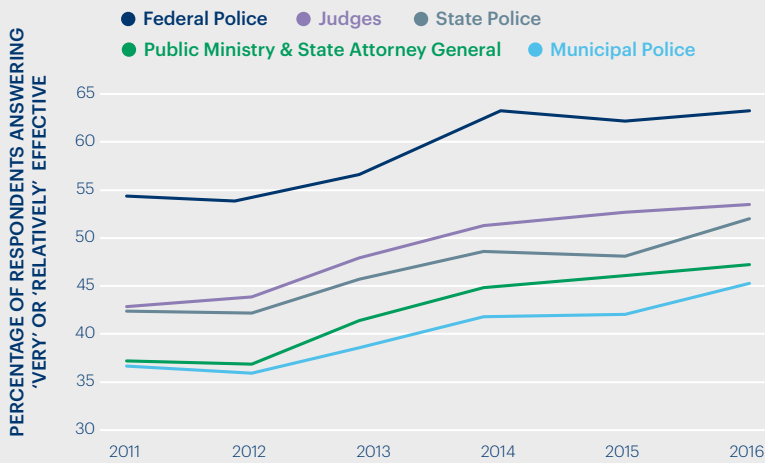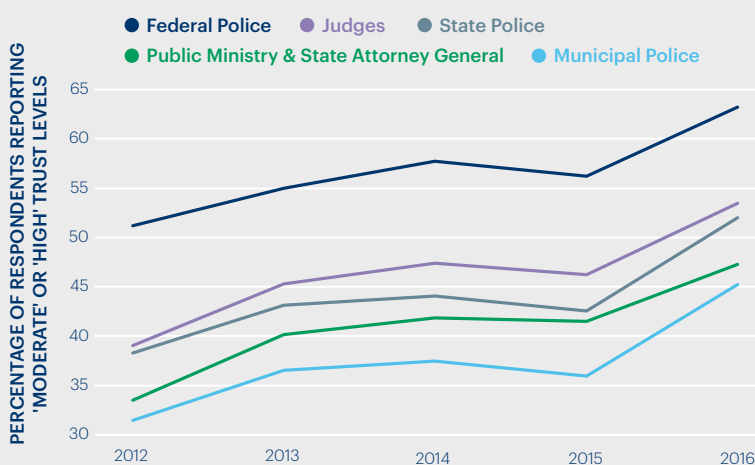
Source: ENVIPE

The results for trust and perceptions of effectiveness represent a positive trend in Mexico's governance. This improvement is reflective of the progress made in implementing justice and policing reforms in recent years, including the new criminal justice system. However, previous MPI analysis has found that Mexico's justice system has struggled to keep up with the high rates of criminality and violence facing the country.[2] For the time series data available, only five percent of Mexicans think that those who break the law are always prosecuted for their crimes, and there was no significant improvement from 2012 to 2014.

Well-functioning governments have independent and effective justice systems. Where impunity is high, progress in peacefulness is difficult. Systems analysis of Positive Peace demonstrates these are interconnected relationships. The issue of impunity is discussed in detail on page 52 of this report.

> 66 Trust in the authorities is improving. On average, the citizens reporting high or moderate degrees of trust in law enforcement and justice entities increased between 2012 and 2016. Trust is highest in the federal police and judges, followed by the state police.

FIGURE 3.3 TRUST IN LAW ENFORCEMENT ENTITIES, 2012–2016

The number of citizens reporting high or moderate degrees of trust in law enforcement and justice entities increased by 13 percentage points between 2012 and 2016.

- ● Federal Police
- ● Judges
- ● State Police
- ● Public Ministry & State Attorney General
- ● Municipal Police

PERCENTAGE OF RESPONDENTS REPORTING 'MODERATE' OR 'HIGH' TRUST LEVELS

Source: ENVIPE

FIGURE 3.4 PERCEPTIONS OF IMPUNITY* (2012–2014)

In 2014, little over five percent of citizens perceived that criminals were always punished.

PERCENTAGE OF THE POPULATION
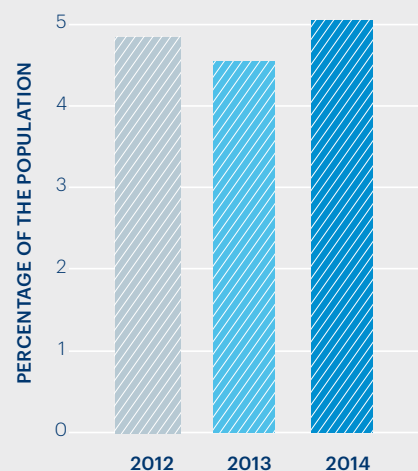
* Percentage of the population that believe criminals are always punished.

Source: ENVIPE

SOUND BUSINESS ENVIRONMENT

Mexican businesses have been facing a more favorable regulatory environment in recent years. This is reflected by indicators from the World Bank's *Ease of Doing Business* annual reports. The cost of starting a business in Mexico, for example, fell by 14 percent from 2011 to 2016, while the time it takes to process construction permits dropped by 41 percent over the same period.

Continued progress in *sound business environment* faces downside risks. This is principally as a result of the current economic context and changing relations with the United States government, particularly with regards to the prospective industrial and trade policies announced by the Trump administration.

Meanwhile, corruption remains one of the principal sources of concern for national and international investors. Transparency International's 2015 Corruption Perception Index ranked Mexico 95th out of 165 countries, making Mexico the worst ranked OECD country. In addition, according to a 2015 survey by the Mexican Institute for Competitiveness (IMCO), 65 percent of entrepreneurs in Mexico claimed to have missed a business opportunity as a result cronyism.[3]

FIGURE 3.5 COST OF STARTING A BUSINESS & TIME IT TAKES TO PROCESS CONSTRUCTION PERMITS, 2006–2016

The cost of starting a business is measured as a percentage of per capita income, on the right hand axis. The cost of starting a business is measured as a percentage of per capita income, on the right hand axis.
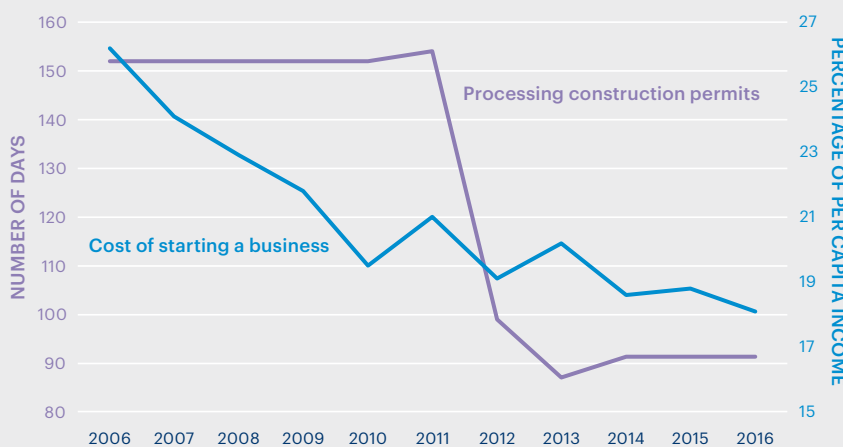
Source: World Bank

> " Continued progress in sound business environment faces risks, principally as a result of the current economic context and changing relations with the United States government.

LOW LEVELS OF CORRUPTION

After improving from 2011 to 2014, perceptions of *low levels of corruption* in law enforcement and justice entities has deteriorated. The share of Mexicans that do not perceive law enforcement entities as corrupt has been consistently highest for the federal police, but levels have not surpassed 40 percent — and fell to below 35 percent in 2016. The municipal police is the entity with the poorest score, at 25 percent in 2016.

Overall, the percentage of citizens that perceive law enforcement entities to be corrupt remains at a high 63 percent. Furthermore, on a different but related metric, over 40 percent of the population in 21 states report witnessing frequent acts of corruption in the public sphere, with states like Guerrero or Mexico City reporting levels as high as 60 and 62 percent, respectively.

In spite of the fact that estimating the true economic cost of corruption is elusive, different estimates have shed light on its impact. INEGI, for example, estimates that it costs Mexico about two percent of its GDP on an annual basis, whereas the International Finance Corporation estimates it to be in the magnitude of nine percent.[4]

FIGURE 3.6

PERCEPTION OF LAW-ENFORCEMENT ENTITIES AS BEING "NOT CORRUPT" (2011–2016)

An average of 13 percent more citizens reported lower levels of perceived corruption in 2016 than in 2011.

Source: World Bank

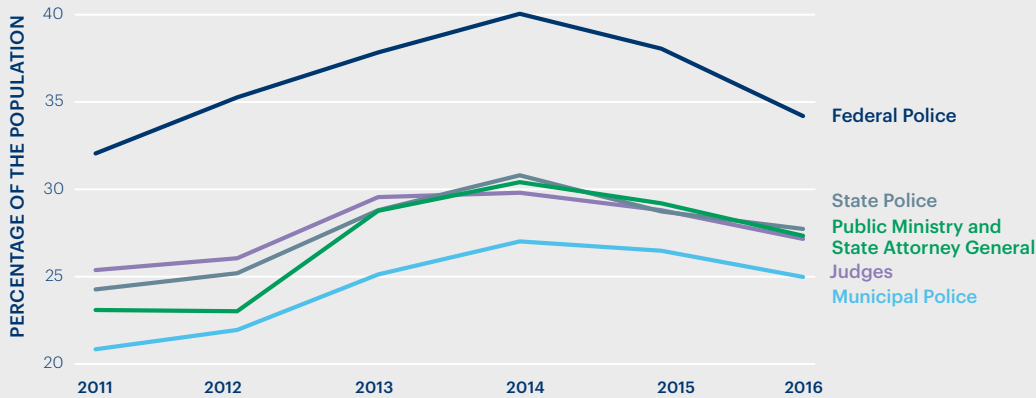> ❝ Over 40 percent of the population in 21 states report witnessing frequent acts of corruption in the public sphere, with some states reporting levels as high as 60 percent.

HIGH LEVELS OF HUMAN CAPITAL

FIGURE 3.7 PERCENTAGE OF POPULATION ENROLLED IN HIGH SCHOOL AND UNIVERSITY, 2011–2015

The number of 14 to 17 year olds enrolled in high school was eight percentage points higher in 2015 than in 2011. For 18 to 22 year olds, the number enrolled in university during the same time period increased by five percentage points.
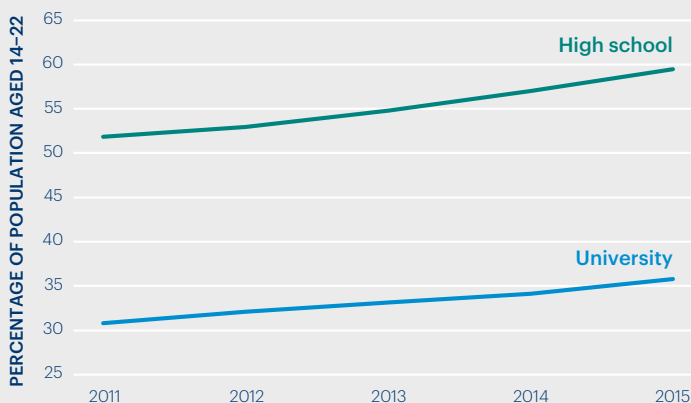
Source: SEP & CONAPO

One of the most important indicators in measuring improvements in levels of human capital is enrolment in secondary and tertiary education. In Mexico, the percentage of the population enrolled in high school and university has improved in the last five years.

Levels of enrollment in 2015 were 59 percent for high school and 36 percent for university. The number of 14 to 17 year olds enrolled in high school increased by eight percentage points between 2011 and 2015, with an increase of five percentage points for university enrolment. Although enrolments have increased at similar rates, high school matriculations have consistently been higher than university ones, by an average of 22 percentage points between 2011 and 2015.

Despite this progress however, the recent deteriorations in peacefulness could threaten aspects of Positive Peace. For example, during the month of February 2017, 148 schools in Sinaloa were closed because of violent clashes between drug-trade organizations.[5] Mexico will need to protect access to education in order to prevent violence, and prevent violence in order to protect education.

GOOD RELATIONS WITH NEIGHBORS

Although 54 percent of Mexicans reported feeling safe in their neighborhood in 2016, this rate is down from the 60 percent recorded in 2011. Perceptions of safety were much lower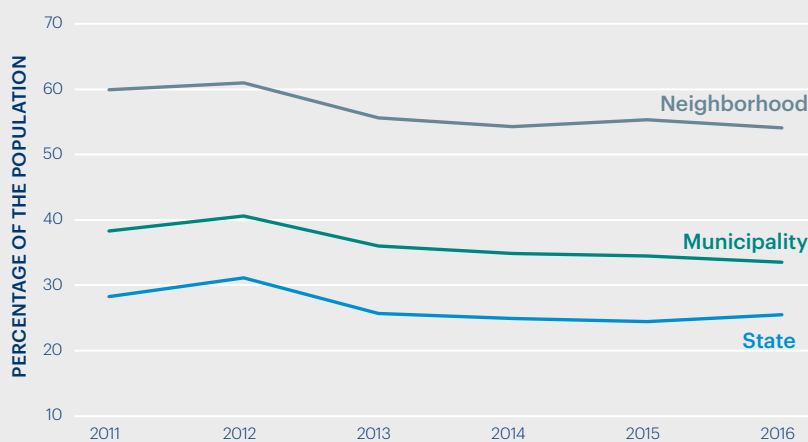 at the municipal and state level for 2016, at 33 and 25 percent, respectively. This is down from the 2011 levels of 38 and 28 percent.

FIGURE 3.8
PERCENTAGE OF CITIZENS THAT REPORT FEELING SAFE, 2011–2016

Perceptions of security are relatively higher at the neighborhood level, with 54 percent reporting to feel safe in 2016, but down from 60 percent in 2011.

Source: ENVIPE

The downward trend is supported by the 2016 ENVIPE results that show that community problems are still widespread. In the case of robbery, 54 percent of Mexican citizens report it as being a serious issue, while only 28 percent report being involved with their community to resolve the issue. Similar results are seen for public lighting and crimes near schools, with 50 and 27 percent of Mexicans reporting them as problems in their community.[6]

> " Although 54 percent of Mexicans reported feeling safe in their neighborhood in 2016, this rate is down from the 60 percent recorded in 2011.

FREE FLOW OF INFORMATION

Access to the internet is on the rise in Mexico. The share of households with a broadband subscription increased by 13 percentage points between 2010 and 2014. The ability for Mexicans to access digital information has therefore been increasing.

This is supported by the fact that 59 percent of Mexicans report having frequent access to public information, with levels as high as 82 and 80 percent in more peaceful states like Aguascalientes and Campeche.

Despite this positive development, press freedom continues to be an issue of concern. Media professionals and the outlets employing them face recurrent intimidation, physical attacks and murder. In 2016 alone, 59 journalists, nine 'netizens' and eight media assistants were killed, totaling 76 fatalities. And although the numbers killed have fallen by 47 percent from a peak of 143 in 2012, deaths in 2016 were still close to three times higher than in 2002.[7]

Numerous legal mechanisms are in place to guarantee the right to freedom of expression, as enshrined in Articles 6 and 7 of the Mexican constitution. But despite the fact that new legislation introduced in 2013 facilitated the transfer of crimes against journalists to the federal prosecutorial system, impunity in this realm remains high.[8]

The Committee to Protect Journalists (CPJ) reports that globally Mexico had the sixth highest level of impunity for violence against journalist in 2016, two places worse than in 2015.[9] According to a survey carried out by the Mexican non-profit MEPI foundation, 80 percent of respondents living in regions affected by drug-trafficking reported that the media was either underreporting or not reporting on crime in their locality.[10]

FIGURE 3.9 HOUSEHOLDS WITH BROADBAND INTERNET, 2010–2014

The share of households with bandwidth internet access increased by 13 percentage points between 2010 and 2014.
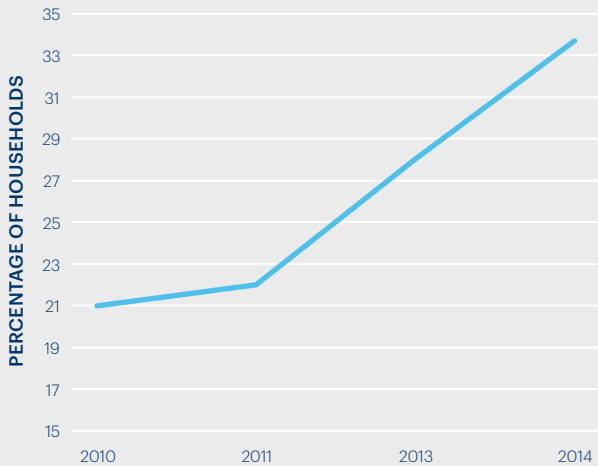
Source: INEGI

FIGURE 3.10 MEDIA PROFESSIONALS KILLED IN MEXICO, 2001–2016

Seventy six media professionals were killed in 2016, a number three times higher than in 2002.
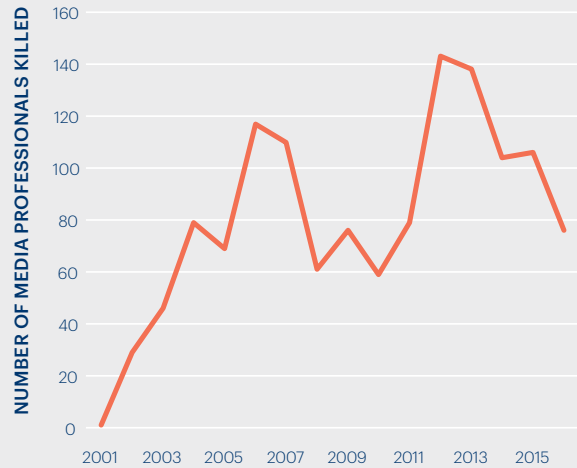
Source: Reporters Without Borders

Note: 2016 numbers as of 19 January 2017. Figures for the most recent year should be considered provisional and are routinely updated.

EQUITABLE DISTRIBUTION OF RESOURCES

From 2000 to 2014, Mexico improved its Human Development Index score by eight percent. Yet, 46 percent of Mexicans are still living in poverty, according to the latest available data from the National Council on the Evaluation of Social Development Policy (CONEVAL).

Mexico's poverty rate is the third highest among the OECD countries, at 17 percent, just below Turkey and Israel. Mexico has the second highest Gini coefficient of all OECD countries[11] at 0.459, significantly higher than the OECD average of 0.318.[12]

Moreover, 26 percent of the population was considered vulnerable for lack of access to social services in 2014. This is a relative poverty measure which is calculated as the percentage of the population that earns an income below CONEVAL's well-being line and that have a certain degree of social deprivation.[13]

Notwithstanding, Mexican citizens' access to public goods has been improving. Two important measures of this are access to health services and basic (water, drainage and electricity) services. For health services, the share of the population with access increased by 20 percentage points between 2008 and 2014. For basic services, the share increased by a more moderate 4 percentage points, from 83 percent in 2008 to 87 in 2014. The improvement in access to health services is notable because high levels of health and wellbeing are correlated with low levels of homicide, at r = 0.6.[14]

FIGURE 3.11 ACCESS TO BASIC SERVICES AND HEALTH SERVICES, 2008–2014

Between 2008 and 2014, access to health services increased by 20 percentage points. Accessibility to basic services increased by 4 percentage points.
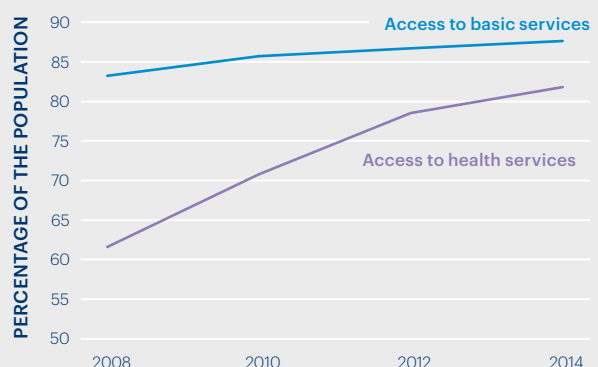
Source: ENCIG, OECD

" Mexico's poverty rate is the third highest among the OECD countries, with 46 percent of Mexicans living in poverty.

ACCEPTANCE OF THE RIGHTS OF OTHERS

FIGURE 3.12
PERCENTAGE OF WOMEN IN THE LABOR FORCE, 2010–2016

The percentage of women in the labor force increased from 36 percent in 2010 to 58 percent in 2016.
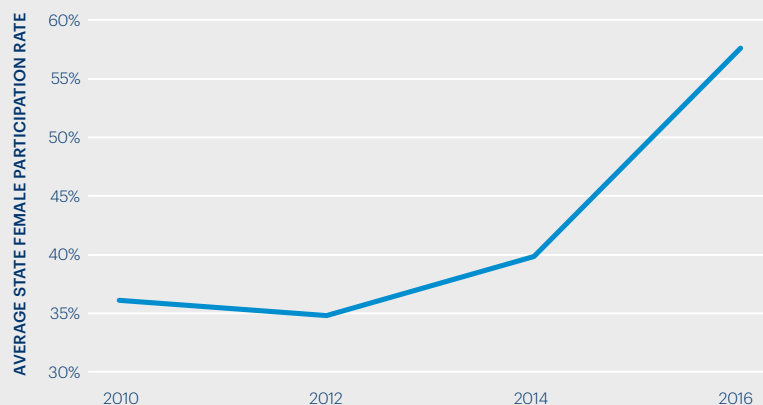
Source: ENOE, INEGI

Across many Mexican states, issues relating to income disparity, as well as high levels of violence and discrimination have led to the marginalisation of certain population groups. The 2013-2018 National Development Plan incorporated gender equality and empowerment as new policy dimensions, mainly as a result of the introduction of a national gender equality plan.[15] Resources were earmarked in the budget to implement gender equality goals.

Meanwhile, the share of women's representation in state administrations and in the labor force has been increasing. This is particularly true for the latter, where the percentage of economically active women went from 36 percent in 2010 to 58 percent in 2016. For the former, 2015 data from IMCO shows that the percentage of women in high-level positions within state administration was at 40 percent.

> " Across many Mexican states, issues relating to income disparity, as well as high levels of violence and discrimination have led to the marginalisation of certain population groups.

2017 MEXICO POSITIVE PEACE INDEX

Based on the Positive Peace framework, IEP has developed a global Positive Peace Index (PPI) that measures the strength of the *attitudes, institutions* and *structures* of 163 countries. The same approach has been used to develop a Mexico Positive Peace Index (MPPI), covering the 32 states in Mexico.

The global PPI is composed of 24 indicators, using three indicators to measure each of the eight pillars of Positive Peace. For a full understanding of Positive Peace please refer to IEP's latest Positive Peace Report, available at **www.economicsandpeace.com**.

Comparing Positive Peace between countries is useful in understanding national differences and to help inform policy decisions. However, the states and districts within any national jurisdiction can have large variations between them. Sub-national measures of Positive Peace allow for a more nuanced understanding and for the better tailoring of policy measures.

IEP has also developed the MPPI to help analyze the positive aspects of Mexican society and answer the following questions:

❯ **Which Positive Peace factors are most important when analyzing violence and conflict within Mexican states?**

❯ **Which Mexican states perform best or worst in Positive Peace?**

❯ **What are the strengths of each state that could be leveraged to counter conflict and violence and improve development?**

The MPPI covers the 32 states of Mexico using indicators from surveys, national statistics and census data and studies conducted by international organizations and academic institutions and is based on the global PPI methodology. The PPI is empirically derived by selecting indicators that had the strongest correlation with the internal peace measure of the GPI. The MPPI uses the same pillars as the PPI.

In total, 28 indicators were selected to construct the MPPI, as compared to 24 for the global PPI. The additional four indicators help to capture some of the idiosyncratic dynamics in Mexico that cannot be measured with just one indicator. For example, the domain *low levels of corruption* includes three indicators of perceptions of corruption:

1) perceptions of corruption in the municipal police,

2) perceptions of corruption in the state police,

3) perceptions of corruption in the Public Ministry and State Attorney General.

All three indicators are included because the law enforcement and justice systems can be very stratified in Mexico's federal system. The state and municipal police have different roles and responsibilities and levels of corruption can differ across these entities. The Public Ministries are the local offices of the judicial system that are responsible for opening criminal investigations, in collaboration with the State Attorney General's office. Until recently, citizens had to go to the Public Ministry office to report a crime and have an investigation opened, even if the police had already responded to the scene of the crime. As such, corruption in the Public Ministry is important and is quite separate from corruption in the police forces.

The specific indicators for the MPPI address some of these complex local factors while still following the global framework. A full list of the 28 indicators is given in the table below and a more detailed discussion on the methodology can be found in Section 7 of this report.

TABLE 3.2 MEXICO POSITIVE PEACE INDEX INDICATORS, 2017

PILLAR	INDICATOR	DESCRIPTION	YEAR	SOURCE
WELL-FUNCTIONING GOVERNMENT	Are you aware of any action taken by local authorities to improve public lighting?	Percentage of respondents that answered Yes	2016	ENVIPE
	Are you aware of any action taken by local authorities to construct or improve parks and sports facilities?	Percentage of respondents that answered Yes	2016	ENVIPE
	How would you rate the performance of the work carried out by the municipal police?	Percentage of respondents answered 'effective'	2016	ENVIPE
	Impunity rate for homicides	Ratio of incoming prisoners for homicide to homicide cases	2014	INEGI CNG
SOUND BUSINESS ENVIRONMENT	Ease of Doing Business rank	State ranking for the subnational *Ease of Doing Business* index	2012	World Bank
	Unemployment rate	Percentage of unemployed people per state	2014	INEGI
	GDP per capita	GDP per capita	2015	INEGI
LOW LEVELS OF CORRUPTION	How often do you perceive acts of corruption?	Percentage of state population answering 'very frequent'	2015	ENCIG
	Do you perceive the Public Ministry and State Attorney General as corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Do you perceive the municipal police to be corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Do you perceive the state police to be corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Is there an anticorruption training program for public administration personnel?	States score 1 for yes and 0 for no or unknown	2015	INEGI CNG
HIGH LEVELS OF HUMAN CAPITAL	HDI health	Sub-component of the Human Development Index	2012	UNDP
	HDI education	Sub-component of the Human Development Index	2012	UNDP
	Scientific and technological companies/institutes	Number of those registered in the Registro Nacional de Instituciones y Empresas Científicas y Tecnológicas (RENIECyT)	2014	DENUE
GOOD RELATIONS WITH NEIGHBORS	Trust in neighbors	Percentage of respondents that answered with 'high degree of trust'	2016	ENVIPE
	Safety in public locations of municipality	Percentage of respondents that answered that they felt 'safe'	2016	ENVIPE
	Net migration	Levels of immigration minus emigration, as a percentage of the population	2014	INEGI
FREE FLOW OF INFORMATION	Households with internet access	Percentage of households with broadband access	2015	INEGI
	Journalists killed	Total number of journalists killed per state	2013	University of San Diego
	Accessibility to public information	Frequency with which individuals are able to access public information	2016	INEGI
	Attacks on journalists	Total number of attacks per state	2015	Article 19
EQUITABLE DISTRIBUTION OF RESOURCES	Multidimensional poverty index — social dimension	Percentage of population that lacks access to one or more social dimensions (education, health, food) and whose income is either higher or equivalent to the 'well-being' line	2014	CONEVAL
	People living in poverty	Percentage of population living in poverty	2014	CONEVAL
	Average number of people per house	Average number of occupants per household	2010	INEGI
ACCEPTANCE OF THE RIGHTS OF OTHERS	Upward social mobility	Additional years of school for this generation compared to the last	2011	EMOVI/CEEY
	Women in the state administration	Percentage of women employed in the state administration	2014	CNGMD
	Indigenous development gap	Absolute value of the difference in HDI score for the indigenous and non-indigenous populations	2010	UNDP

> " Comparing Positive Peace between countries is useful in understanding national differences and to help inform policy decisions. However, the states and districts within any national jurisdiction can have large variations between them.

STATE RESULTS

The MPPI highlights existing differences in the *attitudes, institutions and structures* between Mexican states. This provides important insight into the ability of the states of Mexico to build peace in the long term and underscores institutional strengths and weaknesses. Table 3.3 gives the MPPI state results.

Positive Peace in Mexico was more strongly correlated with negative peace in 2003 than in 2016. The damaging impact of the rapid upturn in violence from 2007 to 2011 and the nature of counter-narcotics operations have altered the patterns. The current relationship between violence and many of the pillars of Positive Peace is atypical.

TABLE 3.3 POSITIVE PEACE SCORES ACROSS STATES AND BY PILLAR, 2016

Only five states perform strongly on seven of the eight Positive Peace pillars. At a global level, peaceful societies tend to have strengths in all pillars. Many states have room for improvement.

STATE	OVERALL SCORE	🏛	💼	$	💡	📶	💬	=	👥
Aguascalientes	2.27	2.57	2.71	1.84	1.90	1.62	1.97	2.76	3.15
Yucatán	2.36	2.04	2.83	1.66	2.36	2.08	1.90	3.01	3.63
Nuevo León	2.36	2.94	2.65	1.60	1.76	2.11	2.49	2.27	3.51
Baja California Sur	2.42	1.95	3.61	2.80	2.11	1.61	1.93	2.44	3.04
Campeche	2.45	2.29	2.02	2.18	2.86	2.13	2.61	3.21	2.64
Querétaro	2.47	3.01	2.97	2.03	1.94	2.53	2.44	3.05	1.93
Sonora	2.64	2.33	2.94	2.99	2.13	1.79	2.50	2.58	4.02
Durango	2.70	2.77	3.31	2.41	3.28	2.32	2.52	2.91	2.34
Jalisco	2.79	3.45	2.98	2.64	2.60	2.16	2.91	3.02	2.68
Nayarit	2.80	2.77	4.03	2.70	3.54	2.20	1.68	2.84	2.95
Sinaloa	2.88	3.13	3.15	2.70	2.85	2.32	2.83	2.87	3.41
San Luis Potosí	2.88	3.56	2.62	2.70	3.36	2.03	3.22	2.89	2.85
Chiapas	2.89	3.42	3.83	2.30	2.28	2.61	2.77	3.08	3.14
Colima	2.90	3.58	2.29	3.01	3.64	1.61	3.31	2.18	3.72
Tamaulipas	2.98	3.39	3.33	2.59	2.86	3.26	3.98	2.19	2.34
Chihuahua	3.01	3.54	3.65	3.30	2.38	2.55	1.85	2.61	3.99
Hidalgo	3.04	3.33	3.45	3.17	3.46	2.06	2.97	3.10	2.90
Zacatecas	3.05	3.87	3.84	1.98	3.49	2.38	3.11	3.12	3.29
Coahuila	3.09	2.77	2.55	3.04	4.86	3.25	2.57	2.87	2.92
Guanajuato	3.10	3.76	2.88	2.82	3.19	2.33	3.29	3.33	3.41
Quintana Roo	3.10	2.87	3.35	3.82	2.79	2.50	3.06	2.47	3.73
Mexico City	3.10	3.47	3.62	4.20	1.00	2.84	4.37	2.02	2.50
Tlaxcala	3.14	3.40	4.21	2.91	3.26	2.48	3.06	3.47	2.60
Michoacán	3.14	3.94	3.36	2.40	4.14	3.12	2.94	3.18	2.27
Baja California	3.15	3.73	4.00	2.65	3.14	2.32	3.21	2.92	3.69
Puebla	3.16	3.51	2.89	2.70	3.39	2.94	3.44	3.45	3.27
México	3.46	3.86	3.40	3.69	3.20	2.71	4.15	3.17	3.24
Morelos	3.48	4.45	3.67	4.35	2.50	2.64	3.82	2.90	2.90
Tabasco	3.49	4.22	3.77	4.11	3.21	2.64	3.74	3.52	2.31
Oaxaca	3.62	3.64	3.86	2.70	4.85	4.74	3.27	3.41	2.72
Veracruz	3.71	4.38	2.94	3.17	4.17	4.53	3.45	2.99	3.92
Guerrero	3.72	3.89	3.48	2.81	4.95	4.21	4.00	3.83	2.99
NATIONAL AVERAGE	**2.98**	**3.31**	**3.26**	**2.81**	**3.05**	**2.08**	**2.98**	**2.93**	**3.06**

FIGURE 3.13 CORRELATION BETWEEN POSITIVE AND NEGATIVE PEACE IN MEXICO, 2003 AND 2016

Positive Peace scores correlate with levels of negative peace in 2003, but the correlation deteriorates by 2016 because of the distortive nature of the violence Mexico faces.
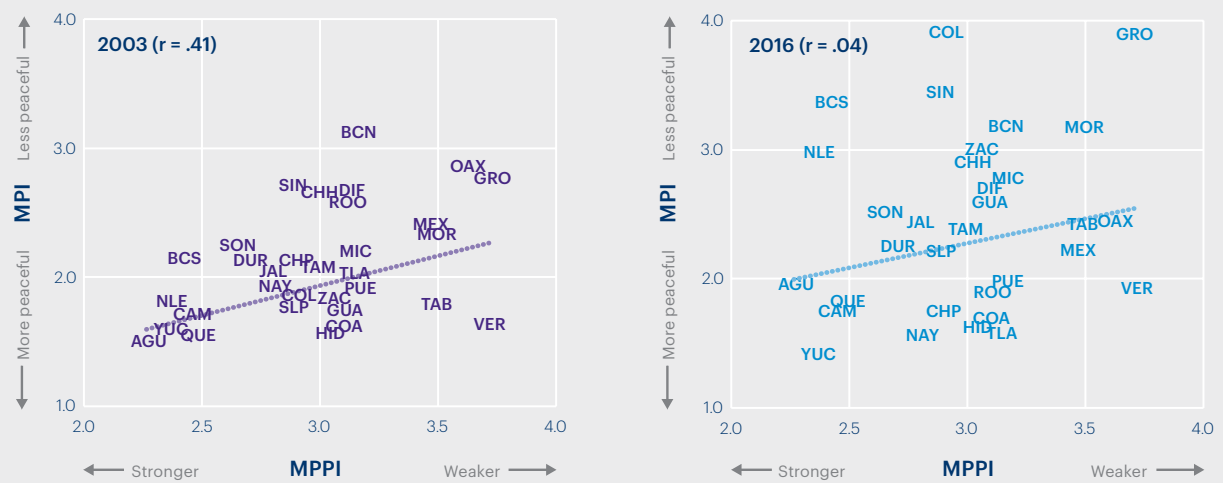
Source: IEP

Many of the drug cartels are based in the states that provide the best transport routes for their drug businesses. These states are either situated near the US border or the coasts and are often among the wealthiest states. Figure 3.1 shows the relationship between MPI and MPPI scores in 2003 and in 2016.

FIGURE 3.14 POSITIVE PEACE IN MEXICO

Poorer states in the southern region of the country have lower levels of Positive Peace, while wealthier states closer to the US border have higher levels of Positive Peace.
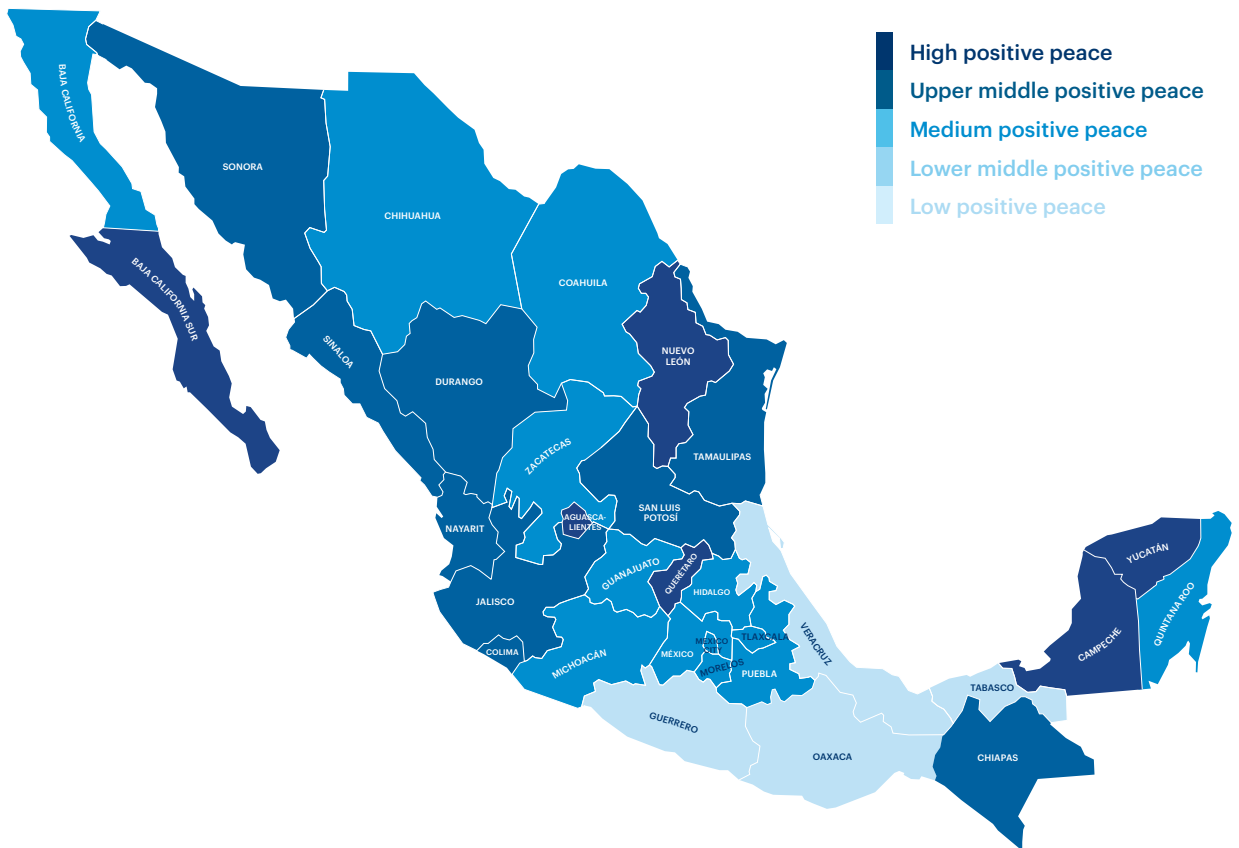
TABLE 3.4 TOP FIVE MPPI SCORES & RANKINGS, 2016
No state outperforms the national average on all Positive Peace pillars.

MPI RANK	STATE	OVERALL SCORE	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK
1	AGUASCALIENTES	2.27	2.57	5	2.83	6	1.84	3	1.90	3	1.97	5	1.63	3	2.76	9	3.15	19
2	YUCATÁN	2.36	2.04	2	2.83	7	1.65	2	2.36	8	1.90	3	2.08	7	3.01	18	3.63	26
3	NUEVO LEÓN	2.36	2.94	10	2.65	5	1.60	1	2.11	2	2.49	7	2.11	8	2.27	4	3.51	25
4	BAJA CALIFORNIA SUR	2.42	1.95	1	3.61	22	2.80	18	2.11	5	1.93	4	1.61	1	2.44	5	3.04	17
5	CAMPECHE	2.45	2.29	3	2.02	1	2.20	6	2.86	14	2.61	11	2.13	9	3.21	26	2.64	8
	NATIONAL AVERAGE	2.98	3.30		3.25		2.81		3.04		2.98		2.58		2.92		3.06	

1 AGUASCALIENTES

Aguascalientes ranks first in the 2017 MPPI. The state outperforms the national average in seven out of the eight Positive Peace pillar scores, and has a top five ranking score in the domains of *low levels of corruption, high-levels of human capital, good relations with neighbors* and *free flow of information.* Aguascalientes' score for the *acceptance of the rights of others* is the only one that is worse than the national average. For this pillar, the state is placed 19th out of 32 in the ranking.

When looking at the individual indicators of these pillars, it is possible to gauge why Aguascalientes is the top MPPI performer in 2016. For example, only 29 percent of citizens in this state reported witnessing frequent acts of corruption in public, a number which is considerably lower than the national average of 44 percent.

With 66 registered scientific and technological institutes and/or companies, Aguascalientes has close to double the national average of 36 and is the state with the fourth largest amount of such companies/institutes. However, the percentage of households with a broadband internet subscription at 26 percent is lower than the national average of 64 percent.

It is — alongside San Luis Potosi and Sonora — a state which registered only one attack on journalists in 2016. This is significant when considering that the national average that year was 12.

2 YUCATÁN

A state that ranked first in the 2016 MPI, Yucatán came in second in the MPPI for the same year. It has the second best score out of 32 states in two pillars: *well-functioning government* and *low levels of corruption.* Additionally, it also outperforms the national average in *sound business environment, high-levels of human capital* and *free flow of information.*

The percentage of citizens in this state that report perceiving the work carried out by the municipal police as effective is the highest in the country, at 70 percent. This is quite telling when considering how discredited the municipal police is in states like Mexico City (36 percent) or Veracruz (38 percent) and sheds some light on the integrity of the work of this law enforcement entity in Yucatán. Moreover, the percentage of the state's citizens that report witnessing frequent acts of corruption is the second lowest in Mexico, at 28 percent. The state also had the second lowest unemployment rate in 2014, with a mere 2.35 percent of the labor force unemployed,

notably as a result of its attractiveness to tourists and foreign investment.

Notwithstanding, Yucatán does score relatively poorly in *equitable distribution of resources* and *acceptance of the*

rights of others, with worse scores than the national average and rankings of 18th and 26th, respectively. In 2014, for example, the percentage of people living in poverty in this state was 45 percent, which is one percentage point above the national average.

③ NUEVO LEÓN

In 2016, Nuevo León ranked third in the MPPI. Like Aguascalientes, Nuevo León outperforms the national average in seven out of the eight Positive Peace pillars. The state has the strongest score in *low levels of corruption* and ranks second for *high levels of human capital.*

Perceptions of corruption in the state and municipal police, as well as the Public Ministry/State Attorney General, are the lowest in the country at 45, 52 and 41 percent, respectively. It also ranks third at the national level in the number of registered scientific and technological institutes and/or companies.

However, Nuevo León performs particularly poorly in the *acceptance of the rights of others.* This is principally because the state lags in representation of women in the state administration, which serves as a proxy for gender equality in the state. This indicator measures how many of the women in state administration have high-level roles relative to the number that have low and mid-level roles. The national average is a rate of 40 percent. In Nuevo León, however, this rate is only 20 percent.

④ BAJA CALIFORNIA SUR

Baja California Sur ranks fourth in the MPPI for 2016. Despite the fact that it is in the bottom five ranking of the 2016 MPI score, the state outperforms the national average in all Positive Peace domains, except *sound business environment.* It ranks first out of 32 states in *well-functioning government* and *free flow of information,* while ranked in the top five in its score for *high levels of human capital, good relations with neighbors* and *equitable distribution of resources.*

The percentage of citizens in Baja California Sur that reported to be aware of action taken by the government to improve public security was 60 percent, close to ten percent above the national average. In addition, the state has the third highest nationwide percentage of households with access to broadband internet (44), as well as the seventh highest percentage of citizens reporting to have frequent access to public information, at 81 percent. In contrast, Baja California Sur is ranked in the bottom five (28th) of the World Bank's *Ease of Doing Business* study for the states of Mexico.

⑤ CAMPECHE

Ranked seventh in the 2017 MPI, Campeche comes in at fifth position for Positive Peace. It outperforms the national average in seven out of the eight Positive Peace pillars. Its most notable score is in the *sound business environment,* for which it ranks first out of 32 states. In addition, it performs notably well in *well-functioning government,* for which its score places the state in third position. Campeche's weakest score is in *equitable distribution of resources,* for which it ranks 26th.

Since 2010, Campeche has had the highest levels of GDP per capita in the country. At 62,803 pesos per annum, it is more than five times higher than the national average of 11,358. It also has the seventh lowest unemployment rate in the country (3.2 percent) which is below the national average of 4.6 percent. The percentage of this state's population that reports witnessing frequent acts of corruption is 35 percent,

the fifth lowest in the country and 11 percentage points below the national average. With regards to the percentage of citizens in Campeche that perceive the law enforcement entities as corrupt, levels are below the national average for the Public Ministry/State Attorney General and the state police, but not for the municipal police.

> **❝ Since 2010, Campeche has had the highest levels of GDP per capita in the country.**

TABLE 3.5 BOTTOM FIVE MPPI SCORES & RANKINGS, 2016
No state outperforms the national average on all Positive Peace pillars.

MPI RANK	STATE	OVERALL SCORE	🏛		💼		💲		💡		💬		📶		⚖		👥	
			SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK	SCORE	RANK
28	MORELOS	3.48	4.45	32	3.67	25	4.35	32	2.50	10	3.82	28	2.64	23	2.90	14	2.90	13
29	TABASCO	3.49	3.49	30	3.77	26	4.11	30	3.21	19	3.27	27	2.64	22	3.52	31	2.31	3
30	OAXACA	3.62	3.62	23	3.86	29	2.70	17	4.85	30	3.27	22	4.75	32	3.41	28	2.72	10
31	VERACRUZ	3.71	3.71	31	2.94	11	3.17	25	4.17	29	3.45	26	4.53	31	2.99	17	3.92	30
32	GUERRERO	3.72	3.72	28	3.48	21	2.81	19	4.95	32	4.00	30	4.21	30	3.83	32	2.99	16
	NATIONAL AVERAGE	2.98	3.30		3.25		2.81		3.04		2.98		2.58		2.92		3.06	

① GUERRERO

Guerrero, the least peaceful state, also has the weakest Positive Peace score. This is largely due to the fact that it ranks in the bottom five for half of the Positive Peace pillars, namely *high-levels of human capital, good relations with neighbors, free flow of information* and *equitable distribution of resources.*

Guerrero is the only state without any scientific and technological companies and/or institutes, and has the fourth lowest score in the education component of the Human Development Index (HDI). It also has the third lowest percentage of its citizens that feel safe at the municipal level, at 23 percent, and the third lowest percentage of households with internet access, at 20 percent. It is the state with the third highest number of attacks on journalists in 2016, at 56, while 12 journalists were killed.

Guerrero does, however, outperform the national average for *acceptance of the rights of others,* for which it is ranked 16th out of 32 states. Despite the fact that Guerrero has the third lowest ratio of women in high-level state administration to low-level roles and the eighth highest indigenous development gap, it has the highest upward social mobility score in the country. This is a measure of the average additional years of schooling that survey respondents in 2011 had in comparison to their parents. In the case of Guerrero, it shows the largest intergenerational improvement because the average level of parental education was just 2.8 years. At the time of the survey, respondents received an average of 8.7 years of school, nearly six years more than their parents received.

❝ Guerrero is the only state without any scientific and technological companies and/or institutes, and has the fourth lowest score in the education component of the Human Development Index (HDI).

2 VERACRUZ

Veracruz ranks tenth in the MPI score for 2016, but ranked second last on the MPPI. Its only good score is for *sound business environment,* which only slightly outperforms the national average and which places the state 11th in this pillar's ranking. This is reflected by the fact that the state ranks 10th in the World Bank's *Ease of Doing Business* study for Mexico.

In contrast, it ranks in the bottom five for *well-functioning government, high-levels of human capital, free flow of information* and *acceptance of the rights of others.* The state

performs badly on several individual indicators. For example, it has the sixth lowest score for the education subcomponent of the HDI and has the 4th lowest percentage of households with an internet subscription, at 21 percent. Moreover it recorded the highest number of journalists attacked in 2016, at 67 and on par with Mexico City. It also recorded the highest number of journalists killed, which totaled 20 that year. Veracruz also recorded the 9th highest indigenous development gap for the latest year available.

3 OAXACA

Oaxaca's 2016 MPPI scores are worse than the national average across six pillars, ranking in the bottom five in three of them. The only exceptions are for *low levels of corruption* and *acceptance of the rights of others,* for which it is ranked 10th and 17th out of 32 states, respectively.

Oaxaca is ranked last in the World Bank's *Ease of Doing Business* sub-national study for Mexico. It also has the second lowest GDP per capita at 68,405 pesos per annum, as well as the second lowest score for the education component of the HDI. At 14 percent of households with broadband access, it has the second lowest score for access to internet, compared

to the national average of 38 percent. In addition, the state also recorded the fifth highest number of journalists attacked and the second highest number of journalists killed in 2016, at 35 and 14, respectively.

Notwithstanding, Oaxaca's indicators for *low levels of corruption* and *acceptance of the rights of others* are more encouraging. Compared to other Mexican states, it has the seventh lowest share of a state's population who perceive the municipal police to be corrupt. In addition, with 47 percent of women represented in the state administration, it has a rate that is higher than the national average of 40 percent.

4 TABASCO

With a 2016 MPI score that places Tabasco in 17th position on the ranking, the state performs much worse in its MPPI score. Ranked 29th overall, the only pillar for which it outperforms the national average is *acceptance of the rights of others,* which places it third. It performs particularly poorly in *well-functioning government, low levels of corruption* and *equitable distribution of resources,* for which it ranks 30th in the first two and 31st in the third.

Nationally, Tabasco has the second largest share of a state's population who are considered vulnerable for lack of access to social services, at 37 percent. Moreover, with 49 percent of its population living in poverty, it surpasses the national average of 45 percent. In addition — and compared to all other Mexican states — it has the lowest percentage of its population who report being aware of action taken by local authorities to improve public security. At 37 percent, it is 14 percentage points below the national average. On a national scale, it also has the lowest percentage of its population that feels safe in their municipality, at 14 percent.

5 MORELOS

Morelos scores poorly both in the MPI and MPPI for 2016. In the former, it is ranked 27th whilst in the latter it is ranked 28th. Although it outperforms the national average in *high-levels of human capital* and *acceptance of the rights of others,* it scores particularly poorly in the other pillars. This is especially the case for *well-functioning government* and *low levels of corruption,* for which its score places the state at the bottom of the ranking.

Over half of the population in Morelos reported witnessing frequent acts of corruption in 2015, with 77 percent of them perceiving the municipal police to be corrupt. This aligns with the fact that citizens of this state report the third lowest percentage of trust in the municipal police, at 39 percent.

NOTES

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     Report-2016.pdf

2   For details, see Institute for Economics and Peace, Mexico Peace Index Report, IEP, 2016,
     http://economicsandpeace.org/wp-content/uploads/2016/04/Mexico-Peace-Index-2016_
     English.pdf

3   For details, see Instituto Mexicano para la Competitividad   'Corrupcion en Mexico:
     transamos y no avanzamos'', IMCO, 2015, http://imco.org.mx/competitividad/indice-
     de-competitividad-internacional-2015-la-corrupcion-en-mexico-transamos-y-no-
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4   For details, see S. Lach 'Contestability and changes in tolerance towards corruption:
     the formation of an elite-citizen coalition in Mexico', World Development Report 2017
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     Fighting-Corruption.pdf (Accessed on 15 February 2017)

5   Rio Doce 'Suspenden clases en 148 escuelas, luego de violencia', Rio Doce, 8 February
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     escuelas-luego-de-enfrentamiento-en-villa-juarez (Accessed 6 March 2016)

6   Instituto Nacional de Estadistica y Geografia, 'Encuesta Nacional de Victimizacion y
     Percepcion sobre Seguridad Publica (EVIPE) 2016: Tabulados Predefinidos, Percepcion
     sobre la seguridad publica, http://www.beta.inegi.org.mx/proyectos/enchogares/
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7   Reporters Without Borders, 'Round-up 2016 of journalists killed worldwide' Reporters
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9   Committee to Protect Journalists 'Getting away with murder: 2016 Global Impunity
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10   Freedom House 'Freedom of the Press Country Report: Mexico', Freedom House, 2016,
     https://freedomhouse.org/report/freedom-press/2016/mexico (Accessed 15 February
     2016)

11   OECD 'Income Inequality remains high in the face of weak recovery', OECD, November
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     on February 24 2017)

12   OECD 'Income Inequality remains high in the face of weak recovery', OECD, November
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     on February 24 2017)

13   For details, see CONEVAL 'Medicion de la pobreza: evolucion de las lineas de bienestar
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     Paginas/Lineas-de-bienestar-y-canasta-basica.aspx (Accessed on 24 February 2017).

14   As measured by the Human Development Index.

15   Secretaria Ejecutivo del Sistema Nacional de Seguridad Publica 'Politica de Igualdad
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CHALLENGES & OPPORTUNITIES
FOR PEACEBUILDING IN MEXICO

> This section presents a detailed discussion of four important policy challenges for Mexico instrumental to attaining higher levels of peacefulness: impunity, policing, strategies to reduce homicide rates, and the role of local governments. Each one of these issues fits neatly within the Positive Peace framework for building the *attitudes, institutions and structures* which are characteristics of the most peaceful societies.

> In the global Positive Peace Index, *low levels of corruption and well-functioning government* are Mexico's two weakest pillars; both score more poorly than the global average.

> Two areas covered in this section are particularly important. Firstly, addressing impunity, where 91 percent of major crimes in Mexico go unpunished. This would lead to a significant improvement in *well-functioning government* and *low levels of corruption.*

> Secondly, strengthening and reforming the police sector. This is vital to reducing crime rates, with crimes such as extortion and rape being reported less than 10 and 18 percent of the time respectively.

IMPUNITY
IN MEXICO

> On average, 91 percent of crimes committed in Mexico go unpunished.

> Just five percent of Mexicans believe that criminals are always penalized for their crimes, while 11 percent of the population perceive that criminals are never punished.

> The percentage of people reporting impunity as their main issue of concern more than doubled from 2012 to 2016, overtaking the percentage of people that see narcotrafficking as the most worrisome issue.[1]

> Impunity is widespread in Mexico, the country ranks 58th out of 59 countries in the 2016 Global Impunity Index (GII).

> There is little variation between state scores for impunity; 24 states are within a ten point range of the worst score of 76, recorded in Quintana Roo.

> The average number of justice officials is 3.5 per 100,000 people. The global average is 16, more than four times the level in Mexico.[2] This suggests that Mexico's justice system lacks appropriate human resources for the task at hand.

> The rate of federal investigations for torture improved by four-fold between 2013 and 2014, going from 17 percent to 67 percent.

The rule of law and the provision of justice are two critical aspects of the *well-functioning government* pillar of Positive Peace. Citizens need to feel confident that their government can protect them and that they can trust the authorities in the enforcement of the law. However, the failure or inability to prosecute criminal perpetrators in Mexico is a widespread phenomenon. Approximately nine out of every 100 crimes results in a conviction.

Perceptions of impunity reflect citizen's trust and expectations of the judicial system. The frequency with which Mexicans perceive criminals to be penalized indicates their confidence in the enforcement of the law. In 2014, close to 11 percent of the population reported that criminals are *never* punished, with just over five percent believing that they are *always* punished and 70 percent reporting it is the case *sometimes*, as shown in figure 4.2.

> " The failure or inability to prosecute criminal perpetrators in Mexico is a widespread phenomenon. In 2016, only 9 out of every 100 crimes resulted in convictions.

Meanwhile, concerns about impunity have been on the rise, even if insecurity and unemployment remain more worrisome for Mexicans. The percentage of people perceiving impunity to be their main issue of concern more than doubled between 2012 and 2016, from eight to 20 percent, overtaking narcotrafficking.[3]

Given the multifaceted nature of impunity, a comprehensive way to gauge its pervasiveness is through a composite indicator. The 2016 Global Impunity Index (GII) uses 19 indicators that serve to quantify three dimensions of impunity.[4] The first is the structural dimension, which measures the capacity of government entities to investigate, prosecute and punish crimes. For this, it relies on variables like rates of investigative police, magistrates, judges and prosecutors per 100,000 people, as well as the ratio of penitentiary staff to inmates. The second is the functional dimension, which accounts for the performance of the security and justice systems. Variables include the reported number of crimes registered per 100,000 people, the percentage of inmates without trial and the ratio of inmates sentenced for homicide to homicides committed. The third dimension is the underreporting rate, known as the *cifra negra* (dark figure), which captures crimes that

FIGURE 4.1
CONVICTED PERSONS AS A PERCENTAGE OF PERPETRATED CRIMES, 2016

At the national level, only nine out of every 100 crimes resulted in convictions.
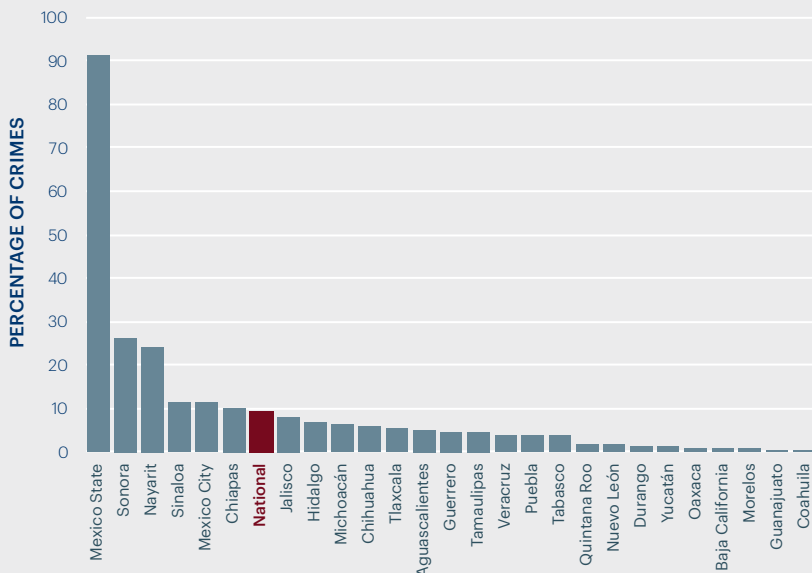
Source: UDLAP Global Impunity Index

> The national average of magistrates and judges per every 100,000 people across the 2016 Global Impunity Index is 16, which is 4.5 times the level in Mexico.

FIGURE 4.2 PERCEPTION OF FREQUENCY WITH WHICH CRIMINALS ARE PUNISHED, 2014

Close to 11 percent of the population perceive that criminals are never punished, with just over five percent believing it is always the case. 72 percent report it as being the case sometimes.

PERCENTAGE OF THE POPULATION
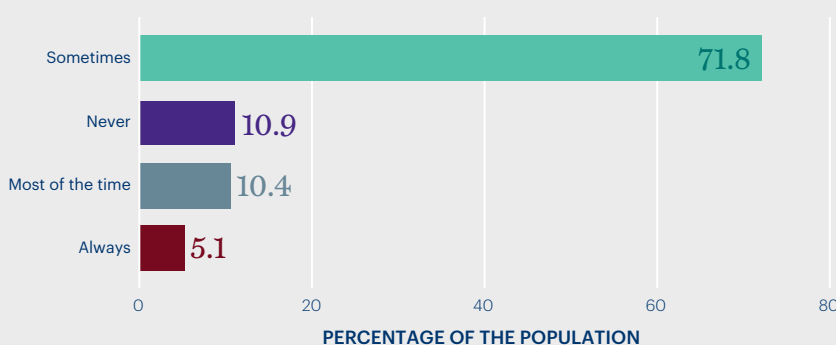
Source: ENVIPE

are not reported or investigated and thus do not appear in other statistics.

Mexico ranked 58th out of 59 countries in the 2016 GII. The average national impunity score for the 32 Mexican states was 67 out of 100. A score of 0 represents a total absence of impunity. The range in impunity between states is small, as 24 states are within ten points of the worst score of 77 recorded in Quintana Roo. This is an indication that impunity in Mexico is a nationally pervasive phenomenon, especially when considering that three

quarters of state impunity scores are within approximately six points of each other.

Mexico's poor international ranking highlights the country's structural weaknesses in addressing impunity. For example, the national average of magistrates and judges per every 100,000 people in Mexico is 3.5. The average for countries included in the GII is 16, or 4.5 times the level in Mexico.[5] Moreover, there are 20 penitentiary officers for every 100 inmates in Mexico. The average across countries included in the GII is more than double that amount: 47 officers

FIGURE 4.3 MOST WORRISOME ISSUES, 2012–2016

The percentage of people perceiving impunity to be their main issue of concern more than doubled from 2012 to 2016, overtaking narcotrafficking.

PERCENTAGE OF THE POPULATION

Insecurity
Unemployment
Corruption
Impunity
Narcotrafficking
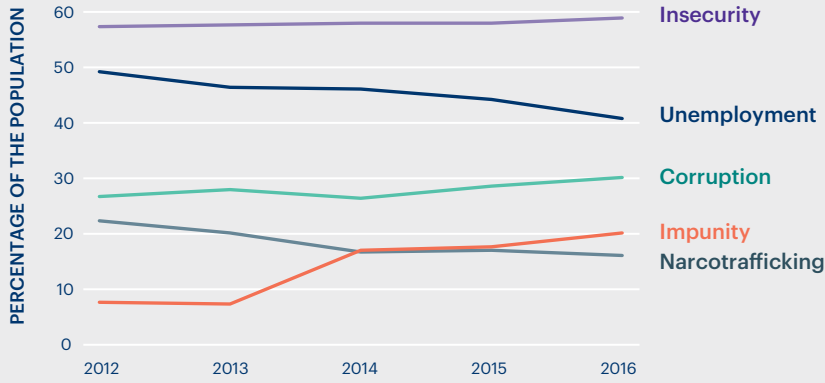
Source: ENVIPE

> " High levels of impunity imply that the rule of law is not being fully enforced and that governments are failing to provide adequate funding and policies for this fundamental public good.

FIGURE 4.4 IMPUNITY INDEX SCORES BY STATE, 2016

Impunity rates are high across Mexico. This is especially true when considering the fact that 24 states have impunity scores that are within +/– 10 points of the lowest ranked state: Quintana Roo.

GLOBAL IMPUNITY INDEX SCORE

State score
National average

Quintana Roo, México, Baja California, Durango, Tamaulipas, Guerrero, Coahuila, Yucatán, Veracruz, Querétaro, Nuevo León, Oaxaca, Baja California Sur, Morelos, Sinaloa, Puebla, Tabasco, Aguascalientes, Hidalgo, Michoacán, Tlaxcala, Jalisco, Colima, Zacatecas, Guanajuato, Chiapas, Chihuahua, Sonora, Distrito Federal, San Luis Potosi, Nayarit, Campeche

Source: UDLAP

FIGURE 4.5 FEDERAL COMPLAINTS AND INVESTIGATIONS FOR TORTURE, 2006–2014

The investigation rate for torture complaints nearly quadrupled from 2013 to 2014.

- Cases not investigated
- Cases under investigation

67% of cases investigated

17% of cases investigated

NUMBER OF COMPLAINTS FILED
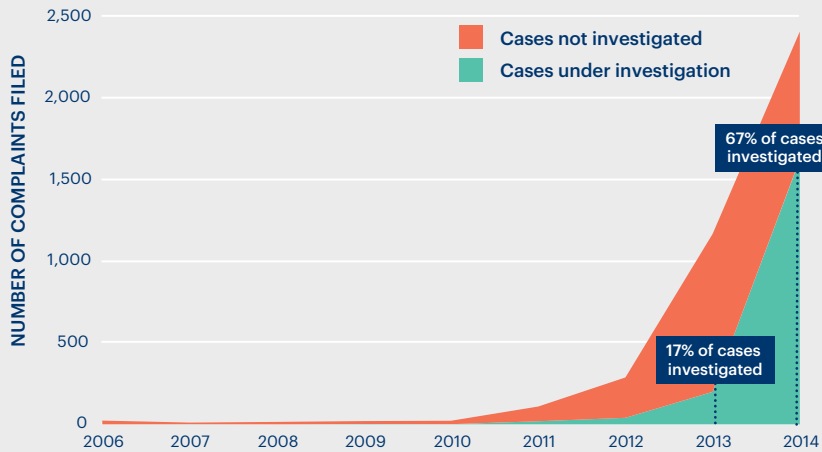
Source: PGR, Amnesty International

per every 100 inmates. In addition, Mexico's prisons are 11 percent over capacity, according to the latest available data, and some states face prison overpopulation rates as high as 164 percent.[6]

High levels of impunity imply that the rule of law is not being fully enforced and that governments are failing to provide adequate funding and policies for this fundamental public good.

> ❝ Mexico has made and continues to make significant strides in improving the rule of law and the quality of governance and law enforcement. But where impunity remains high, it stands as a barrier to peacefulness.

However, there are some notable improvements. For example, the investigation rate for torture complaints improved four-fold between 2013 and 2014 alone, increasing from 17 percent to 67 percent.

Figure 4.5 shows the trend in torture complaints registered with the federal attorney general's office, investigations of those complaints, and the investigation rate. Prior to 2014, no more than 20 percent of complaints were investigated.

Impunity for extralegal violence by police and military personnel has been part of the problem in Mexico.

In part, the steep increase in cases shown in figure 4.5 may be due to better prosecution and investigation processes. Better legal processes for filing citizen complaints, tracking the instances of human rights violations, and investigating cases will reduce impunity and improve peace. As prosecutions increase, citizens may be more likely to report. It also reflects higher trust towards law enforcement authorities, which is explored in more detail in the next section. This rise in the number of investigations carried out by the office of the Federal Attorney General is a positive response.

In summary, the challenge of addressing impunity in Mexico is twofold. Firstly, the resources and capacity available for law enforcement authorities falls short of what is required. Secondly, police officers, members of the armed forces and other government members need adequate training, professionalization and management to deliver on the rule of law. Additionally, where police or other government officials are involved in the facilitation or perpetration of violence, better mechanisms are required for holding them accountable.

Mexico has made and continues to make significant strides in improving the rule of law and the quality of governance and law enforcement. But where impunity remains high, it stands as a barrier to peacefulness.

POLICING
IN MEXICO

> ❯ Local traffic and municipal police forces are perceived to be the most distrusted and corrupt of all law enforcement entities.
>
> ❯ In 2016, the percentage of Mexicans perceiving them to be corrupt was 71 percent. This is a six percentage point improvement from 2012.
>
> ❯ Encouragingly, trust in the police forces increased by 13 percentage points between 2012 and 2016.
>
> ❯ Citizen engagement is improving: the number of Mexicans reporting a disposition to help the police increased by 18 percentage points, from 44 percent in 2012 to 62 percent in 2016.

Mexico's public security policy is developed, coordinated and implemented by the Executive Secretary of the National Public Security System (SESNSP), and policing responsibilities are divided across the three levels of government.

The municipal police carries out crime-preventing duties under the auspices of city councils. The federal and state police have a broader mandate of investigating crimes and issuing judicial warrants under the purview of their corresponding public ministries and attorney generals.

IEP's research on internal security finds that policing is most effective where the public perceives there is a high level of legitimacy in the justice processes and law enforcement. It is difficult to pin point an ideal police rate, but building up the capacity of the police force is an important first step for improving internal security. However, high numbers of officers without professional training and vetting can lead to overly heavy-handed approaches. Although Mexican states are showing signs of improvement in training and professionalization of their police officers, the data shows that progress is uneven, with the more peaceful states doing better in this respect.

CAPACITY

As of August 2016, SESNSP reported that there were a total of 258,557 registered state and municipal police officers across the 32 states.[7] At the national level, this averages to a rate of 211 police officers per every 100,000 people. Mexico's total police and internal security officer rate is estimated to be 371, including the federal police. This compares to a global average of 359 police and internal security officers per 100,000 people.

Coahuila and Chihuahua were the states that increased their police forces the most between 2015 and 2016. The former more than tripled the number of police officers, from 110 to 415 per 100,000 people, effectively becoming the state with the highest police rate in 2016. Chihuahua increased the number of police officers by 47 percent. In contrast, two of the states with the among the largest deteriorations in

the MPI, Colima and Michoacán, were also the states that decreased their number of police officers the most, by 36 and 44 percent, respectively. It is not possible to monitor recent changes in the federal police as there is a lack of updated public information on their force numbers. The latest publically available data dates back to 2011, with an estimate of 35,000 officers.[8]

❝ Two of the states with the biggest deteriorations in the MPI, Colima and Michoacán, were also the states that decreased their number of police officers the most.

FIGURE 4.6 STATE AND MUNICIPAL POLICE RATE BY STATE, 2016

Resources for policing vary across the country. Coahuila has the highest rate at 415 police officers per 100,000 people, Veracruz the lowest at 110.
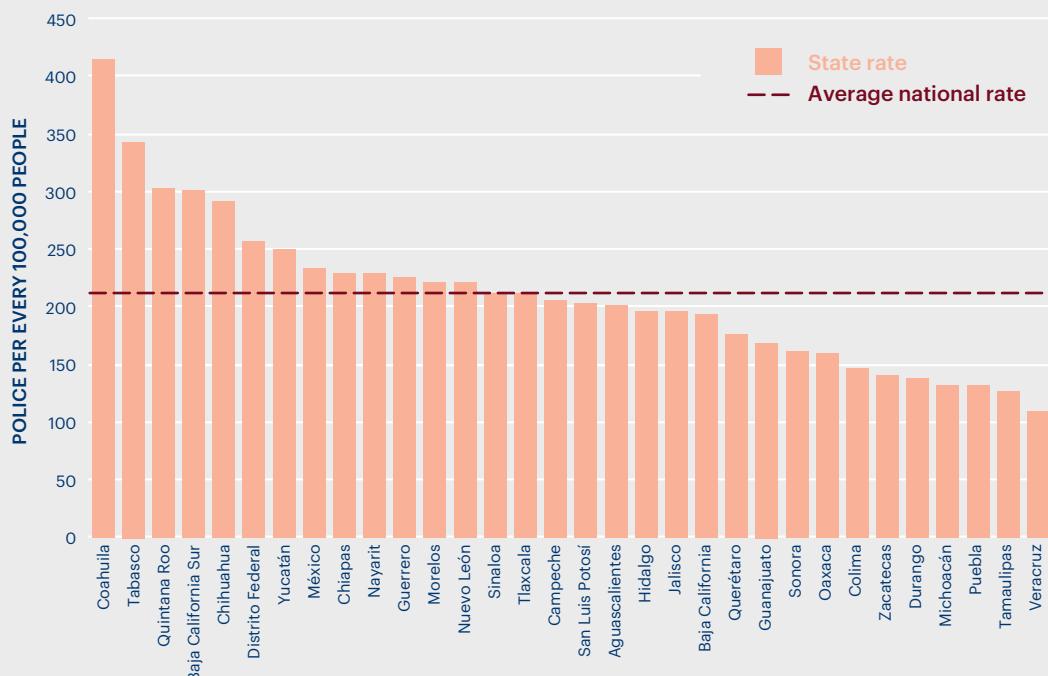
> In 2016, 57 percent of citizens reported to have little or no trust in the municipal police forces.

TABLE 4.1 PERCENTAGE CHANGE IN POLICE RATES PER STATE, TOP AND BOTTOM FIVE, 2015-2016

Coahuila and Chihuahua increased their number of police officers by 277 and 47 percent, respectively, vis-à-vis 2015.

STATE	2015	2016	PERCENTAGE CHANGE
Coahuila	110	415	277%
Chihuahua	199	292	47%
Sonora	141	162	15%
Campeche	180	205	14%
Sinaloa	189	213	12%
Puebla	180	132	-27%
Colima	231	147	-36%
Michoacán	236	133	-44%
Mexico City	489	256	-48%
Morelos	492	222	-55%

Source: SESNSP

LEGITIMACY

The police is the law enforcement entity with the highest degree of interaction with citizens. It is also the citizenry's first point of contact with the criminal justice system. Therefore, the extent to which their actions are deemed legitimate has wide-ranging implications for the rule of law and a *well-functioning government*. But recurrent instances of police misconduct have contributed to the high levels of citizen distrust in the police.

The traffic and municipal police forces are perceived to be the most distrusted and corrupt of all law enforcement entities according to ENVIPE survey results. Respondents had a choice between four categories of perceived trust: high, moderate, low or no trust. With regards to the municipal and traffic police forces, 57 and 53 percent of citizens in 2016 reported to have little or no trust in them. This is more than 20 percentage points worse than the federal police, who, in turn, have the highest percentage of citizens reporting high or moderate degree of trust in them, at 63 percent.

Since 2013 there has been a steady rise in the number of reported torture cases. The municipal, state and federal police forces have been implicated in cases of both forced disappearances and torture. This has been highlighted by the 2014 kidnapping of 43 students in the city of Iguala, Guerrero, where police officers have been accused of complicity with organized crime, or the 2014 torture of the Yurécuaro self-defense group leader, Enrique Hernández Saucedo, at the hands of police officers in the city of Tanhuato, Michoacán.[9]

The use of torture by police investigators to extract confessions may have exacerbated the levels of distrust in police forces.[10] Such practices are symptoms of Mexico's previous 'inquisitorial' criminal justice system, in which the presumption of innocence was not a fundamental tenet. As a result, judges were less prone to question whether confessions were voluntary, while police interrogators were incentivized to extract confessions under duress and convictions were, at times, based on forced admissions of guilt.[11] Together, this has been reinforced by a lack of internal mechanisms for control and accountability, including the failure to dismiss police officers who either have a past record of misconduct or who did not succeed in passing the national standardized aptitude tests (*controles de confianza*).[12]

Notwithstanding, there has been some notable progress over the past five years, as the percentage of citizens reporting a high or moderate degree of trust in the police has been trending upwards. Despite a moderate drop between 2014 and 2015, the number of citizens reporting high or moderate degrees of trust increased by 13 percentage points between 2012 and 2016, from 37 percent to 50 percent. With regards to the percentage of citizens perceiving police forces as corrupt, the figure improved by four percentage points during the same time period, from 69 percent to 65 percent.

FIGURE 4.7   DEGREE OF TRUST IN LAW ENFORCEMENT AND JUSTICE ENTITIES, 2016

The municipal and traffic police forces are the least trusted law enforcement entities.

- Sum of 'high' and 'moderate' degree of trust
- Sum of 'low' and 'no' trust

Federal Police
Judges
State police
Public Ministry & State Attorney General
Municipal police
Traffic police

PERCENTAGE OF THE POPULATION

Source: ENVIPE

FIGURE 4.8   PERCEPTIONS OF TRUST AND CORRUPTION IN POLICE AGENCIES, 2012–2016

For all police agencies, the number of citizens reporting high or moderate degrees of trust increased by 13 percentage points between 2011 and 2016. Perceptions of corruption, on average, fell by four percentage points.

CORRUPTION

PERCENTAGE OF THE POPULATION

Traffic police
Municipal police
State police
Federal police

TRUST

PERCENTAGE OF THE POPULATION

Federal police
State police
Municipal police
Traffic police
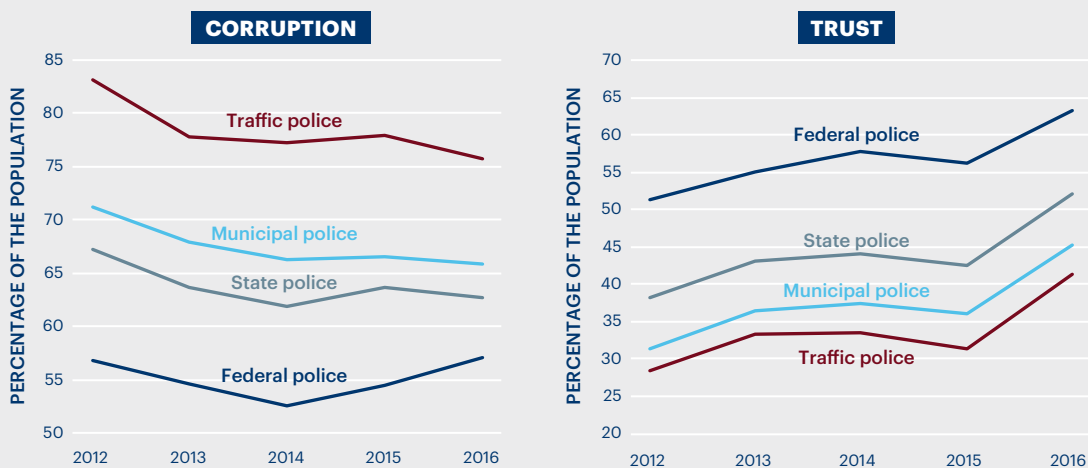
Source: ENVIPE

POLICING CHALLENGES

There are large variations in the financial resources and operational capability across Mexico's police forces. Under-funded police institutions at the state and municipal level have undermined efforts to control criminality nationally. Additionally, there is widespread evidence of police officers colluding with organized crime.[13]

Since the aforementioned 2014 kidnapping of 43 students in the city of Iguala, where officers of the municipal, state and federal police have been accused of being involved in complicity with a local drug cartel, perceptions over police forces' linkages with organized crime have been hardening.[14] In a survey published in December 2016 by Mexico's

FIGURE 4.9 STATE AND MUNICIPAL POLICE SALARIES BY STATE, 2015

Eight states pay their state police officers 15 percent below the national average.
At the municipal level, this is true in seven states.
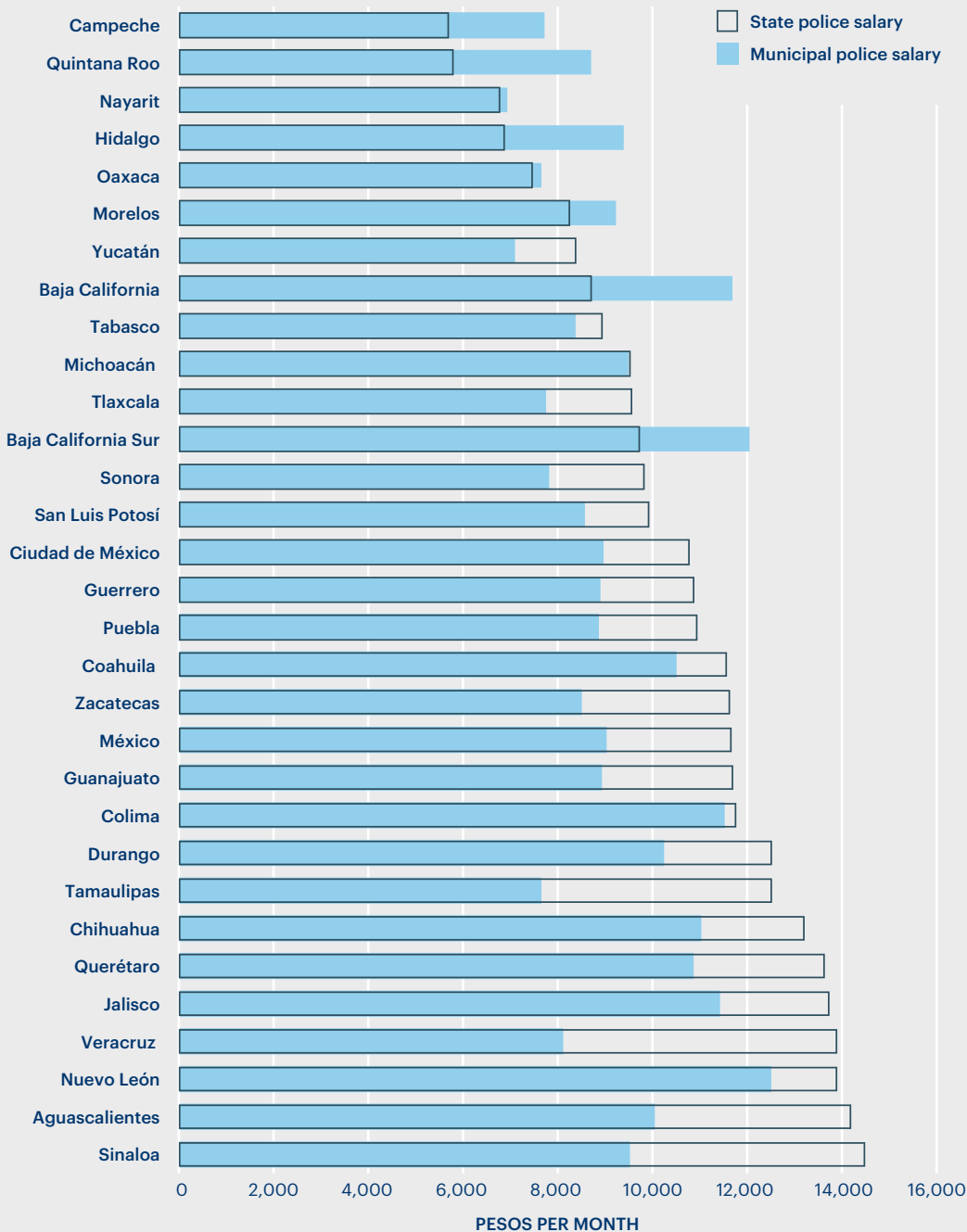
Source: SESNSP

Chamber of Deputies' Social Studies and Public Opinion Center (CESOP), 66 percent of respondents reported to believe that police forces are controlled by organized crime, with 56 percent of them perceiving corruption to be the main cause of this phenomenon.[15]

Consequently, there are two oft-cited reasons why Mexican police officers are so prone to co-optation by organized crime. The first is that their salary levels are ill-adapted to the high risks encountered in their profession. Municipal and state police officers earn an average of 9,236 pesos (USD 455) and 10,434 pesos (USD 514) per month, respectively, as shown in figure 4.9.[16] The second is the fact that crime syndicates — and in particular drug trafficking organizations — offer far higher financial pay-offs to potentially corrupt police officers.[17] Indeed, the federal government's proposal in 2011 to invest an extra 21 pesos daily (7,622 annually) for the professionalization of their municipal and state police forces

was driven by an endeavor to distance police officers from criminal networks.[18] This was driven by estimates showing that narcotrafficking networks were offering daily payments of up to 233 pesos - ten times the sum proposed by the federal government.

A good way to gauge the degree to which salaries and police performance go hand in hand is to look at the correlation between remuneration and a measure of police development. Causa en Comun's *Semaforo de desarrollo policial* is a composite measure of police development, based on the degree to which police forces are professionalizing and vetting officers and enforcing disciplinary systems. As shown in Figure 4.10, higher state police salaries are associated with higher police development scores. Nuevo Leon and Queretaro have the two highest police development scores and have high police salaries, as well as strong Positive Peace results.[19]

> " There are two oft-cited reasons why Mexican police officers are so prone to co-optation by organized crime. The first is that their salary levels are ill-adapted to the high risks encountered in their profession, and secondly the fact that crime syndicates offer far higher financial pay-offs to potentially corrupt police officers.

FIGURE 4.10 POLICE DEVELOPMENT VS STATE SALARY LEVELS, 2015

States that pay their police officers above average salaries are also at the top of the police development measure.
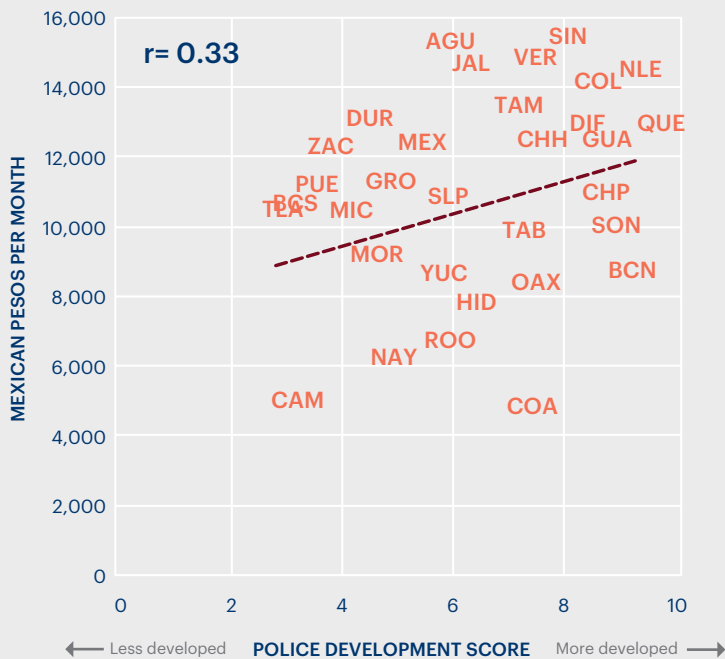
Source: SESNSP, Causa en Comun

POLICE REFORM

Past administrations have recognized the challenges undermining the work of police forces. Among them are the underdevelopment of local police forces and the counterproductive outcomes that stem from the militarization of public security.

The calls for reform come in the wake of the military-led campaign to dismantle drug-cartels during the Calderón presidency (2006-2012). Premised on the idea that local police forces lacked capacity to take on organized crime groups, past governments relied on the army to address security crises. At the same time, the federal police force was expanded during the Calderón administration, from 22,000 officers in 2007 to 35,000 in 2011.[20] Its mandate was to supplement the work carried out by state and municipal police forces, particularly as it had received US training on counter-narcotics operations.[21] But the number of complaints filed against the armed forces and federal police for human rights violations rose steeply between 2007 and 2012, as shown in Figure 4.11.

Reassuringly though, the annual number of human rights complaints filed against these two entities has been falling since 2010. Compared to 2010, the number complaints filed against the armed forces in 2016 fell by 69 percent. For the federal police, the figure fell by 61 percent during the same time period.[22] Complaints across the entire security sector were down 31 percent in 2016, compared to 2011. [23]

The attention paid to policing institutions has consequently been intensifying during the current presidency of Enrique Peña Nieto. This was evidenced by a ten-point public security plan announced in November 2014, which placed police reform as a top priority. It was unveiled two months after the 2014 incident in Iguala, a case which brought public attention to the problems of police misconduct and complicity with organized crime.

Consequently, the push for police reform has since become more politically salient. The Peña Nieto administration has been redirecting the security policy focus away from the military and towards the police. Notwithstanding, the government has deployed the military in states with weak law enforcement such as Michoacán, Guerrero and the state of Mexico.[24] The issue has become particularly pressing at a time when citizens are reportedly feeling more insecure at the neighborhood and municipal levels, as shown in figure 4.12. Tellingly, only 18 percent of Mexicans reported that they felt their security situation would improve in 2016, and 64 percent of them reported feeling unsafe in public spaces.[25]

Unsurprisingly, there is a correlation between levels of violence and perceptions of safety. As shown in Figure 4.13 below, states reporting lower levels of safety are also the ones with the worst MPI scores in 2016. This is the case for Guerrero and Morelos, two states that ranked in the bottom five of the 2016 MPI score and for which less than 30 percent of their population reported feeling safe.

FIGURE 4.11 FILED COMPLAINTS FOR HUMAN RIGHTS VIOLATIONS AGAINST THE ARMED FORCES & FEDERAL POLICE, 2007–2016.

Compared to 2010, the number of complaints filed against the military in 2016 fell by 69 percent. For the federal police, the figure fell by 61 percent during the same time period.
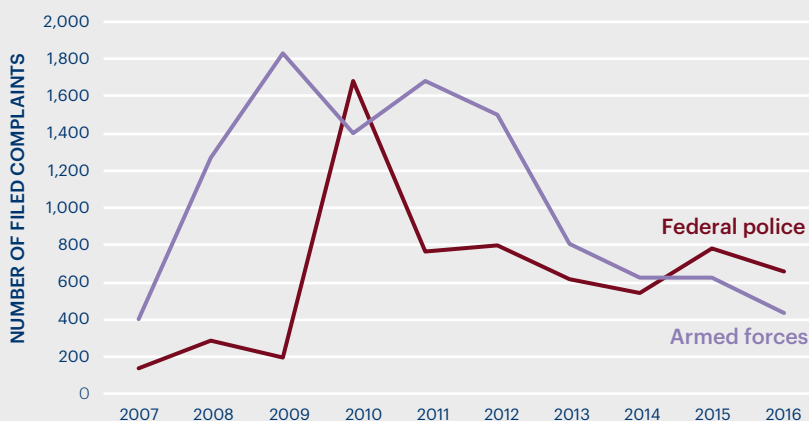
Source: CNDH

FIGURE 4.12 PERCENTAGE OF CITIZENS THAT REPORT FEELING INSECURE, 2011–2016

More men and women felt insecure in their neighborhood and municipality in 2016 than in 2011.

MUNICIPALITY

NEIGHBORHOOD
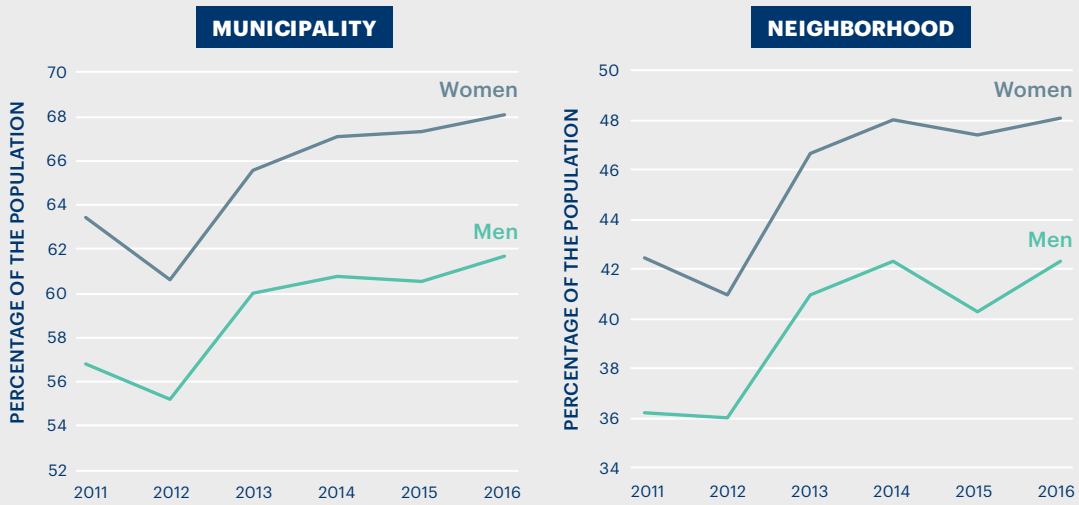
Source: ENVIPE

FIGURE 4.13 PERCEPTIONS OF SAFETY VS MPI SCORE, 2016

Lower levels of violence are associated with higher levels of perceptions of safety.

r= 0.40
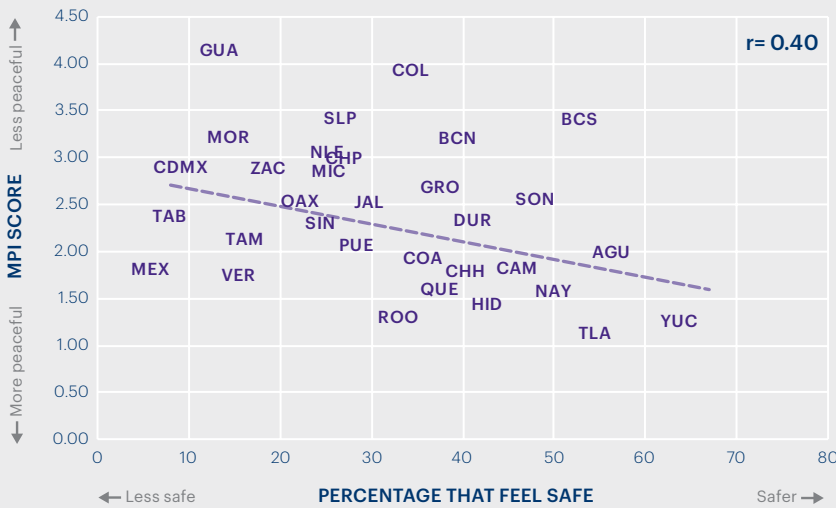
Source: ENVIPE, IEP

Unsurprisingly, there is a correlation between levels of violence and perceptions of safety. States reporting lower levels of safety are also the ones with the worst MPI scores in 2016.

IMPLEMENTING REFORMS

As state legislatures attempt to implement the stipulations of the new criminal justice system, revamping policing institutions has become a priority. This is mainly due to the fact that police forces are seen as the weakest link in the criminal justice system.[26]

The government's flagship proposal has been to encourage states to adopt a Unified Police Command (*Mando Unico*) that would bring the country's 1,800 municipal police forces under the purview of state authorities. Premised on the assumption that this would increase coordination between otherwise disparate municipal police units, it has been presented as a solution to the problems of police corruption and impunity, especially within and across municipalities. But according to the 2016 CESOP survey, 70 percent of respondents reported not having heard about *Mando Unico,* highlighting the need for better publicity on the initiative.[27]

Revamping police institutions will not be easy in places like Veracruz or Michoacán, two states with a significant track record of police forces colluding with organized crime. Meanwhile, the federal government has been coordinating nation-wide efforts to carry out the standardized aptitude tests. These evaluations are coordinated by the National Centre for Evaluation and Accreditation (CNCA) and are meant to ensure that recruits meet the required professional standards. They are also intended to weed out corrupt officers or those with past criminal charges, but also to identify those with a history of substance abuse or psychological problems that may require assistance. Such efforts have been complemented by attempts to improve the levels of reporting to the National Registry of Public Security Personnel (RNPSP) as a means to identify officers with records of past misconduct.

Problems have however begun to arise with respect to the lack of funds made available to pay the severance packages of those police officers who fail to pass the standardized aptitude tests. This is particularly concerning when considering that 18,177 police officers failed the test in 2014. Out of those who failed, 67 percent were concentrated in ten Mexican states. Veracruz, Baja California Sur and Sinaloa were the three states that recorded the highest failure rates at 77, 69 and 65 percent, respectively.[28] In addition, as of December 2016, the same states reported the highest levels of state police officers who had failed the aptitude test but had not been dismissed, at 28, 22 and 41 percent, respectively.

With fifteen states failing to meet the minimum criteria established by the federal government in the area of police development, questions have been raised over the implementation of reforms.[29] This has been compounded by a number of irregularities identified by the supreme audit of the federation (ASF) over the allocation and usage of federal subsidies.[30] Consequently, this has prompted calls for the police to be subject to greater oversight by civilian bodies. This is particularly important at a time when only nine states have adopted accredited systems for the evaluation of their officers.[31]

The trend of citizen engagement with police has been improving. On average, 40 percent more Mexicans reported a disposition to help the police forces in 2016 than in 2012, as shown in Figure 4.14. There was a small decline in 2016. This drop can partly be attributable to the heavy-handed police responses to protests, particularly those related to education reform throughout 2016, as highlighted by the events in the state of Oaxaca in July 2016, where eight protesters

FIGURE 4.14 PERCENTAGE OF CITIZENS REPORTING A DISPOSITION TO HELP THE POLICE, 2012–2016

Citizen's disposition to help the police has been on the rise since 2012, with a slight drop in 2016.
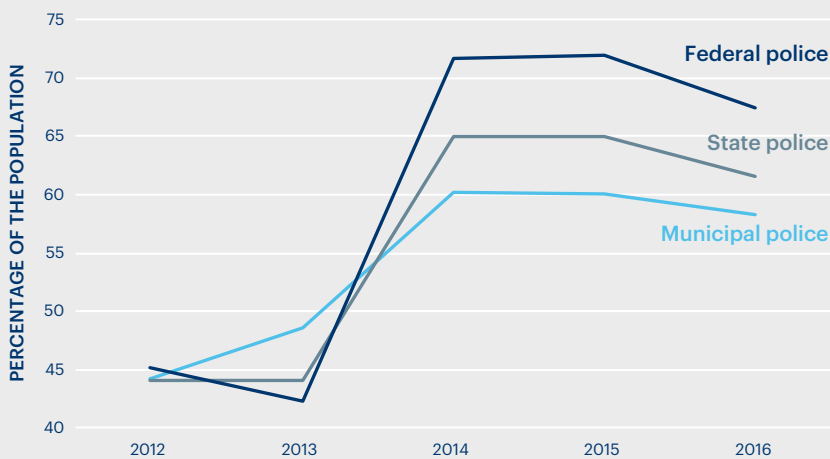
Source: ENVIPE

> Revamping police institutions will not be easy in places like Veracruz or Michoacán, two states with a significant track record of police forces colluding with organized crime.

were killed by the federal police.[32] However, even with the recent gains, the police continue to be perceived as a poorly performing law enforcement institution. This is particularly important during a period in which states are having to adapt to the new criminal justice system — and for which the work carried out by the police will be a key determinant of its success.

POSITIVE PEACE FACTORS FOR REDUCING HOMICIDES

The states with the five lowest homicide rates are amongst the states with the highest Positive Peace scores. Positive Peace is a holistic and systematic framework that creates highly peaceful societies. Positive Peace consists of eight pillars and the systemic nature of peace works best when a social system is strong in all pillars of the framework. The states that have reduced violence or kept it low all demonstrate Positive Peace strengths, and four out of five of them have relatively low levels of corruption. Yucatan has had the lowest homicide rate in the country for 12 of the last 14 years and ranks second in Positive Peace overall and in *low levels of corruption*.

CORRELATES OF LOW RATES OF HOMICIDE

A number of Positive Peace indicators correlate with low rates of homicide at the state level.

Five pillars, listed below, stand out as having indicators with specific relationships to homicide rates. This highlights the interconnected nature of the pillars; the emphasis on social development should be on the system. It should be noted that correlation statistics (r values) tend to be small for relationships at the state level in Mexico because there are only 32 states.

TABLE 4.2 FIVE STATES WITH THE LOWEST HOMICIDE RATES, 2016

RANK	STATE	HOMICIDES PER 100,000 PEOPLE	REGION
1	Yucatán	2.749	South
2	Aguascalientes	2.912	Central
3	Nayarit	3.370	West
4	Hidalgo	5.115	East
5	Querétaro	5.752	Central

Source: SESNSP

WELL-FUNCTIONING GOVERNMENT

There appears to be a pattern of high impunity for homicide in states where the level of homicide is also high. Every state in Mexico faces some level of impunity. However, where the overall homicide rate is low, there is a higher ratio of prison sentences for homicides relative to homicide investigations. This suggests that law enforcement in these states are more diligent in investigating deaths and the justice system processes them more effectively. In Guerrero, Mexico's least peaceful state, the ratio is as low 0.2 incarcerations for every homicide case.

The widespread nature of impunity, and the challenges it poses to a *well-functioning government*, are discussed in detail on page 54. Improvements in impunity will have widespread benefits for peacefulness in Mexico.

LOW LEVELS OF CORRUPTION

Homicide rates in 2016 were lower where a smaller percentage of citizens reported perceiving acts of corruption "very frequently" in 2015, demonstrating the importance of low levels of corruption. Perceptions of corruption correlate

with homicide rates at 0.48, when excluding the outlier Colima, which has had a sudden escalation in violence.

GOOD RELATIONS WITH NEIGHBORS

Where net incoming migration is higher, homicide rates tend to be lower. This is likely to be an interdependent relationship with causality going in both directions.

There have been several reports that people are fleeing states with high rates of violence. Yucatán, Quintana Roo and Querétaro have low homicide rates and high rates of incoming migration, while Guerrero and Sinaloa, which have experienced years of violence, lost nearly two percent of their population to outgoing migration in 2014. This pattern suggests that safety will attract human capital and a lack of peace will erode it, endangering Positive Peace and the capacity to reduce violence in the future.

SOUND BUSINESS ENVIRONMENT

High rates of formal employment are correlated with low homicide rates, at -0.37. Taken together with the relationship to migration, this demonstrates a relationship between *good relations with neighbors, high levels of human capital* and *sound business environment.* States that attract people and can put them to work have the capacity for safer communities. Safer communities will attract people, generating resources for businesses. Coupled with *well-functioning government* and *low-levels of corruption,* strength across many pillars are mutually reinforcing.

EQUITABLE DISTRIBUTION OF RESOURCES

In many parts of the world, there is a clear relationship between poverty and low levels of peacefulness. However, this is not as clear in Mexico. Across the country, there is no statistical relationship to poverty. Even extremely high homicide rates occur at different poverty rates. Guerrero, which has the second highest homicide rate at 62 per 100,000 people, has a 65 percent poverty rate. But Colima, which now has the highest homicide rate in the country at nearly 77 in 2016, has only 34 percent of its residents living in poverty.

What is statistically significant is human development, in particular the health component of the Human Development Index, with a correlation of 0.6. At the subnational level, the HDI Health score is based on average life expectancy, which is an outcome of many factors, including access to a healthy diet and to healthcare and medicines as well as low rates of violence. Raising incomes can be an important part of the peacebuilding process, but income is a means to an end. Ultimately, communities where everyone can access high quality care have lower rates of lethal violence. As such, those communities provide an environment where human potential can flourish, thus further strengthening peace and reducing violence in the long run.

STRATEGIES FOR REDUCING HOMICIDE RATES

Ultimately, long lasting peace is a product of high levels of Positive Peace. Building society-wide Positive Peace can take many different approaches. A wide array of programs and interventions can be used to directly reduce violence and build the resilience that comes from strength in each Positive Peace Pillar. USAID research shows that there are three approaches to effectively reducing violence in communities in Central America.[33] Each one of these strategies can be used to address weaknesses in various aspects of Positive Peace, especially *well-functioning government*, where Mexico has particular deficits.

1) **People-based approaches** focus on people or groups who are perpetuating violence using multi-stakeholder law and public service efforts to frame a direct response. [34]

Types of people-based programs include improving policing, vocational training, school and family based programs, and focused deterrence of specific individuals or groups. Focused deterrence involves identifying specific offenders and groups and mobilizing diverse law enforcement solutions and social services to redirect their activities. Effective programs engage directly with individuals on an ongoing basis. These programs touch on issues of *well-functioning government*, *high levels of human capital* and *low levels of corruption* in particular, meaning a people-based approach can be used to build strength across multiple pillars. Research shows that these approaches have the largest direct impact.

> " A wide array of programs can be used to directly reduce violence and build the resilience that comes from strength in each Positive Peace Pillar.

1) Behavior-based approaches include, but are not limited to, gun law enforcement and comprehensive legislation, gang prevention and regulation, and drug courts and treatment.

Programs targeting gang activities are most effective when paired with focused deterrence. This represents a combination of targeting people and behaviors. Drug treatment has also shown strong positive effects. Mexico has begun implementing drug court programs, starting in Nuevo León and Morelos[35] — two states that have shown an improvement in the MPI since 2011. Drug courts offer a specific justice process to first-time offenders charged with narcotics related crimes, supporting the justice delivery component of a *well-functioning government*. They are most effective when they help people avoid prison and access treatment for drug use because these efforts help reintegrate individuals into society, contributing to *high levels of human capital*. But organized crime groups can exert significant influence on drug users, sometimes recruiting "foot soldiers" from drug treatment centers.[36] Effective drug treatment and drug court programs address the different causes of drug crimes: addiction and/or involvement in organized crime.

1) Place-based approaches are programs like:

    a. Hot-spot policing focused on small geographic locations that have been identified as high risk crime areas.

    b. Disorder policing and neighborhood physical maintenance.

    c. Urban renewal such as improvements to housing, transportation, lighting, etc.

The positive effects of place-based approaches support the findings that local governments have a key role to play in building peace. Research shows that these programs are effective when they incorporate effective local policing, which relies on a well-functioning government and low-levels of corruption, and which incorporate the community, supporting good relations with neighbors.

All three approaches have been most effective when implemented through a multi-stakeholder approach. Bringing people together who represent different interests and groups, generates stronger support for the community improvements. People-based approaches like the 'cultural of legality' programs being taught in some high schools[37] can help improve the attitudes that are critical for Positive Peace, like reporting crime, helping police, and following the law. Taking those attitudes into place-based and behavior-based programs can help improve the institutions and structures necessary for Positive Peace.

> **❝** All three peace-building approaches have been most effective when implemented through a multi-stakeholder approach. Bringing people together who represent different interests and groups, generates stronger support for the community improvements.

WHAT LOCAL GOVERNMENTS CAN DO TO BUILD PEACE

The MPI is an important tool for measuring and assessing change at the state level and is used by many state governments. But violence in Mexico also has patterns at the municipal level which are common across state boundaries. Findings throughout this report point to opportunities for city-level governments to strengthen Positive Peace in their communities:

> ❯ Local police forces can aim to achieve *low levels of corruption*, another of the eight pillars. Municipal police forces are perceived to be the most corrupt law enforcement agencies. At the state level, *low levels of corruption* are correlated with low homicide rates, and local police forces have the greatest gains to make in improving perceptions of corruption.

> ❯ The *Nuevo Sistema de Justicia Penal* is implemented at the local level and local law enforcement, courts and Public Ministries play an important role in delivering justice, a key aspect of a *well-functioning government*.

> ❯ *Good relations with neighbors* and *acceptance of the rights of others* are about building strong communities. Protecting local journalists supports the *free flow of information*. And *high levels of human capital* and *equitable distribution of resources* happen in local schools and hospitals.

Each of the eight pillars of Positive Peace, as well as state and nationwide progress, are explained in detail in section 3 of this report. The following pages review the evidence on the localized nature of homicide rates and discuss some of the solutions available to local communities. It is important to note that Positive Peace is a broad framework, developed from global evidence from the most peaceful countries.

Local activities to improve Positive Peace should be just that — local. Developments that contribute to improving the strength of each of the pillars based on local needs and locally available solutions can come in many forms. The application of IEP's Positive Peace framework has taken unique shape in each context around the world, and can be applied uniquely across Mexico as well.

MUNICIPAL HOMICIDE RATES

The map of municipal homicide rates in figure 4.15 shows that there were two clusters of violence in Mexico in 2016, both crossing the borders of at least four states.

> ❯ The first cluster straddles the border between Sinaloa and Durango, extending north into Chihuahua and south into Zacatecas. Chihuahua, Zacatecas and Sinaloa rank 24, 26 and 30 in the MPI respectively.

> ❯ The second cluster follows the coastline from the northwest tip of Jalisco, through Colima, Michoacán, Guerrero and into Oaxaca. Colima and Guerrero are the two least peaceful states in Mexico, while Jalisco, Oaxaca and Michoacán rank 18, 19 and 23 respectively.

FIGURE 4.15 **FIGURE 4.15** MUNICIPAL HOMICIDE RATES, 2016

There were two clusters of violence in Mexico in 2016, one circling the border between Sinaloa and Durango and the other along the southern Pacific coast. The map includes municipalities with populations greater than 10,000 people.

Homicides per 100,000 people

80
60
20
10
5
1

No data available
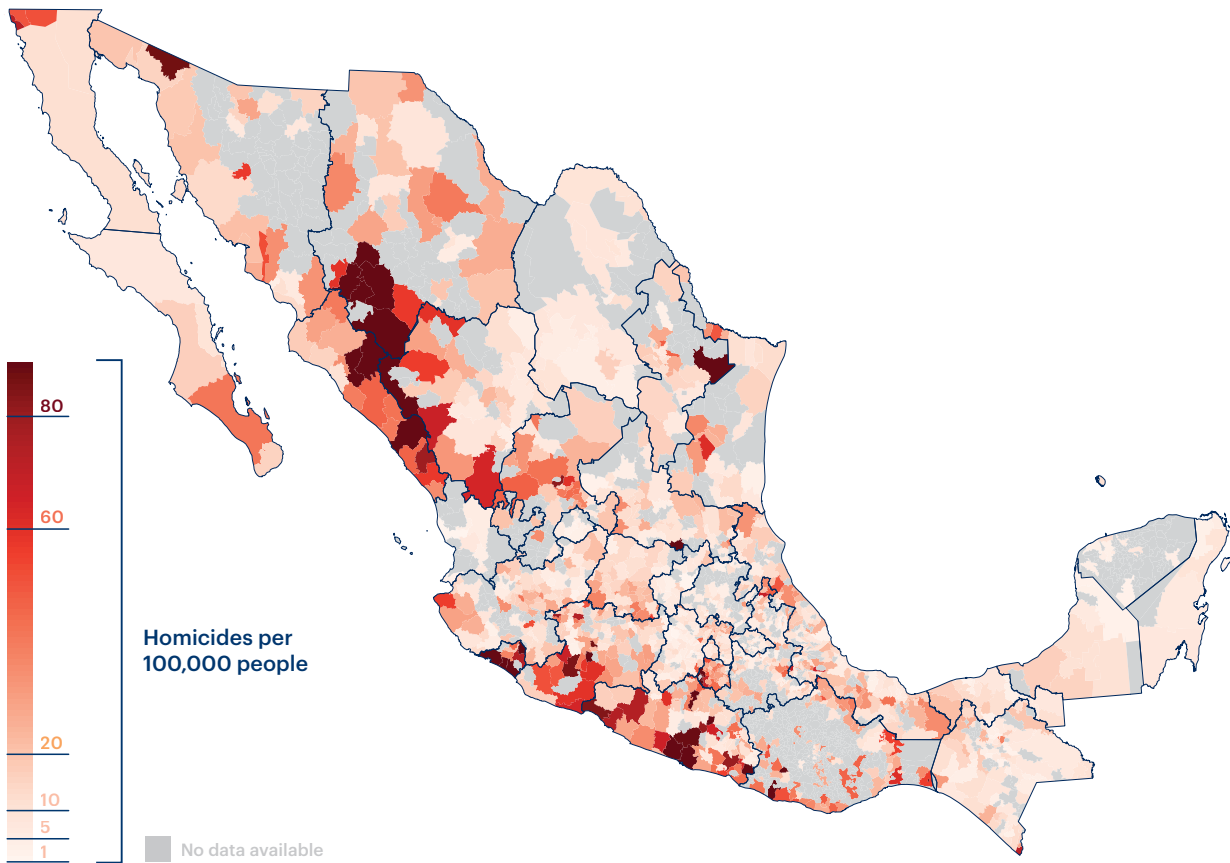
Table 4.3 gives the 25 lowest and highest municipal level homicide rates in 2016.

Naturally, Mexico's least peaceful states will also include its least peaceful municipalities. What is of note is that there may be large differences in the levels of violence within the larger states, and some cities will have more in common in terms of peacefulness with their neighbors in the next state than with other cities in their own state.

Guadalupe Y Calvo, which has the second highest homicide rate, sits in the southern tip of Chihuahua, 38 kilometers from the border of Sinaloa and roughly 90 kilometers from

Durango. Meanwhile, 310 kilometers away but in the same state, Saucillo, Chihuahua has a very low homicide rate, ranking 1,019[th].

Research across Latin American cities shows that this is a recurrent pattern, with half of all homicides occurring on just two percent of city blocks and 0.5 percent of the population being responsible for 75 percent of homicides.[38]

Looking at the localized pattern of violence reiterates both the importance of place-based strategies and the importance of local government and community involvement in building peace.

> " Research across Latin American cities shows that half of all homicides occurs on just two percent of city blocks, and that 0.5 percent of the population is responsible for 75 percent of homicides.

TABLE 4.3 FIVE STATES WITH THE LOWEST HOMICIDE RATES, 2016

	MUNICIPALITY	STATE	POPULATION	HOMICIDE RATE
LOWEST 25 MUNICIPAL HOMICIDE RATES	Santiago Ixcuintla	Nayarit	103,470	0.97
	Metepec	Mexico	237,056	1.27
	San Felipe Del Progreso	Mexico	142,619	1.40
	Cadereyta De Montes	Queretaro	69,871	1.43
	Acajete	Puebla	66,506	1.50
	Ajalpan	Puebla	66,181	1.51
	Calkini	Campeche	58,481	1.71
	Jesus Maria	Aguascalientes	113,254	1.77
	Tlatlauquitepec	Puebla	55,891	1.79
	Bahia De Banderas	Nayarit	163,481	1.84
	Tepeapulco	Hidalgo	53,463	1.87
	San Jose Del Rincon	Mexico	103,572	1.93
	Tacotalpa	Tabasco	48,727	2.05
	Cozumel	Quintana Roo	93,363	2.14
	Simojovel	Chiapas	46,472	2.15
	Paraiso	Tabasco	92,098	2.17
	Pabellon De Arteaga	Aguascalientes	45,183	2.21
	Oxchuc	Chiapas	45,097	2.22
	Tekax	Yucatan	44,558	2.24
	Mineral De La Reforma	Hidalgo	173,122	2.31
	Actopan	Veracruz	43,181	2.32
	Teopisca	Chiapas	42,233	2.37
	Hopelchen	Campeche	41,699	2.40
	Ayotlan	Jalisco	41,291	2.42
	Zinacantan	Chiapas	41,156	2.43
HIGHEST 25 MUNICIPAL HOMICIDE RATES	Zitlala	Guerrero	24,122	169.97
	Guadalupe Y Calvo	Chihuahua	57,644	168.27
	Tecoman	Colima	127,145	151.80
	San Ignacio	Sinaloa	22,968	143.68
	Santiago Amoltepec	Oaxaca	12,691	133.95
	Coatlan Del Rio	Morelos	10,383	115.57
	China	Nuevo Leon	11,369	114.35
	Badiraguato	Sinaloa	30,326	112.11
	Bocoyna	Chihuahua	30,373	111.94
	Armeria	Colima	32,182	111.86
	Mocorito	Sinaloa	48,293	109.75
	Guachochi	Chihuahua	54,994	109.10
	Acapulco De Juarez	Guerrero	848,841	108.15
	Coyuca De Benitez	Guerrero	76,791	108.09
	Gabriel Zamora	Michoacan	22,374	107.27
	San Ciro De Acosta	San Luis Potosi	10,474	105.02
	Urique	Chihuahua	21,965	104.71
	Santiago Jamiltepec	Oaxaca	19,422	102.97
	Miacatlan	Morelos	27,214	102.89
	Mazatepec	Morelos	10,153	98.49
	Amacuzac	Morelos	18,535	97.11
	Manzanillo	Colima	184,855	95.75
	Batopilas	Chihuahua	15,726	95.38
	Tamazula	Durango	27,659	94.00
	Cuauhtemoc	Colima	29,048	92.95

1   Instituto Nacional de Estadistica y Geografia, 'Encuesta Nacional de Victimizacion y Percepcion sobre Seguridad Publica (EVIPE) 2016: Tabulados Predefinidos, Percepcion sobre la seguridad publica, http://www.beta.inegi.org.mx/proyectos/enchogares/regulares/envipe/2016/

2   For details, see Universidad de las Americas Puebla 'Global Impunity Index Mexico (Índice Global de Impunidad México) UDLAP, February 2016, http://www.udlap.mx/igimex/assets/files/igimex2016_ESP.pdf (Accessed 15 January 2017)

3   Instituto Nacional de Estadistica y Geografia, 'Encuesta Nacional de Victimizacion y Percepcion sobre Seguridad Publica (EVIPE) 2016: Tabulados Predefinidos, Percepcion sobre la seguridad publica, http://www.beta.inegi.org.mx/proyectos/enchogares/regulares/envipe/2016/

4   For details, see Universidad de las Americas Puebla 'Global Impunity Index Mexico (Índice Global de Impunidad México) UDLAP, February 2016, http://www.udlap.mx/igimex/assets/files/igimex2016_ESP.pdf

5   Universidad de las Americas Puebla 'Global Impunity Index Mexico (Índice Global de Impunidad México) UDLAP, February 2016, http://www.udlap.mx/igimex/assets/files/igimex2016_ESP.pdf (Accessed 15 January 2017)

6   Data from Comision Nacional de Seguridad

7   Causa en Comun 'Estado de fuerza de las policias preventivas en Mexico', Causa en Comun, 2016, using SESNSP data, http://causaencomun.org.mx/documentos/fuerza-policial-en-mexico/ (Accessed 12 January 2017)

8   For details, see: Eduardo Guerrero Gutierrez 'La estrategia fallida', 2012, http://www.nexos.com.mx/?p=15083 (Accessed 17 January 2017)

9   For details on instances of police misconduct in Mexico see: Human Rights Watch 'Mexico: Police Killings in Michoacán, evidence of extrajudicial executions in Apatzingán and Tanhuato' HRW, 2015, https://www.hrw.org/news/2015/10/28/mexico-police-killings-michoacan (Accessed 17 January 2017); The Guardian, 'Mexican police brutality uncovered by human rights investigators' 7 December 2012, https://www.theguardian.com/world/2012/dec/06/mexican-police-brutality-presidential-inauguration (Accessed 17 January 2017); Reuters, 'Police corruption undermines Mexico's war on drugs' 23 May 2007, http://www.reuters.com/article/us-mexico-drugs-police-idUSN1521094020070523 (Accessed 17 January 2017); The Guardian, 'Police corruption cases on the rise in Mexico' 13 September 2008, https://www.theguardian.com/world/2008/sep/12/mexico.drugstrade (Accessed 17 January 2017)

10 For details, see El Pais ' Decenas de estudiantes desaparecidos tras un ataque de la policía en México', 30 September 2014, http://internacional.elpais.com/internacional/2014/09/30/actualidad/1412091063_050810.html (Accessed 17 January 2017); El Pais 'Dos casos de tortura reflejan los abusos policiales en México', 8 April 2014, http://internacional.elpais.com/internacional/2014/04/08/actualidad/1396984008_706318.html (Accessed 17 January 2017)

11 For details, see Amnesty International ''Mexico: La violencia sexual, usada habitualmente como tortura para obtener 'confesiones' de mujeres' ', Amnesty International, 28 June 2016, https://www.amnesty.org/en/latest/news/2016/06/mexico-sexual-violence-routinely-used-as-torture-to-secure-confessions-from-women/ (Accessed on 18 January 2017); M. Meyer 'Mexican Police: many reforms, little progress' Washington Office on Latin America (WOLA), 2014, https://www.wola.org/sites/default/files/Mexicos%20Police.pdf (Accessed on 18 January 2017)

12 For details, see M. Meyer 'Mexican Police: many reforms, little progress', Washington Office on Latin America (WOLA), 2014, https://www.wola.org/sites/default/files/Mexicos%20Police.pdf (Accessed on 18 January 2017)

13 For details, Human Rights Watch, México: Abusos generalizados en la "guerra contra el narcotráfico", HRW, 2011, https://www.hrw.org/es/news/2011/11/09/mexico-abusos-generalizados-en-la-guerra-contra-el-narcotrafico (Accessed 18 January 2017); Open Society Foundation 'Atrocidades inegables: confrontando crímenes de lesa humanidad en Mexico', OSF, 2016, https://www.opensocietyfoundations.org/sites/default/files/undeniable-atrocities-esp-2nd-edition.pdf (Accessed 18 January 2017); Amnesty International, 'Mexico: La violencia sexual, usada habitualmente como tortura para obtener 'confesiones' de mujeres' Amnesty International, 28 June 2016, https://www.amnesty.org/en/latest/news/2016/06/mexico-sexual-violence-routinely-used-as-torture-to-secure-confessions-from-women/ (Accessed on 18 January 2017)

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THE ECONOMIC VALUE OF PEACE

> The economic impact of violence in Mexico totalled 3.07 trillion pesos or US$180 billion in 2016. This is equivalent to 18 percent of the country's GDP and represents 25,130 pesos per person; equivalent to more than one month's salary for the average Mexican worker.[1]

> The economic impact of violence increased by three percent, or 79 billion pesos, when compared to 2015.

> Violent crime, which includes robbery, assault and rape, was the largest component, accounting for 47 percent of the total impact from violence.

> From 2015 to 2016, the impact of homicide on the economy increased by 27 percent or 210 billion pesos. This deterioration was offset by year-on-year reductions in violent crime.

> The per capita impact of violence varies very significantly from state to state, ranging from Nayarit at 10,220 pesos per person to Colima at 66,500 pesos per person.

> From 2003 to 2016, federal government expenditure on all violence containment increased by 120 percent.

> In 2015, 36 percent of businesses were the victim of at least one crime.

> Businesses identified insecurity and crime as their most pressing concern, well above other issues such as taxation or corruption.

THE ECONOMIC VALUE OF PEACE IN 2016

The economic impact of violence in Mexico totalled 3.07 trillion pesos (US$180 billion) in 2016, or nearly 18 percent of GDP. This represents a three percent increase from 2015, and reflects the country's deterioration in peacefulness.

Violent crime was the most expensive form of violence, representing 47 percent or 1.45 trillion pesos. Violent crime includes robbery, assault and rape. The economic impact of this group of crimes improved from 2015 to 2016, by 125 billion pesos or eight percent.

Together, the economic impact of the three components of violent crime — robbery, assault and rape — decreased by 125 billion pesos or eight percent in 2016 reflecting the national fall in violent crime rates. This is a positive trend, as violent crime accounts for the largest component of the cost of violence.

Homicide is the second most expensive form of violence to the Mexican economy. The cost of homicide includes the direct costs incurred to the deceased's family, the burden on the justice and law enforcement systems, and the decline in productivity from losing a member of the work force.[5] When these costs are added together, the economic impact of homicides in Mexico was nearly 988 billion pesos in 2016.

The rising homicide rate in 2016 drove both the deterioration in overall peacefulness and the rising economic impact of violence. This resulted in an additional economic impact of 210 billion pesos when compared to the previous year, going from 778 billion pesos in 2015 to 988 billion in 2016.

Together, violent crime and homicide make up 79 percent of the more than three trillion pesos that constitute the total economic impact of violence.

Figure 5.1 gives the share of the total economic impact of violence by category in 2016. Government expenditure to contain violence carries an economic impact of 443 billion pesos, making up 14 percent of the total. The data shows that the consequential costs from violence in Mexico are significantly larger than the government containment costs.

The remaining seven percent of economic losses from violence are related to fear, organized crime, firearm sales and the costs of private security. While these losses are significant, the most substantial improvements in the total economic losses from violence come from outright reductions in homicide and violent crime.

The multiplier effect represents the lost economic benefits that would have been generated if all the direct costs were used in more productive alternatives. The total economic impact of violence is the direct cost of violence, the indirect cost and the multiplier effect added together, which reflects the opportunity cost of violence.

> **The rising homicide rate in 2016 resulted in an additional economic impact of 210 billion pesos.**

Table 5.1 presents a full breakdown of the costs included in the 2016 estimate. Direct costs are expenditures incurred by the victim, the perpetrator and the government. Indirect costs accrue after the fact and include medical costs, the present value of future costs, such as lost future income and physical and psychological trauma.

> Together, violent crime and homicide make up 79 percent of the more than three trillion pesos that constitute the total economic impact of violence.

The estimated economic impact of organized crime was 17 billion pesos, but this is probably a very conservative estimate. The organized crime component of the economic impact analysis includes kidnappings and extortion, the cost of which increased by two percent in 2016.

It is important to note that the cost of organized crime in this model does not include all of the costs imposed by organized criminal groups, such as deferred investment, capital flight, or drug-trade related economic activity such as production, transport, and trade.

FIGURE 5.1 CATEGORY BREAKDOWN OF THE TOTAL ECONOMIC IMPACT OF VIOLENCE, 2016

Violent crime represents the largest component of the total economic impact of violence in 2016, at 47 percent of the total.
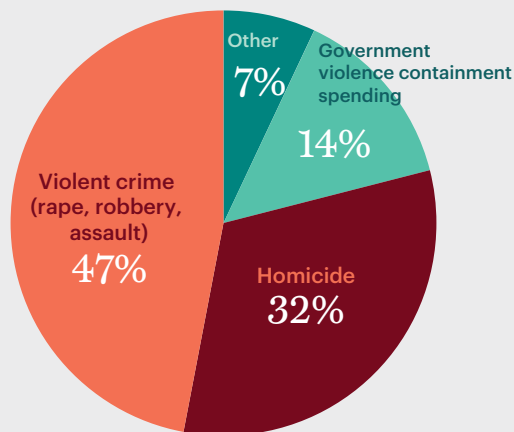
Source: IEP

TABLE 5.1 THE ECONOMIC IMPACT OF VIOLENCE IN 2016 (CONSTANT 2016 PESOS, BILLIONS)

The total economic cost and lost opportunity resulting from violence was more than three trillion pesos in 2016.

INDICATOR	TOTAL ECONOMIC IMPACT OF VIOLENCE
Incarceration	1.7
Organized crime (kidnappings & extortion)	17.3
Private security	24.7
Firearms	53.2
Domestic security spending	94.8
Fear	97.8
Miltary spending	133.4
Justice system spending	213.4
Homicide	987.7
Violent crime (rape, robbery & assault)	1,448.70
TOTAL	3,072.70

Source: INEGI

> The estimated economic impact of organized crime was 17 billion pesos, but this is probably a very conservative estimate.

The indirect costs of violence are relatively high compared to direct costs. For example, the indirect cost of homicide is seven times the direct cost and the indirect cost of rape is five times larger than the direct cost. The method used in this report for indirect costs is to accrue them in the year in which the crime occurs. For example, the lost lifetime earnings of a homicide victim would be included in the indirect costs in the year in which the homicide happened. Table 5.2 lists the economic and societal development effects of violence.[6]

To estimate the indirect costs component of the economic impact of violence, it is important to calculate the lost opportunity cost from the crime. For example, if a murder is avoided, medical and funeral costs would have flowed to alternative economic activities. Similarly, society would avoid the imprisonment and judicial costs of bringing the perpetrator to justice. Additionally, society will gain from the income that the victim and perpetrator would have contributed to the overall economy. To account for all such costs, IEP assumes that for each peso spent on violence containment, the economy loses an additional pesos of economic activity. For more detail on the peace multiplier refer to box 5.2.

TABLE 5.2 ECONOMIC AND SOCIAL DEVELOPMENT EFFECTS OF VIOLENCE

ECONOMIC DEVELOPMENT EFFECTS OF VIOLENCE	SOCIAL DEVELOPMENT EFFECTS OF VIOLENCE
Decreased labor market participation	Intergenerational transmission of violence
Reduced productivity on the job	Erosion of social capital and social fabric
Lower earnings	Reduced quality of life
Decreased investment and saving	Decline in the credibility of the state
Distortion of government resource allocation	Reduced participation in the democratic process
Flight of human and financial capital	

Source: Heinemann & Verner, 2006

PER CAPITA ECONOMIC IMPACT OF VIOLENCE

TABLE 5.3 THE PER CAPITA ECONOMIC IMPACT OF VIOLENCE, 2016

The per capita impact of violence varies very significantly from state to state in Mexico, from Nayarit at 10,220 pesos per person to Colima at 66,500 pesos per person.

STATE	STATE MPI SCORE	PER CAPITA ECONOMIC IMPACT OF VIOLENCE
Nayarit	1.384	10,220
Chiapas	1.574	11,850
Veracruz	1.750	12,800
Tlaxcala	1.403	14,200
Yucatán	1.239	14,600
Campeche	1.607	16,500
Puebla	1.808	18,300
Quintana Roo	1.724	19,000
Hidalgo	1.445	19,600
Coahuila	1.515	20,400
Jalisco	2.264	22,400
Nuevo León	2.803	22,760
Querétaro	1.632	23,300
San Luis Potosí	2.041	23,400
Sonora	2.339	24,000
Mexico State	2.042	24,400
Aguascalientes	1.779	25,000
Michoacán	2.596	25,600
Mexico City	2.550	26,000
Oaxaca	2.272	26,200
Tamaulipas	2.212	26,600
Durango	2.076	28,000
Tabasco	2.250	28,000
Guanajuato	2.443	30,800
Chihuahua	2.731	31,000
Zacatecas	2.828	37,300
Sinaloa	3.274	37,350
Baja California	3.010	37,900
Morelos	2.997	43,300
Baja California Sur	3.195	50,200
Guerrero	3.927	53,600
Colima	3.734	66,500

Source: INEGI

The national per capita impact of violence reached 25,130 pesos in 2016. The impact to every citizen in Mexico is larger than the average monthly salary.

Table 5.3 shows the MPI score and the per capita economic impact of violence by state. As expected, where peacefulness is low, the economic impact of violence is more severe. However, given the high cost of homicide, some states perform even more poorly in terms of the per capita economic impact of violence than their MPI rank.

Colima, which ranks 31st out of 32 in the 2017 MPI, has the highest per capita economic impact of violence, at 66,500 pesos per person. Colima had the highest homicide rate in Mexico in 2016 and has a relatively small population, resulting in a more significant economic burden per state resident.

State-level MPI scores and the per capita impact of violence have a strong correlation (r=0.90). This indicates that the least peaceful states face a higher economic burden from violence, which would be expected. Increased costs as a result of violence take resources away from economic and social development in states with higher levels of violence. This perpetuates a vicious cycle, whereby resources for long-term investments in Positive Peace are lacking, resulting in higher levels of violence, which further reduces the resources available to build Positive Peace.

> ❝ The economic impact per person is four times higher in Guerrero, the least peaceful state (53,600 pesos per person) compared to Yucatan, the most peaceful state (14,600 pesos per person).

Figure 5.2 highlights the correlation between MPI scores and the economic impact of violence per person in pesos. It shows there are large differences in the per capita economic impact of violence between the most and least peaceful states. The economic impact per person is four times higher in Guerrero, the least peaceful state (53,600 pesos per person) compared to Yucatan, the most peaceful state (14,600 pesos per person).

FIGURE 5.2 PER CAPITA ECONOMIC IMPACT OF VIOLENCE, 2016

States with lower levels of peace face a higher economic impact of violence per resident.
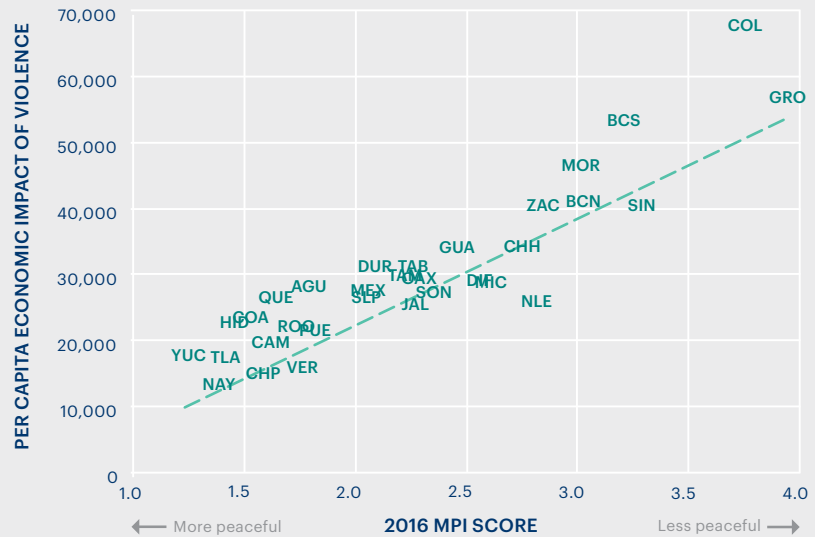
TREND IN THE ECONOMIC IMPACT OF VIOLENCE
2003-2016

FIGURE 5.3 TREND IN THE ECONOMIC IMPACT OF VIOLENCE 2003–2016, CONSTANT 2016 PESOS, TRILLIONS

The economic impact of violence increased three percent from 2015 to 2016.
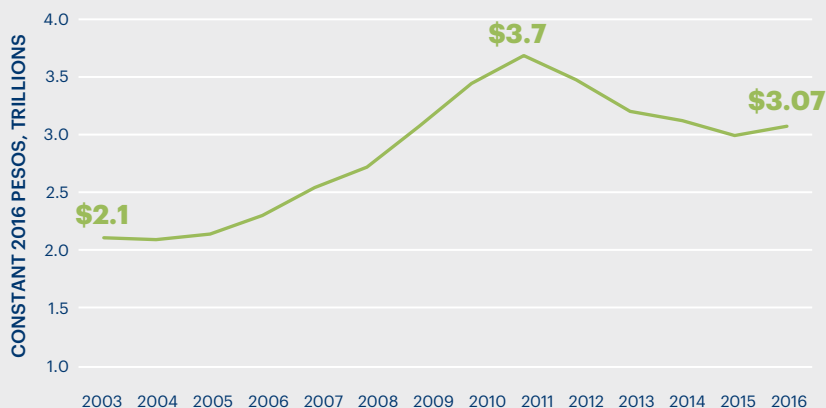
The rising economic impact of violence highlights the deteriorating trend in peace in 2016, resulting in 78.5 billion pesos of additional losses. This increase can mainly be attributed to a rise in the homicide rate. Figure 5.3 shows the trend from 2003, the beginning of the study period.

❝ The improvements in peacefulness between the end of 2011 and 2015 generated an approximate 687 billion peso peace dividend.

The improvements in peacefulness between the end of 2011 and 2015 generated an approximate 687 billion peso peace dividend. This is a significant saving; the gains made since the height of the drug war as well as the recent fall in violent crime related costs have minimized the economic losses from Mexico's deterioration in peace in 2016.

TABLE 5.4 ECONOMIC IMPACT OF VIOLENCE 2003-2016 (CONSTANT 2016 PESOS, BILLIONS)*

INDICATOR	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Homicide	208.0	202.5	227.3	264.1	298.3	384.8	666.5	963.3	1,056.9	946.9	793.0	723.3	778.3	987.7
Violent crime	1,578.9	1,560.7	1,581.4	1,684.6	1,830.5	1,896.5	1,927.0	1,969.6	2,053.8	1,933.5	1,825.5	1,756.7	1,573.8	1,448.7
Organized crime	5.0	5.7	6.3	8.1	7.6	13.0	17.1	17.2	15.8	23.0	25.3	20.2	17.0	17.3
Fear	58.6	59.3	62.0	64.2	66.9	70.2	72.7	76.7	91.4	89.3	94.4	100.4	98.1	97.8
Incarceration	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.5	0.4	1.9	2.2	1.7
Firearms	45.2	45.8	46.3	46.9	47.5	48.2	48.9	49.5	36.4	35.4	55.0	75.0	56.2	53.2
Private security	20.1	20.3	20.5	20.7	20.8	21.0	21.2	22.1	22.4	23.0	23.3	23.5	24.5	24.7
Military spending	77.2	75.0	76.1	79.4	96.5	100.5	114.3	128.5	150.5	139.6	134.4	134.6	150.4	133.4
Domestic security spending	36.0	35.1	35.6	42.5	54.5	62.1	81.9	85.2	102.5	103.5	90.4	101.0	103.6	94.8
Justice system spending	83.8	86.9	87.4	96.8	111.6	120.3	127.0	133.2	150.6	172.4	163.6	183.0	190.1	213.4
TOTAL	**2,113.8**	**2,092.3**	**2,143.9**	**2,308.4**	**2,535.5**	**2,717.7**	**3,077.8**	**3,446.7**	**3,681.8**	**3,468.0**	**3,205.4**	**3,119.6**	**2,994.2**	**3,072.7**

*This spending includes the multiplier

Source: IEP

GOVERNMENT EXPENDITURE ON VIOLENCE CONTAINMENT

Direct government expenditure on containing violence, including spending on incarceration, domestic security spending, the military and the justice system accounted for nearly 14 percent of the economic impact of violence in 2016, at nearly 443 billion pesos.

It is important to analyze direct government violence containment spending because this spending must be raised through government tax revenues and potentially displaces spending in other areas that may help to build Positive Peace in the long term.

From 2003 to 2016, federal government expenditure on all violence containment increased by 120 percent, representing an added burden to Mexico's budget. However, given the fact that direct losses from homicide and violent crime are so significant in Mexico and the rates of violence have been so high, these investments were needed. It was only after 2011 that the increase in total spending slowed and in 2016 there was a year-on-year decline of 0.6 percent. Table 5.5 shows government spending on violence containment from 2003 to 2016.

Figure 5.4 visualizes the trend in each component of government violence containment expenditure from 2003 to 2016. From 2007 to 2015, spending on the military increased by 55 percent, in constant prices. Former president Felipe Calderon significantly amplified the military's role in internal security in 2007. Spending on domestic security functions including federal police also doubled over the same period. However, after 2011, when violence reached its peak, both spending categories levelled off and even registered a very slight decline in 2016. The largest decline in government spending in 2016 was in military expenditure, which fell by 11 percent. Domestic security expenditure also fell by nine percent in the last year of the study.

> " From 2007 to 2005, spending on the military increased by 55%, but it registered a slight decline in 2016.

The most notable trend is the very large increase in justice system spending, which reflects the increased focus of the federal government on justice reform. This increased investment in the justice system coincides with nationwide justice reforms and a recognition of the need to refine the security strategy. In 2011, the federal government spent 60 cents on justice for every peso spent on the military and federal police. Since 2011, that ratio has improved by 57 percent to 94 cents spent on justice per peso spent on security.

TABLE 5.5
GOVERNMENT SPENDING ON VIOLENCE CONTAINMENT, 2003-2016 (CONSTANT 2016 PESOS, BILLION)

INDICATOR	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Domesitic security	18	18	18	21	27	31	41	43	51	52	45	51	52	47
Justice	42	43	44	48	56	60	64	67	75	86	82	92	95	107
Military Expenditure	39	37	38	40	48	50	57	64	75	70	67	67	75	67
TOTAL	**99**	**98**	**100**	**109**	**131**	**141**	**162**	**173**	**202**	**208**	**194**	**209**	**222**	**221**

Source: IEP

FIGURE 5.4 GOVERNMENT EXPENDITURE ON VIOLENCE CONTAINMENT, 2003-2016

Federal spending on violence containment has more than doubled since 2003, driven by a rise in justice system expenditures. The increase in investment in justice coincides with nationwide reforms and a shift in the security strategy.
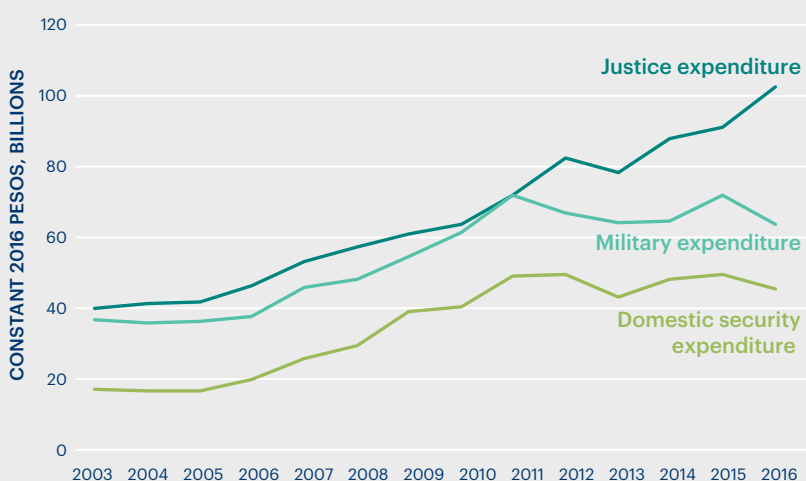
Source: IEP

METHODOLOGY AT A GLANCE

This analysis presents conservative estimates for the economic impact of violence in Mexico.

The estimation only includes elements of violence for which reliable data could be obtained. This page gives a brief outline of the methodology used, with the list of included variables and some variables for which data is not available, presented below.

IEP's estimate of the economic impact of violence includes three components:

1. **Direct costs** are the costs of crime or violence to the victim, the perpetrator and the government. These include direct expenditures such as the cost of policing or incarceration.

2. **Indirect costs** are costs that accrue after the fact. These include physical and psychological trauma, medical costs and the present value of future costs associated with the violent incident, such as lost future income.

3. **The multiplier effect** represents the flow-on effects of direct costs, such as the additional economic benefits that would come from investments in business development or education instead of containing or dealing with the consequences of violence. The concept of the peace multiplier is related to the economic benefits that would have been generated if all the direct costs were redirected into more productive uses of capital. Refer to box 5.2 for more detail on the peace multiplier.

> **Violence containment** refers to the direct and indirect costs associated with preventing or dealing with the consequences of violence.

> **The economic impact of violence** refers to the total cost of **violence containment plus the peace multiplier.**

This study uses a cost accounting methodology to measure the economic impact of violence.

Unit costs are applied to the MPI estimates for the number of crimes committed. These crimes include homicide, assault, rape, robbery, extortion, and kidnapping. A unit cost is also applied to the estimated level of fear of insecurity. The unit costs estimate the direct (tangible) and indirect (intangible) costs of each crime. Direct unit costs include losses to the victim and perpetrator, and exclude costs incurred by law enforcement and health care systems, as these are captured elsewhere in the model. Indirect unit costs include the physical and psychological trauma, and the present value of future costs associated with the violent incident, such as lost life-time wages for homicide victims.

The cost estimates provided in this report are in constant 2016 pesos, which facilitates the comparison of the estimates over time. The estimation only includes elements of violence where reliable data could be obtained. As such, the estimate can be considered conservative. The items listed below are included in the cost of violence methodology:

1. **Homicide**

2. **Violent crime,** which includes assault, rape and robbery

3. **Organized crime,** which includes extortion and kidnapping

4. **Indirect costs of incarceration**

5. **Firearms**

6. **Fear of insecurity**

7. **Private security expenditures**

8. **Federal spending on violent containment,** which includes the military, domestic security and the justice system.

The analysis incorporates federal-level public spending on the military because Mexico's military has been extensively involved in fighting organized criminal groups and is deployed to pursue domestic security goals.[2]

Some of the items not counted in the economic impact of violence include:

> **state-level public spending on security**

> **the cost of domestic violence**

> **the cost of violence to businesses**

> **insurance premiums related to violence**

> **household out-of-pocket spending on safety and security**

> **the cost of drug-trade related crimes such as the production, possession, transport and supply of drugs.**

Although data is available for some of these categories, there is either not full availability across all states, or for all years of analysis from 2003 to 2016.

For more details on the methodology for estimating the economic impact of violence, please refer to Section 5 Methodology

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BOX 5.2 THE MULTIPLIER EFFECT

The multiplier effect is a commonly used economic concept that describes the extent to which additional expenditure has flow-on impacts on the wider economy. Every time there is an injection of new income into the economy this will have a flow-on effect through the economy, leading to more spending, which will, in turn, create employment, further income and additional spending. This mutually reinforcing economic cycle is the reason behind the 'multiplier effect' and why a dollar of expenditure can create more than a dollar of economic activity.

Although the exact magnitude of this effect is difficult to measure, it is likely to be particularly high in the case of expenditure related to containing violence. For instance, if a community were to become more peaceful, individuals would spend less time and resources protecting themselves against violence. Because of this decrease in violence, there is likely to be substantial flow-on effects for the wider economy as both private and public spending is diverted towards more productive areas, such as health, business investment, education and infrastructure.

When a homicide is avoided, for example, the direct costs, such as the money spent on medical treatment and a funeral, could be spent elsewhere. The economy also loses the lifetime income of the victim. The economic

benefits from greater peace can therefore be significant. This was also noted by Brauer and Tepper-Marlin (2009) who argued that violence or the fear of violence may result in some economic activities not occurring at all. More generally there is strong evidence to suggest that violence and the fear of violence can fundamentally alter the incentives faced by business. For instance, analysis of 730 business ventures in Colombia from 1997 to 2001 found that with higher levels of violence, new ventures were less likely to survive and profit. Consequently, with greater levels of violence it is likely that we might expect lower levels of employment and economic productivity over the long-term, as the incentives faced discourage new employment creation and longer-term investment.[3]

This study uses a multiplier of two, signifying that for every peso saved on violence containment there will be an additional peso of economic activity. This is a relatively conservative multiplier and broadly in line with similar studies.[4]

THE IMPACT OF CRIME & VIOLENCE ON MEXICAN BUSINESSES

The cost of violence to business is not a separate category in the total economic impact of violence, primarily to avoid double counting issues. The crime statistics used to estimate the economic impact of violence include the crimes that affect businesses. This analysis is based on the National Survey of Business Victimization (ENVE) undertaken in 2012, 2014 and 2016.

> ❯ According to the last three iterations of the national business victimization survey, businesses identified insecurity and crime as their most pressing concern, well above other issues such as taxation or corruption.
>
> ❯ In 2015, 36 percent of businesses were the victim of at least one crime. Mexico's ENVE estimates that the total burden of crime on business was 139 billion pesos, or one percent of Mexico's GDP, in 2015.
>
> ❯ In 2015, spending measures to protect against crime were greater than losses that occurred as a result of crime.

In 2015, 36 percent of businesses were the victim of at least one crime. Mexico's ENVE estimates that the total burden of crime on business was 139 billion pesos, or one percent of Mexico's GDP, in 2015.[7] Almost half of the cost is from the result of crime such as robberies, theft, extortion and kidnapping, whereas more than half of the cost arises because businesses need to take protective measures, including purchasing locks, changing doors and windows, and installing alarms and surveillance systems. It should be noted these are only the direct costs. The data does not take into account many other factors such as the lost opportunity costs from business investments that did not happen because of violence, or the cost of the time business employees spent dealing with violence.

Businesses identified insecurity and crime as their most pressing concern over the course of the survey, well above the second major concern of low purchasing power within the population. These two concerns exceeded concern of lack of government support and the rate of taxes.

While corruption and poor enforcement of the law is a major concern to the broader population, approximately fewer than 20 percent of businesses identified those as a primary concern. The very high rate of concern over insecurity and crime reflects the large cost of violence to many Mexican businesses and underscores how important lowering violence is to achieving better economic and business outcomes in the country.

FIGURE 5.5
COST OF VIOLENCE TO BUSINESS, 2015

In 2015, spending measures to protect against crime were greater than losses that occurred as a result of crime.

Losses as a result of crime
47%

Spending on measures to protect against crime
53%
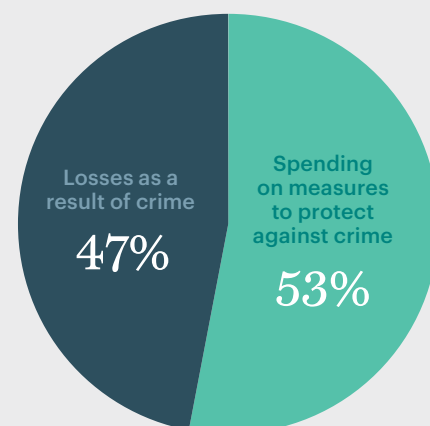
Source: ENVIPE

Furthermore, when looking at the size of businesses affected by crime and violence, large businesses are more likely to face crime than smaller businesses. For every 10,000 large and medium sized businesses in Mexico, roughly 6,000 of them were the victim of a crime in 2015. The three most common crimes against businesses are theft, extortion and fraud, with the commercial sector facing high rates of robbery and the service and industry sectors reporting high rates of extortion.

FIGURE 5.6 PRIMARY CONCERNS OF BUSINESSES (2012, 2014, 2016)

Insecurity and crime has been the primary concern of businesses since 2012.
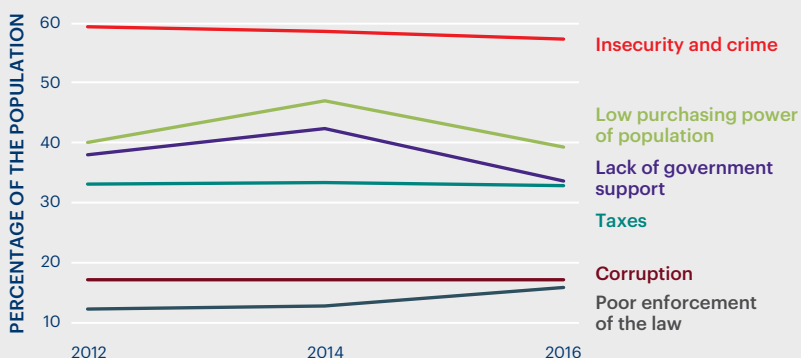
Source: ENVE

FIGURE 5.7 RATE OF VICTIMIZATION BY BUSINESS SIZE, 2015

Large and medium sized businesses report the highest rates of victimization, whereas small and micro sized businesses report much lower prevalence of crime.
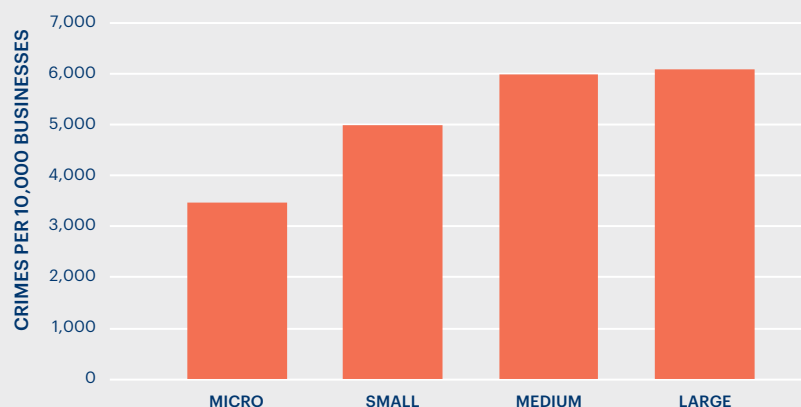
Source: ENVE

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6   Encuesta Nacional de Victimización de Empresas (ENVE), 2016, http://www.beta.inegi.org.mx/proyectos/encestablecimientos/especiales/enve/2016/default.html (Accessed 27 January 2017)

EXPERT CONTRIBUTIONS

LA AGENDA CIUDADANA EN EL CENTRO DE LA GESTIÓN PÚBLICA

PUTTING CITIZENS AT THE CENTER OF POLICY

Luis Avila, Coordinador General, Como Vamos Nuevo León

CÓMO VAMOS, NUEVO LEÓN

El 3 de mayo de 2012, al inicio del proceso electoral de Nuevo León, se presentó por primera vez la plataforma ciudadana Alcalde, Cómo Vamos. Conformada por organizaciones civiles, propuso a las y los candidatos las alcaldías del Área Metropolitana de Monterrey (9 municipios: Monterrey, San Pedro, Juárez, García, Santa Catarina, San Nicolás, Escobedo, Apodaca y Guadalupe) el compromiso de implementar 10 acciones en caso de llegar a ganar sus respectivas elecciones. A partir de ese acuerdo, Alcalde, Cómo Vamos diseñó un sistema de evaluación para dar seguimiento a cada una de las acciones.

Durante los 3 años de gestión de las administraciones municipales, los alcaldes participaron en 16 diálogos convocados por la plataforma para rendir cuenta sobre sus avances (adicionalmente, sus equipos participaron en un número similar de talleres y diálogos sobre temas relacionados con las 10 acciones) y se lograron avances significativos en varios de los temas. En ese periodo, la preocupación central tanto de sociedad como gobierno fue la seguridad. 3 de las acciones impulsaban el fortalecimiento de la policía municipal mediante la depuración, la dignificación salarial y la contratación de elementos en las corporaciones locales. En los 3 rubros, al Área Metropolitana avanzó por encima del promedio nacional en buena medida gracias al seguimiento de la sociedad civil.

Para el periodo 2015 – 2018, la plataforma amplió su alcance. Respaldada por cerca de 90 organizaciones incluyendo a las principales universidades del estado, en el proceso electoral de 2015 sumó a los y las candidatas al gobierno estatal mediante el instrumento de evaluación Gober, Cómo Vamos. La suma de ambos instrumentos (Alcalde y Gober) dio pie a la institucionalización de la iniciativa mediante el nombre Cómo Vamos, Nuevo León.

¿POR QUÉ UNA AGENDA DESDE LA SOCIEDAD CIVIL?

La sociedad civil ha sido promotora de grandes transformaciones en México, particularmente en los últimos años. Ha logrado construir agendas de cambio a nivel local, exhibir actos de corrupción, detener decisiones cuestionables realizadas por los gobiernos y convertirse en una referencia obligada al discutir temas de trascendencia nacional. La importancia de la participación ciudadana lejos de ser discutida, se ha convertido en el centro del discurso tanto de políticos como de organizaciones civiles.

La *irrupción* de la sociedad civil en la agenda pública se ha constituido como una respuesta necesaria para resolver los retos colectivos y como un paso indispensable en proceso de democratización que vive el país. Para poner en perspectiva lo que esto representa, es importante destacar al menos cuatro aspectos:

> **Visión:** Una visión integral sobre lo público, en particular sobre las transformaciones difíciles pero necesarias que requiere una comunidad, puede ser impulsada de mejor forma desde la sociedad civil. En la función pública, trazar una visión para la ciudad (estado, o país) implica enfrentar restricciones políticas, de operación o incluso legales (de atribuciones).

> **Continuidad:** Los gobiernos impulsarán una agenda pertinente para su periodo de gobierno, difícilmente habrá continuidad en proyectos y políticas si éstas no son impulsadas o vigiladas desde la sociedad civil.

> **Evaluación**: La sociedad civil cuenta con incentivos para hacer un seguimiento puntual sobre los temas públicos que el propio gobierno, ofreciendo diagnósticos más confiables y certeros sobre el estado en el que se encuentran temas públicos.

> **Retos colectivos:** Construir y dar seguimiento a una agenda es también un ejercicio de corresponsabilidad sobre los temas de interés común: es una forma de ver los 'problemas' de la comunidad como retos colectivos (no sólo como tarea exclusiva del gobierno).

Cómo Vamos, Nuevo León ha contribuido con ese cambio en la relación gobierno – sociedad civil a partir de tres premisas centrales. La primera de ellas es **impulsar una agenda de forma proactiva**.

A diferencia de observatorios que monitorean el cumplimiento de indicadores, promesas de campaña o requisitos legales, la agenda es definida e impulsada por ciudadanos y organizaciones sociales aglutinados en la plataforma Cómo Vamos. Si bien dicha agenda no representa todo el quehacer de la gestión pública, sí manda una señal clara a los candidatos y gobiernos sobre el interés ciudadano.

En segundo lugar, es **un ejercicio colaborativo**. El diseño de esa agenda requiere de la participación de un grupo amplio y diverso de actores cívicos. La "eficiencia" de la elaboración es sacrificada en beneficio de la efectividad que tiene una agenda compartida por amplios sectores. En dicha construcción colaborativa, también se incluye a los actores públicos. En 2015, cuando Cómo Vamos presentó la agenda sobre la cual buscaría comprometer a candidatos y candidatas, ofreció un espacio de retroalimentación sobre dicha agenda con el fin de enriquecerla. En ese intercambio participaron algunos precandidatos y líderes de partidos políticos. De igual forma, en la implementación de la herramienta, los gobiernos aportan en la mejora continua con base en observaciones, dificultades y sugerencias de mejora.

En tercer lugar, la plataforma permite **construir una relación de colaboración** entre diversos actores sobre los temas públicos. Para dar seguimiento a los compromisos, existe una canal de comunicación formal y estrecho (un canal inédito) entre sociedad civil y gobierno. De igual forma, la articulación entre

tantas y tan diversas organizaciones de la sociedad civil implica establecer vínculos, espacios y diálogos que a la vez fortalecen las capacidades de organización en la comunidad de Nuevo León.

PRINCIPIOS DE UNA VINCULACIÓN EFECTIVA CIUDADANOS — GOBIERNO

Alcalde, Cómo Vamos mantiene un sistema de interlocución formal con los municipios sujetos a la evaluación. El alcalde nombra a una persona cercana y con una visión general de toda la administración ("enlace general") que será el puente entre el alcalde, su equipo y la plataforma. Para el seguimiento de cada compromiso, también hay enlaces temáticos, que son el vínculo directo con las dependencias responsables. El proceso funciona en la medida que el alcalde, periódicamente, rinde cuentas de forma pública sobre los resultados de la evaluación. La persona que responde a las evaluaciones frente al alcalde, es el enlace general. Este modelo, que en 2017 vive su quinto año, ha permitido establecer una vinculación efectiva entre sociedad y gobierno como nunca antes había existido en Nuevo León. El mecanismo ha permitido el desarrollo de capacidades del sector social en tres aspectos:

1) Se cuenta con un conocimiento sobre el sector público que no se tenía; tanto de sus dinámicas, de los incentivos e incluso de las dificultades que enfrentan los gobiernos. De acuerdo con la Encuesta de Cultura Ciudadana (estudio elaborado en varias ciudades de América Latina, incluyendo Monterrey), los ciudadanos que participan en ejercicios de rendición de cuentas como el aquí descrito, aumentan la confianza en sus autoridades locales.

2) Las relaciones con gobierno se han profesionalizado. Ambas partes dan seguimiento a acuerdos, mantiene espacios de interacción formal, con mayor alcance (tanto de sociedad civil con funcionarios de diversos ámbitos como de éstos con un mayor número de organizaciones civiles) y con mayor impacto del que tendrían si se siguieran caminos separados.

3) La comprensión de los temas públicos ha aumentado, tanto para autoridades como para sociedad civil. La plataforma ha facilitado talleres con especialistas, intercambio de buenas prácticas y diagnósticos a partir de evaluaciones que contribuyen al mejor entendimiento de los temas en la agenda. De igual forma, la experiencia y el "día a día" de los funcionarios públicos permite que este conocimiento, en la comunidad, se amplíe y profundice.

Para lograr una vinculación efectiva, ha sido importante implementar los siguientes hitos:

1) **Firma de Compromiso:**
   Alcalde, Cómo Vamos ha comprometido – en 2 procesos electorales, en 9 municipios – alrededor de 130 candidatos. Esta dinámica, en plena campaña, resulta en un escenario propicio para que los futuros gobernantes se comprometan y se establezcan las bases de un pacto social amplio entre el sector público y el sector social.

2) **Diálogo permanente:**
   Los municipios tienen voz en el instrumento, en particular en la implementación y factibilidad de los indicadores. En la primea edición, después del primer año de trabajo, se hizo una revisión general de la evaluación considerando la retroalimentación de los municipios. Se llegaron a modificar indicadores y ajustar algunas metas. Por ejemplo, la meta original de reforestación (plantar árboles hasta cumplir con el estándar internacional de 1 árbol por cada 3 habitantes) se ajustó a una meta mucho más factible a partir de una métrica establecido por municipio. La discusión sobre indicadores es solo un ejemplo de cómo el diálogo entre autoridades y sociedad civil se enriquece cuando es constante y permanente. Aún en los momentos de mayor tensión, no debe concluirse.

3) **Espacios de colaboración:**
   Además de los diálogos para rendir cuentas, es importante encontrar espacios de colaboración para impulsar los temas públicos que escapan a la evaluación o que ayudan a fortalecerla. Un ejemplo citado previamente son los talleres y el intercambio de buenas prácticas entre municipios. Sin la existencia de un tercero (en este caso, la plataforma), es excepcional que los gobiernos compartan aprendizajes entre ellos.

PRINCIPALES APRENDIZAJES

Después de 5 años de trabajo (1 en campaña, 4 con alcaldes y 1 con el gobierno estatal), aún queda mucho por aprender y mejorar de una iniciativa de las características de Cómo Vamos, Nuevo León. Este es un ejercicio que se construye a lo largo del tiempo, como todo proceso democrático, las lecciones son vitales para conducir el destino del mecanismo. Sin embargo, se pueden destacar al menos tres lecciones importantes que son de utilidad para quienes inician procesos similares desde la sociedad civil.

> **La agenda es el motor y está en movimiento:** Proponer los temas desde la comunidad es el primer paso para iniciar una relación con las autoridades. En la medida en que la alianza social sea amplia, mayor será el impacto en las decisiones públicas. De igual forma, dicha agenda evoluciona a lo largo del tiempo y tanto comunidad y gobierno deben enfrentar retos dinámicos de forma colaborativa.

> **El alcance se define según las capacidades locales:** Es importante dar pasos firmes y pequeños sobre los cuales se pueda construir. En Nuevo León, fue fundamental trabajar primero en iniciativas municipales antes de instrumentar el seguimiento a nivel estatal, Cada ámbito de gobierno es distinto pero la experiencia interna contribuye a lograr los cambios necesarios.

> **La madurez cívica aumenta:** La participación de los actores involucrados se redefine en función de los aprendizajes y la consolidación de organizaciones, dinámicas internas y generación de capacidades. Es probable que el trabajo inicial –realizado por una organización líder- se complemente de mejor forma de acuerdo con la propia experiencia de los participantes se agudice. El diálogo es más maduro con autoridades: éstas reconocen el valor de la participación cívica y las organizaciones reconocen las dificultades de resolver temas públicos complejos.

PANORAMA ACTUAL DE LOS MINISTERIOS PÚBLICOS DENTRO DEL SISTEMA DE JUSTICIA PENAL EN MÉXICO (CASO CIUDAD DE MÉXICO Y ESTADO DE MÉXICO)

OVERVIEW OF PUBLIC MINISTRIES WITHIN THE CRIMINAL JUSTICE SYSTEM IN MEXICO (CASE STUDY OF MEXICO CITY AND MEXICO STATE)

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INTRODUCCIÓN

El Sistema de Justicia Penal Acusatorio que actualmente opera en México, implementado en todas las entidades federativas a partir de junio de 2016, requiere de diagnósticos oportunos en el desempeño de las judicaturas, las procuradurías y defensorías públicas.

La tarea de cada uno de estos sujetos es fundamental para el mejoramiento de la impartición de justicia que, como consecuencia, traerá una disminución de la impunidad, entendida como aquella anomalía derivada en razón de que "[...] los delitos cometidos no son sancionados por una u otra causa."[1]

En este sentido, es importante decir que en el nuevo modelo acusatorio predominan los argumentos y contraargumento de las partes (Ministerio Público, defensa del imputado, y el Asesor Jurídico de la víctima), así como las pruebas que ofrecen y desahogan adecuadamente en las audiencias para que un Juez imparcial las valores y emita su fallo. Así, el Juez deja de ser un persecutor de la verdad (como sucedía en el sistema inquisitivo) para que sean las partes del procedimiento quienes persigan por medio de la contradicción de argumentos y medios de prueba[2], la oralidad, y la persuasión, la construcción de la verdad.

De ahí que el objetivo de este texto sea resaltar la importancia de las actuaciones ministeriales para lograr una adecuada impartición de justicia en nuestro país, es decir apegada al marco jurídico vigente. Por lo que la evaluación de sus actuaciones es toral para identificar sus fortalezas y debilidades e implementar estrategias para solucionar problemas.

LA FUNCIÓN DEL MINISTERIO PÚBLICO DENTRO DEL SISTEMA DE JUSTICIA PENAL

Uno de los problemas que enfrenta la impartición de justicia en México es originada por la incapacidad de los Ministerios Públicos en dos grandes rubros: la investigación de los delitos y su desempeño en las audiencias penales.

Estas debilidades tienen repercusiones para la determinación de la verdad[3] que realiza el Juez ya que sólo él puede resolver con base en lo que las partes ofrecen en las audiencias. En este sentido, la finalidad del Ministerio Público es esclarecer los hechos con apego a la veracidad, ya que todas sus actuaciones deben regirse por los principios de legalidad, objetividad, eficiencia, profesionalismo, honradez, lealtad y respeto a los derechos humanos reconocidos en la Constitución (artículo 214, CNPP[4]).

Entre las atribuciones conferidas al Ministerio Público se encuentra la facultad exclusiva de iniciar la investigación, por lo que de sus actuaciones dependerá en gran medida la impartición de justicia, ya que la carga de la prueba[5] recae en la parte acusadora. Es decir, de la investigación que conduzca se desprenderá la existencia de un hecho delictivo y la probable participación de la persona investigada en el mismo.

En relación a esto el CNPP instruye al Ministerio Público a iniciar una investigación cuando tenga conocimiento de la existencia de un hecho que pueda ser constitutivo de delito (artículo 212), para que reúna indicios[6] para su esclarecimiento y, en su caso, los datos de prueba[7] para que permitan formular la acusación del imputado.

En esto consiste "el esclarecimiento de los hechos" y su relación con la protección del inocente, procurar que el culpable no quede impune y que se repare el daño. Esto contribuye a asegurar el acceso a la justicia. Conocer la verdad es además un derecho de las víctimas y de la sociedad en general (artículo 18 LGV[8]).

Ahora bien, para el buen desempeño en las audiencias penales, los medios de prueba que prepare el Ministerio Público deben ser accesibles para que el Juez conozca los hechos, y deben ser ofrecidos en conexión y como sustento de la argumentación que desea probar para vincular de forma argumentativa los hechos, el tipo penal[9] y los medios de prueba.

Para lograr mayor eficiencia en el descubrimiento de la verdad, el Ministerio Público debe coordinar a los peritos y policías y a otras autoridades; además de considerar las fortalezas y las debilidades de las hipótesis iniciales,[10] para desechar aquellas que no aporten las pretensiones que persigue la teoría del caso[11] y reforzar aquellas que si lo hagan.

Si la investigación es deficiente y los medios de prueba ofrecidos insuficientes, la determinación de la verdad no se logrará y afectará a la víctima del delito y a la sociedad en general.

RESULTADOS DE LA EVALUACIÓN

Desde 2015 Mexico Unido Contra la Delincuencia (MUCD) monitorea las Audiencias de Salas de Oralidad Penal, para evaluar si las actuaciones de los sujetos procesales se apegan a los principios y objetivos del Sistema de Justicia Penal Acusatorio.[12] Actualmente monitoreamos audiencias en la Ciudad de México y en el Estado de México, en función de cuatro ejes de evaluación: **1)** Actuaciones judiciales, **2)** Actuaciones del Ministerio Público de Judicialización, **3)** Actuaciones del Defensor

público y **4)** Actuaciones del Asesor jurídico público. Dicha evaluación se realiza bajo tres vertientes:

1) Cumplimiento normativo;

2) Calidad de desempeño

3) Principios y objetivos del CNPP

Con base en la información recabada se detectan las irregularidades más frecuentes en las actuaciones de los actores antes mencionados, y se elabora un diagnóstico que sirve para proponer soluciones. Sobre las actuaciones del Ministerio Público, MUCD detectó las siguientes áreas de oportunidad:

> **Investigación deficiente, problemas para acreditar los casos de flagrancia y detenciones ilegales.**

MUCD encontró que el 91.5% de las audiencias iniciales son sobre delitos en flagrancia,[13] lo que significa que sólo un 8.5% de delitos puestos ante un Juez, es decir, judicializaos, son resultado de una investigación derivada de una denuncia. Esto indica que el Ministerio Público no cumple con las obligaciones del artículo 131 del CNPP, sobre iniciar una investigación cuando existan elementos para proceder. Además tiene fallas para acreditar los supuestos de flagrancia establecidos en el artículo 146 del CNPP (detención de la persona al momento de cometer el delito, que sea perseguida ininterrumpidamente inmediatamente después de cometerlo, o que sea señalada por la víctima o algún testigo presencial).

Esta situación se agrava si se consideran los datos de INEGI[14] sobre los delitos denunciados en el 2015, que señalan que el Ministerio Público inició una carpeta de investigación sólo en el 59.6% de los casos donde se presentó una denuncia.[15]

Además, MUCD encontró que en el 3% de las detenciones que el Ministerio Público presentó ante el Juez de Control[16], este determinó situaciones de ilegalidad por diversas razones, por lo que se liberó al detenido. Esto conlleva dos tipos de perjuicio: **a)** violaciones a los derechos humanos del detenido y, **b)** no se salvaguarda la seguridad de la víctima.

> **Capacidad insuficiente para relacionar los medios de prueba**

Los medios de prueba que el Ministerio Público prepare en la investigación, deben ser desahogados y vinculados adecuadamente en la audiencia con

la finalidad de que el Juez conozca los hechos, ya que "[...] la finalidad principal de la actividad probatoria es alcanzar el conocimiento de la verdad acerca de los hechos ocurridos y cuya descripción se convertirá en premisa del razonamiento decisorio."[17]

Al respecto, MUCD ha encontrado que en muchas ocasiones el Ministerio Público no cuenta con las técnicas suficientes que auxilian a las proposiciones probatorias[18] y las argumentaciones, que señalan que el hecho acaecido encuadra con el tipo penal señalado por la ley. Esto ocurre en parte por desconocimiento de la carpeta de investigación, por la incorrecta fundamentación legal y por una argumentación inadecuada.

Además, las deficiencias argumentativas de los Ministerio Públicos de investigación, implica que si bien aportan datos aislados que confirman la existencia de un delito, no acreditan la participación del imputado en el mismo.

Así, en 24% de las audiencias iniciales monitoreadas por MUCD, el Ministerio Público mostró debilidades para argumentar formal y/o materialmente, para justificar sus pretensiones y relacionarlas adecuadamente con los hechos y pruebas de forma fundada y motivada.

Tan solo en la Ciudad de México durante el mes de septiembre de 2016, en el 20% de las audiencias se absolvió al inculpado por pruebas insuficientes que no acreditaban el delito cometido por el inculpado.

Además, se identificó que en el 20% de los casos en la Ciudad de México y en el 24% en el Estado de México, el Ministerio Público tuvo dificultades en el conocimiento y dominio de las fases de la audiencia, como solicitar medidas cautelares sin antes vincular a proceso. Además sigue solicitando al Juez medidas cautelares excesivas sin justificar su necesidad ni aportar datos suficientes para su pretensión, como solicitar prisión preventiva cuando es procedente otra medida cautelar menos lesiva.

CONCLUSIONES

La sociedad debe exigirles a las Procuradurías Generales de Justicia y Fiscalías del país, en particular a las de la Ciudad de México y del Estado de México, que mejoren la labor desempeñada por el Ministerio Público, ya que su función es de vital importancia para la impartición de justicia y para el pleno respeto de los derechos de las víctimas.

En este sentido, la transparencia que permite la oralidad de las audiencias, visibiliza las malas prácticas en las que incurren los Ministerios Públicos, que repercuten negativamente en el acceso a la justicia y en el abatimiento de los altos índices de impunidad.

De ahí la relevancia de programas de monitoreo como el de MUCD, cuyo objetivo es evaluar las actuaciones de las autoridades operadoras del Sistema de Justicia, para identificar áreas de oportunidad y, a partir de ello, elaborar exigencias y propuestas de mejora que garanticen el acceso a la justicia a todos los ciudadanos.

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1 CARBONELL Miguel, Corrupción judicial e impunidad: el caso México, en MENDEZ SILVA Ricardo, Lo que todos sabemos de corrupción y algo más. Mexico, 2010.

2 Son toda fuente de información que permite reconstruir los hechos respetando las formalidades del proceso.

3 Declaración de que los hechos ocurrieron, resultado de un proceso probatorio.

4 Código Nacional de Procedimiento Penales.

5 Es la obligación procesal de probar lo que se afirma.

6 Fenómeno que permite conocer por medio de otro su existencia.

7 Información que considera razonablemente la existencia de un hecho delictivo y la probable participación aun no desahogada ante un Juez.

8 Ley General de Victimas.

9 Descripción de un acto u omisión establecido como delito en una ley penal

10 En toda investigación se comienza con una suposición de lo que ocurrió.

11 Es la idea central de la reconstrucción de los hechos basados en los medios probatorios y la norma penal.

12 Principios: Publicidad, Contradicción, Concentración, Continuidad e Inmediación.

Objetivos: Acceso a la justicia, Justicia eficiente, pronta y expedita, Calidad del Proceso, Certeza jurídica y garantía de procedimientos apegados al debido proceso, Respeto a los Derechos Humanos de las partes, Justicia Alternativa, Justicia Restaurativa, Transparencia en el proceso, Reducir la impunidad.

13 Delito que se conoce de su ejecución en el momento de cometerse.

14 Instituto Nacional de Estadística y Geografía.

15 Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública. INEGI, 2016.

16 Es el juez que conoce del asunto desde la investigación hasta antes del auto de apertura a juicio.

17 FERRER Jordi, Prueba y Verdad. España, 2005.

18 Oración que relaciona las pruebas con la probable participación y el hecho delictivo.

CORRUPCIÓN: EL ALIADO DE LA VIOLENCIA EN MÉXICO

CORRUPTION: THE ALLY OF VIOLENCE IN MEXICO

Dalia Toledo and Jonathan Jiménez, Researchers, Ethos

Si bien muchos estudios sugieren que la corrupción genera mayoraes niveles de violencia, entender a cabalidad la relación entre ambas variables no es una tarea sencilla. De acuerdo con el Banco Mundial (2016), la corrupción es el ofrecimiento, entrega, recepción o solicitud, en forma directa o indirecta, de cualquier cosa de valor, con objeto de influir de manera inapropiada en las acciones de otra parte. El presente texto sugiere que la corrupción sigue dos vías a través de las cuales se genera la violencia. Por un lado, se encuentran los que afirman que la corrupción permite el desarrollo de las actividades del crimen organizado. Por ejemplo, Robles, Calderón y Magaloni sostienen que «la existencia de un sistema de procuración de justicia y cuerpos policiales colapsados y corruptos son factores que han favorecido la diversificación de la cartera de actividad criminal de los carteles de las drogas» (2013, pág. 5). Entonces, la expansión del crimen organizado, a través de los vínculos entre criminales y funcionarios públicos corruptos, incrementa la inseguridad, dado que los primeros generalmente recurren a la violencia para (Lessing, 2013):

> Intimidar a sus opositores.

> Obligar al Estado a abrir una mesa de diálogo y negociación.

> Mandar señales de fortaleza o liderazgo.

> Expresar a sus competidores el poder que tienen por la plaza.1

Por otro lado, se encuentran los estudios que se basan en el supuesto de que los criminales toman decisiones en función de la probabilidad de ser sancionados y del tamaño del castigo (teoría criminológica de la disuasión). En esta teoría, la corrupción es considerada como una variable central, ya que este tipo de actos por parte de quienes persiguen y castigan el delito influyen en los niveles de impunidad.

En su edición 2016, el Índice de Paz México señaló que la impunidad se ha acentuado en los últimos años, pues en 2007, cuatro de cada cinco homicidios fueron condenados, mientras que en 2013 esta tasa fue de tan sólo uno de cada cinco. Entonces, basados en los principios de la teoría criminológica de la disuasión, en México el incentivo para cometer delitos es alta, dado que la probabilidad de ser castigado es baja. Si bien los niveles de impunidad son resultado de múltiples factores, muchos datos sugieren una relación estrecha entre ésta variable y la corrupción. De acuerdo el Estudio Comparativo de Población Carcelaria del Programa de las Naciones Unidas para el Desarrollo (PNUD), en México, 66% de los reclusos entrevistados afirmaron que, si hubiesen tenido el dinero suficiente para el pago de un soborno, hubieran podido evitar la detención y el procesamiento. Asimismo, se menciona que en 10% de los delitos cometidos por reclusos participó alguna autoridad (policía, militar, fiscal o juez) (PNUD, 2013).

Según los datos de la Encuesta Nacional de Calidad e Impacto Gubernamental (ENCIG), la percepción ciudadana sobre la corrupción y la tasa de usuarios que experimentaron un acto de corrupción al realizar un trámite o recibir un servicio público han incrementado.

	ENCIG 2013	ENCIG 2015
Percepción de corrupción	48.5	50.9
Tasa de prevalencia de corrupción en servicios públicos	12,080	12,590

Fuente: Elaboración propia con datos de la ENCIG 2013 y 2015.

Cabe resaltar que las instituciones peor evaluadas son aquellas encargadas de la persecución del delito, así como de la procuración y administración de justicia. Por ejemplo, 9 de cada 10 personas mayores de 18 años considera que la corrupción en los cuerpos policiacos es frecuente o muy

frecuente. La percepción de los Ministerios Públicos o de los Jueces y Magistrados también es desalentadora (ENCIG, 2015).

SECTOR	PERCEPCION DE LA CORRUPCION
Policias	89.8
Partidos politicos	88.6
Gobierno Federal	81.8
Gobiernos Estatales	81.6
Diputados y Senadores	80.8
Gobiernos Municipales	79.6
Ministerio Publico	79
Institutos electorales	69.5
Jueces y magistrados	68.7
Medios de comunicacion	68.3
Empresarios	66.8
Sindicatos	66.6
Hospitales publicos	48.5
Universidades publicas	46.8
Escuelas publicas	42.9
Ejercito y Marina	40.3
Comisiones de derechos humanos	39.7
Instituciones religiosas	39.5
Companeros del trabajo	29.5
Vecinos	22.3
Familiares	18

Las cifras y datos presentados hasta ahora sugieren que la corrupción y la violencia son variables estrechamente relacionadas. En este sentido, no es coincidencia que los gobiernos con altos niveles de violencia muestran múltiples casos de corrupción.

Los niveles de corrupción en México nos han colocado en la mira de los reflectores nacionales e internacionales. Su impacto en variables como inversión, crecimiento, combate de la pobreza y, sobre todo, la seguridad pública ha incentivado numerosos debates sobre cómo combatir eficazmente este lastre. En este contexto surge el Sistema Nacional Anticorrupción (SNA), el cual busca subsanar las debilidades que han presentado por años las instituciones encargadas de prevenir, detectar, investigar y sancionar este tipo de actos (Secretaría de la Función Pública, Auditoría Superior de la Federación (ASF), Tribunal Federal de Justicia Administrativa y Consejo de la Judicatura Federal). Además, el SNA propone la creación de la Fiscalía Especializada en el Combate a la Corrupción y de un Comité de Participación Ciudadana (CPC) como la figura nodal del Sistema. La creación del SNA ha significado otros cambios en la política de combate a la corrupción, algunos de los más importantes son:

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> El Código Penal Federal -documento que enuncia todos los delitos que son perseguidos por la federación — no contemplaba los delitos relacionados con hechos de corrupción. A partir de la aprobación de las leyes del SNA, se especifican cuáles son y qué pena debe cumplir quien los cometa.

> La nueva Ley General de Fiscalización y Rendición de Cuentas faculta a la ASF para realizar auditorías en tiempo real y fiscalizar las aportaciones federales. Con ello la ASF será capaz de auditar el ejercicio y desempeño de todos los recursos que la federación transfiere a los estados y municipios, que en promedio representan 86% de lo que se ejerce a nivel subnacional.

> Anteriormente, los funcionarios eran los únicos acreedores a sanciones por actos de corrupción, el SNA abre la posibilidad de sancionar también a los particulares.

> Se establece la creación de la Plataforma Nacional Digital con información relevante para el combate de la corrupción (declaraciones patrimonial, fiscal y de intereses de los funcionarios, listado de funcionarios públicos sancionados, por ejemplo).

> Se propone un monitoreo más efectivo de las policías locales, a través de Fiscalía Especializada en el Combate a la Corrupción. Actualmente, la colusión de los policías locales con los grupos de crimen organizado está penado en el Código Penal Federal, con lo que los Ministerios Públicos pueden recibir denuncias al respecto e investigarlas.

> Se establece la obligatoriedad para que, en un plazo no mayor a un año después de publicada la Ley General del SNA, los estados creen sus sistemas locales anticorrupción con los estándares mínimos establecidos a nivel federal.

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Un componente central del SNA es la participación ciudadana, la cual no sólo se limita a la conformación del CPC ni a la representación de la sociedad civil en órganos colegiados del SNA como el Comité Coordinador.[2] La creación del SNA abre una ventana de oportunidad para que, a través de una mayor participación social, puedan disminuir los niveles de corrupción e impunidad que se viven en el país. Por un lado, el SNA pone a disposición de los ciudadanos herramientas, como sistemas de denuncia, para hacer visible la corrupción que afecta al ciudadano en su día a día. En el escenario más optimista, si la denuncia ciudadana se traduce a acciones concretas por parte del gobierno, se detonará un círculo virtuoso que no solo permitirá disminuir los niveles de corrupción e impunidad, sino que se aumentará la confianza en las instituciones.

Además de aprovechar los mecanismos institucionales o la información que genera el SNA para que el ciudadano común participe en el combate de la corrupción, el papel que juega la sociedad civil organizada es fundamental. Por ejemplo, traducir el entramado legal del Sistema a un lenguaje sencillo para incentivar la participación ciudadana, promover la cultura de la legalidad o monitorear el diseño e implementación de los Sistemas Locales Anticorrupción son tareas que se deberán impulsar desde la sociedad civil para garantizar un mayor impacto del SNA.

En los últimos años, la inseguridad ha generado importantes costos humanos y ha implicado una disminución de la calidad de vida de los mexicanos. Considerando que la violencia es un fenómeno multicausal, las políticas para combatirla deben abarcar distintos ámbitos, como la corrupción en las instituciones de seguridad pública y justicia. Además, el combate de la corrupción no debe verse como una tarea exclusiva del gobierno, el aporte de la sociedad civil es fundamental para romper con el círculo vicioso de corrupción, violencia e impunidad, y el SNA brinda oportunidad para ello.

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1   La plaza debe ser entendida como un espacio geográfico determinado que permite el comercio de sustancias ilícitas, así como otras actividades de rentabilidad criminal.

2   El Comité Coordinador es el máximo órgano colegiado del SNA, está formado por un representante de cada una de las dependencias que conforman el Sistema.

LA PAZ EN CULIACÁN: PERSPECTIVAS DE UN EMPRESARIO
PEACE OM CULIACÁN: PERSPECTIVES FROM AN ENTREPRENEUR

Ing. Alberto Coppel Luken

Tengo 65 años y vivo en Culiacán desde joven. A lo largo de los años, he visto como esta ciudad, que antes era pacífica, se ha visto engullida por la violencia que ha generado la guerra contra las drogas – un fenómeno que se ha replicado en muchas otras ciudades del país.

La siembra de drogas a lo largo de la sierra de Sinaloa comenzó antes de la segunda guerra mundial. Todo empezó con el cultivo de la amapola para producir morfina, promovida por la industria farmacéutica americana. Poco después vendría el fenómeno del cultivo de la mariguana.

Sin embargo, el problema de fondo surge a raíz de la criminalización de estas drogas y la oposición de los cultivadores. Con la penalización de las drogas, los surtidores se vieron obligados a involucrarse en múltiples actividades ilegales para continuar con su negocio.

La criminalización de las drogas se ha visto acompañada por un incremento en las tasas de delitos (asesinatos, enfrentamientos, secuestros, desapariciones, tortura etc.). Al mismo tiempo, las autoridades trataron de detener la producción y transporte de drogas, mientras el consumo siguió aumentando en Estados Unidos. En retrospectiva, las autoridades americanas se han visto forzadas a reconocer los errores de la guerra contra las drogas. La legalización de sustancias como la mariguana en los estados de Colorado, California o Washington, demuestra un cambio en las actitudes y percepciones hacia el problema de la criminalización de estas.

No se puede hablar de la paz en Culiacán sin hablar de la criminalización de las drogas, ya que es la causa principal del incremento en los niveles de violencia en esta ciudad. Es difícil imaginar el restablecimiento de la paz en Culiacán sin la despenalización de las drogas.

En el ámbito actual, podemos hacer paralelos con la ley seca, una legislación que prohibió la venta de bebidas alcohólicas en Estados Unidos durante más de diez años (1922-1933). Durante esta época, el consumo se mantuvo a pesar de ser ilegal, mientras que la delincuencia organizada se reforzó. Finalmente, la despenalización del alcohol en Estados Unidos trajo un marco regulatorio apropiado para la venta del alcohol y la consecuente reducción del poder del crimen organizado.

La violencia y las muertes a causa de la guerra contra las drogas en México, requieren repensar la utilidad de esta política llevada a cabo por las autoridades durante un largo periodo. El gobierno y los ciudadanos mexicanos hacemos muchas cosas a favor de la paz. Trabajamos en proyectos juntos y contribuimos con grandes esfuerzos. Hemos logrado mucho, sobre todo cuando vemos que la tasa de delitos con violencia en Culiacán es baja en relación al resto del país. No obstante, la tasa de homicidios sigue siendo muy alta y eso daña la imagen – tanto de la ciudad como del estado de Sinaloa. Además, esto genera un alto costo económico y una sentida percepción de inseguridad.

Podemos seguir haciendo muchas cosas, pero estoy convencido de que el problema persistirá hasta que no se discuta una política de egulación de drogas. Lamentablemente, esto depende de los políticos, quienes no parecen estar convencidos de considerar y llevar a cabo estas propuestas. Por el momento, la mayoría de los ciudadanos tampoco ven viable esta solución. Dentro de unos años, espero que sean pocos, es probable que la mayoría esté a favor de la despenalización. Por lo pronto, seguiremos trabajando, tanto ciudadanos como gobernantes, en fortalecer los pilares de paz. Sin embargo, es importante subrayar que aunque contamos con diversos programas para promover la paz, nos hace falta considerar los beneficios que la despenalización de las drogas traerá a Culiacán.

METHODOLOGY

2017 MEXICO PEACE INDEX
METHODOLOGY

The Mexico Peace Index is based on the work of the Global Peace Index, the preeminent global measure of peacefulness that has been produced by IEP annually since 2007. The MPI is the third in a series of national peace indices, following the United Kingdom Peace Index and the United States Peace Index. Based on a definition of peace as the absence of violence or fear of violence, this index uses a similar methodology to the UKPI and the USPI. This is the fourth edition of the MPI.

IEP's starting point in creating peace indices is to imagine a perfectly peaceful state, region, or country. In such a state, there would be no direct violence, no homicides, or violent crime. In addition, there would be no need for state action against the perpetrators of crime and no need for the state to devote resources to violence containment. Thus, there would be no police or judiciary employees and no need for a penitentiary system. Citizens would have no fear of violence being committed against them, so there would be no harassment or public disorder. Finally, in a perfectly peaceful state, citizens would have no need to own firearms or other weapons for the purpose of self-defense.

Such a state is clearly theoretical, as there is no state so perfectly at peace. The peace indices thus aim only to provide a framework for measuring levels of violence and, as a consequence, its concomitant levels of peace. In police states where the government may exercise repressive control and have significant police numbers and intrusive monitoring, there may be relatively little crime, but this does not reflect an environment without the fear of violence. Similarly, a society that has a large proportion of the population incarcerated reflects high levels of historical violence and consists of a group of the population that, if released, could hypothetically cause greater violence. A state without law enforcement could experience higher rates of violence. By building a composite index, which reflects these factors, a more comprehensive reflection of the peacefulness of a society can be obtained.

It is important to note that the MPI makes no moral judgment on what the appropriate levels of a state's response to containing violence should be. Different contexts and circumstances require different government responses to the problem of violence. Thus, the MPI score should

be seen as a measure of how close a state currently is to realizing a perfectly peaceful environment, as opposed to a moral judgment of its peacefulness, or a judgment on the performance of the incumbent or previous administrations.

In order to ascertain whether similar patterns and environments associated with peace at the sub-national level exist in different countries, IEP has maintained a largely consistent structure for all national peace indices. However, some differences are necessary as each country has its own history and specific cultural factors that need to be accounted for in order to properly capture peacefulness as a multidimensional phenomenon. In addition, data limitations may mean that some indicators that are available in one country are not available in another.

> 66 In order to ascertain whether similar patterns and environments associated with peace at the sub-national level exist in different countries, IEP has maintained a largely consistent structure for all national peace indices.

A composite index combines multiple factors in a standardized way to create a statistical measure that is aimed at making a complex idea simple to understand. The MPI measures peacefulness at the state level in Mexico. A key reason for choosing this unit of analysis is that, similar to the United States, Mexico's state governments have wide-ranging autonomous powers, allowing them to have a significant impact on the level of violence. The response to violence may therefore differ significantly from state to state.

The MPI is composed of five indicators. The *homicide* and *violent crime* indicators are the same as those used in the USPI and UKPI, based on the US Federal Bureau of Investigation's standard definition of violent crime. The *detention without a sentence* indicator in the MPI captures the excessive use of incarceration in some states. The *weapons crime* indicator represents gun use and availability, using the best available data. This is similar to the approach used in the USPI as well. Lastly, the *organized crime* indicator is specific to Mexico, because of the problems the country faces with organized criminal activity.

MEXICO PEACE INDEX EXPERT PANEL

The MPI Expert Panel was established to provide independent advice and technical guidance to IEP researchers in developing the index methodology. The Panel is composed of experts from independent, non-partisan, civil society and academic organizations. For the 2017 MPI it comprised:

> **Carlos J. Vilalta Perdomo**
> Professor, Centro de Investigación y Docencia Económicas, A.C. (CIDE)

> **Edgar Guerrero Centeno**
> Deputy Director General of Government Information Policies and National Government Censuses, Instituto Nacional de Estadística y Geografía (INEGI)

> **Guillermo Zepeda Lecuona**
> Director, Jurimetría, Iniciativas para el Estado de Derecho, A.C.

> **Leonel Fernández Novelo**
> Local Observatories Coordinator, Observatorio Nacional Ciudadano

> **Juan Pablo Arango Orozco**
> Researcher, Causa en Común

> **Alberto Díaz-Cayeros**
> Senior Fellow, Center for Democracy Development and Rule of Law, Freeman Spogli Institute of International Affairs, Stanford University

> **Jonathan Furszyfer del Río**
> Director of Security, México Evalúa

DATA SOURCES

One of the key challenges in developing a composite peace index is finding adequate data over a sufficient period of time to accurately and comprehensively understand the underlying trends in peace. In general, IEP uses data from national statistics offices wherever possible. All of the data used to calculate the MPI comes from government bodies in Mexico. IEP then uses survey data collected by the national statistical office to adjust the figures for underreporting. Where possible, the data source used for this study is the Executive Secretary of the National System for Public Security (SESNSP).

2017 MPI INDICATORS
DATA SOURCES AND IMPUTATION METHODS

Homicide

Definition: The number of homicides per 100,000 people, measured as the number of cases that were investigated by the state prosecution authorities.

Imputation: None

Source: Executive Secretary of the National System for Public Security (SESNSP)

Violent Crime

Definition: The number of violent crimes per 100,000 people, adjusted for underreporting. Violent crimes include robbery, rape and assault.

Imputation: None

Source: SESNSP

Organized Crime

Definition: The number of extortions, drug-trade related crimes, and kidnappings per 100,000 people. Extortion and kidnapping rates are adjusted for underreporting. Drug-trade related crimes include production, transport, trafficking, trade, supply, or possession of drugs or other "crimes against public health," as they are termed in Mexican law.

Imputation: Where values were missing, IEP assigned the mean value for the given year before adjusting for underreporting.

Source: SESNSP

Weapons Crime

Definition: The number of crimes committed with a firearm per 100,000 people. Includes intentional and negligent homicides and assaults committed with a firearm.

Imputation: Missing values are filled using the value from the 2015 MPI. With each release of data, SESNSP reports some revised numbers for historical data points. It is best practice to use the revised data, as it often reflects improved accuracy. However, in some cases, no value was reported at all for homicides or assaults committed with a firearm or the total number of homicides and assaults committed with a firearm was revised downward to zero. Where no weapons crimes were reported, IEP used the archived data on weapons crimes from the 2015 MPI.

In previous iterations of the MPI, Baja California and Baja California Sur did not report any weapons crimes for any year. For those two states, the indicator "deaths by firearm" from INEGI death statistics was used for the years that it is available. These values are used for the years 2004 to 2009 and an average of the three years (2007 to 2009) was used for the years 2010 to 2012. In the 2017 MPI, these historic values were used to fill any current gaps in the data.

Source: SESNSP

Underreporting multipliers

Definition: Number of crimes reported by victims on the victimization survey divided by the number of those crimes that victims stated they reported to the authorities.

Underreporting multipliers are applied to the number of rapes, robberies, assaults, kidnappings and extortions recorded by SESNSP.

Imputation: If the number of reported crimes is equal to zero, it is not possible to apply the underreporting multiplier, therefore the highest under-reporting rate for that crime from other states is used. In some cases no crimes were reported either during the survey or to the authorities, however the assumption is that some crimes did occur but were not captured in the survey data as the sample is limited. In this case the average underreporting multiplier across states is assigned.

Source: National Survey of Victimization and Perceptions of Public Security (ENVIPE), 2012-2015

Detention without a Sentence

Definition: The number of people in prison without a sentence divided by the number of homicide and violent crime cases, as counted in the homicide and violent crime indicators.

Imputation: Values for 2006 were used for the years 2003 to 2005.

Source: Secretariat of Public Security (2006-2012) and the National Security Commission (2013-2016), data provided by Guillermo Zepeda and Paola Jiménez, *Jurimetria*.

Population data

Definition: The estimated population of each state in each year. Population data is used to calculate the rate per 100,000 people for homicide, violent crime, organized crime and weapons crime.

Imputation: None. INEGI provides estimates of the population based on Mexico's census through the year 2009 and projections based on population growth rates for the years 2010 to 2015.

Source: INEGI

CRIME DATA:
REPORTED VS. SURVEY DATA

In constructing an index that relies on crime data, a decision must be made between a range of alternative sources, all of which come with their own advantages and disadvantages. For instance, for most countries, the recorded levels of crime tend to be significantly lower than the actual level. Although there is a range of reasons, often this is because many offenses are simply not reported to the police.

The underreporting of crime in Mexico is a significant problem. Specifically, the 2016 National Survey on Victimization and Perception of Public Safety (ENVIPE) from the National Institute of Statistics and Geography (INEGI) suggests that 93.7 percent of crimes in Mexico are not reported to the authorities. This survey uses a representative sample of households to analyze not only the impacts of crime on individuals and society but also perceptions of public security. It collects information on a number of different crimes, the victims and their context, and perceptions about public security, confidence in the institutions and the justice system.

One of the main advantages of this dataset is that it contains information regarding unreported crimes, as opposed to official data that only accounts for crimes reported to the authorities. The ENVIPE survey also contains information on the percentage of crimes that are actually reported to the police.

The level of underreporting varies quite considerably by both state and offense. Out of the crimes reported, assault and kidnapping are the most reported, with roughly 30 percent of each being reported to the police. In comparison, estimates from the British crime survey suggest that around 40 percent of violent crime is reported in the UK, with the US closer to 48 percent.

The SESNSP data on rape, robbery, assault, kidnapping and extortion have been multiplied by the ratio of reported to unreported crimes to allow for a more accurate reflection of the occurrence of violence in Mexico.

IEP calculates the underreporting rate for a number of crimes based on the information from ENVIPE. The survey asks each respondent if they were a victim of a particular type of crime and whether or not they had reported it to the authorities. IEP then divided the total numbers of crimes reported by survey respondents by the number of crimes that survey respondents said they reported to the authorities. This produces a multiplier for adjusting the official statistics. The adjustments are made for the crimes of rape, robbery, assault, extortion and kidnapping.

Two adjustments were made to produce a full dataset. Because of the small sample sizes, there are some cases where none of the survey respondents reported the crime to the authorities. In cases where none of the instances of a crime were reported, the maximum underreporting multiplier for that crime and year was assigned to these states. Second, there were some states where there were no respondents that reported experiencing a particular crime — either kidnapping or rape. If no crimes were recorded on the survey, the average reporting multiplier is used for that crime in that year.

Finally, the underreporting rates for each state and crime were averaged over time and these average underreporting rates were applied to the official statistics for every year of the MPI. This average over time is used for three reasons:

›   **The underreporting rates** for each year do include some imputations, based on assumptions, given the above.

›   **The victimization data** is only available for a subset of the years included in the MPI, and as such some proxy rate must be applied over time in any scenario.

›   **Crime reporting** is quite problematic in Mexico. While ENVIPE is based on a sample of the state populations, an average over time smooths out any large fluctuations in underreporting rates that may be the result of complex and imperfect surveying and reporting methodologies, rather than a true change in reporting.

INDICATOR SCORE AND OVERALL SCORE CALCULATIONS

The MPI indicators are scored between 1 and 5, with 5 being the least peaceful score and 1 being the most peaceful score. Banded indicator scores are calculated by normalizing the range of raw values based on each state's average value over the period 2003 to 2015. First, the average value for each state over the 13 years of the study is calculated. Then the outliers are removed from the range of average state values in order to identify the min and max of normally distributed average values. Outliers in this case are defined as data points that are more than three standard deviations greater than the

mean. Next, the values for each year are normalized using the min and max of the normal range and are banded between 1 and 5. The calculation for banded scores is:

$$Banded\ score = \left(\frac{raw\ value - min}{max - min} \times 4 \right) + 1$$

Finally, if any of the banded values are above 5, the state is assigned a score of 5 and if any values are below 1, the state is assigned a score of 1.

After the score for each indicator has been calculated, weights are applied to each of the indicators in order to calculate the overall MPI score. The overall score is calculated by multiplying each indicator score by its index weight and then summing the weighted indicator scores.

There are many methods for choosing the weights to be applied to a composite index. In order to maintain consistency across IEP's various peace indices, the weights in the MPI mirror those used in the GPI, USPI and UKPI as closely as possible. The 2017 weights are the same as the 2016 Mexico Peace Index.

The weights for the GPI indicators were agreed upon by an international panel of independent peace and conflict experts, based on a consensus view of their relative importance. To complement this approach and reflect the local context of Mexico, a second expert panel was formed consisting of leading Mexican academics and researchers to determine the final weights for the five indicators in the MPI. These final weights are shown in table 7.1.

With direction from the expert panel, a number of different methods such as equal weighting, principal component analysis and analytical hierarchical processing were used to test the robustness of the results.

TABLE 7.1 INDICATOR WEIGHTS IN THE MPI

INDICATOR	% OF INDEX
Homicide	30%
Violent Crime	21%
Weapons Crime	20%
Detention without a Sentence	8%
Organized Crime	21%

Source: IEP

2017
MEXICO POSITIVE PEACE INDEX
METHODOLOGY

The Positive Peace Index is the first empirically-derived index aimed at measuring the latent variable of Positive Peace, using the definition of the *attitudes, institutions and structures* that create and sustain peaceful societies.

The starting point for developing the PPI was to correlate the GPI against over 4,700 cross-country harmonized datasets measuring a variety of economic, governance, social, attitudinal and political factors. This aggregation of data attempted to cover every known quantitative and qualitative data set measuring factors at the nation-state level. Each dataset that was significantly correlated was then organized under eight distinct domains of Positive Peace.

These structures were derived by empirical inspection and from the large body of qualitative and quantitative economic, development studies and peace and conflict literature highlighting the importance of these factors. Rather than attempting to isolate singular factors associated with peace, this approach is focused on identifying the broad and complex associations that exist between the drivers of violence and a multitude of formal and informal cultural, economic, and political, variables.

The Mexico Positive Peace Index (MPPI) is a composite index that measures Positive Peace at the subnational (state) level and covers all 32 states. To do this, data sources were compiled from national statistics, census and survey questions most closely aligned to the eight Positive Peace pillars. The eight pillars are measured from a combination of 28 indicators to create the MPPI:

❯ **8 national survey questions**

❯ **14 national census data indicators**

❯ **6 data sources from academic and intergovernmental organizations.**

There are a number of considerations that need to be made when applying Positive Peace to sub-national measurements. Such considerations can be either conceptual or technical.

The global PPI is empirically derived by selecting indicators that correlated with peace at the global level. However, applying Positive Peace at the sub-national level may produce a different set of relevant factors. This is demonstrated by socio-economic factors that correlate at the global level but do not correlate when measured at the Mexican state level. This is more the result of the very unique nature of conflict and violence in Mexico than it is of the relevance of the eight pillars to Mexico in the long term.

For example it is known that the set of factors that correlated with peace in Mexico in 2003 are more closely associated with the Positive Peace framework than the ones that correlated in 2016. The rise of the drug cartels and the ensuing conflicts associated with their activity have distorted the normal associations. Therefore the indicators of the MPPI have been selected based on their relevance to the conceptual frameworks of each of the global pillars rather than the current correlations to peace in Mexico.

While national statistics relating to health, education and poverty are available for the states, some other measures of Positive Peace are not collected at the subnational level. For example, in measuring the *Well-Functioning Government* pillar, organizations such as the World Bank and the Economist Intelligence Unit provide composite measures for the rule of law, functioning of democracy and government effectiveness at the country level. The same measures at the state level are not available, therefore other similar measures are used.

The MPPI uses a combination of objective and subjective measures of Positive Peace, all scored across the 32 states. Where possible, preference has been given to objective measures. Where this has not been possible, preference has been given to survey data, especially if it is enquiring about the local situation. For example, between the two questions "do you feel safe in your state" or "do you feel safe in your neighborhood?" the latter would be selected as it has more of a personal or communal impact to the respondent and therefore any answer given is more likely to be a more accurate portrayal.

Secondly, timeliness and currency of data can be an issue for some data sets. Finding data at the state level can be difficult and, as such, it is often necessary to use data that is, in some cases, two to three years old. However, it is observed that Positive Peace at the global level is very slow-moving. That is, while violence and conflict can erupt and spread quickly, building and strengthening the *attitudes, institutions and structures* that create and sustain peaceful societies takes a long time, sometimes decades. Therefore, although using current data is preferable, using slightly older data for Positive Peace is still viable.

MPPI INDICATORS

In calculating the MPPI, the first step is to normalize each of the 28 indicators. To do this, each indicator is first categorized into either being a *positive* or a *negative* indicator. Positive indicators are such that it is desirable for a state to have more of the measure. For negative indicators, it is more desirable for a state to have less of the measure. Table 7.2 lists all indicators in the MPPI.

Each indicator is normalized based on whether it is a positive or negative measure. For positive indicators, scores are assigned a value between one and five. States that perform the best in any one indicator are assigned a score of one. States that perform the worst in any one indicator are assigned a score five. A state's score in each pillar is the average of all its banded indicator scores. The overall MPPI is the average of a state's eight pillars. In this sense each indicator is equally weighted in each pillar and each pillar is equally weighted in the overall MPI score.

❝ Rather than attempting to isolate singular factors associated with peace, our approach is focused on identifying the broad and complex associations between drivers of violence and a multitude of cultural, economic and political variables.

TABLE 7.2 MEXICO POSITIVE PEACE INDEX INDICATORS, 2017

PILLAR	INDICATOR	DESCRIPTION	YEAR	SOURCE
WELL-FUNCTIONING GOVERNMENT	Are you aware of any action taken by local authorities to improve public lighting?	Percentage of respondents that answered Yes	2016	ENVIPE
	Are you aware of any action taken by local authorities to construct or improve parks and sports facilities?	Percentage of respondents that answered Yes	2016	ENVIPE
	How would you rate the performance of the work carried out by the municipal police?	Percentage of respondents answered 'effective'	2016	ENVIPE
	Impunity rate for homicides	Ratio of incoming prisoners for homicide to homicide cases	2014	INEGI CNG
SOUND BUSINESS ENVIRONMENT	Ease of Doing Business rank	State ranking for the subnational *Ease of Doing Business* index	2012	World Bank
	Unemployment rate	Percentage of unemployed people per state	2014	INEGI
	GDP per capita	GDP per capita	2015	INEGI
LOW LEVELS OF CORRUPTION	How often do you perceive acts of corruption?	Percentage of state population answering 'very frequent'	2015	ENCIG
	Do you perceive the Public Ministry and State Attorney General as corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Do you perceive the municipal police to be corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Do you perceive the state police to be corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Is there an anticorruption training program for public administration personnel?	States score 1 for yes and 0 for no or unknown	2015	INEGI CNG
HIGH LEVELS OF HUMAN CAPITAL	HDI health	Sub-component of the Human Development Index	2012	UNDP
	HDI education	Sub-component of the Human Development Index	2012	UNDP
	Scientific and technological companies/institutes	Number of those registered in the Registro Nacional de Instituciones y Empresas Científicas y Tecnológicas (RENIECyT)	2014	DENUE
GOOD RELATIONS WITH NEIGHBORS	Trust in neighbors	Percentage of respondents that answered with 'high degree of trust'	2016	ENVIPE
	Safety in public locations of municipality	Percentage of respondents that answered that they felt 'safe'	2016	ENVIPE
	Net migration	Levels of immigration minus emigration, as a percentage of the population	2014	INEGI
FREE FLOW OF INFORMATION	Households with internet access	Percentage of households with broadband access	2015	INEGI
	Journalists killed	Total number of journalists killed per state	2013	University of San Diego
	Accessibility to public information	Frequency with which individuals are able to access public information	2016	INEGI
	Attacks on journalists	Total number of attacks per state	2015	Article 19
EQUITABLE DISTRIBUTION OF RESOURCES	Multidimensional poverty index — social dimension	Percentage of population that lacks access to one or more social dimensions (education, health, food) and whose income is either higher or equivalent to the 'well-being' line	2014	CONEVAL
	People living in poverty	Percentage of population living in poverty	2014	CONEVAL
	Average number of people per house	Average number of occupants per household	2010	INEGI
ACCEPTANCE OF THE RIGHTS OF OTHERS	Upward social mobility	Additional years of school for this generation compared to the last	2011	EMOVI/CEEY
	Women in the state administration	Percentage of women employed in the state administration	2014	CNGMD
	Indigenous development gap	Absolute value of the difference in HDI score for the indigenous and non-indigenous populations	2010	UNDP

	INDICATOR	DESCRIPTION	YEAR	SOURCE
WELL-FUNCTIONING GOVERNMENT	Are you aware of any action taken by local authorities to improve public lighting?	Percentage of respondents that answered Yes	2016	ENVIPE
	Are you aware of any action taken by local authorities to construct or improve parks and sports facilities?	Percentage of respondents that answered Yes	2016	ENVIPE
	How would you rate the performance of the work carried out by the municipal police?	Percentage of respondents answered 'effective'	2016	ENVIPE
LOW LEVELS OF CORRUPTION	Do you perceive the Public Ministry and State Attorneys as corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Do you perceive the municipal police to be corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
	Do you perceive the state police to be corrupt?	Percentage of respondents answering 'No'	2016	ENVIPE
GOOD RELATIONS WITH NEIGHBORS	Trust in neighbours	Percentage of respondents that answered with 'high degree of trust'	2016	ENVIPE
	Safety in public locations of municipality	Percentage of respondents that answered that they felt 'safe'	2016	ENVIPE

METHODOLOGY FOR CALCULATING **THE ECONOMIC IMPACT OF VIOLENCE**

IEP classifies the costs associated with the economic activity related to violence as the total economic impact of violence. This is defined as 'expenditures related to containing, preventing and dealing with the consequences of violence'. The economic impact of violence includes the direct and indirect costs of violence, as well as a multiplier effect.

The economic impact of violence provides an estimate of the economic effect of violence on the Mexican economy.
The costing model covers the period of 2003 to 2016 and includes the following indicators:

> homicide

> violent crime, which includes assault, rape and robbery

> organized crime, which includes extortion and kidnapping

> firearms

> fear of insecurity

> private security expenditures

> indirect costs of incarceration

> federal spending on violent containment, which includes the military, domestic security and the justice system.

The analysis incorporates federal-level public spending on the military because Mexico's military has been extensively involved in fighting the organized criminal groups domestically. Therefore, IEP considers spending on the Mexican military to be included in the cost of internal security.

Some of the items not counted in the economic impact of violence include:

> state-level public spending on security

> the cost of domestic violence

> the cost of violence to businesses

> insurance premiums

> household out-of-pocket spending on safety and security

> the cost of drug-trade related crimes such as the production, possession, transport and supply of drugs.

These items were not included for two reasons. First, some items have been captured elsewhere in the model. For example, the costs associated with drug-trade related crimes are included in the cost of domestic security, including law enforcement, incarceration and the justice system. Secondly, reliable data could not be sourced at a state level for the entire study.

IEP estimates the total economic impact of violence by estimating three components:

> **Direct costs** are the costs of crime or violence to the victim, perpetrator and the government. These include direct expenditure such as cost of policing.

> **Indirect costs** that accrue after the fact. These include physical and psychological trauma and the present value of future costs associated violent incident, such as lost future income.

> **The multiplier effect** represents the flow-on effects of direct cost of violence, such as the additional economic benefits that would come from investment in business development or education instead of containing or dealing with the consequences of violence.

All prices have been adjusted to constant 2016 pesos, using official data on average annual consumer price index (CPI) from the Central Bank of Mexico. Where figures were denominated in a foreign currency, they have been converted into pesos using the average official exchange rate for the year the estimate was made.

ESTIMATION METHODS

A combination of approaches are used to estimate the economic cost of violence to Mexico's economy. The analysis involved three components:

1. **Financial information** detailing the level of expenditure on items associated with violence was used wherever possible.

2. **Unit costs** were used to estimate the cost of violent activities. Specifically, an estimate of the economic cost of a violent act was sourced from the literature and applied to the total number of times such an event occurred to provide an estimate of the total cost of categories of violence.

3. **Where data on the incidences of a particular type of violence was missing,** the figure was either estimated based on an appropriate proxy or excluded from the study.

IEP uses federal government expenditure data for military, domestic security, and justice system as federal government violence containment cost. Data is sourced from Secretariat of Public Finance and Credit (SHCP). State and municipal level spending are excluded from the study due to data unavailability.

The federal government expenditure data does not provide details of the spending at state level. Therefore, a combination of state population size and MPI score is used to estimate the likely distribution between states.

A unit cost approach is used to estimate the economic cost of homicide, violent crime, organized crime, fear of insecurity and firearms. Unit costs for the homicide, violent crimes and organized crimes are based on a study by McCollister (2010) that estimated tangible and intangible cost of violent crimes in the United States.

Direct costs or tangible costs of crime include medical expenses, cash losses, property theft or damage, and productivity losses.

Indirect costs include physical and psychological trauma as well as long term costs due to a violent incident.

In addition to the breakdown by tangible and intangible costs, McCollister (2010) offers further details of the costs by victim, perpetrator and justice system. Such itemization enables IEP to exclude the justice system costs to avoid double counting with expenditure data used for the justice system and domestic security.

IEP also uses Dolan & Peasgood's (2006) estimate of the unit cost of fear of crime to calculate cost of perception of insecurity in Mexico. The unit cost of firearms in the Mexican black market is used to calculate the total cost of firearms. Goodman & Marizco (2010) suggest that the price of a weapon in Mexico is two to three times higher than the price of the same weapon in the US market.

To ensure that cost estimates appropriately represent relative income levels in Mexico, they were scaled according to Mexico's GDP per capita relative to the US before being converted to 2016 Mexican pesos. This was based on the aforementioned US study suggesting that the indirect cost of a homicide approximates US$8.4 million. The equivalent cost in Mexico was then calculated based on purchasing-power adjusted GDP per capita of US$17,107 for Mexico as compared to US$54,629 for the US in 2014. This is called the adjusted unit cost.

All the costs are adjusted to constant 2014 pesos using consumer price index (CPI) data from the Central Bank of Mexico. The base year of 2014 was chosen because it is the most recent year for which CPI data was available. Estimating the economic impact in constant prices facilitates comparisons over time.

Any GDP-related analysis uses the most recent available GDP data from INEGI.

> 66 Direct costs or tangible costs of crime include medical expenses, cash losses, property theft or damage, and productivity losses. Indirect costs include physical and psychological trauma as well as long term costs due to a violent incident.

CALCULATING THE COST OF HOMICIDE, VIOLENT CRIME & ORGANIZED CRIME

To calculate the cost for the categories of crime used in this study, IEP uses the data from the MPI.

Data on the incidence of homicide is sourced from the SESNSP. Incidents of homicide are multiplied by adjusted unit costs to calculate the total cost of homicide in Mexico.

Violent crime, which includes incidents of rape, robbery and assault are also sourced from SESNSP and are adjusted for underreporting. For more details on the data and underreporting adjustment refer to page 92. The economic

costs of each category of violent crime are calculated using the respective adjusted unit costs.

The cost of organized crime is based on the number of incidents of extortion and kidnapping. To estimate the total cost of extortions and kidnapping in Mexico, IEP assumes that extortions and robbery as well as kidnapping and assault are equivalent in terms of their economic impact on the victim. Therefore unit costs are sourced from McCollister (2010) and applied to extortion and kidnapping.

COST OF FEAR OF INSECURITY

ENVIPE is used to estimate the perception of insecurity at the state level in Mexico. IEP uses the proportion of respondents who felt insecure, multiplied by the state's population to arrive at the number of people who reported a fear of insecurity. Victimization survey estimates are available

for 2005 and 2009 to 2015. Therefore, IEP estimates the fear of insecurity for the years for which data is not available. The unit cost of fear is taken from Dolan and Peasgood (2006), from which the adjusted unit cost is derived.

COST OF FIREARMS

The 2017 Economic Impact of Violence analysis includes an updated estimate for the cost of firearms in Mexico.

There is no official data available on the number of firearms in Mexico. A number of studies have attempted to calculate the annual increase in the number of firearms or annual imports from the US. Goodman and Marizco (2010) use firearms seizures on the US-Mexico border to estimate the number of firearms. However, such studies largely underestimate the annual increase in the number of firearms.

ENVIPE asks respondents whether or not anyone in the household purchased a firearm in the last year. Mexico Evalua collated population estimates of household firearms purchases for the available survey years, 2011 to 2015, and provided this data to IEP. IEP used linear imputation based

on the state level estimates for the prior years to generate a time series dataset.

The Small Arms Data Observatory provided IEP with estimates of the price of a firearm on the black market in Mexico from the dataset *Illicit Small Arms Prices — Countries Dataset*.

Based on this estimated unit cost and the quantity of firearms purchased in each state, IEP generated values for the total costs of firearms.

CALCULATING THE INDIRECT COST OF INCARCERATION

The direct cost of incarceration is included in the government expenditure on domestic security and the justice system. Therefore, IEP only includes the indirect cost of incarceration, which is the lost income due to imprisonment. This is calculated using the Mexican minimum wage and the number of inmates that would have been in full time employment. Data on the minimum wage for Mexico is sourced from department of labor and social welfare (STPS).

Literature suggests that 60 percent of people who were sentenced to prison had full-time employment prior to being in prison and 20 percent of them have some employment inside prison. Therefore, IEP considers that 40 percent of the inmates would have been in full time employment. Minimum wage lost is calculated for 40 percent of the prison population in Mexico.

CALCULATING THE COST OF PRIVATE SECURITY

No reliable data is available of the number of private security personnel in Mexico for the period of 2003 to 2015. The number of security officers for 2004 was sourced from Small Arms Survey. Also, the ratio of private security officers to public security officers is sourced from Small Arms Survey and was assumed to be constant overtime. IEP estimates the economic cost of private security using the ratio of private to public security officers and the minimum wage.

" No reliable data is available of the number of private security personnel in Mexico for the period of 2003 to 2015.

ECONOMIC IMPACT OF VIOLENCE

To estimate the total economic impact of violence, IEP uses a peace multiplier to estimate the additional economic activity that would have resulted if the violence was avoided. The conceptual underpinning of the multiplier is the opportunity cost of the resources lost by the victim, perpetrator, and the law enforcement agencies due to the crime. Therefore, the peace multiplier represents the flow-on effects of redirected expenditure from violence containment to more economically enabling activities such as business investment or education.

APPENDIX A:
VERIFYING MEXICO'S OFFICIAL CRIME DATA

KEY FINDINGS

› A review of the data for homicides, extortion and crimes committed with a firearm shows that inconsistencies and gaps in official data are widespread.

› The official law enforcement homicide dataset includes eight out of 37 pieces of information required by international data quality standards.

› As many as 10 percent of homicide deaths in Mexico were not investigated by law enforcement in 2015, down from 15 percent in 2014.

› Nayarit, Veracruz, Tabasco, Hidalgo and Quintana Roo have the largest discrepancies in their homicide data.

› Nayarit, Veracruz and Hidalgo have been among the five states with largest discrepancies in homicide victim counts for two years in a row, and the discrepancies in Nayarit and Veracruz have grown.

› The number of homicide victims recorded by law enforcement in Nayarit was 61 percent of the total registered in the health data. In Veracruz, this ratio was 64 percent.

› In 2015, there were five states where law enforcement has undercounted homicides by more than 20 percent, down from 10 in 2014.[1]

› But in seven states, the discrepancy has grown from 2014 to 2015: Aguascalientes, Tabasco, Nayarit, Campeche, Veracruz, Jalisco and Guerrero.

› Tlaxcala, Querétaro, Colima, Chihuahua, Guanajuato, Oaxaca and Veracruz have inconsistencies in their extortion data.

› Tabasco, Baja California, Baja California Sur, Oaxaca and Morelos have the largest gaps in data for the MPI weapons crime indicator.

› A total of 14 states have some anomaly in their weapons crimes data, failing to record either assaults committed with a firearm, homicides committed with a firearm, or some portion of both.

› However, coding of gun crimes has improved since 2011, with 28 states now correctly coding and reporting case files.

› Tlaxcala had the largest number of identified data discrepancies, with gaps in weapons crime data, inconsistent ranks for extortion and one of the five largest gaps between homicide victim counts.

› Tlaxcala, Veracruz and Chihuahua show significant discrepancies in both homicide and extortion data, suggesting a pattern of poor quality official crime data in these three states.

› Homicide victims are undercounted by law enforcement by at least 20 percent in each state.

The quality of official crime data in Mexico varies by state, making it difficult, although not impossible, to harmonize measures of violence. Recognizing this, the MPI adjusts for underreporting using data from Mexico's victimization survey. However, underreporting is only one of the dynamics that affects the accuracy of official statistics. Further improvements in the collection of crime data would enable

more accurate analyses by the government, IEP and other institutions in understanding the extent and causes of violence in Mexico.

IEP uses a variety of methods to develop an accurate picture of peacefulness in Mexico overall and by state. The development of a composite index of peace directly addresses

some of the deficits in measuring violence. Very few states have inaccuracies in all of the 13 variables that go into the five MPI indicators and the overall score. Assembling, normalizing and weighting these various datasets produces relative scores, which are a good assessment of levels of peacefulness and changes within the country and its states.

IEP also presents this section on the veracity of data annually in order to provide context for the index results and highlight progress in transparency.

Comparing hospital registered deaths to law enforcement registered deaths from homicide is the most straightforward way to assess data quality in each state. But IEP provides a variety of analyses to this end, discussed below and in more detail in the Methodology section on page 91.

DATA DISCREPANCIES

At present, the most comprehensive data on violence in Mexico is the dataset of preliminary investigations published by the national public security secretariat. Ideally, this data reflects the number of investigations opened by each state's Public Ministry offices, based on the crimes reported to the Public Ministry and to law enforcement. However, the quality and accuracy of the investigations data does vary by state.

IEP uses this dataset as the starting place for estimating rates of violence because of its long time series and because it is updated monthly.[2] Alternative datasets are also published by the national statistical agency, but many of them only include recent years and take a year or more to become publically available. These datasets aren't available quickly enough for use in the index and they do not allow for trend analysis, but they can be used to infer the veracity of each state's judicial statistics.

IEP undertook three analyses to verify the state-level official violence data used in the 2017 MPI:

> Compared homicide data from law enforcement and judicial data and health data based on death certificates, to highlight discrepancies.

> Compared data from the national victimization survey to the estimates for violent crime and organized crime. For the most part, the various datasets proved incomparable, but the extortion statistics offer some clues toward the veracity of state data.

> Identified anomalies in the weapons crime data. Several states report 0 assaults and homicides committed with a firearm, but local crime data and data on firearms purchases suggest that these zeros represent missing data more so than the absence of crime.

HOMICIDE

The national discrepancy between Mexico's various sources of homicide data has improved recently, from a gap of 15 percent in 2014 to 10 percent in 2015. During the worst years of the drug war, there was a growing disparity between the number of homicide deaths counted by death certificates and those being investigated by law enforcement. Recent improvements in data collection techniques have helped to improve the accuracy, but the discrepancies are larger in some states than others. This section reviews the available data sources and the state-by-state results.

There are several sources of homicide data in Mexico. Mexico's national statistical agency publishes one homicide dataset reporting the number of death certificates that indicated homicide as the cause of death. SESNSP, the national public security secretariat, publishes the number of law enforcement investigations for homicides begun during the measurement period, which is the data used by IEP in the MPI.

SESNSP also published the number of victims of homicide, along with the number of open investigations, for the first time in 2014.[3] Comparing these datasets gives some idea of which states have the largest discrepancies in their official crime data, which in turn provides insight into the accuracy of official crime statistics. As such, IEP compared the victim counts from the following two sources:

> Homicide victims as reported by the Executive Secretariat of the National System for Public Security (SESNSP), which are homicides reported in the field by law enforcement.

> Homicide victims as reported by the National Institute of Statistics and Geography (INEGI), which are homicides counted from certificates of death.

In a perfect situation, the number of homicide victims identified by law enforcement would be the same as the number of homicide victims identified by medical professionals. In 2015, every Mexican state had at least a small discrepancy between these sources. Some amount of discrepancy may be reasonable, as some of the cases investigated by law enforcement may turn out not to have been homicides upon review by a coroner. Analysis shows that seven states had a discrepancy of more than 20 percent.

Attempted homicides are included in law enforcement data under the crime of homicide, which can mean that there are more cases than deaths. However, a greater number of homicide victims identified by medical professionals than by law enforcement indicates that better procedures would improve data collection techniques. Figure A.1 shows the ratio of the two datasets for each state.

FIGURE A.1 DIFFERENCE IN HOMICIDE RATE BY STATE, 2011–2016

Although the magnitude of improvements still largely outweighs recent deteriorations, 19 states now have homicide rates higher than their 2011 levels. On the other hand, Chihuahua's homicide rate is now 55 points lower than 2011, while Colima's is 52 points higher.

Shaded bars indicate states where both the homicide and organized crime rates increased.

DIFFERENCE IN HOMICIDE RATE, 2011–2016

Lower homicide rate in 2016 ← | → Higher homicide rate in 2016
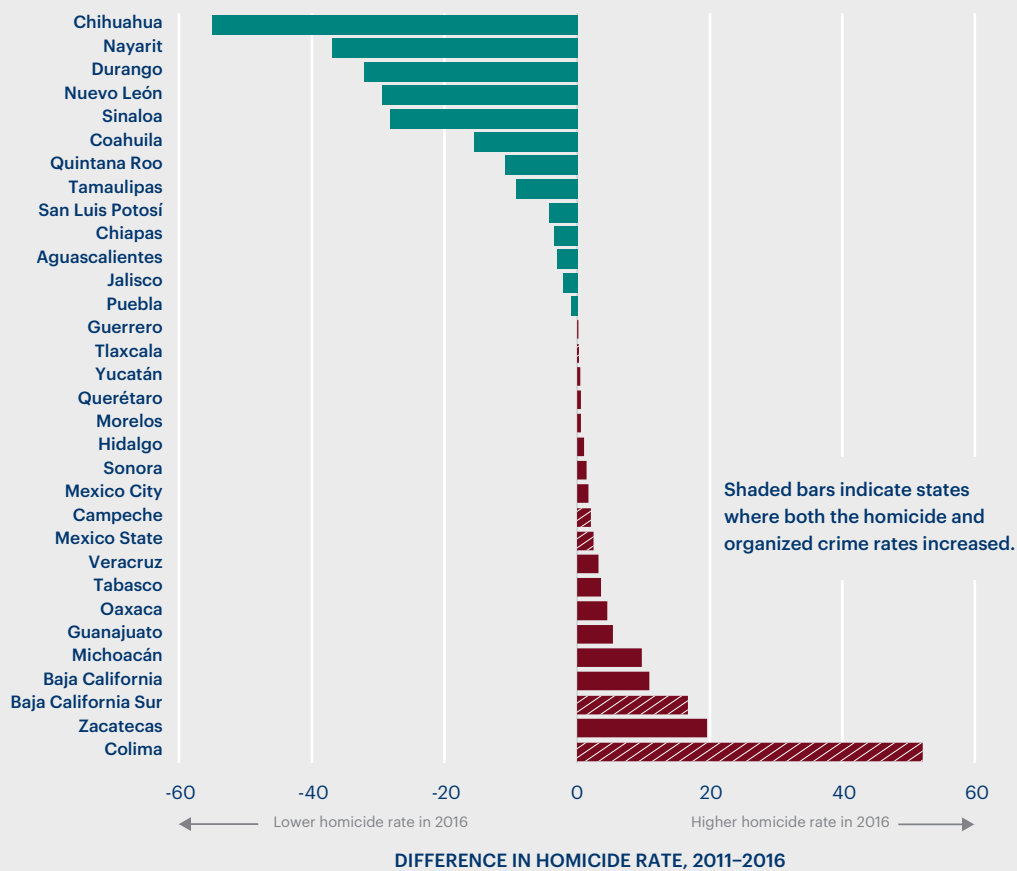
Source: SESNSP, IEP calculations

Nayarit, Veracruz, Tabasco, Hidalgo and Quintana Roo have the largest discrepancies in their homicide data. Nayarit, Veracruz and Hidalgo have been among the five states with largest discrepancies for both years that the two datasets are available to compare (2014 and 2015). In 2015, the number of victims registered by law enforcement in Nayarit was only 61 percent of the total registered in the health data. Two homicides believed to have occurred in Nayarit were registered in Ciudad de México, but this still fails to account for the other 47 missing victims. Furthermore, the discrepancy has grown: in 2014, Nayarit's

law enforcement counted 67 percent of the total victims identified by health records. Veracruz shows a similar trend. In 2015, 64 percent of victims were accounted for, compared to 67 percent in 2014.[4] Hidalgo fares slightly better, recording 72 and 70 percent of the total number of victims in 2015 and 2014 respectively.

Nationally, INEGI counted 19,965 homicides that occurred in 2015. SESNSP reports that there were 18,673 investigations opened that year. At least 1,292 of these deaths are not being investigated.

However, because attempted homicide is included, the *net* difference between the SESNSP and INEGI totals can be misleading. In just the states where the number of death certificates is greater than the number of victims associated with an investigation, INEGI's count exceeds SESNSP's by 1,936, or 10 percent.

The discrepancy between deaths and investigations has declined from 2014 to 2015, suggesting improvements in justice and transparency. In 2014, INEGI's count exceeded SESNSP's by 2,656, or 15 percent. This improvement has coincided with the implementation of Mexico's new criminal justice system in 30 states across the country. IEP will continue to monitor the veracity of homicide victim data as more years of reporting are made available.

Table A.1 provides the full details of homicide data in 2015 for each state.

TABLE A.1
HOMICIDE DATA, INEGI AND SESNSP, 2015

STATE	SESNSP INVESTIGATIONS	SESNSP VICTIMS	INEGI VICTIMS	DIFFERENCE	SESNSP VICTIMS AS % OF INEGI
Nayarit	42	78	127	49	61.4%
Veracruz	1186	615	960	345	64.1%
Tabasco	257	244	358	114	68.2%
Hidalgo	149	159	222	63	71.6%
Tlaxcala	80	61	78	17	78.2%
Chihuahua	1185	1151	1432	281	80.4%
Colima	564	189	227	38	83.3%
Mexico City	920	901	1054	153	85.5%
Mexico State	2059	2303	2662	359	86.5%
Guerrero	2236	2016	2288	272	88.1%
Aguascalientes	38	42	47	5	89.4%
Campeche	83	59	66	7	89.4%
Sonora	551	512	572	60	89.5%
Puebla	601	561	619	58	90.6%
Zacatecas	435	289	307	18	94.1%
Yucatán	59	53	56	3	94.6%
Sinaloa	1147	993	1048	55	94.8%
Chiapas	468	513	536	23	95.7%
Baja California Sur	176	175	177	2	98.9%
Jalisco	1134	1149	1162	13	98.9%
Nuevo León	638	451	452	1	99.8%
San Luis Potosí	306	257	254	-3	101.2%
Guanajuato	949	975	950	-25	102.6%
Querétaro	117	144	139	-5	103.6%
Oaxaca	846	849	776	-73	109.4%
Baja California	1112	906	826	-80	109.7%
Michoacán	1256	943	839	-104	112.4%
Morelos	602	516	455	-61	113.4%
Coahuila	237	340	290	-50	117.2%
Durango	234	238	203	-35	117.2%
Tamaulipas	580	763	641	-122	119.0%
Quintana Roo	136	228	142	-86	160.6%

Bogotá Protocol on homicide data quality in Latin America and the Caribbean

The Bogotá Protocol, developed in 2015, establishes the technical criteria for a high level of validity, reliability, and transparency in homicide data. Also in recent years, Mexico has been moving toward better quality violence data. But the country needs to improve to meet international transparency standards. INEGI data only meets 22 of 30 criteria, or 73 percent, and SESNSP data meets seven of 37 criteria.

	BOGOTA PROTOCOL CRITERIA	INEGI	SESNSP
1	The recording unit for homicides should be the victim.	**1/1** As of 1997	**1/1** As of 2014
2	Homicide is defined as the death of a person caused by an intentional assault by another person or persons. That does not include unintentional, accidental or attempted homicides.	**0/1** The coroner determines whether a death is considered a homicide. The definition is not provided in the data base.	**0/1** Data can be disaggregated by intentional or unintentional, but includes attempted homicide cases and victims.
3	The record of each homicide should include information on the victim, the incident, and the alleged perpetrator. The protocol sets out 23 pieces of information that should be recorded for each death.	**12/16** The dataset does not include a single id, number of other victims, whether the homcide occurred in public or private, or an open field for a descrption of the incident, but it does code incidents of family violence.	**1/23** Homicides are coded as: 'with' or 'without' a firearm or knife, but in practice this data is typically incomplete.
4	Data should be relatively complete. The standards differ for different pieces of information, but in general, no more than ten percent of any indicator should be blank or missing. The standards are strictest for the sex of the victim — no more than one percent of cases should be marked as "sex unknown."	**4/5** 5.2% of cases were coded as 'age unknown' in 2015.	**2/5** Less than 5% of deaths have an unspecfied municipality, but the sex and age of the victim are not included.
5	Data sources should converge to a high degree. The maximum allowable discrepancy is 20 percent.	**1/1** In 2016, the discrepancy between SESNSP and INEGI was 10.4%	**1/1** In 2016, the discrepancy between SESNSP and INEGI was 10.4%
6	Mechanisms for verification of data, on a case-by-case basis, must exist and must make use of the input of public servants, academics and civil society experts.	**0/2**	**0/2**
7	Data should be disseminated, transparent and freely accessible, including disaggregated micro data.	**2/2** Microdata is freely available online in multiple formats.	**1/2** Data is freely accessible, but it is not disaggregated to the levels required.
8	Data should be frequent and timely. It should be released or updated every six months. Data releases should be lagged no longer than six months for crime data and 18 months for health data. For example, homicide data for 2016 should be released by June of 2017 for crime data and June of 2018 for health data.	**2/2** Data is released and updated every six months, with no more than a one year lag for complete datasets.	**2/2** Data is released on the 20th of each month for the month prior. It is regularly updated.
	Completeness of information:	22 out of 30 items	8 out 37 items

VIOLENT CRIME AND ORGANIZED CRIME

The *violent crime* and *organized crime* indicators include three crimes each. IEP reviewed each of these six crimes in ENVIPE to attempt to verify the estimates used in the MPI. However, only extortion rates offer a meaningful comparison. The ENVIPE results do not include state-level estimates for the incidence of rape or kidnapping. The methodologies and categories for assault and robbery are too different to compare. And as there is no clear, individual victim in drug-trade related crimes, there is no victimization data to compare to the case data for narcotics crimes.

It is possible to compare official extortion data to the victimization data. Although the estimated rates of extortion can differ, the rank order would be expected to roughly

match. When a state has a much higher rank in the official data than the victimization survey, this suggests that the official data is probably incorrect.

Tlaxcala, Querétaro and Colima, have the largest rank discrepancies, outranking the ENVIPE estimate by 22, 17 and 16 places respectively. Chihuahua, Guanajuato, Oaxaca and Veracruz all have higher ranks in the official data by 12 places. Tlaxcala, Veracruz and Chihuahua are also among the ten states with the largest discrepancies in homicide rates. Taken together, large discrepancies in both homicide and extortion data raise concerns about the quality of official data in these states.

WEAPONS CRIME

The weapons crime indicator measures assaults as well as intentional and unintentional homicides committed with a firearm per 100,000 people. It serves as a proxy for the availability and use of firearms in the state. When an assault or homicide investigation is opened, the case is coded as with or without a firearm. The large majority of civilian firearms are illegal in Mexico, but between 2011 and 2015, more than 2.8 million households reported purchasing a firearm, with purchases reported in every state.[5] The ubiquity of guns in Mexico suggests that every state should have some portion of the assault and homicide data coded as occurring with a firearm. However, weapons crime data is often missing. IEP fills gaps in the data using alternative data sources, as explained in the methodology on page 91. But this section reviews gaps in the raw, unadjusted data.

In the latest dataset released by SESNSP, there are four states that have not reported any assaults committed with a firearm for the entire study period: Baja California, Morelos, Sonora and Tabasco. Looking at assaults and homicides, 14 states have some anomaly in their weapons crimes data, ranging in severity from one missing data point to blanks for the entire time series.

Data from Nuevo León also indicates that weapons crime numbers should be higher than currently recorded. IEP has previously collected more granular, municipal-level firearms data for the state of Nuevo León, for its annual diagnostic report on peace in that state. Figure A.2 shows the trend in *weapons crime* from 2009 to 2015 using two different datasets.

The top chart in the figure shows the rate of homicides and assaults from the federal dataset published by SESNSP. Until 2015, homicides make up the entire indicator because there were no recorded assaults with a firearm. In 2015, when these assaults first appear in the data, the trend spikes indicating better data collection.

The bottom chart shows the same trend in homicides committed with a firearm and two other crimes indicative of weapons use from local data published by the state's attorney general:

> life-threatening assaults, which can reasonably be expected to include assaults committed with a firearm, and

> discharging a firearm, which refers to the crime of shooting a gun and endangering the life of one or more people.

When these three crimes are used to estimate the trend in firearms crimes, the rise observed in 2015 is moderated to a constant trend. In the top chart, the trend in homicides and assaults triples from 2014 to 2015. In the bottom chart, it declines by two percent in the last year. In reality, the rate of homicides and assaults with a firearm is likely a flatter trend in Nuevo León.

> ❝ The large majority of civilian firearms are illegal in Mexico, but between 2011 and 2015 more than 2.8 million households reported purchasing a firearm, with purchases reported in every state.

FIGURE A.2 WEAPONS CRIME RATE IN NUEVO LEÓN, 2003–2016

Looking at local data sources can help verify the federal data. These two charts compare the trend in weapons crime in Nuevo León, showing that the absence of assaults with a firearm in the federal data is probably not representative of the true trend.

Addition of assault with a firearm data

Trend in homicides committed with a firearm

Total
Homicide
Life-threatening assaults
Discharging a firearm
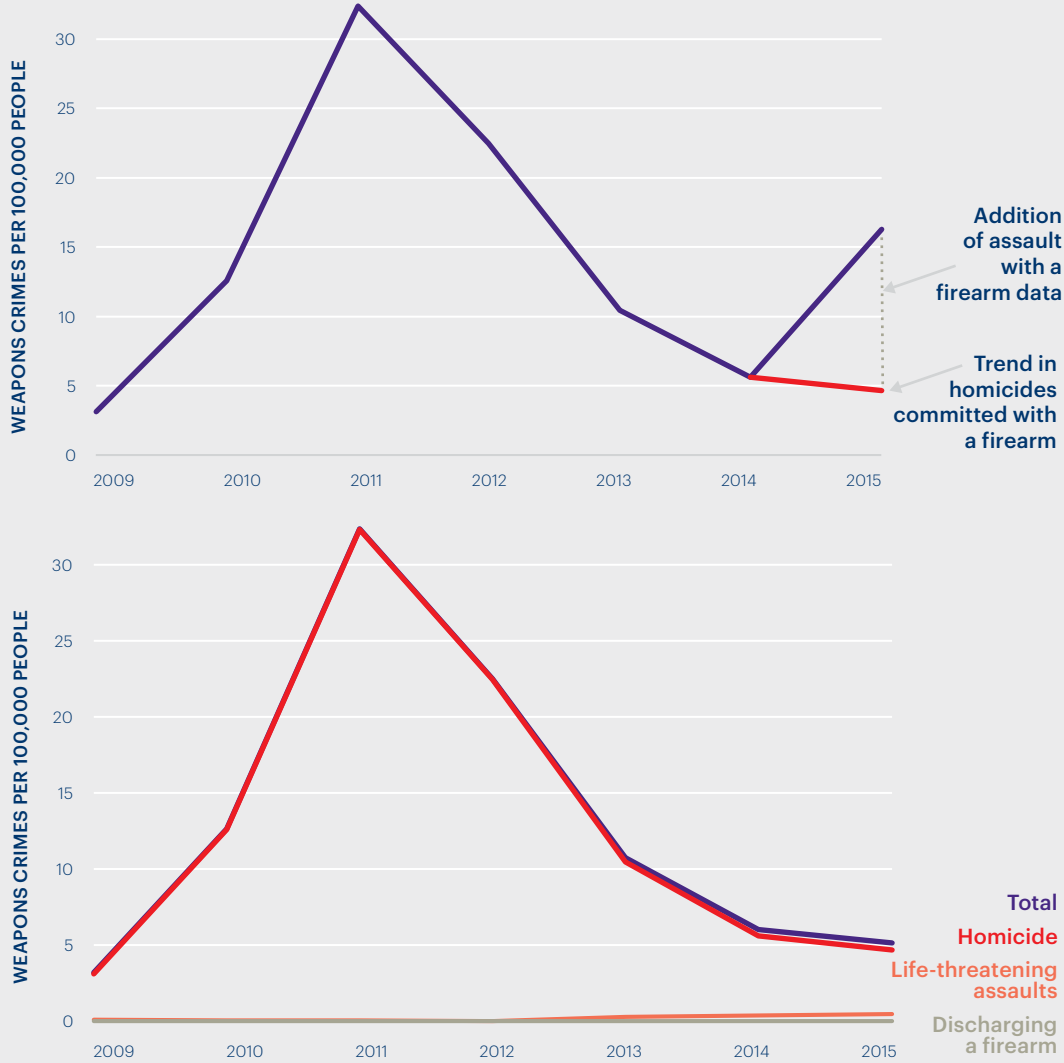
Source: SESNSP, Estadísticas de Procuración de Justicia de Nuevo León, CONAPO, IEP calculations

Oaxaca is another state with a similar pattern. Prior to 2011, Oaxaca reported zero homicides or assaults committed with a firearm. After 2011, the number of homicides and assaults known to involve a firearm begins to rise gradually, until escalating sharply in 2016, similarly to Nuevo Leon and other states.

For 2016, all 32 states reported some homicide-with-a-firearm data and 28 states report gun crime data for both assault and homicide, making 2016 the most complete year yet for weapons crime data. This is likely an indication that several municipalities across the country have improved the coding of their case files, as the dataset is aggregated from each municipality and then submitted to the federal government.

The 14 states that have some anomaly in their weapons crime data are:

1)	Tabasco	8)	Nuevo León
2)	Baja California	9)	Jalisco
3)	Baja California Sur	10)	Mexico City
4)	Oaxaca	11)	México
5)	Morelos	12)	Colima
6)	Sonora	13)	Querétaro
7)	Tlaxcala	14)	Campeche

TABLE A.2 MISSING WEAPONS CRIME DATA

STATE	ASSAULT		HOMICIDE		TOTAL NUMBER OF MISSING YEARS
	NUMBER OF YEARS MISSING	SPECIFIC YEARS	NUMBER OF YEARS MISSING	SPECIFIC YEARS	
Tabasco	14	2003-2014	11	2003-2013	25
Baja California	14	2003-2014	9	2003-2011	23
Baja California Sur	12	2003-2014	7	2006-2012	19
Oaxaca	9	2003-2010, 2014	8	2003-2010	17
Morelos	14	2003-2014	0	-	14
Sonora	14	2003-2014	0	-	14
Tlaxcala	8	2004-20111	6	2006-2011	14
Nuevo León	12	2003-2014	0	-	12
Jalisco	4	2003-2006	4	2003-2006	8
Distrito Federal	6	2003-2008	0	-	6
México	4	2003-2006	1	2009	5
Colima	0	-	1	2005	1
Querétaro	1	2015	0	-	1
Campeche	1	2014	0	-	1
Aguascalientes	0	-	0	-	0
Chiapas	0	-	0	-	0
Chihuahua	0	-	0	-	0
Coahuila	0	-	0	-	0
Durango	0	-	0	-	0
Guanajuato	0	-	0	-	0
Guerrero	0	-	0	-	0
Hidalgo	0	-	0	-	0
Michoacán	0	-	0	-	0
Nayarit	0	-	0	-	0
Puebla	0	-	0	-	0
Quintana Roo	0	-	0	-	0
San Luis Potosí	0	-	0	-	0
Sinaloa	0	-	0	-	0
Tamaulipas	0	-	0	-	0
Veracruz	0	-	0	-	0
Yucatán	0	-	0	-	0
Zacatecas	0	-	0	-	0

STATE REVISIONS TO DATA:
TWO SCENARIOS

Most datasets go through post-publication revisions when improved information comes to light, and it is not different for law enforcement data. In Mexico, the federal dataset is built from the municipal level up, whereby local Public Ministry offices report the number of preliminary investigations by crime to the state's Attorney General's office (PGJ), and each state office reports the data to the federal public security Executive Secretariat (SESNSP). As such, state and local governments have discretion to make appropriate data revisions. Revisions to the federal dataset improve transparency, but they also affect peace scores. Consider two examples: San Luis Potosi and Nayarit.

San Luis Potosi has had a large upward revision in rape data, resulting in a worsening *violent crime* score — from 1.35 using data published in 2015 to 1.94 using data published at the end of 2016. As a result, San Luis Potosi has dropped in the rankings after updating the data. But the revisions represent progress in transparency and a more accurate analysis of the state's progress in peacefulness.

Nayarit has revised their extortion data. In 2015, the state reported zero cases of extortion for the entire year. In the 2016 data release, the state reported one case. There is no perfect way to address missing data. IEP uses two methods:

1) Where a state has reported zero incidences of a crime for the entire year, IEP considers that a failure to report data rather than an absence of crime. Missing crime data is imputed using the average state crime rate for the missing year (see the methodology on page 91).

2) Where a state has reported values for the crimes of rape, robbery, assault, extortion or kidnapping, IEP adjusts those values using the state's underreporting rate(s) derived from ENVIPE, Mexico's victimization survey.

However, sometimes, these methods taken together can have a distorting effect. There is no perfect way to adjust crime data to account for the unknown.

In some cases, this method produces more accurate estimates than others. For example, in the case of Nayarit, IEP's estimates for the level of organized crime have *fallen* despite an *increase* in the number of extortions reported. Nayarit's 2015 data included zero cases of extortion. As a result, underreporting-adjusted extortion rates were imputed and the total organized crime rate was estimated at 178.6 crimes per 100,000 people. In the 2016 data for the year 2015, Nayarit reported 1 case of extortion, which IEP adjusted for underreporting using the state's extortion multiplier of 12 — estimating 12 extortion cases. All in all, based on revised data,

Nayarit's estimated organized crime rate in 2015 now stands at 9.9 per 100,000 people.

It may well be true that there was only one case of extortion leading to an investigation in 2015 in Nayarit, a smaller state of 1.2 million people on Mexico's Pacific coast. When some data — rather than no data — is reported, there are few viable and objective methods for adjusting that data. Underreporting rates are among the best options. However, it may also be the case that there were far more cases of extortion and only one was recorded by the attorney general's office. This is common in Mexico. Unless the data is completely blank, IEP cannot impute it at a higher value that what is recorded.

Nayarit's status as the state showing the most improvement is not affected by these adjustments. Assessments of improvement and deterioration are consistent within the latest dataset. Values used to compare peace in 2015 and 2016 come from the 2016 dataset. But Nayarit's *ranking* as the second most peaceful state in Mexico in 2016 could change with more complete official data. This is why IEP recalculates the entire time series of scores each year using the latest available data.

Without accurate official data, levels of and challenges to peacefulness cannot be accurately measured. This transparency is crucial to a *well-functioning government* and building long term Positive Peace.

1   December 2016 values are imputed using December 2015 values because the December 2016 is not released before the index is calculated. Each iteration of the MPI corrects this with an updated dataset. As such, the 2016 MPI published 2015 violence estimates using December 2014 values in place of December 2015 values. The 2017 MPI reflects actual values for December 2015 and the 2018 MPI will publish updated values for December 2016.

2   Secretariado Ejecutivo del Sistema Nacional de Seguridad Publica, Incidencia Delictiva del Fuero Común, 2014, http://secretariadoejecutivo.gob.mx/incidencia-delictiva/incidencia-delictiva-victimas.php#, (accessed 24 February 2016).

3   Figures reflect updated data. The 2016 MPI reported that, in 2014, the number of victims reported by law enforcement in Veracruz accounted for only 64 percent of those counted from death certificates. Both the SESNSP and INEGI datasets are routinely updated as new information comes to light. As such, Veracruz now records a slightly better ratio, at 67 percent. In contrast, the gap between datasets in Nayarit has widened, as INEGI updated its totals with an additional 10 victims, resulting in a change from 71 to 67 percent. Similar minor adjustments have been recorded in other states and can be expected in coming years.

4   ENVIPE and INEGI data, compiled by Monica Ayala of Mexico Evalua in January 2017

APPENDIX B:
RESULTS TABLES

TABLE B.1 2017 MEXICO PEACE INDEX SCORES
A lower score indicates a better level of peacefulness.

STATE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Aguascalientes	1.33	1.35	1.35	1.57	1.81	1.93	1.94	1.93	2.23	2.00	1.73	1.68	1.74	1.78
Baja California	2.95	2.99	3.16	3.40	3.43	4.06	4.02	3.94	3.72	3.32	3.01	2.74	2.81	3.01
Baja California Sur	1.97	2.25	2.78	2.61	2.74	2.67	2.48	2.12	1.99	2.17	2.55	2.15	2.66	3.20
Campeche	1.54	1.51	1.56	1.45	1.53	1.55	1.49	1.49	1.48	1.57	1.82	1.68	1.56	1.61
Chiapas	1.96	1.84	1.58	1.49	1.54	1.47	1.57	1.62	1.70	1.65	1.63	1.57	1.65	1.57
Chihuahua	2.50	2.36	2.50	2.63	2.52	3.66	3.98	3.73	3.69	3.44	2.99	2.66	2.45	2.73
Coahuila	1.45	1.43	1.45	1.42	1.47	1.64	1.96	2.25	2.53	2.69	2.46	2.02	1.72	1.52
Colima	1.69	1.82	1.74	1.90	2.09	1.98	2.06	2.03	2.22	3.38	2.82	2.14	2.50	3.73
Mexico City	2.48	2.51	2.57	2.59	2.55	2.77	3.20	3.35	3.10	3.11	2.87	2.65	2.62	2.55
Durango	1.96	1.86	2.47	2.37	2.56	3.22	3.60	4.21	3.83	3.22	2.86	2.31	2.24	2.08
Guanajuato	1.63	1.69	1.85	2.00	2.33	2.45	2.66	2.36	2.29	2.47	2.36	2.33	2.43	2.44
Guerrero	2.59	2.37	2.32	2.60	2.64	2.90	3.53	3.44	3.79	3.90	3.98	3.68	3.80	3.93
Hidalgo	1.42	1.44	1.51	1.47	1.51	1.62	1.62	1.64	1.46	1.34	1.50	1.46	1.38	1.45
Jalisco	1.87	1.83	1.87	2.20	2.47	2.53	2.53	2.85	2.75	2.48	2.51	2.21	2.28	2.26
México	2.23	2.21	2.14	2.21	2.02	2.03	2.27	2.18	2.29	2.60	2.69	2.38	2.12	2.04
Michoacán	2.03	2.03	1.94	2.20	2.26	2.44	2.59	2.15	2.26	2.44	2.49	2.43	2.07	2.60
Morelos	2.16	2.31	2.47	2.70	2.30	2.45	3.26	3.77	3.22	4.01	3.78	3.14	2.88	3.00
Nayarit	1.76	1.83	1.73	2.03	2.16	2.20	2.02	2.82	3.16	2.26	1.86	1.68	1.54	1.38
Nuevo León	1.64	1.62	1.66	1.83	2.00	1.92	1.80	2.41	3.62	3.02	2.29	2.08	2.45	2.80
Oaxaca	2.69	2.38	2.24	2.35	2.35	2.19	2.39	2.23	1.79	1.68	1.73	1.90	2.12	2.27
Puebla	1.74	1.66	1.54	1.58	1.57	1.63	1.68	1.67	1.89	2.25	1.94	1.74	1.91	1.81
Querétaro	1.38	1.39	1.41	1.33	1.38	1.38	1.43	1.35	1.44	1.47	1.48	1.56	1.59	1.63
Quintana Roo	2.48	2.14	2.10	2.14	2.44	2.75	2.65	2.80	2.71	2.85	2.56	2.44	2.24	1.72
San Luis Potosí	1.64	1.86	1.79	1.86	2.15	2.25	2.25	2.43	2.43	2.12	1.69	1.62	1.74	2.04
Sonora	2.07	2.32	2.45	2.47	2.52	2.48	2.54	2.67	2.44	2.31	2.43	2.24	2.18	2.34
South	2.14	1.97	1.83	1.91	1.99	2.01	2.23	2.18	2.35	2.33	2.28	2.09	2.27	2.32
Tabasco	1.62	1.57	1.38	1.59	1.86	1.99	2.24	2.17	2.15	2.02	2.10	2.01	2.16	2.25
Tamaulipas	1.90	1.86	2.09	2.08	2.06	2.19	2.28	2.62	2.84	2.77	2.35	2.56	2.40	2.21
Tlaxcala	1.86	1.77	2.15	1.96	1.16	1.21	1.21	1.23	1.32	1.33	1.34	1.32	1.35	1.40
Veracruz	1.46	1.45	1.47	1.47	1.54	1.55	1.43	1.58	1.80	1.84	1.74	1.46	1.44	1.75
Yucatán	1.42	1.39	1.40	1.43	1.51	1.46	1.43	1.41	1.45	1.38	1.40	1.29	1.31	1.24
Zacatecas	1.66	1.50	1.51	1.57	1.65	1.73	1.60	1.68	1.78	2.04	1.89	1.77	2.23	2.83
NATIONAL SCORE	**1.98**	**1.95**	**1.97**	**2.07**	**2.15**	**2.29**	**2.50**	**2.65**	**2.63**	**2.56**	**2.40**	**2.17**	**2.17**	**2.26**

TABLE B.2 POSITIVE PEACE CORRELATIONS, 2003 AND 2016

The correlates of peacefulness in Mexico have changed since 2003, demonstrating the distortive nature of the drug trade related violence. This table gives the correlations between overall MPI scores and the Positive Peace domain scores and individual indicators for the first and last years of the study.

	INDICATOR	2003 MPI	2016 MPI
	MPPI OVERALL SCORE	**0.42**	**0.22**
PILLARS OF POSITIVE PEACE	Equitable Distribution of Resources	-0.05	-0.17
	Free Flow of Information	0.3	0.02
	High Levels of Human Capital	0.06	0.06
	Sound Business Environment	0.52	0.07
	Low Levels of Corruption	0.37	0.15
	Acceptance of the Rights of Others	0.18	0.2
	Good Relations with Neighbors	0.31	0.29
	Well-functioning Government	0.24	0.31
POSITIVE PEACE INDICATORS	Feel safe in public locations within municipality	-0.24	-0.38
	Net migration	-0.24	-0.38
	Confidence in the municipal police	-0.36	-0.33
	HDI health	-0.09	-0.3
	Average number of people per house	-0.21	-0.25
	Homicide impunity rate	-0.16	-0.24
	Women in the state administration	-0.19	-0.2
	People living in poverty	-0.12	-0.18
	Awareness of action taken by local authorities to construct or improve parks and sports facilities	-0.1	-0.15
	Unemployment rate	0.05	-0.12
	Perceptions of corruption among the Public Ministry and State Attorney	0.31	-0.1
	Perceptions of corruption among the state police	0.44	-0.1
	Awareness of action taken by local authorities to improve public lighting	-0.01	-0.09
	GDP per capita	-0.16	-0.07
	Upward social mobility	0.1	-0.02
	Scientific and technological companies and or institutes	-0.09	0.01
	Existence of an anticorruption training program for public administration personnel	-0.16	0.02
	Perception of the availability of public information	-0.07	0.05
	HDI education	0.18	0.09
	Attacks on journalists	0.28	0.12
	Indigenous development gap	0.21	0.12
	High degree of trust in neighbors	-0.2	0.13
	Perceptions of corruption among the municipal police	0.45	0.16
	Ease of Doing Business Index rank	0.5	0.19
	Journalists killed	0.3	0.21
	Population considered vulnerable social dimension	0.29	0.23
	Households with internet	0.23	0.34
	Perceived acts of corruption	0.47	0.54

TABLE B.3 ECONOMIC IMPACT OF VIOLENCE BY STATE, 2016

STATE	ECONOMIC IMPACT OF VIOLENCE (CONSTANT 2016 PESOS)	ECONOMIC IMPACT OF VIOLENCE PER CAPITA (CONSTANT 2016 PESOS)	ECONOMIC IMPACT OF VIOLENCE AS % OF GDP
Aguascalientes	32.6	25,000	15%
Baja California	133.9	37,900	25%
Baja California Sur	39.5	50,200	29%
Campeche	15.2	16,500	3%
Chiapas	63.0	11,850	21%
Chihuahua	116.4	31,000	22%
Coahuila	61.1	20,400	10%
Colima	48.9	66,500	46%
Mexico City	229.3	26,000	8%
Durango	50.0	28,000	23%
Guanajuato	181.1	30,800	23%
Guerrero	192.4	53,600	73%
Hidalgo	56.9	19,600	19%
Jalisco	179.4	22,400	15%
México	417.2	24,400	25%
Michoacán	118.5	25,600	28%
Morelos	84.2	43,300	41%
Nayarit	12.7	10,220	10%
Nuevo León	117.4	22,760	9%
Oaxaca	105.8	26,200	38%
Puebla	114.3	18,300	20%
Querétaro	47.4	23,300	12%
Quintana Roo	30.7	19,000	11%
San Luis Potosí	65.0	23,400	18%
Sinaloa	112.4	37,350	29%
Sonora	71.5	24,000	14%
Tabasco	67.5	28,000	17%
Tamaulipas	95.4	26,600	18%
Tlaxcala	18.4	14,200	18%
Veracruz	103.8	12,800	12%
Yucatán	31.3	14,600	11%
Zacatecas	59.2	37,300	32%

NOTES

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This report introduces new thinking and evidence about Positive Peace. It includes the Positive Peace Index, which measures Positive Peace in 162 countries, covering 99 per cent of the world's population.

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Twelve interviews with peacebuilders on developing the attitudes, institutions and structures of Positive Peace in Mexico.

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The fourth edition of the Global Terrorism Index provides a comprehensive summary of the key global trends and patterns in terrorism over the past 16 years.

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A statistical analysis of the state of peace in 162 countries and an assessment of the attitudes, structures and institutions that sustain peaceful societies.

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Institute for Economics and Peace, Aug 2016

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2014 Global Terrorism Index Report
Institute for Economics and Peace, Nov 2014

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2015 Global Terrorism Index
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