MEXICO PEACE INDEX

2020

IDENTIFYING AND MEASURING THE FACTORS THAT DRIVE PEACE

Institute for Economics & Peace

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Quantifying Peace and its Benefits

CONTENTS

EXECUTIVE SUMMARY

The 2020 report is the seventh edition of the Mexico Peace Index (MPI), produced by the Institute for Economics and Peace (IEP), and provides a comprehensive measure of peacefulness in Mexico, including trends, analysis and estimates of the economic impact of violence. The MPI is based on the Global Peace Index, the world's leading measure of global peacefulness, produced by IEP every year since 2007.

Mexico's peacefulness deteriorated by 4.3 percent in 2019, marking the fourth successive year of decline. The deterioration was driven by substantial increases in criminal activity, with the rate of organized crime rising by 24.3 percent. Consequently, 23 of the 32 states deteriorated in peacefulness, while only nine improved. However, the rate of increase in homicide slowed significantly compared to the prior year, increasing by only 1.4 percent.

Over the last five years, homicides have risen dramatically. Since 2015, the homicide rate has increased by 86 percent, with over 35,000 people killed last year. Conflicts within and between criminal organizations have proliferated, driving the increase in violence. There were 35 cartel conflicts between 2006 and 2018, involving 42 criminal organizations or their factions. Highlighting the gravity of the situation, homicide is now the leading cause of death for 15 to 44 year olds and the fourth most common for children five to fourteen.

Mexico reports the lowest level of domestic security and justice spending of all of the 33 countries in the Organization for Economic Co-operation and Development (OECD), at 0.7 percent of GDP. Consequently, Mexico has found it difficult to build sufficient capacity in its judicial system to meet the country's needs. To effectively address violence, Mexico must improve and increase its spending on the criminal justice system. For instance, Mexico averages 3.6 judges and magistrates per 100,000 people, four times fewer than the global average. This deficit limits the capacity of the judicial system to process cases, leading to high impunity rates.

Ending corruption and building effective institutions that are trusted by the public are, arguably, the most critical aspects holding back Mexico's progress. Over the last ten years, the population's assessment of the government, confidence in the political process and trust in the rule of law have deteriorated, especially in regard to corruption. Mexico ranks 128th out of 163 countries in terms of control of corruption, as assessed by the World Economic Forum (WEF), and has fallen 57 places in the last decade. However, the average perception of corruption in public security institutions did slightly improve last year, falling by 1.5 percentage points. It is too early to determine whether this change is the start of a sustained improvement.

> " Homicide is now the leading cause of death for 15 to 44 year olds and the fourth most common for children five to fourteen.

Insecurity is the highest concern among Mexicans, above unemployment, inflation, corruption and impunity. While fear of insecurity has steadily increased over the last five years, awareness of government actions to counter it have decreased. Meanwhile, concern about impunity in the legal system rose almost five percentage points last year, with more than a quarter of Mexicans putting it amongst their top three priorities for the nation's challenges.

The report analyzes the different dynamics driving the high levels of violence across the country. Violence can be broken down into four different categories, each of which requires a different policy response:

1. Political violence
2. Opportunistic violence, such as extortion and robbery
3. Interpersonal violence, such as assault, sexual assault and violence in the family
4. Cartel conflict, characterized by high levels of homicide, drug-trade related crime and armed conflict between criminal groups.

In 2019, Yucatán was the most peaceful state in Mexico for the third consecutive year, followed by Tlaxcala, Chiapas, Campeche and Nayarit. However, three of the five most peaceful – Yucatán, Tlaxcala and Campeche – recorded a deterioration in their MPI scores in 2019, highlighting how widespread the breakdown in peace has been.

Baja California remained Mexico's least peaceful state in 2019, followed by Colima, Quintana Roo, Chihuahua and Guanajuato. Four of the five – Baja California, Colima, Chihuahua and Guanajuato – had homicide rates above 49 deaths per 100,000 people, which is

considered extreme. In 2019, all five of the least peaceful states recorded deteriorations in their overall scores.

The largest improvements over the last five years occurred in Sinaloa, Tamaulipas, Coahuila, Yucatán and Chiapas. All but Tamaulipas recorded improvements in their homicide rates, while all five states improved their *detention without a sentence* and *organized crime* scores. Sinaloa and Tamaulipas improved so much that they are no longer ranked amongst the five least peaceful states.

The largest deteriorations over the last five years occurred in Colima, Baja California, Guanajuato, Chihuahua and Quintana Roo. These five states all have rising homicide rates, especially Colima, which has recorded the highest homicide rate in Mexico since 2016. All five states have also recorded increases in organized crime activity.

The economic impact of violence in Mexico was estimated to be 4.57 trillion pesos (US$238 billion) in 2019, equivalent to 21.3 percent of Mexico's GDP. The total economic impact fell 0.3 percent compared to the prior year, but the decline was driven by reductions in spending on domestic security and the criminal justice system. The economic impact of homicide, organized crime, military spending and violent assault continued to increase.

In 2019, the economic impact of violence was eight times higher than public expenditure on health and six times higher than spending on education. On a per capita basis, the economic impact of violence was 36,129 pesos, approximately five times the average monthly salary in Mexico.

If Mexico were to reduce its homicide rate by ten percent – an achievable target – the economic impact of homicide would fall by 219 billion pesos. This

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If Mexico were to reduce its homicide rate by ten percent, the economic impact of homicide would fall by 219 billion pesos.

reduction would be equivalent to four times what the government spent on science, technology and innovation in 2019.

Providing Mexico can tackle its under investment in the criminal justice system, address corruption and improve its institutions, the country has excellent prospects for substantial improvements in peace. Globally, Mexico ranks 67th out of 163 countries in the Positive Peace Index and ranks fifth in Central America and the Caribbean. Positive Peace is a measure of the *attitudes, institutions and structures that create and sustain peaceful societies,* Mexico's Positive Peace results are considerably stronger than its ranking on the Global Peace Index, indicating its capacity to improve. Mexico recorded substantial progress in *Free Flow of Information* and *Sound Business Environment* over the past decade. However, the country saw large deteriorations in *Low Levels of Corruption* and *Well-Functioning Government*. The average state score for *Low Levels of Corruption* deteriorated by 16 percent for the four years up to 2018, although national indicators did record slight improvements in 2019.

Taken together, the findings of the 2020 MPI highlight the need to counter increasing lawlessness. A holistic, integrated public security and peacebuilding framework is needed in order to reverse the trend. Special emphasis needs to be placed on impunity, the under investment in the criminal justice system and the high levels of perceived corruption. Security strategies must also address the four major categories of violence in Mexico, each with a different set of dynamics and therefore requiring different policy responses. The 2020 MPI report provides the evidence for policy makers, business leaders and civil society organizations to develop new and broader peacebuilding solutions in Mexico.

KEY FINDINGS

SECTION 1: RESULTS & TRENDS

> In 2019 Mexico's peacefulness deteriorated by 4.3 percent, marking the fourth successive year of deteriorations. This was largely driven by a 24.3 percent increase in the organized crime rate.

> The homicide rate increased by 1.4 percent in 2019, which is a much slower rise than the previous year's increase of 15.7 percent.

> The national violent crime rate increased 4.7 percent in 2019, driven mainly by an 18.3 percent rise in the rate of sexual assault.

> For the second consecutive year, Baja California is the least peaceful state in Mexico, followed by Colima, Quintana Roo, Chihuahua and Guanajuato.

> Yucatán remains the most peaceful state, followed by Tlaxcala, Chiapas, Campeche and Nayarit.

> Nine of the 32 states improved in peacefulness in 2019, while 23 states deteriorated.

> Morelos recorded the largest deterioration in overall score, driven by a 193 percent increase in its organized crime rate.

> Mexico's peacefulness has declined by 27.2 percent over the last five years.

> The homicide rate increased 86 percent from 2015 to 2019, rising from 15 deaths per 100,000 people in 2015 to 28 in 2019.

> Only seven states have recorded improvements in their homicide rates since 2015. Baja California Sur achieved the largest improvement, reducing its homicide rate by more than half to stand at 10.3 deaths per 100,000 people.

> The violent crime rate increased by 39.8 percent from 2015 to 2019, with rates of sexual assault rising 60 percent over that period.

> Gun violence is also on the rise, with the national firearms crime rate more than doubling, from 13.6 per 100,000 people in 2015, to 29.6 in 2019.

> The organized crime rate has increased by 46.2 percent since 2015. The greatest deterioration occurred for the rate of retail drug crimes, which increased by 75.4 percent.

> Colima recorded the largest deterioration in peacefulness over the last five years, followed by Baja California, Guanajuato, Chihuahua and Quintana Roo.

> Sinaloa, Tamaulipas, Coahuila, Yucatán and Chiapas showed the greatest overall improvement over the last five years.

SECTION 2: DYNAMICS & VIOLENCE

> Statistical analysis shows that there are four distinct types of violence in Mexico, each with a different set of dynamics: political violence, opportunistic violence, interpersonal violence and cartel conflict.

> Homicide is now the leading cause of death for youth in Mexico. Each year, more than a third of homicide victims are between the ages of 15 and 29.

> From 2006 to 2018, 35 conflicts were recorded involving 42 criminal organizations or their factions.

> An estimated 175,000 people have been killed over the 13 years of the drug war.

> There were at least 180 acts of political violence in the first quarter of 2019 – a 46 percent increase over the same period in the prior year. Twenty-four of these attacks were assassinations of political figures.

> In total, there were at least 200 political assassinations between September 2017 and March 2019.

> Seventy-three percent of threats and attacks against political figures in early 2019 targeted local politicians.

> Reporters Without Borders has recorded a total of 1,524 journalists and media professionals assassinated in Mexico over the last 20 years.

> The number of journalists assassinated has been steadily declining since its peak in 2012. In 2019, 51 assassinations were recorded – a 64 percent decline from the 2012 peak of 143.

SECTION 3: ECONOMIC VALUE OF PEACE

> The economic impact of violence in Mexico was 4.57 trillion pesos (US$238 billion) in 2019, equivalent to 21.3 percent of the country's GDP.

> The economic impact of violence fell by 0.3 percent in 2019, driven by decreases in government expenditure on domestic security and justice.

> The economic impact of violence was nearly eight times higher than public investments made in health care and more than six times higher than those made in education in 2019.

- Mexico spent 0.70 percent of its GDP on its domestic security and the justice system in 2019, the least of any OECD country.

- Homicide comprised 48 percent of the economic impact of violence at 2.19 trillion pesos (US$114 billion) in 2019.

- The economic impact of violence was 36,129 pesos per person, approximately five times the average monthly salary of a Mexican worker.

- The per capita economic impact varies significantly from state to state, ranging from 11,714 pesos in Yucatán to 83,926 pesos in Colima.

- The economic impact of organized crime increased by 20.7 percent in 2019, the largest percentage increase of all indicators.

SECTION 4: POSITIVE PEACE

- Globally, Mexico ranks 67th out of 163 countries in the Positive Peace Index and ranks fifth in Central America and the Caribbean. This is considerably higher than its ranking on the Global Peace Index, highlighting its potential for improvement.

- *Low Levels of Corruption* is the worst performing Pillar and has deteriorated 13 percent over the last decade.

- The average state score for *Low Levels of Corruption* deteriorated by 16 percent from 2014 to 2018.

- The Pillars showing the greatest improvements in the past ten years were *Free Flow of Information* at 15 percent and *Sound Business Environment* at 11 percent.

- The sub-national Mexico Positive Peace Index (MPPI) showed substantial variation across Mexico's states. Nuevo León, Colima and Baja California Sur had the strongest levels of Positive Peace, while Guerrero, Chiapas and Puebla have the weakest.

- A total of 28 states – out of 32 – recorded improvements in Positive Peace from 2014 to 2018.

- Some states have high levels of Positive Peace while also recording high levels of violence. This is in part associated with a strong presence of organized crime, which can distort the conventional relationship between levels of violence and Positive Peace.

- Organized crime tends to flourish where the *Well-Functioning Government* and *Low Levels of Corruption* Pillars are weak.

Legend:
- (1, 2.01)
- (2.01, 2.53)
- (2.53, 2.91)
- (2.91, 3.8)
- (3.8, 5)
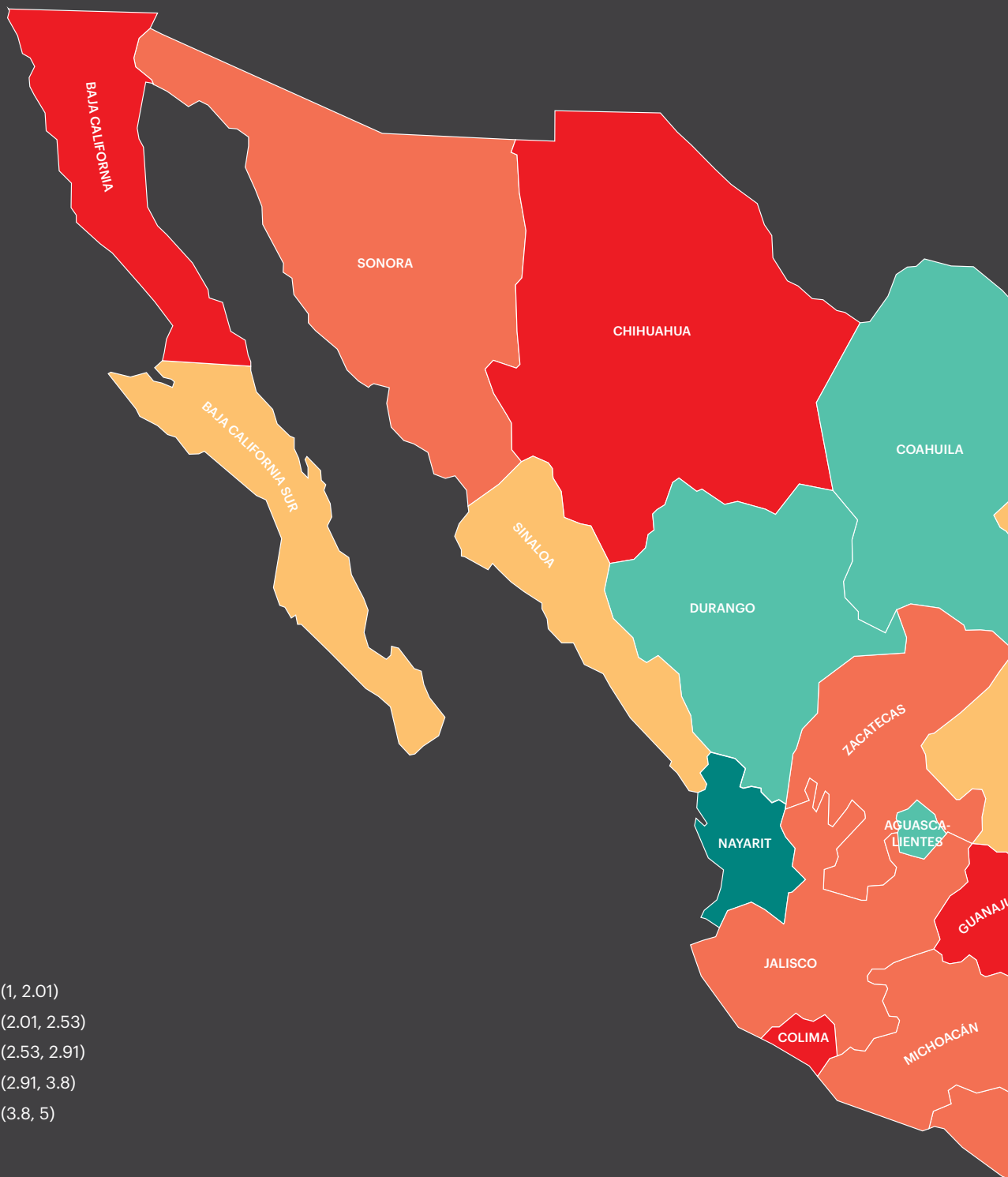
VISION *of* HUMANITY

visionofhumanity.org

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.

2020 MEXICO PEACE INDEX

A SNAPSHOT OF THE STATE OF PEACE IN MEXICO

MPI SCORE

More peaceful

Less Peaceful
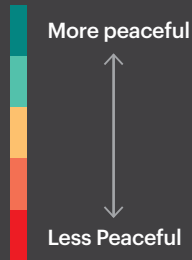
RANK		STATE	SCORE	RANK		STATE	SCORE
1	●	Yucatán	1.272	17	●	Baja California Sur	2.797
2	●	Tlaxcala	1.579	18	●	Sinaloa	2.798
3	●	Chiapas	1.726	19	●	México	2.91
4	●	Campeche	1.959	20	●	Jalisco	2.977
5	●	Nayarit	2.001	21	●	Sonora	3.093
6	●	Hidalgo	2.161	22	●	Michoacán	3.118
7	●	Coahuila	2.163	23	●	Mexico City	3.124
8	●	Durango	2.281	24	●	Tabasco	3.161
9	●	Veracruz	2.292	25	●	Zacatecas	3.473
10	●	Puebla	2.378	26	●	Morelos	3.583
11	●	Aguascalientes	2.436	27	●	Guerrero	3.783
12	●	Querétaro	2.521	28	●	Guanajuato	3.817
13	●	Oaxaca	2.572	29	●	Chihuahua	3.977
14	●	Tamaulipas	2.594	30	●	Quintana Roo	4.165
15	●	San Luis Potosi	2.718	31	●	Colima	4.357
16	●	Nuevo León	2.773	32	●	Baja California	4.572
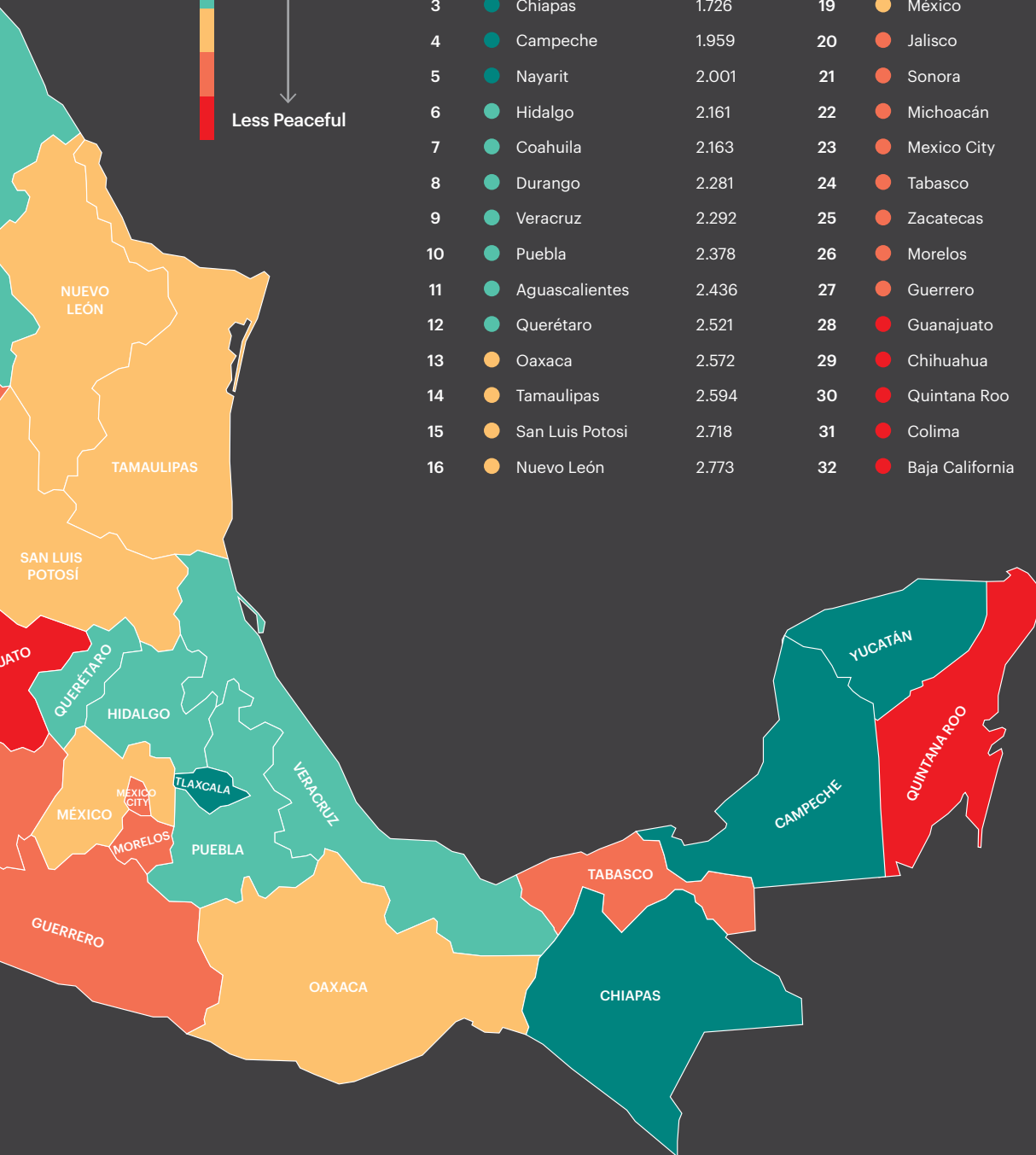
RESULTS

2019 RESULTS

- In 2019 Mexico's peacefulness deteriorated by 4.3 percent, marking the fourth successive year of deteriorations. This was largely driven by an increase in the organized crime rate of 24.3 percent.

- The rate of decline in the Mexico Peace Index has slowed compared to 2017 and 2018, when the overall score deteriorated by 11.4 percent and 6.1 percent, respectively.

- The homicide rate increased by 1.4 percent in 2019, which is a much slower rise than the previous year's increase of 15.7 percent.

- Over 35,500 homicides were recorded in Mexico in 2019, compared to 34,655 in 2018, marking the highest level of violence on record.

- At the national level, the *violent crime* score deteriorated by 3.4 percent in 2019, driven mainly by a rise in the rate of sexual assault at 18.3 percent.

- For the second consecutive year, Baja California is the least peaceful state in Mexico, followed by Colima, Quintana Roo, Chihuahua and Guanajuato.

- Yucatán remains the most peaceful state, followed by Tlaxcala, Chiapas, Campeche and Nayarit.

- Nayarit's improvement places it amongst the five most peaceful states for the first time since 2016, following a reduction in the rates of firearms crimes and homicide by 57.3 and 53.4 percent, respectively.

- Nine of the 32 states improved in peacefulness in 2019, while 23 states deteriorated.

- Morelos recorded the largest deterioration in overall score, driven by a 193 percent increase in its organized crime rate.

FIVE-YEAR TRENDS

- Mexico's peacefulness has declined by 27.2 percent over the last five years.

- The deterioration was mainly driven by an increase in the national homicide rate of 85.9 percent, rising from 15.1 deaths per 100,000 people in 2015 to 28.1 in 2019.

- Only seven states have recorded improvements in their homicide rates since 2015. Baja California Sur has achieved the largest improvement, reducing its homicide rate by more than half to stand at 10.3 deaths per 100,000 people.

- The violent crime rate increased by 39.8 percent from 2015 to 2019, while rates of sexual assault have risen by 59.5 percent.

- Gun violence is also on the rise, with the national firearms crime rate more than doubling, from 13.6 per 100,000 people in 2015, to 29.6 in 2019.

- The organized crime rate has increased by 46.2 percent since 2015. The greatest deterioration occurred for the rate of retail drug crimes, which increased by 75.4 percent.

- By contrast, the *detention without a sentence* indicator has consistently improved. Since 2015, the total number of detainees without a sentence has declined by 24.7 percent, reaching the lowest level in over a decade.

- Colima recorded the largest deterioration in peacefulness, followed by Baja California, Guanajuato, Chihuahua and Quintana Roo.

- Colima has recorded the highest homicide rate for four of the last five years.

- Sinaloa, Tamaulipas, Coahuila, Yucatán and Chiapas showed the greatest overall improvement over the last five years.

TABLE 1.1

Mexico Peace Index results, 2020

A lower score indicates a better level of peacefulness.

MPI RANK	STATE	OVERALL SCORE	HOMICIDE	VIOLENT CRIME	FIREARMS CRIME	ORGANIZED CRIME	DETENTION WITHOUT A SENTENCE	OVERALL CHANGE, 2018-2019	
1	Yucatán	1.272	1.104	1.322	1.041	1.601	1.49	0.016	—
2	Tlaxcala	1.579	1.861	1.428	1.506	1.326	1.758	0.038	—
3	Chiapas	1.726	1.669	1.823	1.491	1.923	1.752	-0.07	↑ 1
4	Campeche	1.959	1.526	1.299	1.279	3.375	3.296	0.384	↓ 1
5	Nayarit	2.001	1.973	1.308	1.628	2.107	4.574	-0.551	↑ 9
6	Hidalgo	2.161	1.793	3.423	1.791	2.091	1.34	0.213	↓ 1
7	Coahuila	2.163	1.596	2.776	1.428	3.418	1.227	0.119	↓ 1
8	Durango	2.281	1.643	3.115	1.466	3.184	2.157	0.023	↑ 2
9	Veracruz	2.292	2.372	1.995	2.18	2.843	1.605	0.05	—
10	Puebla	2.378	2.3	3.599	2.347	1.695	1.333	0.152	↓ 2
11	Aguascalientes	2.436	1.492	3.948	1.718	3.415	1.225	0.133	—
12	Querétaro	2.521	1.602	3.425	1.745	4.162	1.229	0.384	↓ 5
13	Oaxaca	2.572	2.936	3.049	2.893	1.722	1.388	-0.005	↑ 2
14	Tamaulipas	2.594	2.615	3.67	2.021	2.553	1.23	-0.362	↑ 5
15	San Luis Potosí	2.718	2.155	3.623	2.256	3.603	1.283	0.187	↓ 2
16	Nuevo León	2.773	2.152	3.086	2.431	4.227	1.312	0.111	↑ 1
17	Baja California Sur	2.797	1.666	4.107	1.357	5	1.419	-0.379	↑ 7
18	Sinaloa	2.798	2.957	2.917	2.649	3.146	1.348	-0.193	↑ 4
19	México	2.91	2.091	5	2.332	3.165	1.268	0.268	↓ 3
20	Jalisco	2.977	3.104	3.795	2.723	2.777	1.523	-0.016	↑ 3
21	Sonora	3.093	3.937	2.008	3.149	3.118	2.562	0.592	↓ 9
22	Michoacán	3.118	3.806	2.453	4.455	2.102	1.611	0.305	↓ 4
23	Mexico City	3.124	2.142	5	2.987	3.517	1.195	0.144	↓ 2
24	Tabasco	3.161	2.834	4.993	2.747	2.908	1.28	-0.07	↑ 1
25	Zacatecas	3.473	3.449	3.041	3.214	5	1.333	0.014	↑ 1
26	Morelos	3.583	4.431	3.871	3.326	3.226	1.231	0.625	↓ 6
27	Guerrero	3.783	4.3	2.845	4.044	4.655	1.369	-0.217	↑ 3
28	Guanajuato	3.817	4.645	4.252	4.928	2.149	1.169	0.171	↓ 1
29	Chihuahua	3.977	5	3.052	4.773	3.558	1.675	0.256	—
30	Quintana Roo	4.165	4.087	5	3.669	5	1.31	0.495	↓ 2
31	Colima	4.357	5	3.452	5	4.804	1.536	0.246	—
32	Baja California	4.572	5	4.206	5	5	1.732	0.087	—
	NATIONAL	**2.914**	**2.817**	**3.615**	**2.778**	**3.07**	**1.364**	**0.12**	

Source: IEP

NATIONAL RESULTS

Peace in Mexico deteriorated by 4.3 percent in 2019. This was largely driven by a 24.3 percent increase in the organized crime rate, which increased from 112 to 139 offenses per 100,000 people. 2019 marked the worst year for peacefulness in Mexico since 2015, the first year recorded under the new data standards. Last year, only nine states improved in overall score, while 23 deteriorated.

Although four of the five indicators deteriorated in 2019, the overall rate of deterioration slowed. The deterioration of the *homicide* and *firearms crime* indicators slowed considerably compared to the last five years, with both deteriorating by less than two percent.

The homicide rate increased to 28.1 per 100,000 people, reaching the highest level since official records began in 1990. This represents a 1.4 percent increase and is a slower deterioration than previous years. In 2019, just six states accounted for almost half of all homicides in Mexico. These were: Guanajuato, Baja California, the state of México, Jalisco, Chihuahua and Michoacán.

The *organized crime* score had the largest deterioration in 2019, with a deterioration of 14.6 percent. The changing criminal landscape in Mexico has seen a steady rise in extortion and retail drug crime, driven by the continued fragmentation of larger organized crime groups. Fragmentation has led to the diversification of criminal activity, extreme violence, and a steady rise in Mexico's homicide rate as smaller groups compete for territory and control of drug trafficking routes.[2]

Morelos recorded the largest year-on-year change of any state in Mexico. In 2019, the organized crime rate in Morelos increased by 193 percent, primarily due to a substantial rise in extortion offenses.

After organized crime, the violent crime rate recorded the largest increase, rising by 4.7 percent in 2019. In 2019, 12 states improved their violent crime rates, whilst 20 deteriorated. Increases in the rates of sexual assault and family violence drove the trend, while robbery stayed roughly the same. The national rates of sexual assault and family violence increased by 18.3 and 14.3 percent respectively.

The rate of firearms crime increased marginally by 1.2 percent. Seventeen states deteriorated in score, compared to 15 that improved. Nationally, gun violence accounted for 69.3 percent of homicides in 2019. The rate of homicide with a firearm rose marginally, by 0.4 percent, whilst the rate of assault with a firearm rose by four percent.

For the fourth consecutive year, the *detention without a sentence* indicator improved, with the number of detainees without a sentence declining by 1.5 percent. The state of México recorded the largest improvement, with 428 fewer people being detained without a sentence in 2019.

FIGURE 1.1

Changes in peacefulness by indicator, 2018–2019

Peacefulness in Mexico deteriorated by 4.3 percent from 2018 to 2019. A lower score indicates a better level of peacefulness.
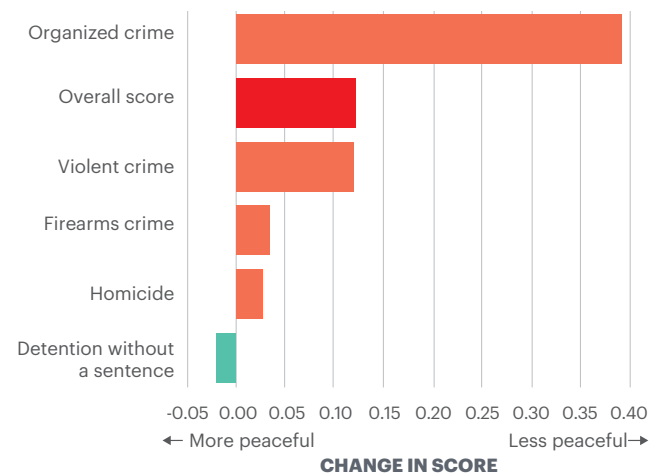
Source: IEP

> The deterioration in peacefulness was largely driven by a 24.3 percent increase in the organized crime rate.

METHODOLOGY AT A GLANCE

The Mexico Peace Index (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 peace, which is defined as "the absence of violence or fear of violence". This is the seventh iteration of the MPI. The MPI primarily uses data published by the *Secretariado Ejecutivo de Sistema Nacional de Seguridad Pública* (SESNSP), or Executive Secretary of the National System for Public Security. However, wherever possible, the official data is adjusted for underreporting and contextualized using other datasets. This page summarizes the methodology.

The details of the methodology can be found in Section 5.

The MPI is composed of the following five indicators, scored between 1 and 5, where 1 represents the most peaceful score and 5 the least peaceful:

GLOBAL PEACE INDEX 2019

HOMICIDE

The number of victims of intentional homicide per 100,000 people.

Source: SESNSP

VIOLENT CRIME

The number of violent crimes per 100,000 people, adjusted for underreporting. Violent crimes include robbery, assault, sexual violence and violence within the family.

Source: SESNSP

ORGANIZED CRIME

The number of extortions, drug trade related crime and kidnapping or human trafficking investigations per 100,000 people. Extortion, kidnapping and human trafficking rates are adjusted for underreporting. Drug trade related crimes include:

- the federal crimes of production, transport, trafficking, trade, supply, or possession of drugs or other crimes under the *Crimes Against Public Health law/Los Delitos contra La Salud Publica*

- retail drug crimes, as a proxy indicator of the size of the market fueled by illegal drug production and distribution; and

- crimes classed under the *Law Against Organized Crime/La Ley Contra El Crimen Organizada,* which includes all of the above crimes when three or more people conspire to commit them.

The crimes included in the *organized crime* indicator are weighted against each other to derive the indicator score.

Indicator sub-weights adjust the scores based on the distribution of crimes, the relative social impact of the offense, and the degree to which the crime represents the presence of criminal organizations.

Source: SESNSP

FIREARMS CRIME

The number of victims of an intentional or negligent homicide or assault committed with a firearm per 100,000 people.

Source: SESNSP

DETENTION WITHOUT A SENTENCE

The ratio of people in prison without a sentence to the number of violent crimes (including homicide).

Source: National Security Commission / *Comisión Nacional de Seguridad* (CNS)

UNDERREPORTING AND ADJUSTMENT

Two of the indicators – *violent crime* and *organized crime* – are adjusted for underreporting. In 2019, 93.2 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.[1] 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 crime and adjusts the official statistics for robbery, assault, sexual violence, extortion and kidnapping or human trafficking to better reflect actual rates of violence.

2019
STATE
RESULTS

MOST PEACEFUL STATES

In 2019, Yucatán, Tlaxcala, Chiapas, Campeche and Nayarit were the five most peaceful states in Mexico. Of these, only two recorded improvements in their overall score: Chiapas and Nayarit. Figure 1.2 visualizes the states' scores by indicator. Despite scoring consistently well across most indicators,

Nayarit and Campeche face challenges in the *detention without a sentence* and *organized crime* indicators.

Two of the five states – Tlaxcala and Campeche – recorded an increase in their homicide rate, consistent with national trends.

TABLE 1.2

Most peaceful states, 2019

For the third consecutive year, Yucatán was the most peaceful state in Mexico.

MOST PEACEFUL			
Rank	State	MPI Score	Change
1	Yucatán	1.272	0.016
2	Tlaxcala	1.579	0.038
3	Chiapas	1.726	-0.07
4	Campeche	1.959	0.384
5	Nayarit	2.001	-0.551

Source: IEP

FIGURE 1.2

Most peaceful states by indicator scores, 2019

The five most peaceful states score well in the *homicide, organized crime,* and *firearms crime* indicators. Campeche and Nayarit have the worst scores in Mexico for the *detention without a sentence* indicator. A lower score indicates a better level of peacefulness.
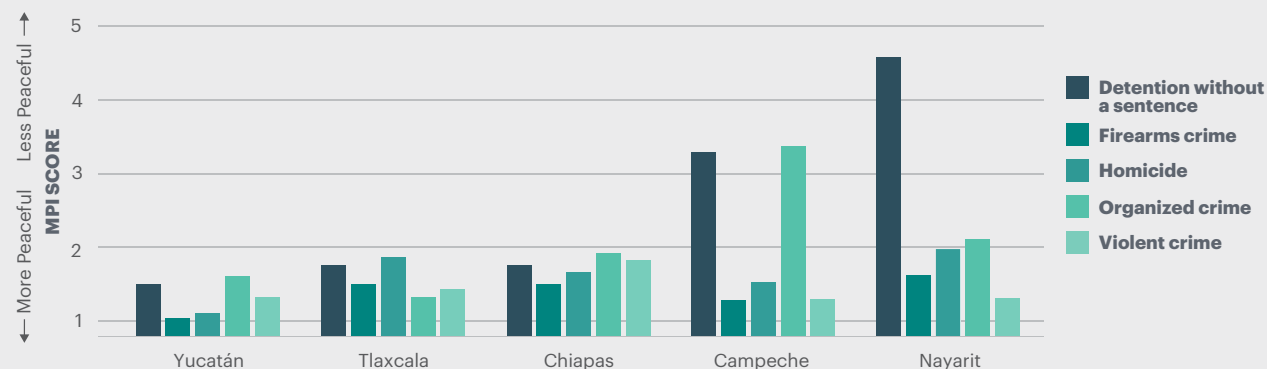
Source: IEP

Rank 1: Yucatán

2019 SCORE
1.272

CHANGE IN RANK 18/19:
0

CHANGE IN SCORE 18/19: **0.016**

Yucatán remained the most peaceful state in Mexico for the third year in a row. In 2019, Yucatán had the lowest rates of homicide and firearms crime in Mexico. Contrary to the national trend, the *firearms crime, homicide* and *violent crime* scores have continued to improve in Yucatán over the last five years. In particular, Yucatán recorded one of the largest improvements in the rate of gun violence in 2019. The rates of homicide with a firearm and assault with a firearm declined by 52.8 and 23.5 percent, respectively.

Despite its strong performance, the state recorded a marginal deterioration of 1.3 percent in its overall score, compared to 2018. This was primarily due to deteriorations in the *detention without a sentence* and *organized crime* indicators. The largest deterioration was in the rate of kidnapping and human trafficking, which increased by 69.3 percent. However, Yucatán has consistently scored well across all indicators, meaning these deteriorations had little impact on Yucatán's overall ranking.

Rank 2: Tlaxcala

2019 SCORE
1.579

CHANGE IN RANK 18/19:
0

CHANGE IN SCORE 18/19: **0.038**

Tlaxcala was the second most peaceful state in Mexico in 2019, however, of the five indicators used in the Index, only *violent crime* improved.

The violent crime rate almost halved between 2018 and 2019, from 809 cases to 408 per 100,000 people, with improvements recorded in all components of *violent crime*. The largest improvements were recorded in the rates of family violence and sexual assault. In 2019, Tlaxcala reported the lowest rate of family violence of any state in Mexico, at 3.5 cases per 100,000 people.

The overall score in Tlaxcala deteriorated by 2.5 percent, primarily driven by *deteriorations in the detention without a sentence* and *homicide* scores. The *detention without a sentence* score rose by 28.3 percent compared to the prior year, while the homicide rate increased by 30.9 percent. Although the organized crime rate increased by 23.6 percent, Tlaxcala had the lowest organized crime rate for the fourth consecutive year, at 17.8 offenses per 100,000 people. The rise in organized crime follows the national trend and was largely due to an increase in major organized crime offenses, including drug trafficking.

Tlaxcala has seen significant economic growth in recent years, and in 2019 the state registered the highest economic growth across Mexico with a growth rate of 9.1 percent.[3] This was predominantly driven by investment in Tlaxcala's construction and mining industries.[4]

Rank 3: Chiapas

2019 SCORE
1.726

CHANGE IN RANK 18/19:
↗ **1**

CHANGE IN SCORE 18/19: **-0.07**

In 2019, Chiapas rose by one place in the overall rankings due to a four percent improvement in its overall score. Chiapas recorded improvements in four of the five indicators: *firearms crime, homicide, organized crime* and *violent crime*. The largest improvement occurred in the violent crime rate, which improved from 1,020 offenses per 100,000 people in 2018, to 784 in 2019. This was predominantly due to a decline in the rates of assault, robbery and family violence. Chiapas had the fifth lowest violent crime rate in Mexico in 2019.

Whilst the homicide and firearms crime rates declined in Chiapas, the rate of homicide with a firearm increased by 8.7 percent between 2018 and 2019. Gun violence rose markedly in the state, with approximately 55.6 percent of homicides being committed with a gun in 2019, compared to 47.5 in 2018.

Rank 4: Campeche

2019 SCORE
1.959

CHANGE IN RANK 18/19:
↘ **1**

CHANGE IN SCORE 18/19: **0.384**

Campeche was ranked the fourth most peaceful state in 2019, falling one place in the overall rankings from the previous year. Following the national trend, the *detention without a sentence* indicator recorded an improvement of 7.7 percent. Campeche had the third lowest number of detainees without a sentence in 2019.

The overall score in Campeche deteriorated by 24.4 percent, which was driven by a rise in organized crime activity. Year-on-year, the organized crime rate in Campeche almost doubled. The deterioration in the organized crime indicator was primarily due to a large increase in the rate of major organized crime offenses, which rose from 1.8 per 100,000 people in 2018, to 20.3 in 2019. The rates of extortion and retail drug crimes also increased by 33 and 30.1 percent, respectively.

In Campeche, the deterioration in major organized crime offenses can be explained by the sharp increase in incidences of piracy targeting offshore oil platforms and ships in the Gulf of Mexico.[5] This deterioration saw Campeche's organized crime rate deteriorate from the third lowest in Mexico in 2018 to the sixth lowest in 2019.

The rate of firearms crime, violent crime and homicide also increased by 12.3, 9.9 and two percent, respectively. Although Campeche recorded deteriorations in these three indicators, the state retains the lowest violent crime rate, and one of the lowest rates of firearms crime and homicide in Mexico.

Rank 5: Nayarit

2019 SCORE

2.001

CHANGE IN RANK 18/19:

↗ 9

CHANGE IN SCORE 18/19: -0.551

In 2019, Nayarit recorded the largest improvement of any state in Mexico. Nayarit's overall score improved by 21.6 percent, resulting in a rise of nine places in the overall rankings to be the fifth most peaceful state in Mexico.

Four of the five indicators improved in Nayarit. The largest improvement occurred for the *firearms crime* indicator, which improved by 34.6 percent. This was primarily driven by a decrease in homicides committed with a firearm, the rate fell from 22.2 per 100,000 people in 2018, to 8.8 in 2019.

Tourism increased alongside peacefulness in Nayarit. In 2019, the upward trend in tourism continued, with several new developments bringing long-term investment to the region. Nayarit welcomed over 2.7 million visitors in 2019.[6]

Violent crime was the only indicator that deteriorated in Nayarit between 2018 and 2019. The violent crime rate increased by 44.3 percent, driven by deteriorations in the rates of family violence, sexual assault and assault. Robbery was the only sub-indicator of *violent crime* to improve, with the rate declining by 14.5 percent.

BOTTOM FIVE

———

LEAST PEACEFUL STATES

In 2019, the five least peaceful states in Mexico were Baja California, Colima, Quintana Roo, Chihuahua and Guanajuato. All of the five least peaceful states recorded deteriorations in their overall score in 2019, increasing the gap between the most and least peaceful states. Notably, the *organized crime* score deteriorated in all five states between 2018 and 2019,

with Quintana Roo recording a deterioration of 50.5 percent.

Figure 1.3 visualizes these states' scores by indicator. All of the scores for the five least peaceful states were within the bottom half of states in Mexico in terms of their *homicide*, *firearm crime* and *organized crime*.

TABLE 1.3

Least peaceful states, 2019

Baja California retained its position as the least peaceful state in Mexico for the second consecutive year.

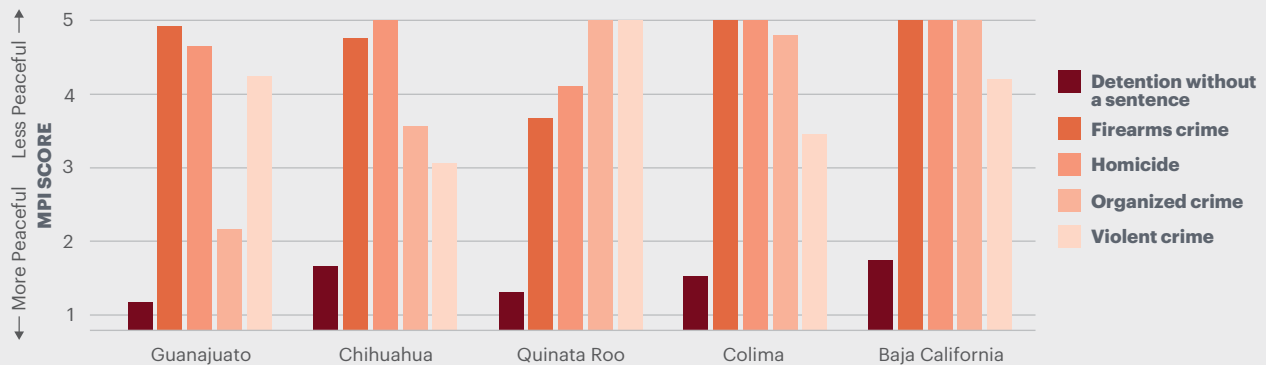| LEAST PEACEFUL			
Rank	State	MPI Score	Change
32	Baja California	4.572	0.087
31	Colima	4.357	0.246
30	Quintana Roo	4.165	0.495
29	Chihuahua	3.977	0.256
28	Guanajuato	3.817	0.171

Source: IEP

FIGURE 1.3

Least peaceful states by indicator scores, 2019

The five least peaceful states have consistently poor scores in the *homicide, firearms crime* and *organized crime* indicators.
In 2019, Colima had the highest homicide rate in Mexico.

Source: IEP

Rank 32: Baja California

2019 SCORE	CHANGE IN RANK 18/19
4.572	**0**

CHANGE IN SCORE 18/19:	**0.087**

Baja California is Mexico's least peaceful state, following a two percent deterioration in its overall score in the last year. This deterioration was mainly driven by a rise in the *organized crime* rate, which increased by 32.2 percent in 2019. Baja California saw a sharp increase in the rate of extortion, which rose by 89.1 percent in one year. According to INEGI's annual victimization survey, over 6,000 people were victims of extortion in 2018.[7] Retail drug crime and major organized crime offenses also increased in 2019, although the rate of kidnapping and human trafficking did improve slightly.

The resurgence of violence in Baja California, particularly in the city of Tijuana, is attributed to the Jalisco Cartel New Generation (CJNG) aligning with the "remnants" of the Tijuana Cartel, also known as the Arellano Felix Organization (AFO).[8] Intense fighting over the key drug trafficking routes to the United States from the Sinaloa Federation has been concentrated in Tijuana, and caused the homicide rate in Baja California to spike in 2018.[9] Although Baja California recorded an 8.9 percent improvement in the homicide rate in 2019, Tijuana retained its rank as the deadliest city in Mexico with an estimated 2,185 homicides.[10]

The number of detainees without a sentence rose by 24.9 percent in 2019, resulting in Baja California recording one of the highest figures in Mexico. The rate of violent crime increased by 2.5 percent, primarily driven by increases in the rates of sexual assault and family violence.

While the overall score deteriorated, the firearms crime rate improved by 14.3 percent, with improvements in the rates of assault with a firearm and homicide with a firearm.

Despite these improvements, the state still has the second highest firearms crime rate in Mexico. Taken together, the consistently high rates of homicide and firearms crime suggest organized crime related violence is continuing to drive violence in Baja California.

Rank 31: Colima

2019 SCORE	CHANGE IN RANK 18/19:
4.357	**0**

CHANGE IN SCORE 18/19:	**0.246**

Colima retained its place as the second least peaceful state in Mexico. The deterioration in overall score was mainly due to a deterioration in the *organized crime* score. Only one of the four indicators, *detention without a sentence*, recorded an improvement.

Between 2018 and 2019, the organized crime rate in Colima rose by 43.5 percent. Three of the four sub-indicators deteriorated, with the rate of major *organized crime* offenses increasing by 97.4 percent. This uptake in violence, which started in 2015, is driven by an ongoing turf war between Mexico's two most powerful drug cartels, the CJNG and the Sinaloa Cartel.[11] Both cartels seek control of the port city of Manzanillo, which is a key entry point for drug trafficking.[12]

Colima had the highest homicide rate in Mexico for the fourth year in a row, at 96.6 deaths per 100,000 people. Although the homicide rate has declined since it peaked in 2017, the rate still increased by two percent last year.

In 2019, the firearms crime rate in Colima deteriorated by 2.5 percent. However, the proportion of assaults with a firearm fell by 43.6 percent. This contrasts to homicides, where the percentage with a firearm increased by 6.3 percent to 81 per cent. Colima had the highest rate of homicide with a firearm in Mexico, which was almost three times higher than the national average.

Rank 30: Quintana Roo

2019 SCORE
4.165

CHANGE IN RANK 18/19:
↘ **2**

CHANGE IN SCORE 18/19: **0.495**

In 2019, Quintana Roo fell by two places in the overall rankings, driven by a large deterioration in the *organized crime* score. This deterioration was due to sharp increases in the rates of kidnapping and human trafficking, extortion and retail drug crimes which increased by 176, 116 and 103 percent, respectively.

The majority of organized crime activity in Quintana Roo has been concentrated in Cancún, as groups such as the Gulf Cartel, factions of Los Zetas and the CJNG fight for control of the illicit drug trade and other criminal activities, such as business extortion.[13]

After *organized crime*, the *violent crime* indicator recorded the second largest deterioration. The violent crime rate increased by 39.6 percent, with all four sub-indicators recording deteriorations. Sexual assault recorded the largest deterioration, followed by robbery and family violence.

The homicide rate was roughly steady in 2019, increasing by 0.3 percent, from 47.5 to 47.7 homicides per 100,000 people. Although the year-on-year change has plateaued, Quintana Roo maintains the seventh highest homicide rate in Mexico.

Despite these deteriorations, Quintana Roo did improve in the *firearms crime* and *detention without a sentence* indicators. The improvement in the firearms crime rate was mainly driven by a reduction in the number of homicides committed by a firearm which fell from 65.7 percent to 56.9 percent, however this was somewhat offset by an increase in assaults with a firearm which increased by 11 per cent. The *detention without a sentence* score improved by 9.3 percent. Following the national trend, the number of detainees without a sentence in Quintana Roo has been steadily decreasing since 2015.

Rank 29: Chihuahua

2019 SCORE
3.977

CHANGE IN RANK 18/19:
0

CHANGE IN SCORE 18/19: **0.256**

In 2019, Chihuahua ranked as the fourth least peaceful state, with a 6.9 percent deterioration in its overall score. This was driven by large deteriorations in the homicide, firearms crime and organized crime rates, which increased by 15.4, 13.8 and 11.1 percent, respectively.

The resurgence of violence in Chihuahua is believed to be linked to the presence of drug-trafficking groups such as Los Zetas, the Sinaloa Cartel and La Linea, a faction of the Juarez Cartel based in Chihuahua.[14]

Gun violence has been on the rise in Chihuahua. In 2019, approximately 69.6 percent of homicides were committed with a gun. The rate of assault with a firearm increased by 7.5 percent, while homicide with a firearm increased by 15.9

percent from the prior year. In November 2019, gunmen killed nine US-Mexican dual citizens of an extended Mormon family near the border of Chihuahua and Sonora.[15] The attack was attributed to a violent confrontation between La Linea and Los Salazar, a group based in the neighboring state of Sonora.[16]

The only indicator to improve in the state was in the *detention without a sentence* indicator, which improved by 7.4 percent. In 2019, there were 250 fewer detainees that had not been sentenced.

Rank 28: Guanajuato

2019 SCORE
3.817

CHANGE IN RANK 18/19:
↘ **1**

CHANGE IN SCORE 18/19: **0.171**

For the first time, Guanajuato ranks among Mexico's least peaceful states, following consistent deteriorations in its overall score over the last four years. In 2019, Guanajuato's overall score deteriorated by 4.7 percent.

The largest deterioration in 2019 occurred in the *violent crime* indicator, which rose by 8.5 percent last year. This was primarily driven by a 21.3 percent rise in the rate of sexual assault.

The homicide rate increased four percent in the last year. Guanajuato had the fourth highest homicide rate in Mexico, at 56.3 homicides per 100,000 people.

The firearms crime rate rose by 6.1 percent, from 61.7 cases per 100,000 people in 2018 to 65.5 in 2019. Gun violence has driven the rising homicide rate in recent years, with approximately 84 percent of homicides being committed with a gun in 2019. The rate of assault with a firearm similarly rose by 10.1 percent, with Guanajuato recording the third highest rate in Mexico.

The rate of organized crime increased by 5.9 percent in 2019, and has been steadily rising for the past five years. Notably, the rate of kidnapping and human trafficking more than doubled between 2018 and 2019.

The intensifying turf war between the CJNG and the Santa Rosa de Lima cartel has driven the increase in Guanajuato's homicide, firearms crime and organized crime rates. The two organized crime groups both seek to control territory in the state to carry out fuel theft, extortion and kidnapping as well as their drug trade.[18]

FIVE YEARS
TRENDS

FIVE YEARS TRENDS

Overall peacefulness in Mexico has deteriorated by 27.2 percent since 2015, driven by rising gun violence and organized crime activity. The *firearms crime* indicator recorded the largest deterioration over the five-year period, deteriorating by 53.1 percent.

FIGURE 1.4

Changes in peacefulness in Mexico, 2015–2019

Between 2015 and 2019, peacefulness in Mexico deteriorated by 27.2 percent.

OVERALL PEACEFULNESS, 2015–2019

ANNUAL PERCENTAGE CHANGE IN SCORE
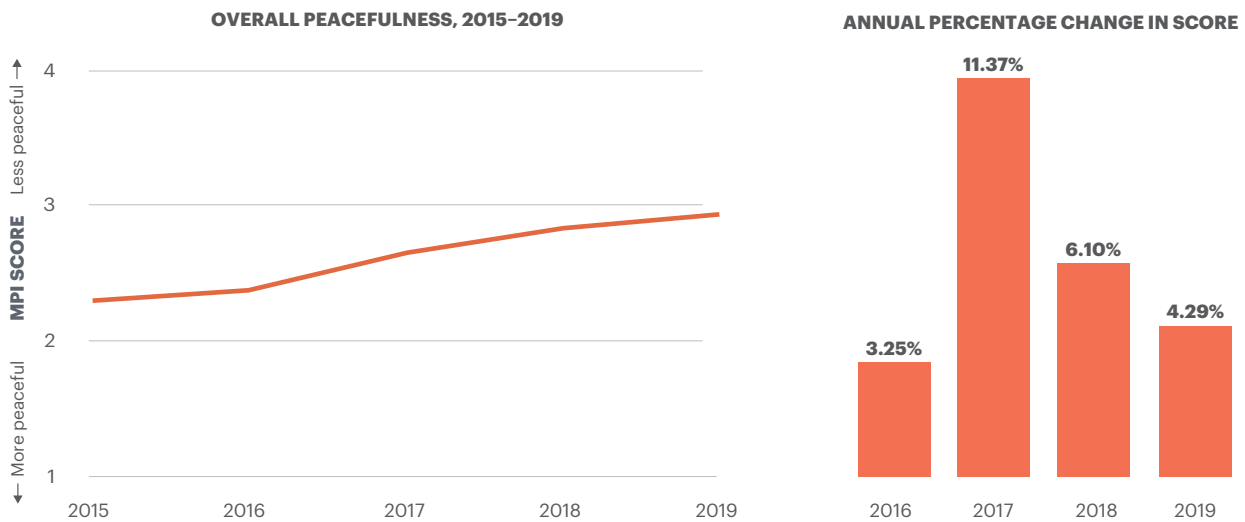
Source: IEP

HOMICIDE

Since 2015, the national homicide rate has increased by 85.9 percent. However, in 2019 the homicide rate remained fairly steady, rising by only 1.4 percent. This marks a considerably slower rate of increase than previous years. In the past five years, seven states recorded improvements in their homicide rate, while 25 deteriorated.

Baja California Sur recorded the largest improvement in the homicide rate, with a 58.2 percent reduction in the five years to 2019. The homicide rate in Baja California Sur peaked in 2017 at 104.5 per 100,000 people before sharply declining to 10.3 in 2019.

The recent decline in homicides follows a reduction in the firearms crime rate in Baja California Sur, which fell by 94.1 percent from 2017 to 2019. In the same period, the rate of organized crime offenses declined by 15.7 percent. Baja California Sur recorded an improvement in the levels of violence as the Jalisco New Generation Cartel (CJNG) and its allies strengthened their position across the state, leading to fewer violent confrontations with rival criminal organizations.[19]

The homicide rate in Oaxaca was over five times higher in 2019 than in 2015. This follows a significant increase in the rate of homicides committed with a firearm, which rose more than six-fold. The substantial increase in the homicide rate follows increases in the violent crime, firearms crime and organized crime rates.
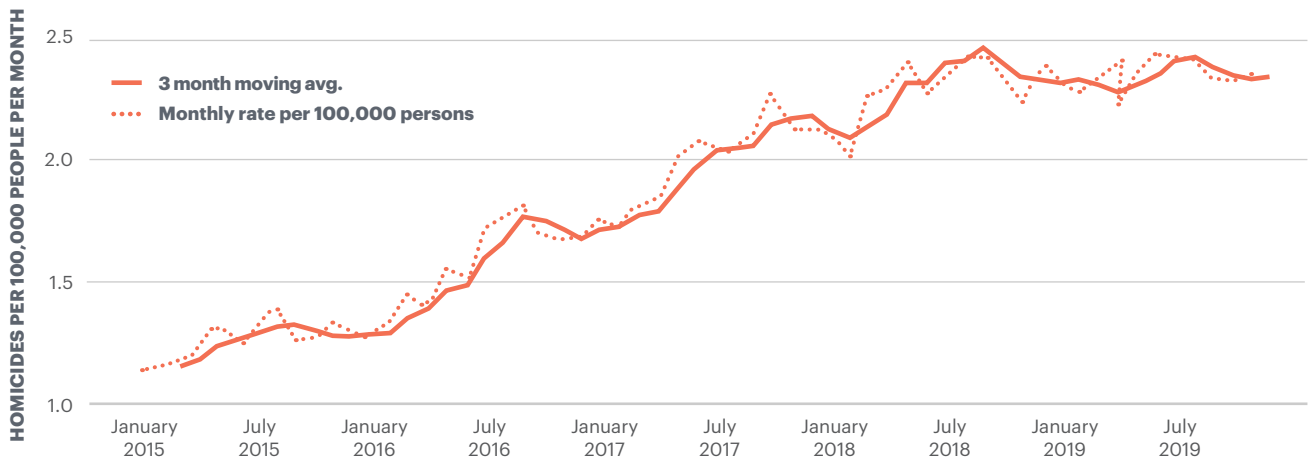
> "
> Only seven states have recorded improvements in their homicide rates since 2015.

FIGURE 1.5
Homicide rate, 2015–2019

Between January 2015 and December 2019, the homicide rate more than doubled, reaching a high in July 2018.

Source: SESNSP

Figure 1.5 depicts the national trend using monthly data. The national homicide rate peaked in July 2018 at 2.5 deaths per 100,000 people.

Over the last five years, state-level homicide rates have risen dramatically. In 2015, a quarter of Mexico's states had relatively low homicide rates. By 2019, just two remained low, while six had reached a level considered extreme. Table 1.4 details the number of states with a homicide rate in the low, moderate, high or extreme category by year. The categories are based on the distribution of homicide rates in 2015, when they were much lower. In this analysis, a "low" homicide rate is considered less than 7.6 per 100,000 people. A "moderate" rate is between 7.6 and 13.4, while a rate higher than 13.4 is classed as "high". An "extreme" homicide rate is greater than 49 homicides per 100,000 people, and is considered extreme because it is more than three times higher than the state average in 2015.

As shown in Table 1.4, the number of states with a low homicide rate fell from eight to two in the five years to 2019, while the number of states with an extreme homicide rate rose from one to six. The increase in the number of states with extreme homicide rates highlights the widespread impact of escalating violence in Mexico.

Just two states, Aguascalientes and Yucatán, recorded a low homicide rate in 2019. Yucatán had the lowest homicide rate at 1.6 deaths per 100,000 people. Although Aguascalientes recorded a low homicide rate, it has increased by 147 percent since 2015 to 7.6.

In 2019, the number of states with an extreme homicide rate increased by one, due to a rise in organized crime related violence in Morelos. The homicide rate in Morelos more than doubled between 2015 and 2019, with 73.2 percent of homicides committed with a firearm in 2019. As of 2019, five criminal organizations,

TABLE 1.4
Homicide levels by year

The number of states with extreme homicide rates has increased from one in 2015 to six in 2019.

	Low	Moderate	High	Extreme
2015	8	8	15	1
2016	6	10	14	2
2017	3	8	15	6
2018	2	7	18	5
2019	2	8	16	6

Source: SESNSP, IEP calculations

TRENDS

NATIONAL HOMICIDE RATE
85.9%
The national homicide rate increased by 85.9 percent between 2015 and 2019.

AGUASCALIENTES   **YUCATÁN**

Just two states, Aguascalientes and Yucatán, recorded a low homicide rate in 2019.

including the CJNG, were competing for control of Morelos' capital Cuernavaca.[20]

Colima recorded the highest homicide rate in Mexico for the fourth year in a row, with 96.6 deaths per 100,000 people. Since 2015, the homicide rate in Colima has more than tripled. This followed similar increases in *firearms crime, organized crime* and *violent crime*. The extreme homicide rate in Colima was predominantly driven by violent clashes between armed criminal groups. In 2015, approximately 75.7 percent of homicides were committed with a firearm in Colima. This figure rose to 81 percent in 2019.

Since 2015, Guerrero has consistently recorded an extreme homicide rate. However, Guerrero's homicide rate has declined since 2017, such that it is within two points of falling back into the "high" category. The largest improvement was recorded from 2018 to 2019, when the homicide rate fell by 26.2 percent. The state government has implemented a number of security measures,

including the deployment of additional security forces, particularly to the most violent municipalities of Acapulco and Iguala. It has also developed a Bureau for Peacebuilding that works to reduce violence.[21] At the same time, there has been a major shift in the drug market from the use of heroin – made from poppy grown in Guerrero, among other places – to the synthetic and much cheaper fentanyl. Consequently, Guerrero has seen a steady decline in the rates of homicide, major organized crime offenses, and kidnapping and human trafficking.[22]

Although the homicide rate improved over the last five years, criminal organizations remain a challenge in Guerrero. The proliferation of smaller splinter organizations in the state, such as Guerreros Unidos and Los Rojos, has coincided with an increase in the rate of extortion and retail drug crimes.[23] Organized crime related homicides in Guerrero have been the result of violent confrontations between criminal organizations fighting for control of drug trafficking routes to the Pacific and other parts of Mexico.[24]

TABLE 1.5
States with extreme homicide rates

The total number of states with extreme homicide rates (above 49 per 100,000 people) has risen from 1 to 5 since 2015.

2015		2016		2017		2018		2019	
State	Rate	State	Rate	State	Rate	State	Rate	State	Rate
Guerrero	56.39	Guerrero	62.1	Sinaloa	50.59	Guanajuato	53.64	Guerrero	50.95
		Colima	82.49	Chihuahua	54.53	Chihuahua	60.84	Morelos	52.97
				Baja California	67.05	Guerrero	69.58	Guanajuato	56.28
				Guerrero	70.36	Baja California	89.44	Chihuahua	69.48
				Baja California Sur	104.47	Colima	95.41	Baja California	81.76
				Colima	109.28			Colima	96.6

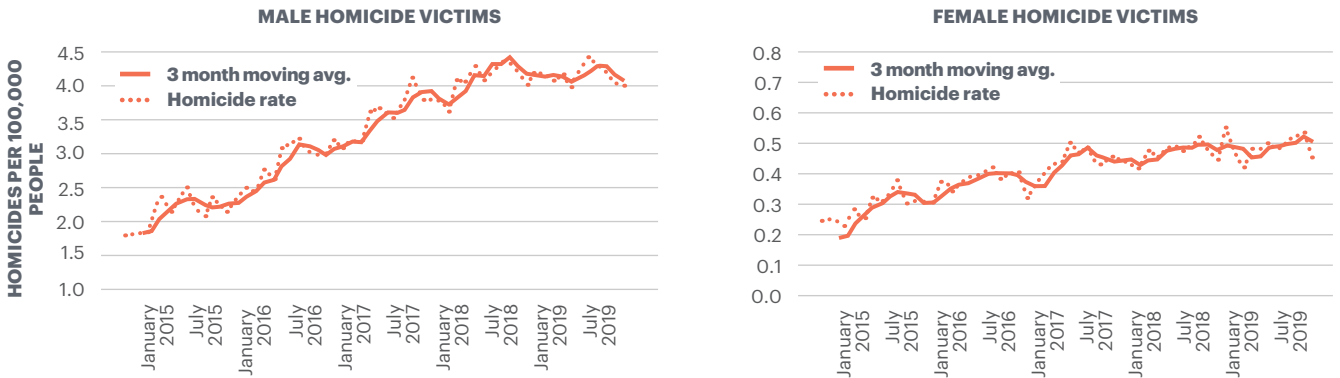Source: SESNSP, IEP calculations

"

Organized crime related homicides in Guerrero have been the result of violent confrontations between criminal organizations fighting for control of drug trafficking routes to the Pacific and other parts of Mexico.

FIGURE 1.6

Monthly homicide rates by sex, 2015–2019

The homicide rate for men increased by 123 percent between January 2015 and October 2019. In the same period, the homicide rate for women rose by 84.7 percent.

MALE HOMICIDE VICTIMS

FEMALE HOMICIDE VICTIMS

Source: SESNSP and CONAPO data, IEP calculations

Figure 1.6 shows the monthly trend in the homicide rates for men and women between January 2015 and October 2019. Over this period, the male homicide rate has consistently been between seven to eight times higher than the female rate.

The monthly male homicide rate more than doubled from 1.79 to more than four per 100,000 men and boys over the five years, while the female homicide rate rose by 84.7 percent from 0.24 deaths per 100,000 women and girls to 0.45. It is unclear why the homicide rates for men and women are rising in tandem, as, historically, male deaths are more likely to be associated with organized crime while female deaths are more likely to be associated with domestic violence.

There is some evidence to suggest that the increase in gun violence has contributed to rising rates of male and female homicide. The proportion of male homicides committed with a gun was 61 percent in January 2015. By October 2019, this figure rose to 73 percent. The data indicates that women are killed by guns less often, however, the percentage of female homicides committed with a firearm rose from 27 percent in January 2015 to 54 percent in October of 2019.

In the period from January 2015 to October 2019, Baja California Sur recorded the highest rate of male homicide in October 2017

peaking at 30.7 per 100,000 people. The male homicide rate in Baja California Sur more than doubled between September and October 2017, rising from 51 deaths to 118 deaths. Zacatecas recorded the highest female homicide rate in April 2017, at 5.31 per 100,000 people, equating to 44 female deaths.

Since January 2015, the rate of femicide has increased by 164 percent at the national level. Femicide is defined in Mexican law as the murder of a woman for gender-based reasons. As such, femicides are included in the female homicide rates, but not all female murder victims can be considered victims of femicide.

The deterioration in the rate of femicide has been larger than that of male or female homicides. Between 2015 and 2019, approximately 3,751 deaths were the result of femicide, which accounts for 2.7 percent of homicides in Mexico over the period.[25] Figure 1.7 visualizes the indexed trend of monthly femicide data between January 2015 and December 2019. The femicide rate is expressed as the number of femicides per 100,000 women and girls. Between 2015 and 2019, the femicide rate deteriorated in 28 of Mexico's 32 states, with only four states recording improvements.

FIGURE 1.7

Monthly femicide rate, 2015–2019

The rate of femicide in Mexico more than doubled between 2015 and 2019.
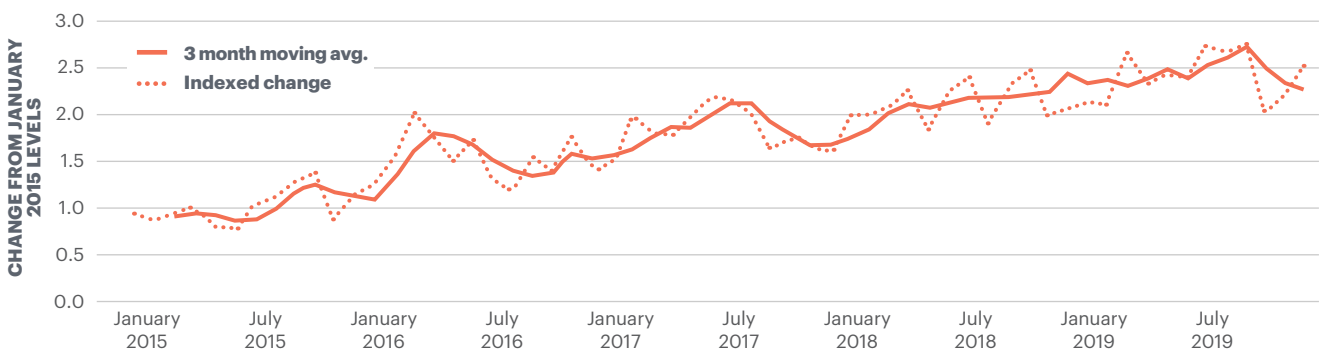
Source: SESNSP, IEP calculations

FIREARMS CRIME

Since 2015, the rate of homicide with a firearm has increased by 124 percent, while assault with a firearm has similarly risen by 108 percent. Nationally, the proportion of homicides committed with a gun rose from 57.4 percent in 2015 to 69.2 percent in 2019, indicating a proportionally higher level of gun violence. This equates to over 24,500 homicides committed with a gun in 2019.

Over the last five years, gun violence has risen in line with organized crime activity. The proliferation of smaller organized crime groups has seen competition over territory and access to drug trafficking routes intensify. In the last five years, violent shootouts between rival criminal groups have resulted in a higher number of deaths.

The rise in gun violence has also been driven by the illegal import and sale of firearms from the United States, Nicaragua and South American countries.[26] While the exact number of firearms trafficked to Mexico is unknown, it is estimated that the majority of weapons are trafficked from the United States, predominantly from Southwest border states such as Texas.[27] Of the weapons recovered or seized at crime scenes in 2018, approximately 70 percent were made or sold in the United States.[28]

Five states reported improvements in the firearms crime rate between 2015 and 2019, while 27 states deteriorated. Yucatán recorded the lowest firearms crime rate, at 0.69 per 100,000 people. In the last five years, the firearms crime rate in Yucatán has declined by 74.6 percent.

The state of Tabasco recorded the largest deterioration in the firearms crime rate from 2015 to 2019, with the rate rising from 1.9 to 29.1. This sharp increase in gun violence might be attributed to the expansion of the CJNG into the state.[29] In 2019, Colima

> "Of the weapons recovered or seized at crime scenes in 2018, approximately 70 percent were made or sold in the United States.

overtook Baja California to become the state most affected by firearms crime, recording 81.7 cases per 100,000 people.

Nationally, the homicide with a firearm rate deteriorated by 0.8 percent in 2019, marking a considerably slower rate of deterioration than in previous years. Quintana Roo recorded the largest deterioration in homicides committed with a firearm.

The rate of assault with a firearm in Mexico more than doubled between 2015 and 2019. While six states recorded an improvement, 25 deteriorated and one state recorded no change. In Sinaloa, the assault with a firearm rate improved by 53 percent from 2015 to 2019, marking the largest improvement of any state in Mexico.

Michoacán recorded the largest deterioration. Since 2015 the rate of assault with a firearm in Michoacán increased fourfold, reaching 24 offenses per 100,000 in 2019.

Figure 1.8 highlights the trend in the firearms crime rate from 2015 to 2019 using monthly data. Although the firearms crime rate has been rising consistently since 2015, the rate of increase fell to 1.9 percent between 2018 and 2019. The *firearms crime* indicator includes assaults and homicides committed with a firearm.

FIGURE 1.8

Trends in gun violence, 2015–2019

The rate of firearms crime has increased by 118 percent since 2015.
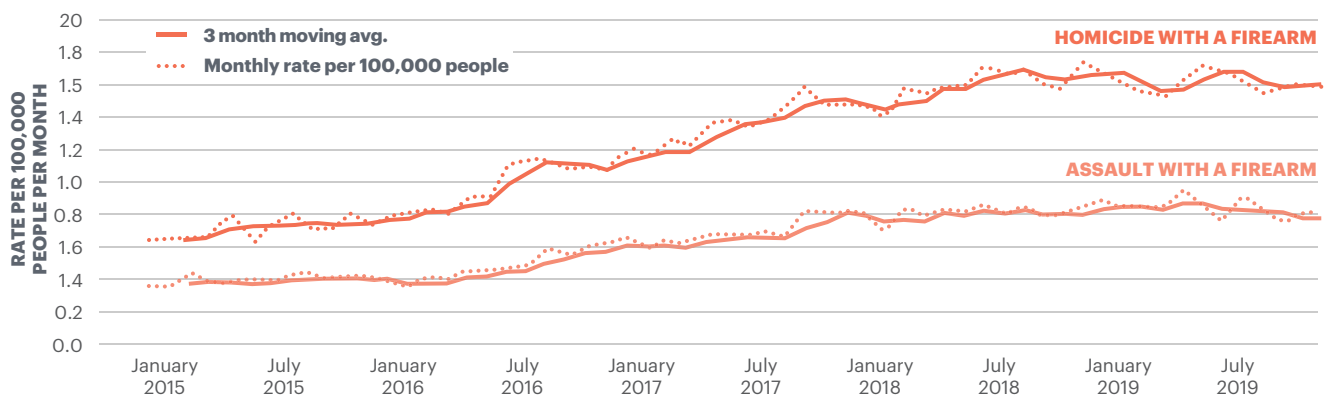
Source: SESNSP

ORGANIZED CRIME

This subsection presents the trends and results for the four sub-indicators that comprise the overall measure of *organized crime*. The four sub-indicators are *extortion*, *kidnapping and human trafficking*, *retail drug crimes* and *major organized crime offenses*. *Major organized crime offenses* include federal drug trafficking crimes and organized crime related offenses committed by three or more people.

Figure 1.9 shows the monthly indexed trends in each of these rates, which compares them to their levels in January of 2015. The rising trend in retail drug crime and extortion has been driving the rise in the national organized crime rate for the past five years. The rate of retail drug crime had the largest increase for *organized crime*, and increased by 75.4 percent since the beginning of 2015, while the rate of extortion rose by 52.6 percent. At the national level, the rate of extortion climbed from 44.6 per 100,000 people in 2015, to 68.1 in 2019.

Nationally, the rise in extortion comes as a result of the fragmentation and diversification of criminal organizations, with smaller factions turning to methods that are less likely to be detected by authorities and provide a fast and easy way to raise revenue.[30] At the beginning of 2019, the Mexican government began to crackdown on pipeline fuel theft which led to criminal organizations shifting focus to localized crimes, such as extortion.[31]

Querétaro recorded the largest increase in extortion, which rose from 1.9 cases per 100,000 people in 2015 to 82.3 in 2019. Zacatecas had the highest rate of extortion with 283 cases per 100,000 people. The extortion rate in Zacatecas more than tripled in the last five years.

FIGURE 1.9
Indexed change in organized crime offenses, 2015–2019

The rate of organized crime offenses rose by 46.2 percent between 2015 and 2019.
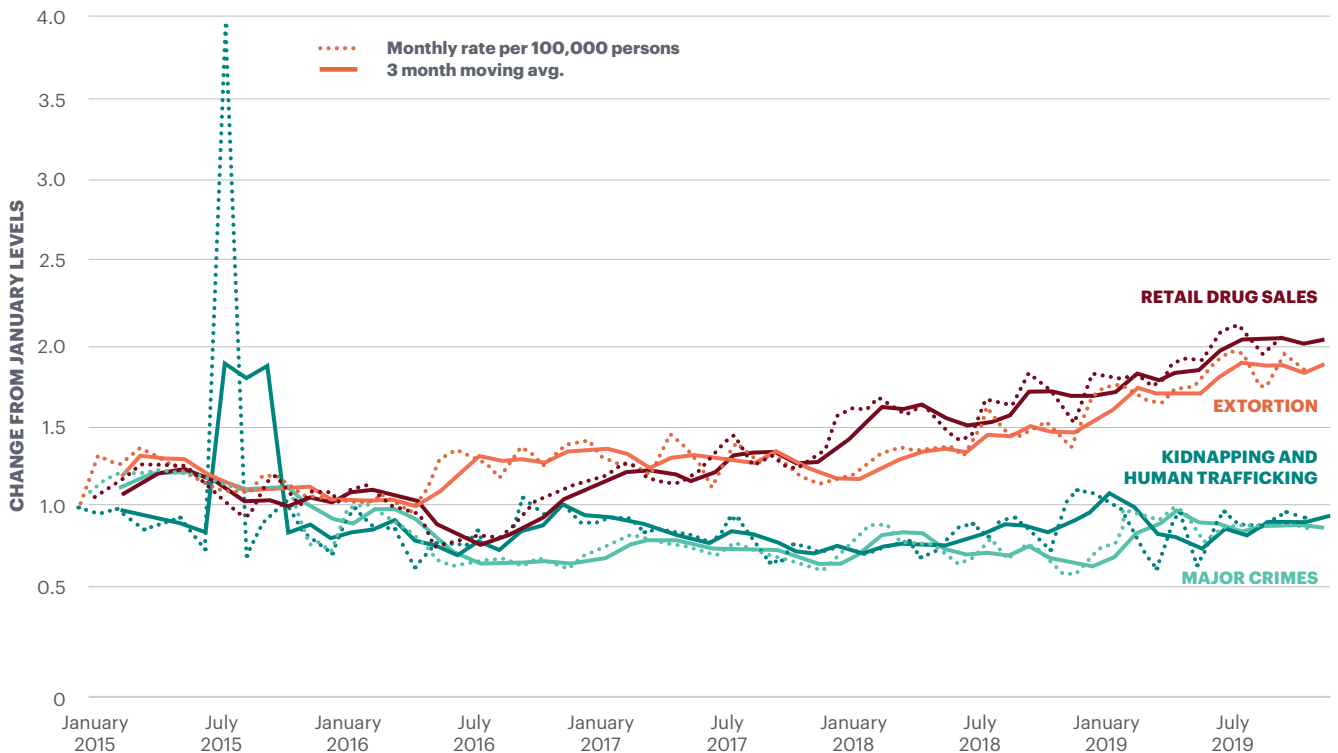
Source: SESNSP

According to INEGI's annual victimization survey, the majority of extortion cases, or 68.3 percent, occurred in the victim's home, followed by the victim's place of work at 15 percent.[32] Rates of extortion are also almost twice as high in cities than rural areas.

The occurrence of "virtual kidnapping" calls in Mexico has increased substantially in recent years.[33] Virtual kidnapping is a type of extortion whereby perpetrators demand a ransom payment via telephone without having actually taken a hostage.[34] In 2018, an estimated 91.6 percent of cases of extortion reported by individuals occurred by phone.[35]

The 2018 National Survey of Business Victimization (ENVE) estimated that approximately 525,000 cases of extortion of businesses occurred, marking a rate of 1,150 extortions for every 10,000 businesses.[36] The vast majority of these extortions – or 97.4 percent – were either not reported to or investigated by the authorities.

In 2019, Baja California had the highest rate of retail drug crime offenses, at 285 per 100,000 people. Previously, violence in Baja California was driven by fighting for control of lucrative trafficking routes to the United States.[37] Violent confrontations have typically occurred between the CJNG and the Sinaloa Cartel.[38] However, internal fighting between the CJNG and the Los Cabos faction in recent years has also contributed to the deterioration in organized crime rate.[39] More recently, competition over "the right to sell drugs" in local areas, known as a *plaza* in Mexico, has intensified in the city of Tijuana.[40] Local and state officials estimate that the majority of homicides in Tijuana are linked to local drug sales.[41] Organized crime-related violence has largely been concentrated in Tijuana, and caused the state's homicide rate to increase by 202 percent since 2015.

In contrast, the rates of major organized crime offenses and kidnapping and human trafficking have declined by 21.3 and 21.2 percent respectively over the last five years. The spike in the kidnapping and human trafficking rate in August 2015, shown in Figure 1.9, was due to a high level of police reporting that month, based on successful police rescues of trafficked migrants in Coahuila.[42] Since then, the rate has fluctuated, but has generally followed a downward trend.

The largest deteriorations in the organized crime rate were recorded in Baja California, Colima, Zacatecas, Querétaro and Quintana Roo.

Baja California and Colima recorded the largest deteriorations in the last five years, with the rate of all organized crime offenses rising by 331 and 237 percent, respectively.

Organized crime in Baja California begun to increase sharply following the expansion of the CJNG into the state.[43] The rate of organized crime offenses in Baja California rose from 84.6 per 100,000 people in 2015, to 364 in 2019, driven by significant increases in the rates of retail drug crime and major offenses. For the last two years, Baja California has recorded the highest rates of retail drug crime and major offenses in Mexico.

The states of Tamaulipas, Sonora, Sinaloa, Jalisco and Puebla reported the largest improvements in their organized crime rates.

Tamaulipas, which shares a border with the United States, recorded a 57.8 percent decline in its organized crime rate. Notably, Sinaloa and Jalisco, home to two of the largest organized crime groups in Mexico, had a 50.9 and 37.4 percent reduction in their organized crime rate respectively between 2015 and 2019. In Sinaloa, the rate of extortion fell by 69.2 percent, while the rate of kidnapping and human trafficking declined by 41.1 percent. This is likely partially due to successful cooperation between state and municipal police forces in the region.[44]

Despite these improvements, the Sinaloa Cartel maintains a strong presence in its home state. In October 2019, the Sinaloa Cartel highlighted the extent of their influence following the capture of Ovidio Guzmán López, the son of imprisoned former leader Joaquín Guzmán, by Mexican authorities.[45] The Sinaloa Cartel responded with "overwhelming force" to Guzmán's arrest for trafficking charges, shutting down the city of Culiacán and engaging in a shootout with authorities that caused at least eight deaths and ultimately prompted Guzmán López's release.[46]

Since 2015, some of Mexico's largest organized crime groups – including the Sinaloa Cartel, the CJNG and Los Zetas, have fragmented or faced internal fighting following the arrests of cartel leaders.[47] Smaller organized crime groups have sought to "diversify their criminal portfolios" and "use extreme violence" to gain control of key territory.[48] Smaller criminal groups pose a new set of challenges because they lack clear hierarchical structures and are harder to track.[49]

> "
> Sinaloa and Jalisco, home to two of the largest organized crime groups in Mexico, had a 50.9 and 37.4 percent reduction in their organized crime rate respectively between 2015 and 2019.

VIOLENT CRIME

Despite a small improvement in 2018, the violent crime rate in 2019 was still 39.8 percent higher than in 2015. The *violent crime* indicator consists of four components: *assault, sexual assault, family violence*, and *robbery*. While all components of *violent crime* increased between 2015 and 2019, the sexual assault rate recorded the largest percentage increase, at 59.5 percent. Over the five-year period, seven states recorded improvements, while 25 states deteriorated.

Figure 1.10 visualizes the indexed trend for the four types of violent crime captured in the MPI over the past five years, using monthly data.

The national sexual assault rate rose from 110.2 in 2015, to 175.8 in 2019. For the third consecutive year, Aguascalientes recorded the highest rate of sexual assault in the country, at 697 per 100,000 people. Over the last five years, 28 states recorded deteriorations in the rate of sexual assault, while only four states improved. The largest improvement was in Yucatán where the rate of sexual assault more than halved over the last five years.

Since 2015, the national family violence rate rose by 55.8 percent. The largest deterioration occurred between 2015 and 2016, when the rate increased 19.4 percent. Oaxaca recorded the largest increase over the past five years with the rate of family violence reaching 415 cases per 100,000 people in 2019.

The current crime data on sexual assault and family violence shows large fluctuations in either direction – both increases and declines. It should be noted that programs are underway to improve police and emergency call responses to female victims. However, underreporting data has not been available over time to indicate whether improved reporting rates and police recording of crimes has influenced the trend.

Since 2015, the national robbery rate deteriorated by 51.3 percent, with 19 states recording deteriorations and 13 states improving. The state of Oaxaca recorded the largest deterioration in robbery over the last five years, with the rate increasing six-fold. In contrast, the largest improvements in the robbery rate occurred in Coahuila, Nayarit and Durango, with rates improving by 81, 58 and 56 percent, respectively. In the last year, the national robbery rate recorded an improvement of 1.9 percent and was the only sub-indicator of *violent crime* to improve in 2019.

Nationally, the assault rate has fluctuated in the last five years. In 2019, the assault rate deteriorated by 8.6 percent, marking the worst year since at least 2015. Between 2015 and 2019, the same number of states recorded improvements in their assault rate as deteriorations, at 16 each.

FIGURE 1.10

Indexed change in violent crime rates, 2015–2019

Since 2015, the rate of sexual assault and family violence has increased by 55.8 and 59.5 percent, respectively.
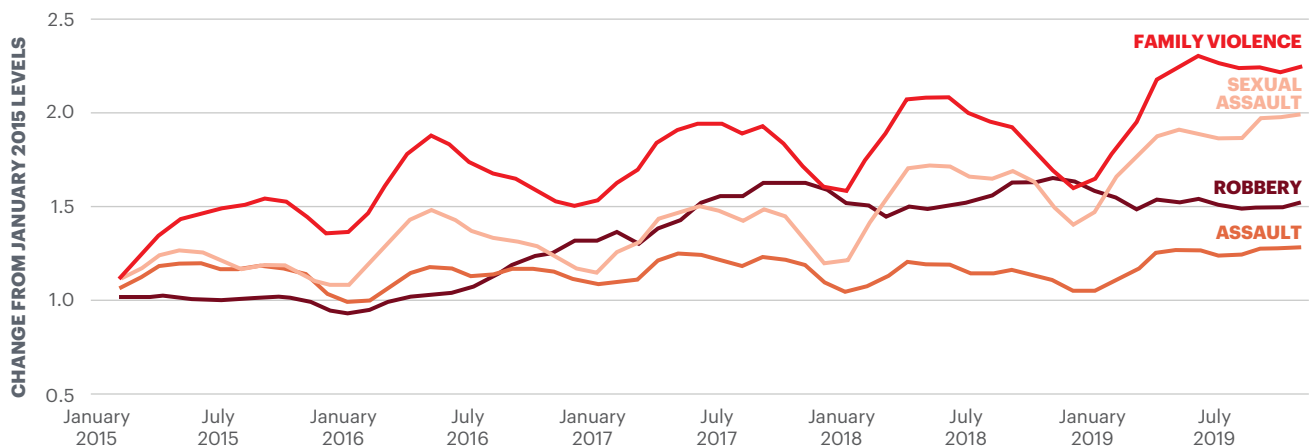
Source: SESNSP

DETENTION WITHOUT A SENTENCE

Detention without a sentence is the only MPI indicator to improve in score at the national level every year since 2015. In 2019, roughly 60,000 persons were incarcerated without a sentence in Mexico, a 24.7 percent decline since 2015.

Between 2015 and 2019, only four states reported deteriorations in the number of detainees without a sentence. These were Zacatecas, Nuevo León, Mexico City and Guanajuato.

Yucatán recorded the largest reduction in the number of detainees without a sentence, from 726 in 2015 to 176 in 2019. This marked a 75.8 percent decline and follows a similar fall in firearms crime, violent crime and homicide in the same period.

In Mexico, a number of recent legal reforms have sought to reduce the use of pre-trial detention. The introduction of presumption of innocence as a legal standard in Mexico, as part of the new criminal justice system, intends to protect the rights of the accused and establishes that the majority of people should not be detained without a conviction. Article 19 of Mexico's constitution states that a judge may order "preventative prison" for up to two years prior to sentencing when other precautionary measures are not enough to:

- Guarantee the presence of the accused at the legal proceedings
- Prevent obstruction of justice
- Protect victims, witnesses or the community.[50]

As such, the *detention without a sentence* indicator captures both the need for pre-trial detention and the degree to which state governments are relying on this tool.

Article 19 of the Mexican constitution prescribes preventative prison for nine "grave" crimes, which include organized crime related offenses, rape and homicide.[51] In February of 2019, the national legislature voted to include an additional eight crimes, including corruption and abuse of a minor.[52] State-level congresses must now vote on the constitutional change.[53]

As more and more municipalities across the country implemented reforms to the justice system, there was a steady decline in the overall number of detainees without a sentence, which is one indicator that reform is taking hold.

FIGURE 1.11

Total number of detainees without a sentence, 2006–2019

Since 2015, the number of detainees without a sentence has fallen by almost 20,000.
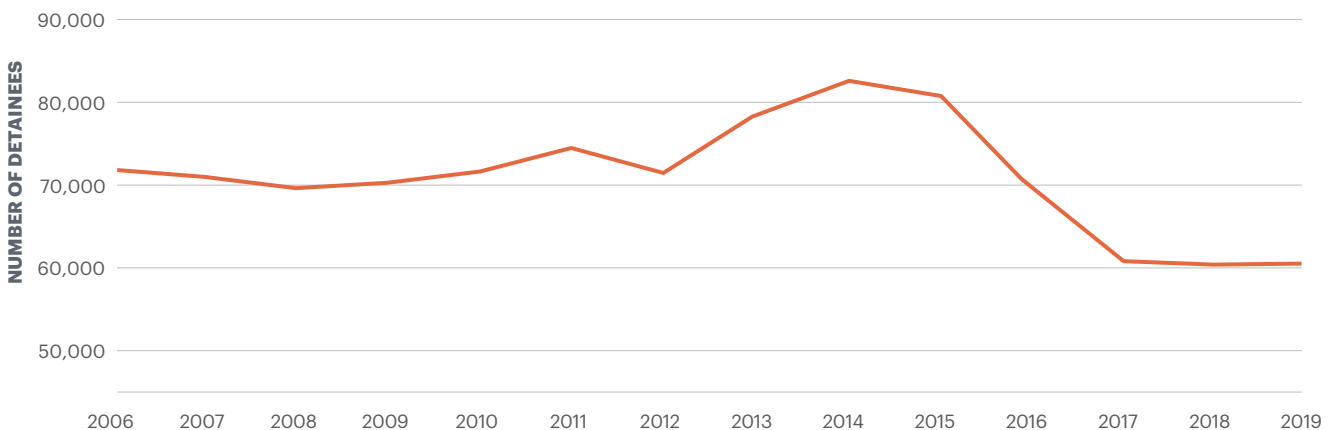
Source: CNS data provided by Jurimetria
Note: Includes prisoners charged with state level crimes and incarcerated in state prisons; federal crimes not included.

IMPROVEMENTS AND DETERIORATIONS IN PEACEFULNESS

IMPROVEMENTS IN PEACEFULNESS

Over the last five years seven states have improved their peacefulness while 25 deteriorated. The largest improvements were recorded in Sinaloa, Tamulipas, Coahuila, Yucatán and Chiapas. All of the five states recorded significant improvements in score with two of these states, Sinaloa and Tamaulipas, improving so strongly they are no longer amongst the five least peaceful states.

Four of these five states – Chiapas, Coahuila, Sinaloa and Yucatán - recorded improvements in their homicide rates, even while the national homicide rate continued to rise over the last five years. Driving these improvements were *detention without a sentence* and *organized crime* scores, with both indicators improving in all five states.

TABLE 1.6
Five most improved states, 2015–2019

Sinaloa recorded the largest improvement in its overall score following improvements in four of the five indicators. Over the last five years, the organized crime rate in Sinaloa more than halved.

STATE	CHANGE IN SCORE	2015 MPI RANK	2019 MPI RANK	CHANGE IN RANK
Sinaloa	-0.434	30	18	↑ 12
Tamaulipas	-0.351	29	14	↑ 15
Coahuila	-0.312	22	7	↑ 15
Yucatán	-0.212	2	1	↑ 1
Chiapas	-0.109	8	3	↑ 5

Source: IEP

Sinaloa   Rank: 18

2019 SCORE   CHANGE IN RANK 15/19:
2.798   ↗ 12
CHANGE IN SCORE 15/19:   -0.434

Sinaloa recorded the largest improvement between 2015 and 2019, moving up 12 places in the rankings, from 30th in 2015 to 18th in 2019. Sinaloa improved in four of the five indicators, with the largest improvements recorded for *detention without a sentence* and *organized crime* indicators. While the number of detainees without a sentence fell by 54.3 percent, the rate of organized crime offenses improved by 50.9 percent between 2015 and 2019.

In 2017, Sinaloa implemented the Sectoral Public Security Program 2017-2021 (*Programa Sectorial de Seguridad Pública*), which outlined the state's main criminal challenges and proposed steps towards alleviating these risks. The proposed steps included multi-sectoral institutional change and increased community participation to prevent and mitigate crime.[54] Programs included the construction of "strategic operating zones" to enhance cooperation between state and municipal level police.[55] Sinaloa, which had the second highest homicide rate in 2015, recorded an 8.3 percent improvement over the last five years. The homicide rate is now 30.2 per 100,000 people.

Tamaulipas   Rank: 14

2019 SCORE   CHANGE IN RANK 15/19:
2.594   ↗ 15
CHANGE IN SCORE 15/19:   -0.351

Tamaulipas had the second largest improvement in peace, moving up 15 places in the rankings driven mainly by improvements to the *organized crime* indicator. In 2015, Tamaulipas had the second highest organized crime rate in Mexico, but over the last five years it has recorded the largest state improvement in this indicator. All components of organized crime improved, with particular progress recorded in the rates of major offenses and kidnapping and human trafficking, which fell by 85.7 and 80.6 percent, respectively.

The majority of organized crime activity stems from the Cártel del Noreste, a faction of Los Zetas.[56] In 2017 the Governor of Tamaulipas, Francisco Javier García Cabeza de Vaca, sought to tackle organized crime by increasing the number of state police officers, dismantling organized crime networks within the prison system and requesting additional intelligence support from the Federal Government.[57] In the last five years, organized crime activity in Tamaulipas has shifted from conflict over access to international drug trafficking routes to confrontations over small areas of territory within the state.[58]

Coahuila   Rank: 7

2019 SCORE   CHANGE IN RANK 15/19:
2.163   ↗ 15
CHANGE IN SCORE 15/19:   -0.312

Coahuila's score improved by 12.6 percent over the last five years, driven by improvements in the *detention without a sentence*, *firearms crime* and *homicide* indicators. Contrary to the national trend, Coahuila's rates of homicide and firearms crime improved by 18.7 and 11.2 percent, respectively.

Despite significant improvements, organized crime remains one of the greatest challenges facing Coahuila. From 2015 to 2019, the organized crime rate deteriorated by 45.3 percent. The recent resurgence in organized crime activity may be linked to the expansion of the CJNG, which has established alliances with local cartels.[59] The CJNG has announced its intentions to take control of Coahuila, which borders the US and is deemed a strategic drug trafficking territory.[60]

Yucatán   Rank: 1

2019 SCORE   CHANGE IN RANK 15/19:

1.272   ↗ 1

CHANGE IN SCORE 15/19:   -0.212

Yucatán has recorded consistent improvements in every indicator over the last five years. Of the five states with the largest improvements, Yucatán was the only state to record an improvement in the *violent crime* indicator.

From 2015 to 2019, Yucatán recorded an improvement of 68 percent in its violent crime rate. This was primarily driven by a reduction in the assault rate, which declined by 89 percent from 2015 to 2019. Contrary to the national trend, Yucatán recorded an improvement in the rates of sexual assault and family violence.

The organized crime rate fell by 17.3 percent over the last five years. While Yucatán recorded deteriorations in the rates of retail drug crimes and major offenses, this was offset by a reduction in the extortion rate which improved by 91.3 percent. Since 2015, Yucatán has consistently recorded one of the lowest organized crime rates in Mexico.

Chiapas   Rank: 3

2019 SCORE   CHANGE IN RANK 15/19:

1.726   ↗ 5

CHANGE IN SCORE 15/19:   -0.109

Chiapas has experienced consistent improvements over the last five years, rising five places in overall rankings to be ranked the third most peaceful state in Mexico in 2019. The largest improvement was recorded in the *detention without a sentence* indicator, which improved by 29.2 percent from 2015 to 2019.

The organized crime rate improved by 26.7 percent, with the largest improvements occurring for kidnapping and human trafficking, which improved by 78 percent, followed by major offenses at 23 percent. Major offenses include federal drug trafficking and organized crime related offenses committed by three or more people. Both the CJNG and Los Zetas cartels maintain a presence in Chiapas. However, there have been few violent confrontations between the two groups in recent years.[61]

Countering these improvements were deteriorations in the *firearms crime* and *violent crime* indicators. Gun violence has been steadily increasing since 2015 and continues to be the main challenge to improved levels of peacefulness in the state. Between 2015 and 2019, the firearms crime rate increased by 88.3 percent, while the proportion of homicides committed with a firearm have steadily increased from 32.8 percent in 2015, to 55.6 percent in 2019.

Over the last five years, the *violent crime* indicator also deteriorated by 1.1 percent. The largest deterioration recorded was in the rate of family violence, deteriorating by 284 percent, followed by sexual assault at 31.7 percent.

DETERIORATIONS IN PEACEFULNESS

The five states with the largest deteriorations in peacefulness deteriorated in nearly every indicator since 2015. These were Colima, Quintana Roo, Guanajuato, Chihuahua and Zacatecas. All five states recorded increases in the *homicide*, *firearms crime* and *organized crime* scores, which indicates an increased presence of organized crime and cartel fragmentation.

Despite these significant deteriorations, all five states did record improvements in the *detention without a sentence* indicator, consistent with the national trend. Table 1.7 details the five states with the largest deteriorations in their score between 2015 and 2019.

TABLE 1.7
Five states with the largest deteriorations, 2015–2019
Colima had the largest deterioration in overall score, recording substantial increases in the *homicide, firearms crime, violent crime* and *organized crime* indicators.

STATE	CHANGE IN SCORE	2015 MPI RANK	2019 MPI RANK	CHANGE IN RANK
Colima	1.762	24	31	↓ 7
Quintana Roo	1.687	23	30	↓ 7
Guanajuato	1.53	14	28	↓ 14
Chihuahua	1.227	25	29	↓ 4
Zacatecas	1.207	13	25	↓ 12

Source: IEP

Colima   Rank: 31

2019 SCORE   CHANGE IN RANK 15/19:

4.357   ↘ 7

CHANGE IN SCORE 15/19:   1.762

Colima recorded the largest breakdown in peacefulness over the last five years, with the overall score deteriorating by 67.9 percent. Colima reported deteriorations in every indicator except *detention without a sentence*, which improved by 69.3 percent. The *firearms crime* indicator had the largest deterioration, deteriorating by 121 percent from 2015 to 2019.

Over the last five years, the organized crime rate in Colima deteriorated by 237 percent. This sharp rise was largely driven by an increase in the extortion rate, which was over five times higher in 2019 than in 2015. The substantial escalation in

violence has been attributed to a "restructuring" of the organized crime landscape along Mexico's Pacific coast.[62] Following the imprisonment and extradition of Joaquín "El Chapo" Guzmán, the leader of the Sinaloa Cartel, in January 2017, other criminal organizations have sought to take advantage and gain access to drug trafficking routes along the Colima Coast.[63]

Colima recorded a substantial deterioration in *firearms crime* and *homicide* over the last five years. The rate of homicide with a firearm has deteriorated by 295 percent from 2015 to 2019 and Colima has consistently recorded one of the highest rates of firearms crime and homicide in Mexico since 2015. Over the last five years, gun violence has been a particular challenge to improving levels of peacefulness in Colima.

Quintana Roo	Rank: 30
2019 SCORE	CHANGE IN RANK 15/19:
4.165	↘ **7**
CHANGE IN SCORE 15/19:	**1.687**
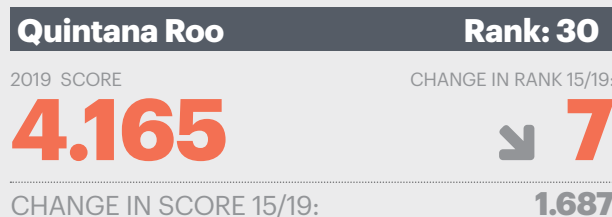
Since 2015, Quintana Roo has fallen seven places in the overall rankings, reflecting a 68.1 percent deterioration in its overall score. While four of the five indicators deteriorated between 2015 and 2019, the deterioration in overall score was largely due to a 184 percent increase in *firearms crime*.

In Quintana Roo, the rate of homicide with a firearm was 13 times higher in 2019, than in 2015, the largest deterioration of any state in Mexico. Over the last five years, violent shootouts have been a common feature of cartel fighting, with violence beginning to impact popular tourist destinations, such as Cancún.[64]

The homicide rate in Quintana Roo rose by 213 percent from 2015 to 2019, while the organized crime rate more than doubled. The rise in organized crime was driven by significant increases in the rate of extortion and kidnapping and human trafficking, which deteriorated by 128 and 411 percent, respectively. In 2019, Quintana Roo had the second highest kidnapping and human trafficking rate in Mexico.

Guanajuato	Rank: 28
2019 SCORE	CHANGE IN RANK 15/19:
3.817	↘ **14**
CHANGE IN SCORE 15/19:	**1.53**

Since 2015, Guanajuato has fallen 14 places in the overall rankings and ranked 28th in 2019, its lowest ever ranking. The majority of Guanajuato's deterioration was driven by increases in the *firearms crime* and *homicide* indicators. Since 2015, the homicide rate has more than doubled, with Guanajuato recording the highest number of homicides in Mexico for the last two years. The rise in the homicide rate since 2015 has been accompanied by a substantial increase in the rate of gun violence, which rose by 165 percent. In particular, the homicide with a firearms crime rate was four times higher in 2019, than in 2015.

Guanajuato also recorded a 162 percent increase in the organized crime rate, driven primarily by a significant increase in the rate of retail drug crimes which rose from 51.6 to 150 offenses per 100,000 people from 2015 to 2019. The rate of major offenses was the only component of *organized crime* to improve, improving by 34.7 percent from 2015 to 2019. The surge in organized crime is believed to be partially driven by fuel theft from government oil pipelines.[65] Guanajuato has emerged as an alternative distribution channel for stolen oil that became the source of violent confrontations between the Santa Rosa de Lima Cartel (CRSL) and the CJNG.[66] In March 2019, state and federal governments sought to dismantle criminal organizations and eradicate fuel theft in Guanajuato by increasing surveillance operations, enacting legislative reform and coordinating military and police operations.[67,68]

Chihuahua	Rank: 29
2019 SCORE	CHANGE IN RANK 15/19:
3.977	↘ **4**
CHANGE IN SCORE 15/19:	**1.227**
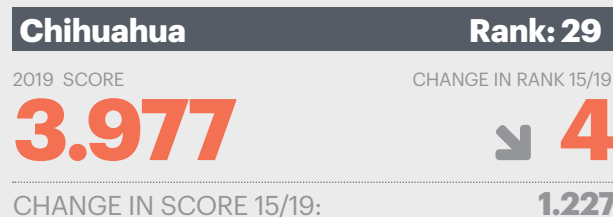
Chihuahua has deteriorated in its overall score every year since 2015, falling four places to be ranked as the fourth least peaceful state in 2019. Chihuahua's deterioration in peacefulness was driven by an increase in its *organized crime* score, which rose by 47 percent. The state recorded significant increases in the rates of kidnapping and human trafficking and retail drug crime, which increased by 165 and 153 percent, respectively.

Since 2015, the deterioration in the organized crime rate has fueled the rapid increase in homicides with over 2,600 deaths registered in 2019. The homicide rate more than doubled, while the firearms crime rate increased by 129 percent. Much of the violence in Chihuahua has been concentrated in the border city of Ciudad Juarez, which has consistently ranked among the five most violent municipalities in Mexico since 2015.[69] The substantial increases in the rates of homicide, firearms crime and organized crime are likely the result of violent confrontations between rival organized crime groups as they compete to control the transit route between Ciudad Juarez and El Paso, Texas.[70]

Despite these deteriorations, Chihuahua improved in the *detention without a sentence* and *violent crime* indicators over the last five years. The number of detainees without a sentence fell by ten percent, while the violent crime rate declined by 2.4 percent.

Zacatecas | Rank: 25

2019 SCORE
3.473

CHANGE IN RANK 15/19:
↘ **12**

CHANGE IN SCORE 15/19: **1.207**

Zacatecas' overall score deteriorated by 53.3 percent from 2015 to 2019, resulting in a fall of 12 places in the overall rankings. This was driven by a sharp rise in the *organized crime* score, followed by *homicide* and *firearms crime*. While four of the five indicators deteriorated, the *detention without a sentence* score recorded a marginal improvement of 1.2 percent, in line with the national trend.

The organized crime rate was over three times higher in 2019 than in 2015. The largest deteriorations were seen in the rates of extortion and retail drug crimes which increased by 235 and 232 percent, respectively. In 2019, Zacatecas registered the highest extortion rate of any state in Mexico. Despite these substantial deteriorations, there was a slight improvement in the rate of major offenses between 2015 and 2019, which improved by 4.1 percent.

EXPLAINING THE DYNAMICS OF VIOLENCE IN MEXICO

KEY FINDINGS

- There are four distinct types of violence in Mexico, each with a different set of dynamics: political violence, opportunistic violence, interpersonal violence, and cartel conflict.

- Homicide is now the leading cause of death for youth in Mexico. Each year, more than a third of homicide victims are between the ages of 15 and 29.

- Mexico's drug-war homicide rate reached an estimated 17.9 "narco-executions" per 100,000 people in 2018, according to third party data sources.

- Subtracting narco-executions, Mexico's non-drug war homicide rate would be 9.8 per 100,000 in 2019, 65 percent lower than the current total.

- From 2006 to 2018, 35 conflicts were recorded involving 42 criminal organizations or their factions.

- An estimated 175,000 people have been killed over the 13 years of the drug war.

- There were at least 180 acts of political violence in the first quarter of 2019 – a 46 percent increase over the same period in the prior year.[1] Twenty-four of these attacks were assassinations of political figures.[2]

- In total, there were at least 200 political assassinations between September 2017 and March 2019.

- Seventy-three percent of threats and attacks against political figures in early 2019 targeted local politicians.[3]

- Reporters Without Borders has recorded a total of 1,524 journalists and media professionals assassinated in Mexico over the last 20 years.

- The number of journalists assassinated has been steadily declining since its peak in 2012. In 2019, 51 assassinations were recorded – a 64 percent decline from the 2012 peak of 143.

CURRENT LEVELS OF VIOLENCE

Violence has reached critical levels in Mexico.[4] The national victimization survey found that more than 33 million crimes were committed in 2018.[5] One in three adults are the victim of a crime each year,[6] while 71 percent of people report that it is not safe for their children to play outside.[7] Homicide is now the country's leading cause of premature death.

Based on the latest available data, homicide was the leading cause of death for all age groups from 15 to 44, and the fourth most common cause of death for children aged five to fifteen in 2017.[8] Youth have been particularly affected by the increase in violence. Figure 2.1 highlights the youth homicide rate compared to the general population. Each year, more than one third of homicide victims are between the ages of 15 and 29.[9] The gap between the youth homicide rate and the total population reached record highs in 2017 and 2018, resulting in a youth homicide rate 43 percent higher than that of the general population.

Violence has been increasing across the country, with only seven states seeing no deterioration in peace in 2019. Prior to the start of the drug war in 2006, levels of violence were high by global standards; however, they were generally limited to specific parts of the country. By 2019, most city homicide rates were above ten deaths per 100,000 people and an increasing number of states had homicide rates that can be classed as "extreme".[10] The rise in homicide rates has been accompanied by rises in other forms of violence.

This section of the 2020 MPI analyzes the various dynamics driving the high levels of violence in Mexico, finding that there are a variety of issues underlying the trends.

High levels of impunity and corruption underpin these pervasive

levels of criminality. Mexico currently faces unprecedented levels of political violence, homicides, interpersonal violence, opportunistic criminality and cartel warfare. Taken together, the data and analysis discussed in this section indicate that Mexico will need to address four distinct dynamics – each with unique policy implications – in order to reverse the trend:

1. Prevent political violence to protect the integrity of elections, especially in local elections, where two thirds of all political violence occurs.

2. Protect civilians and businesses from extortion, robbery and other forms of opportunistic criminality.

3. Implement programs and policies to reduce interpersonal violence. Existing trainings for police and emergency call operators and low-cost justice solutions, such as youth and family courts, can help reduce impunity and caseloads.[11]

4. Contain conflicts between criminal organizations, by planning strategic interventions that anticipate and prevent succession conflicts after the arrest or death of cartel leadership. State-level successes have included multi-pronged security approaches to prevent violence in the wake of leadership arrests.

FIGURE 2.1

Youth homicide rate, 1990–2018

On average, more than a third of homicide victims every year are between the ages of 15 and 29.
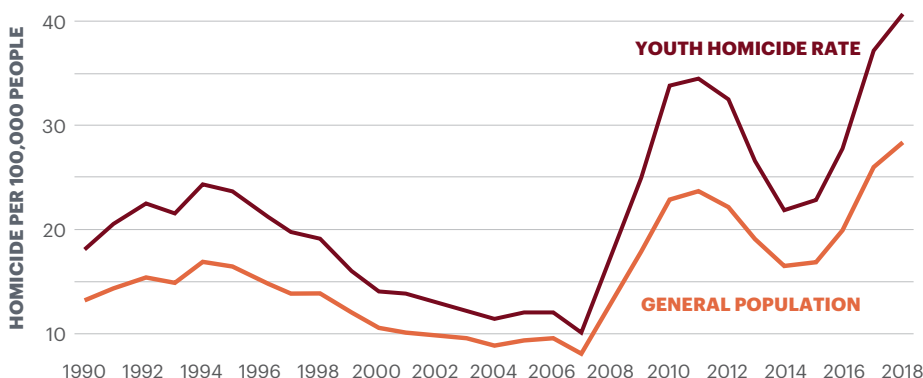
Source: INEGI, CONAPO, IEP calculations

HOMICIDE

15-29

Homicide is now the leading cause of death for youth in Mexico. Each year, more than a third of homicide victims are between the ages of 15 and 29.

WHAT FORMS OF VIOLENCE
ARE TAKING PLACE?

Over the last five years, the national homicide rate increased by 86 percent, rising from 15 deaths per 100,000 people to 28. Rates of gun violence have doubled, while the violent crime rate rose by 40 percent. Some aspects of organized criminal activity have improved, but Mexico has faced rising levels of extortions and retail drug crime over the past five years.

Violent crime has risen across most of Mexico. Over the five-year period covered by the MPI, seven states recorded improvements in the *violent crime* indicator, while 25 deteriorated. Most of the country has been affected by increasing levels of sexual violence and family violence, while about half of the states have recorded increases in robbery and assault.

Building on the evidence presented in Section 1, this section reviews additional datasets on varying forms of homicide, conflicts between criminal organizations, political violence and violence against journalists, in order to fully understand the dynamics of violence in Mexico.

LETHAL VIOLENCE

Mexico faces two dynamics when it comes to homicide: conflicts between criminal organizations and violence amongst the general public. Official crime data in Mexico does not currently provide enough detail to distinguish organized crime related violence from other causes. However, third party estimates indicate that roughly two-thirds of homicides can be connected to organized crime. Based on this, IEP estimates that the total number of drug war

fatalities is nearly 175,000 deaths over the 13-year period from 2007 to 2019.[12]

There were 22,365 organized crime related deaths recorded in 2018.[13] Based on this estimate, Mexico's drug war homicide rate reached 17.9 "narco-executions" per 100,000 people in 2018. Figure 2.2 shows the trend in the total homicide rate and the drug trade related homicide rate, using data from the Lantia Consultores database on organized crime related deaths from 2006, when the drug war began, to 2018.

The drug-war homicide rate alone is high by international standards. However, the total homicide rate has been much higher each year, with an average of nine additional people per 100,000 killed each year. The gap highlights that Mexico would still have a high homicide rate even without organized crime and that organized crime is only one of the challenges facing the country. Subtracting narco-executions, Mexico's non-drug war homicide rate would be 9.8 per 100,000 in 2019. This figure is 65 percent lower than the current total, but remains high nonetheless, leaving a considerable amount of violence to be solved in absence of the drug war.

FIGURE 2.2
Trend in the drug-war homicide rate, Mexico, 2006–2018

The rate of homicides related to the drug war reached a historic high in 2018, at 17.9 narco-executions per 100,000 people.
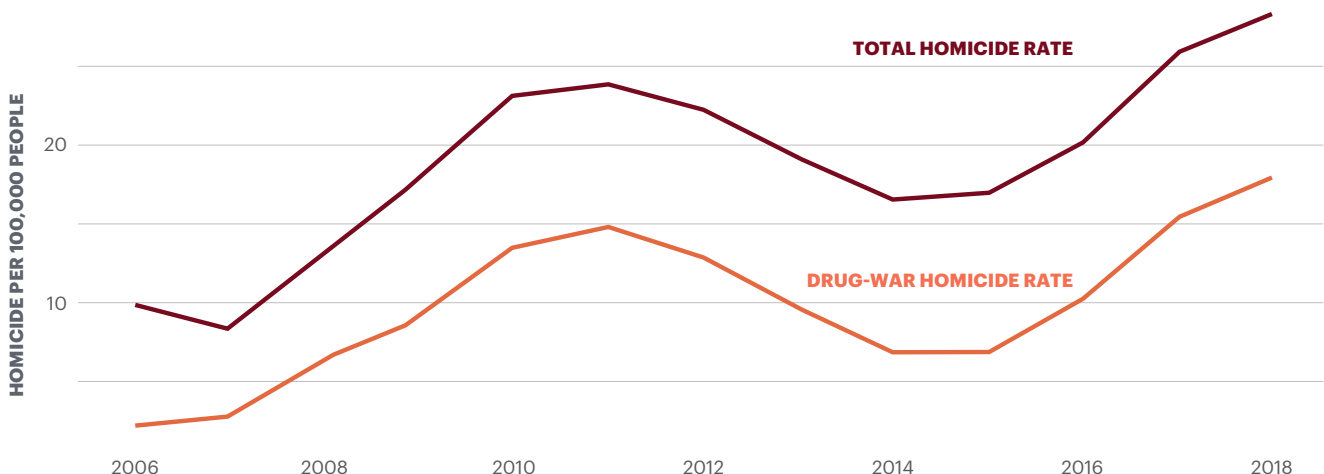
Source: Lantia Consultores, INEGI, CONAPO, IEP calculations

CARTEL CONFLICTS

Security analysts have reported increasing fragmentation of Mexico's criminal organizations since the start of the drug war and the arrest or execution of leaders of the major cartels. This has led to internal fighting and the division of these groups, contributing to the high level of organized crime related homicide.[14] Figure 2.3 shows that the number of violent conflicts between criminal groups rose from three in 2007 to 18 in 2018. A violent conflict is defined as an incident in which one armed group uses force against another armed group and there is at least one direct death.[15] Many of these conflicts have arisen out of leadership vacuums in the major criminal organizations, as varying factions have fought for control of the major cartels, eventually forming their own groups and battling each other for territory.

The Uppsala Conflict Data Program (UCDP) Georeferenced Events Dataset (GED) provides the best available information of violence between criminal groups. Table 2.1 gives the active conflicts for each year from 2006 to 2018. Over this period, 35 conflicts between cartels were recorded, leading to at least 42,621 deaths.[16]

Prior to 2006, only three criminal organizations were recorded in the armed conflict data for Mexico: the Sinaloa Cartel, the Tijuana Cartel, and the Gulf Cartel. Over the following 14 years, 42 criminal organizations and splinter groups appeared in the data. The main organizations split into factions and fought each other, while at the same time, new organizations arose that claimed to be fighting back against the rising violence.

The Sinaloa Federation, the Tijuana Cartel, and the Gulf Cartel are Mexico's original drug trafficking organizations (DTOs). These groups grew significantly by providing alternative over-land trafficking routes to the Cali Cartel when the US Drug Enforcement Administration (DEA) clamped down on the Caribbean Colombia-to-Florida cocaine route in the late 1980s. Viable marijuana and poppy production inside Mexico, as well as financial agreements with various Mexican politicians and law enforcement agencies allowed the three organizations to grow the industry into tens of billions of dollars by the 1990s. Trafficking and drug-sale territory was divided into *plazas* and violence was kept relatively low as long as there were no territorial encroachments. Political dynamics played a key role at the time. Most elected offices around the country were held by one political party, meaning that a few high-level bribes went a long way. In this context, corruption and criminality flourished.

In the late 1990s, Mexico's dominant political party faced increasing electoral competition at the local level. Mayorships, governorships and seats in state congresses started to go to a variety of parties, affecting existing corruption agreements and thus the *plaza* map. In 2000, Mexico's presidency was won by an opposition party for the first time in 71 years.

The Sinaloa organization's history has partly influenced the concept of Mexico's drug trafficking organizations as "cartels." Typical cartels cooperate, usually by dividing up territory and fixing prices. In recent years, criminal organizations in Mexico have splintered and fought violently. However, at the turn of the 21st century, a true cartel was in place in the form of the Sinaloa Federation, which brought together the Sinaloa DTO, the Juarez DTO, and the Beltran Leyva family.[17]

In 2006, the Sinaloa Federation began to fall apart, with armed conflict breaking out between the Sinaloa and Juarez cartels.[18] From 2006 to 2018, 12,753 fatalities were recorded, making it the deadliest organized crime conflict on record. The next deadliest was between two second-generation groups: Los Zetas and CJNG, with 5,707 deaths recorded between 2007 and 2018.[19]

In 2008, the Sinaloa Federation split again, with a conflict erupting between the Sinaloa leadership and its Beltrán Leyva faction. The Beltrán Leyva group had been responsible for transporting various illicit goods to the United States, until Alfredo Beltrán Leyva was arrested in January 2008. The group suspected Sinaloa leader Joaquin "El Chapo" Guzmán of turning Alfredo in to the authorities and retaliated.[20]

FIGURE 2.3

Number of active armed conflicts, Mexico, 1990–2018

The number of conflicts between criminal organizations in Mexico rose from three in 2007 to 18 in 2018.
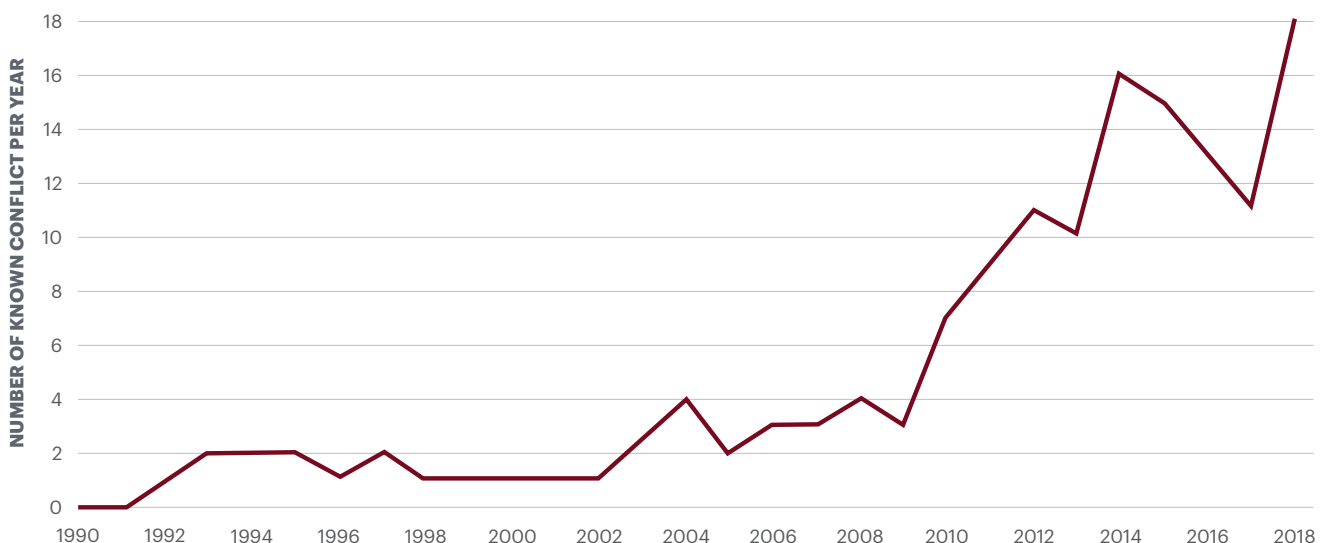
Source: Uppsala Conflict Data Program (UCDP) Global Events Database (GED)

TABLE 2.1

ORGANIZED CRIME CONFLICTS BY YEAR, 2006–2018

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
												Los Zetas - Civilians
												Los Zetas, Cártel del Noreste faction - Los Zetas, Old School Zetas faction
							Los Ardillos - Los Rojos					Jalisco Cartel New Generation - Santa Rosa de Lima Cartel
							Sinaloa Cartel - Los Chavez Matamoros faction - Sinaloa Cartel - Los Salgueiro faction	Los Ardillos - Los Rojos				La Union de Tepito - Fuerza Anti Unión
							Sinaloa Cartel - Forces of Damaso	Sinaloa Cartel - Los Memos faction - Sinaloa Cartel - Los Salazar faction				Los Aztecas - La Linea
							Los Zetas - Civilians	Sinaloa Cartel - Forces of Damaso	Los Ardillos - Los Rojos			Sinaloa Cartel - Forces of Damaso
							Los Zetas - Civilians	Sinaloa Cartel - Forces of Damaso	Los Ardillos - Los Rojos			Sinaloa Cartel - Forces of Damaso
							Guerreros Unidos - Los Rojos	Guerreros Unidos - Los Rojos	Guerreros Unidos - Los Rojos			Guerreros Unidos - Los Rojos
							Gulf Cartel, Dragones de Sheyla faction - Gulf Cartel, Los Fresitas faction	Sinaloa Cartel - Tijuana Cartel	Sinaloa Cartel - Tijuana Cartel		Sinaloa Cartel - Forces of Damaso	Sinaloa Cartel - Tijuana Cartel
						Los Zetas - Civilians	United Self Defense Corp of Michoacán - The Knights Templar	United Self Defense Corp of Michoacán - The Knights Templar	United Self Defense Corp of Michoacán - The Knights Templar	Los Zetas - Civilians	Los Ardillos - Los Rojos	Jalisco Cartel New Generation - Nueva Plaza Cartel
						Guerreros Unidos - Los Rojos	La Mochomera - Sinaloa Cartel	La Mochomera - Sinaloa Cartel	Jalisco Cartel New Generation - Sinaloa Cartel	Jalisco Cartel New Generation - Sinaloa Cartel	Sinaloa Cartel - Tijuana Cartel	Jalisco Cartel New Generation - Sinaloa Cartel
					Los Zetas - Civilians	Beltrán Leyva Cartel - Sinaloa Cartel	Beltrán Leyva Cartel - Sinaloa Cartel	Beltrán Leyva Cartel - Sinaloa Cartel	Beltrán Leyva Cartel - Sinaloa Cartel	Beltrán Leyva Cartel - Sinaloa Cartel	Jalisco Cartel New Generation - Sinaloa Cartel	Beltrán Leyva Cartel - Sinaloa Cartel
				Los Zetas - Civilians	Jalisco Cartel New Generation - Los Zetas	Jalisco Cartel New Generation - Los Zetas	Los Zetas - Civilians	Jalisco Cartel New Generation - The Knights Templar	Jalisco Cartel New Generation - The Knights Templar	Jalisco Cartel New Generation - The Knights Templar	Beltrán Leyva Cartel - Sinaloa Cartel	Beltrán Leyva Cartel - Independent Cartel of Acapulco
				Gulf Cartel - Los Zetas	Jalisco Cartel New Generation - La Resistencia	Jalisco Cartel New Generation - The Knights Templar	Jalisco Cartel New Generation - The Knights Templar	Jalisco Cartel New Generation - Los Zetas	Jalisco Cartel New Generation - Los Zetas	Jalisco Cartel New Generation - Los Zetas	Jalisco Cartel New Generation - Los Zetas	Jalisco Cartel New Generation - Los Zetas
				Los Zetas - Sinaloa Cartel	Los Zetas - Sinaloa Cartel	Los Zetas - Sinaloa Cartel	Los Zetas - Sinaloa Cartel	Los Zetas - Sinaloa Cartel	Los Zetas - Sinaloa Cartel	Los Zetas, Cártel del Noreste faction - Los Zetas, Old School Zetas faction	Los Zetas, Cártel del Noreste faction - Los Zetas, Old School Zetas faction	Los Zetas - Sinaloa Cartel
			Tijuana Cartel - Tijuana Cartel, El Teo faction	Beltrán Leyva Cartel - Beltrán Leyva Cartel, Valdez Villareal faction	La Familia - The Knights Templar	La Familia - The Knights Templar	La Familia - The Knights Templar	La Familia - The Knights Templar	Sinaloa Cartel, El Pepillo faction - Sinaloa Cartel, Los 28 faction	Jalisco Cartel New Generation - La Nueva Familia	Jalisco Cartel New Generation - La Nueva Familia	Jalisco Cartel New Generation - La Nueva Familia
Sinaloa Cartel - Tijuana Cartel	Sinaloa Cartel - Tijuana Cartel	Beltrán Leyva Cartel - Sinaloa Cartel	Tijuana Cartel - Tijuana Cartel - El Teo faction	Tijuana Cartel, El Teo faction	Independent Cartel of Acapulco - La Barredora	Independent Cartel of Acapulco - La Barredora	Gulf Cartel, Ramirez Treviño faction - Gulf Cartel, Villareal faction	Independent Cartel of Acapulco - La Barredora	Independent Cartel of Acapulco - La Barredora	Los Zetas, Jorge Ivan Hernandez Cantu faction - Los Zetas, Juan Pedro Salvador Saldivar Farias faction	Independent Cartel of Acapulco - La Barredora	Jalisco Cartel New Generation - La Familia
Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Los Zetas - Los Zetas, Velazquez Caballero faction	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel	Juárez Cartel - Sinaloa Cartel
Gulf Cartel - Sinaloa Cartel	Gulf Cartel - Sinaloa Cartel	Gulf Cartel - Sinaloa Cartel	Gulf Cartel - Sinaloa Cartel	Gulf Cartel - Sinaloa Cartel	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas	Gulf Cartel - Los Zetas

Source: Uppsala Conflict Data Program (UCDP) Global Events Database (GED)

Mexican law enforcement killed and captured two more of the Beltrán Leyva brothers in December 2009 and January 2010.[21] Power struggles erupted and roughly 200 fatalities occurred over the course of 2010 from armed conflict between the Beltrán Leyva Cartel and its Valdez Villareal faction.[22] At the time, reports indicated that law enforcement successes and conflicts between factions had weakened, if not eliminated, the Beltrán Leyva organization. However, the cartel maintained itself and violence continued, with almost 2,000 more fatalities from conflict between the Beltrán Leyva and Sinaloa cartels occurring over the next eight years.

The year 2010 also saw the first appearance of Los Zetas in the conflict data – a former Gulf Cartel faction that would become one of Mexico's most violent criminal organizations. According to an investigation conducted by Mexico's attorney general's office, Los Zetas were first formed by Arturo Guzmán Decena, a lieutenant in the Mexican army who became the security escort for Gulf Cartel boss Osiel Cárdenas Guillén in 1997.[23] By 1999, Guzmán Decena had assembled about 40 ex-soldiers – some of them special forces – to provide elite Gulf Cartel security.[24]

The Zetas wing of the Gulf Cartel increasingly assumed more responsibilities, from assassinations to extortions to transporting goods. However, the US Congressional Research Service notes that their "main asset [was] not drug smuggling but organized violence."[25] There are conflicting reports about why Los Zetas eventually split from the organization that founded them. However, by 2010, Los Zetas had asserted its independence and controlled nearly all of Mexico's gulf coast and a good portion of the US border. It is estimated that 775 people were killed that year in the conflict between Los Zetas and the Gulf Cartel.

In early 2011, Mexican security spokesman Alejandro Poire told national newspaper *Milenio* that the arrest or execution of nearly half of Mexico's 37 most wanted organized crime leaders had achieved "severe and irreparable damage to the structures of operations of all organized crime organizations."[26] The history of each organization corroborates that this strategy disrupted the first and second tier leadership of Mexico's major criminal organizations. Security analysts began referring to Mexico's "disorganized" crime.[27]

Over the course of 2011, six new organizations entered the fray, including the CJNG, which would eventually rival Los Zetas for the status of Mexico's most terrifying group. The CJNG reportedly emerged from the collapse of the Milenio Cartel, a division of the Sinaloa federation. A leadership conflict split the Milenio cartel into the CJNG and La Resistencia; CJNG quickly prevailed.

CJNG is now thought to have a presence in 22 states, has fought directly with the Mexican army, and has established control over three key ports which it uses to import chemicals from China for the production of drugs exported to the United States.[28] CJNG also have a reputation for intense violence, including the use of mass graves and public displays of assassination targets.[29] From 2015 to 2018, over 5,000 fatalities were recorded in clashes between CJNG and Sinaloa.[30]

The Beltrán Leyva Organization also split again in 2011. Edgar Valdez Villarreal, or "La Barbie," who had led the Valdez Villarreal faction in 2010, was arrested in September of that year. The ensuing fight for control led to two new organizations: La Barredora and the Independent Cartel of Acapulco, based in Guerrero.[31]

Meanwhile, in neighboring Michoacán, the La Familia cartel was facing its own internal fractionalization following the arrest of at least 345 suspected operatives and the execution of co-founder Nazario "El Chayo" Moreno González. Both La Familia and its splinter group, the Knights Templar, professed to be protecting the people of Michoacán while battling each other for control of the territory and forming various alliances with larger organizations.[32]

Lastly, the conflict between La Familia and the Knights Templar inspired some of the original self-defense groups that have arisen in Mexico over the last decade. Across the country, multiple groups of citizens have taken up arms to protect their communities. It is believed that some of the original members of the CJNG started out as the Mata Zetas, or "Zeta Killers," which professed to be protecting Mexico from Los Zetas.

Tracking and containing splinter groups is difficult, and the data collected by UCDP is necessarily a conservative estimate of the number of groups and conflicts. However, the available information clearly shows that cartel fragmentation has been one of the major security challenges facing Mexico for the 13 years of the war on drugs.

> "
> Mexico's drug-war homicide rate reached an estimated 17.9 "narco-executions" per 100,000 people in 2018, according to third party data sources.

POLITICAL VIOLENCE AND VIOLENCE AGAINST JOURNALISTS

Amidst the generally high level of violence in Mexico, targeted assassinations are common. A decline in assassinations of journalists is one of the few positive trends in violence. However, Mexico remains one of the most dangerous places in the world to be a journalist or a local politician.

VIOLENCE AGAINST JOURNALISTS

Reporters Without Borders has recorded a total of 1,524 journalists and media professionals assassinated in Mexico over the last 20 years. Figure 2.4 gives the trend over time. The annual number of assassinations has been steadily declining since its peak in 2012. In 2019, 51 assassinations were recorded – a 64 percent decline from the 2012 peak of 143.

FIGURE 2.4

Assassinations of journalists, Mexico, 2001–2019

The number of recorded assassinations of journalists has fallen 64 percent from its peak in 2012.

Source: Reporters Without Borders

Assassinations of journalists have declined, but overall attacks on journalists continued to rise. Article 19 collects data on all kind of attacks on journalists, from threats and intimidations, to technological attacks, to physical violence. Figure 2.5 gives the trend in attacks other than assassinations for the last ten years.

Over the ten years measured, threats and intimidation tactics accounted for 44.8 percent of all incidents. However, in 2018, they rose to 73 percent of the total, highlighting the extent to which attempts to scare and silence journalists have increased, even as the number of journalists murdered has fallen. In line with the decline in the number of journalists murdered, the number of physical attacks on journalists fell by 41.6 percent from its peak in 2013.

FIGURE 2.5

Non-lethal violence against journalists, 2009–2018

There has been a rising number of threats and acts of intimidation of journalists.
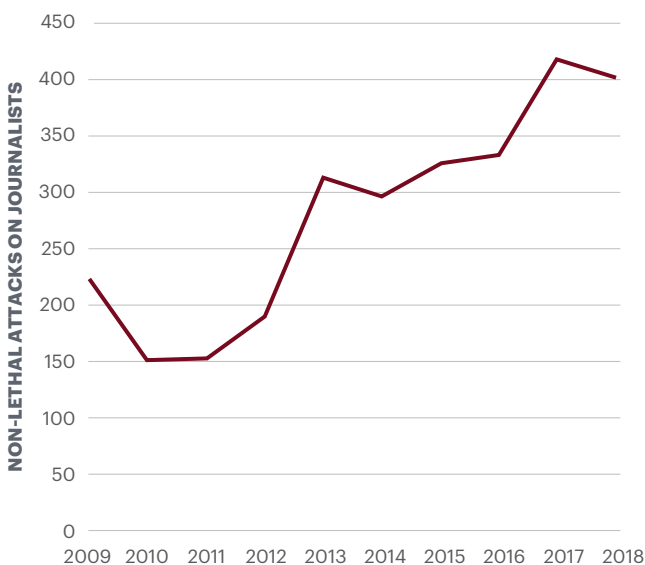
Note: Assassinations of journalists have been removed from this dataset in order to compare the trend shown in figure 2.4.
Source: Article 19

2018 ELECTION VIOLENCE

The 2018 election is thought to be the most violent election in Mexico since 1910, when that year's presidential contest sparked the 1910-1920 Mexican Revolution. From 1 September 2017 to 31 August 2018, 850 events of political violence were recorded across Mexico. This time span captures the ten months prior to the July 1st 2018 election and the two months following, during which violence continued during the political transition. Violence peaked just prior to the election; 30 percent of attacks were recorded in June of 2018.[33]

Seventy-five percent of these attacks targeted municipal-level political figures, compared to 18 percent affecting state figures and seven percent affecting federal figures. Data in this section comes from the database developed by Etellekt Consulting, which counts threats and acts of violence against an incumbent or a candidate for political office at the municipal, state, or federal level, or members of political parties or those associated with electoral processes.
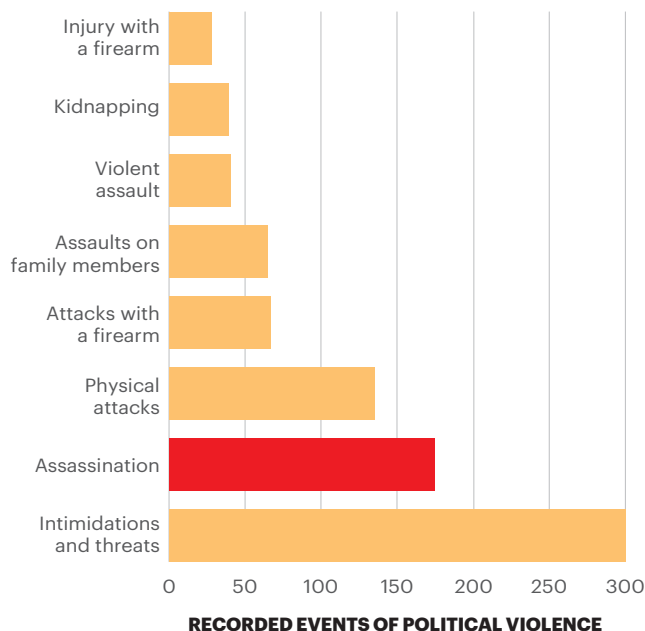
Of all political parties, members of the Institutional Revolutionary Party / *Partido Revolucionario Institucional* (PRI) and Morena experienced the highest levels of violence, with 217 and 201 events recorded, respectively, making up 54 percent of the total. The PRI also experienced the highest number of political assassinations, at 61, especially in the states of Puebla and Veracruz. The PRI was the party that held the presidency for all but 12 years from 1929 to 2018.[34]

A large majority – 81 percent – of recorded attacks were targeted at opposition figures, suggesting that assailants were typically either aligned with the incumbent or found the incumbent's policies preferable to the opposition's. Assailants may have been responding to proposed changes in policy by the candidates or, in a more pragmatic sense, the perception that incumbent politicians

FIGURE 2.6
Recorded events of political violence in Mexico by type, 1 September 2017–31 August 2018

Assassinations were the second most common form of political violence during the 2018 election year, outpaced only by the number of threats and intimidations.

Source: Etellekt Consultores

FIGURE 2.7
Political affiliations of victims of political violence, 1 September 2017–31 August 2018

With the largest number of candidates, PRI and Morena were the major targets for political violence in the lead-up to the 2018 elections.

Source: Etellekt Consultores

are more tolerant of organized crime.

There was a moderate correlation between the number of aggressions against municipal-level politicians and how tight their race was. The smaller the difference in votes between the first and second place politician, the more acts of violence – with a correlation coefficient of -0.3.[35]

Every state in Mexico had at least one act of violence against a Morena opposition candidate, amounting to 122 opposition candidates. Morena, or the National Regeneration Movement, built its campaign around anti-corruption messages and ultimately won the presidency, control of congress, and several local governments.[36]

Twelve of 18 states with a PRI opposition candidate recorded acts of political violence against that candidate, totaling 87 PRI opposition candidates attacked over the 12 months.[37]
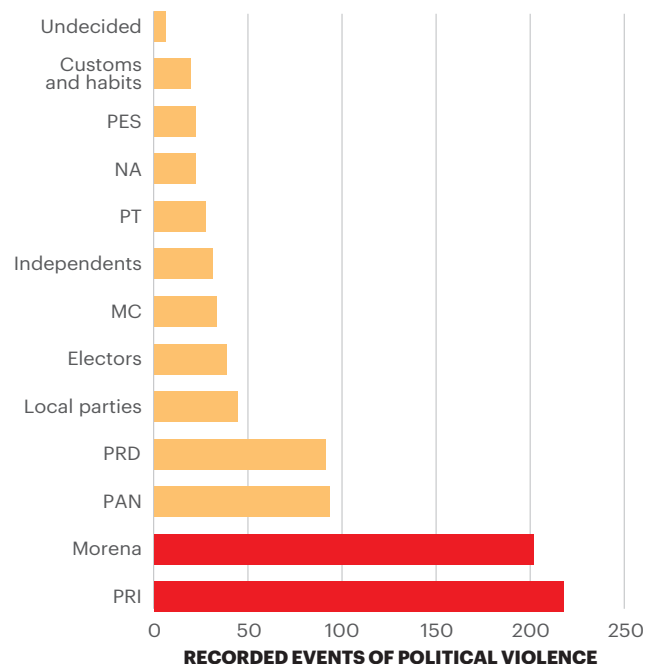
POLITICAL VIOLENCE IN 2019

Political violence continued after the 2018 election. A report in April of 2019 found there were at least 180 acts of political violence in the first quarter of 2019 – a 46 percent increase over the same period in the prior year.[38] Twenty-four were assassinations of political figures, including five elected officials.[39] The party of the current president – the Morena party – was the most heavily targeted, experiencing 47 percent of attacks.

Political violence in early 2019 mostly targeted municipal-level figures and opposition candidates.

- Seventy-three percent of threats and attacks targeted municipal-level politicians, totaling 133 events.[40]
- Eighty percent of events, or 144 incidents, targeted individuals from different political parties than the governor of their state.[41]

Although the total number of attacks increased, the number of assassinations declined compared to the year prior. There were 24 intentional homicides of political figures in the first quarter of 2019, compared to 38 in the first quarter of 2018 – a 36 percent decline.[42] However, there were 111 threats and intimidations, nearly a three-fold increase from the 38 in the prior period. Kidnapping also rose, from two instances to eleven.[43] Additionally, seven of the homicides recorded in 2019 included an act of kidnapping as well.[44]

The total number of attacks on male politicians has been broadly consistent, with records only falling slightly from 101 to 98 incidents. However, violence against female politicians nearly quadrupled, from 21 to 79 attacks, reflecting the increasing role of women in politics. Whereas attacks on female politicians made up 17.6 percent of political violence in early 2018, these events were 43.8 percent of the total in early 2019.[45] As of the 2018 elections, women make up 48 percent of the legislators in Mexico's national congress[46] and 49 percent of elected legislators in state congresses.[47]

In the first quarter of 2019, attacks by organized crime groups declined while there was a rise in the number of attacks perpetrated by "party militants". Of 180 incidents, a total of 60 threats or attacks were conducted by individuals affiliated with a political party, and 38 of those were organized or carried out by elected officials.[48]

PATTERNS IN MEXICO'S VIOLENCE TRENDS

Violence in Mexico is usually discussed in terms of the drug war and most studies use the homicide rate as a proxy for the general level of violence. However, there is significant evidence that different types of violence are following distinct trends and responding to varying dynamics – which has significant policy implications.

Most forms of violence in Mexico are uncorrelated to one another. For example, homicide rates are not necessarily the highest in the places most affected by extortion. Political violence is another good example. It would be expected that levels of political violence would be higher where violence in general is higher or where there is greater organized crime activity. However, the rate of political violence per 100,000 people does not correlate with any other form of violence.

Figure 2.8 shows the relationship between the political violence rate and the homicide rate in 2018 as an example. As seen in the figure, states like Colima and Baja California, which have the highest homicide rates in the country, had relatively low rates of political violence. Conversely, Puebla and Oaxaca had high rates of political violence and relatively lower rates of homicide.

FIGURE 2.8
Homicide vs. rate of political violence, 2018

The highest levels of political violence in 2018 were not necessarily in the states with the highest homicide rates.
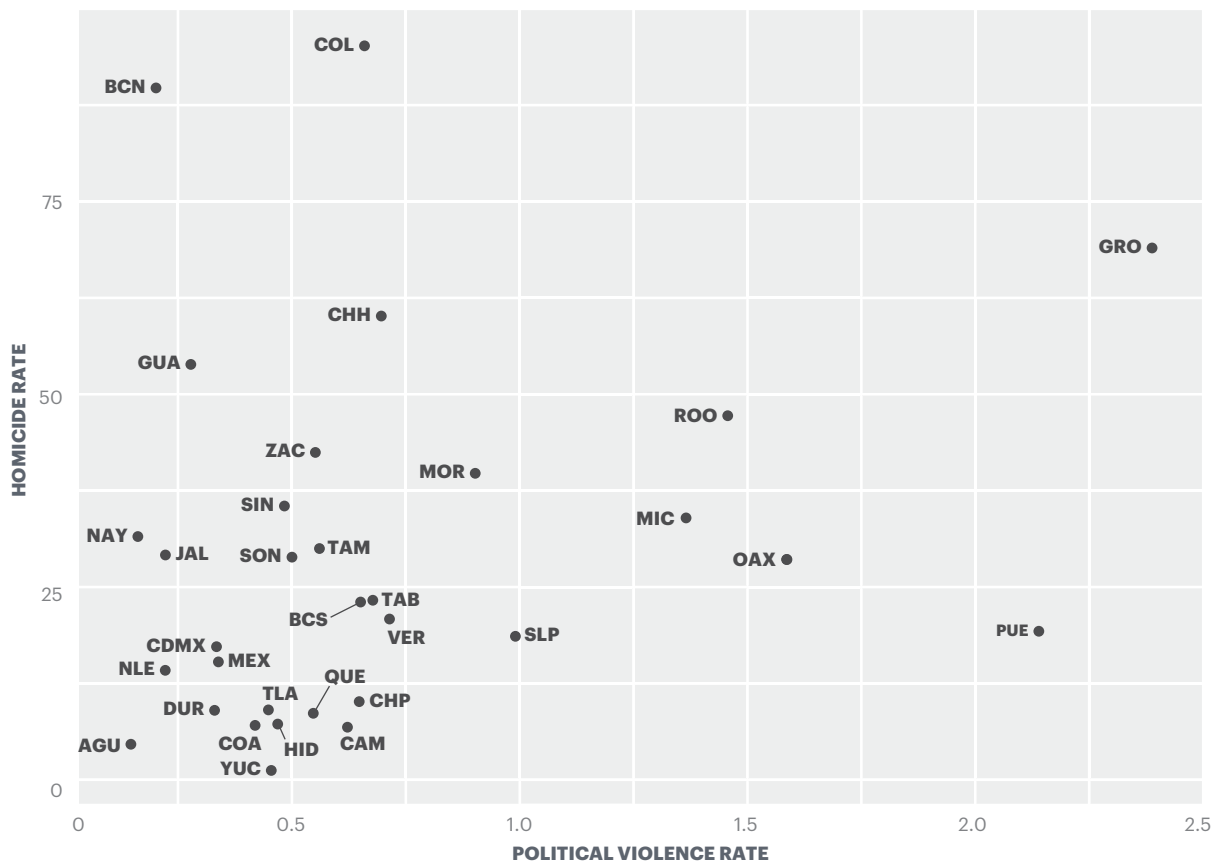
Source: SESNSP, Etellekt, IEP calculations

IEP performed a principal components analysis (PCA), which groups the available indicators based on similar trends, to better understand the relationship between different forms of violence. The PCA analysis generally corroborates the results of the correlation analysis that IEP tested, but it allows us to see the relationships between variables in context of the entire violence dataset, rather than just two variables at a time.

The main finding of this analysis is that there are four distinct dynamics of violence taking place in Mexico:

1. Political violence
2. Opportunistic violence, including extortion and robbery
3. Interpersonal violence, including assault, sexual assault, and violence in the family
4. Cartel conflict, characterized by high levels of homicide, drug-trade related crime and armed conflict between criminal groups and the government

The total homicide rate has been removed from this analysis, because the data does not distinguish between homicides that take place in an organized crime context versus an interpersonal context. Instead, the rate of armed conflict deaths per 100,000 has been used, based on the data from UCDP discussed earlier in this section. This data specifically identifies homicides that occurred in the context of a conflict between Mexico's criminal organizations.

Figure 2.9 shows these dimensions. Arrows pointing in the same direction are indicators that tend to rise and fall together. The longer the arrow, the more it explains the differences between violence in each state. The space between the arrows is a graphical representation of their statistical relationship, showing that some forms move more closely together than others. Thus, as shown in the figure, cartel conflicts and drug-trade related crime are driven by different dynamics than political violence, opportunistic violence and interpersonal violence.

States in Mexico may experience either one or a combination of these dynamics at the same time. Security policies that only focus on organized crime at the expense of interpersonal or political violence will not bring peace; each dimension needs a different set of specific policy responses.

Political violence, as discussed above, appears to be driven by distinct dynamics around the country, rather than by the general level of violence.

Interpersonal violence other than homicide does not seem to be related to political violence or organized crime, but different forms of interpersonal violence show clear relationships with each other.

Extortion is a profit-driven form of crime that appears to follow the same patterns as robbery. Kidnapping and human trafficking also strongly track with extortion and robbery, supporting the view that this dimension of violence in Mexico is more opportunistic and profit driven.[49]

Drug trafficking is similarly a profit-seeking activity, but instead of taking place all across the country, it requires specific settings, such as access to ports and road networks for transporting goods. Drug trafficking and sales are also clustered with cartel conflict deaths. High levels of cartel conflict in 2018 were related to high levels of drug trafficking or drug sales in 2019, demonstrating that conflicts take place over valuable trafficking routes or retail market zones.

Figure 2.9 visualizes some of the dynamics in particular states. States in Mexico can be grouped based on their profile of violence, indicated by the colors in Figure 2.10, and by their level of organized crime in relation to homicide.

Several states have much lower homicide rates than their levels of organized crime activity would suggest, and vice versa. States in

FIGURE 2.9

Dimensions of violence in Mexico

Violence in Mexico can be grouped into four distinct dimensions: political violence, opportunistic violence, interpersonal violence, and cartel conflict.
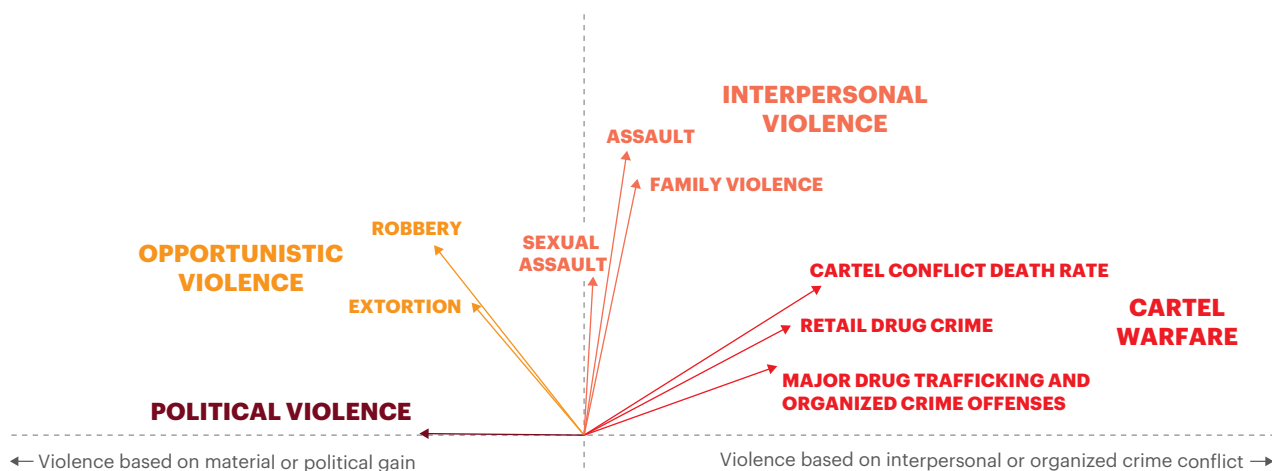
Note: Diagram developed based on the bi-plot of a principal components analysis, rotated 45 degrees to the right.
Source: IEP analysis. Political violence data: Etellekt. Crime data: SESNSP. Conflict data: UCDP.

green have the lowest levels of violence and are among the most peaceful states in the MPI. States in blue have moderate homicide and violent crime rates, and record low to moderate levels of organized crime. The blue group is the largest group, including nine states. Altogether, about half of the states in Mexico fall into the blue and green lower violence groups.

The states in red have the highest homicide rates. The states in black have high levels of organized crime activity, but relatively lower homicide rates and gun violence and more moderate rates of violent crime compared to the rest of the country. The states in orange are at risk.

The results of this cluster analysis[50] – which determines the state colors in Figure 2.10 – suggests that criminal organizations have a strong foothold in the states shown in black, enabling them to pursue profitable activities with a minimum of disruptive violence. Historically, Durango – a desert state near the US border – has been considered solid territory of the Sinaloa cartel. Nuevo León and Coahuila, which border Texas, are Gulf Cartel and Los Zetas territory. The battle between these organizations, which are among Mexico's oldest, most powerful, and most violent, has often played out in the state of Chihuahua.

The states in orange have high levels of opportunistic criminal activity, and in particular, the CJNG is active in all five. All five states have high rates of extortion, kidnapping and human trafficking, and with the exception of Tabasco, high levels of retail drug trafficking. Quintana Roo represents a strategic drug trafficking location through the Caribbean, while CJNG reportedly maintains training facilities in nearby Tabasco.[51]

These states are grouped in the same color cluster because they are experiencing similar dynamics. However, the much higher homicide rates in Morelos and Quintana Roo may demonstrate the future risks that the other states face. Morelos had the second largest increase in the homicide rate last year. Quintana Roo had the same result the previous year, with the second largest increase from 2017 to 2018, when the homicide rate there more than doubled.

The implications of this analysis are that policy responses will need to differ based on the profile of each state at a given point in time. Organized crime dynamics can shift quickly, and policymakers and law enforcement should update each state's profile based on the most recent local intelligence. However, understanding the dynamics of violence based on the dimensions outlined above can provide a framework for reducing crime and violence.

In tackling organized crime, it will be important to anticipate and prevent the violent conflicts that can arise when the leadership of a cartel is arrested or executed. This creates a power vacuum where mid-tier operatives are more likely to fight for control of the group. Cartel fragmentation can lead to highly violent conflicts that can last for years. Furthermore, state security strategies may need to work over longer time lines than they have in the past.

Sustainable peace will require long-term institutional improvements, in order to end corruption and impunity and establish a robust rule of law. Progress on these points is discussed further in Section 4 of this report, which identifies *Low Levels of Corruption* and *Well-functioning Government* as key Pillars of Positive Peace for Mexico to improve in.

FIGURE 2.10

Violence profiles of Mexican states, 2019

States in Mexico can be grouped based on their profile of violence, indicated by the colors shown here, and by their level of organized crime in relation to homicide.
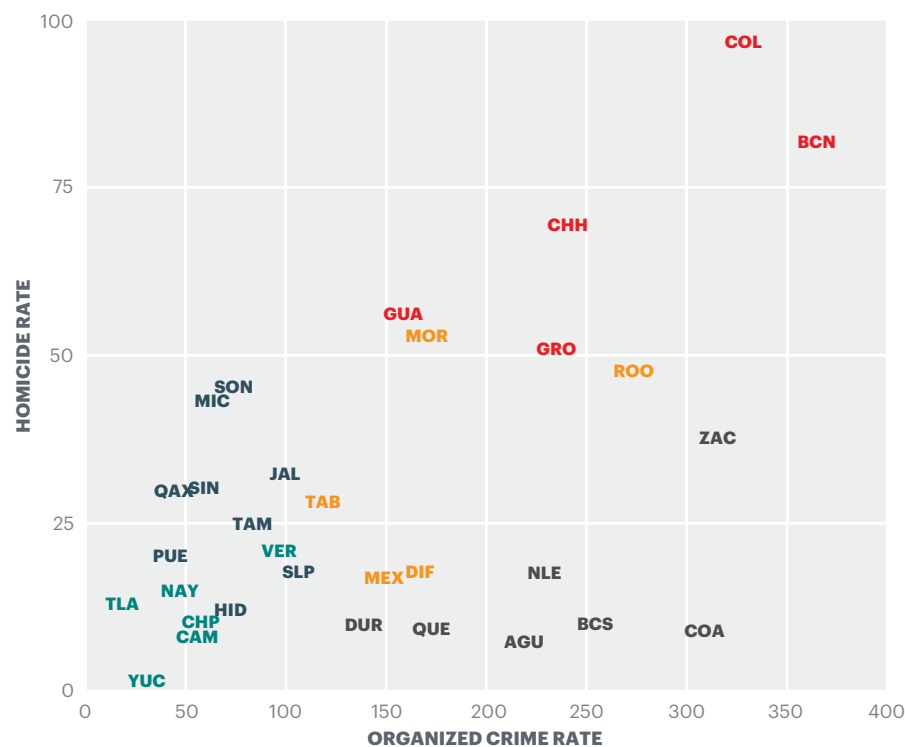
Note: the state colors are based on a a KNN clustering methodology for five clusters, based on the four crime indicators included in the MPI.
Source: SESNSP data, IEP analysis

> "Cartel fragmentation can lead to highly violent conflicts that can last for years. Furthermore, state security strategies may need to work over longer time lines than they have in the past.

THE ECONOMIC VALUE OF PEACE IN MEXICO

KEY FINDINGS

- The economic impact of violence in Mexico was 4.57 trillion pesos (US$238 billion) in 2019, equivalent to 21.3 percent of the country's GDP.

- The economic impact of violence fell by 0.3 percent in 2019, driven by decreases in government expenditure on domestic security and justice.

- The economic impact of violence was nearly eight times higher than public investments made in health care and more than six times higher than those made in education in 2019.

- Mexico spent 0.70 percent of its GDP on domestic security and the justice system in 2019, the least of any OECD country.

- Homicide comprised 48 percent of the economic impact of violence at 2.19 trillion pesos (US$114 billion) in 2019.

- A one percent decline in the economic impact of violence is approximately equal to the federal government's investment in science, technology and innovation in 2019.

- The economic impact of violence was 36,129 pesos per person, approximately five times the average monthly salary of a Mexican worker.

- The per capita economic impact varies significantly from state to state, ranging from 11,714 pesos in Yucatán to 83,926 pesos in Colima.

- The economic impact of organized crime increased by 20.7 percent in 2019, the largest percentage increase of all indicators.

- The states experiencing the highest levels of violence do not necessarily receive higher per capita funds for domestic security.

THE ECONOMIC VALUE
OF PEACE IN 2019

The economic impact of violence in Mexico was estimated to be 4.57 trillion pesos (US$238 billion) in 2019, equivalent to 21.3 percent of Mexico's GDP. This is 0.3 percent less than the prior year and the first improvement in five years. However, since 2015, the economic impact has increased by 39.9 percent reflecting the deterioration in peacefulness.

The total economic impact of violence includes the direct cost of violence, the indirect cost and the multiplier effect. Direct costs are expenditures incurred by the victim, the perpetrator and the government. Indirect costs accrue after the fact and include the present value of long-term costs arising from incidents of crime, such as lost future income and physical and psychological trauma. Table 3.1 presents a full breakdown of the costs included in the 2019 economic impact estimate.

The multiplier effect represents the economic benefits that would have been generated if all relevant expenditure had been directed into more productive alternatives. A summary of the methodology is provided at the end of this section and a comprehensive explanation of how the economic impact of violence is calculated is provided in Section 5.

Decreases in government spending on *domestic security* and *justice* underpinned the 0.3 percent improvement in the economic impact of violence in 2019. However, the economic impact of *homicide, organized crime, military and violent assault,* including sexual assault, continued to increase. Figure 3.1 illustrates the trend in the economic impact of violence in Mexico from 2015 to 2019.

> " The economic impact of violence was nearly eight times higher than public investments made in health care.

Since 2015, the economic impact of violence has increased every year except for 2019. The largest increase of 465 billion pesos occurred in 2018, representing an 11.3 percent increase from 2017. In 2019, the decreases in government expenditure were driven by cuts to *justice* and *domestic security*, decreasing by 8.6 and 14 percent respectively from the prior year. Indicators of interpersonal violence, such as *homicide* and assault have increased.

The increased economic impact of interpersonal violence follows the trend of declining overall peace in Mexico, as discussed in Section 1. The findings of this section indicate that the costs from interpersonal violence are increasing while public order and safety expenditures are decreasing. Table 3.2 presents the trend from 2015 to 2019.

The economic impact of violence in Mexico is eight times higher than the public expenditure on health, and six times higher than spending on education. This highlights the extent to which violence constrains the Mexican economy and how even modest reductions in violence can free up resources which could be reallocated to public services.

TABLE 3.1

The economic impact of violence in 2019, constant 2019 pesos, billions

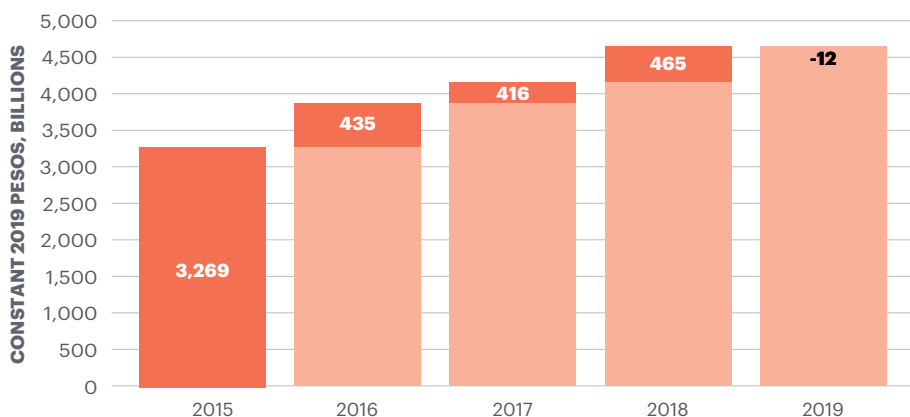Total economic losses amount to 4.57 trillion pesos in 2019.

INDICATOR	DIRECT	INDIRECT	MULTIPLIER EFFECT	TOTAL ECONOMIC IMPACT OF VIOLENCE
Homicide	190.33	1,811.99	190.33	2,192.66
Violent Crime	271.14	890.86	271.14	1,433.13
Organized Crime	-	17.57	-	17.57
Fear	-	33.32	-	33.32
Private Security & Weapons	170.78	-	170.78	341.56
Military Spending	125.91	-	125.91	251.81
Domestic Security Spending	42.64	-	42.64	85.29
Justice System Spending and Incarceration	107.44	2.88	107.44	217.76
Total	908.24	2,756.62	908.24	4,573.11

Note: Totals may not be exact due to rounding
Source: IEP

FIGURE 3.1

Trend in the economic impact of violence, 2015–2019

The economic impact of violence increased by 38.8 percent from 2015 to 2019, increasing yearly, except for 2019. Numbers on the chart indicate the size of the year-on-year change, in billions of pesos.

Source: IEP

KEY FINDINGS ↗

ECONOMIC IMPACT

4.57tn

pesos in 2019. The total economic impact of homicide on the Mexican economy.

↘

0.3%

The economic impact of violence fell by 0.3 percent in 2019, driven by decreases in government expenditure on domestic security and justice.

Violence and the fear of violence create significant economic disruptions. Violent incidents incur costs in the form of property damage, physical injury or psychological trauma. Fear of violence also alters economic behavior, primarily by changing investment and consumption patterns, as well as diverting public and private resources away from productive activities and towards protective measures.

" The consequential costs from violence in Mexico are significantly larger than government expenditure on violence containment.

TABLE 3.2

The economic impact of violence in 2019, constant 2019 pesos, billions

| INDICATOR	2015	2016	2017	2018	2019	CHANGE (2018 TO 2019)
Homicide	1168.5	1493.2	1896.8	2190.1	2192.7	0.1%
Violent Crime	1210.0	1235.9	1286.4	1455.2	1433.1	-1.5%
Organized Crime	14.9	13.4	13.9	14.6	17.6	20.7%
Fear	34.3	34.5	31.8	33.6	33.3	-0.7%
Protection Costs	264.5	345.9	345.4	331.1	341.6	3.1%
Military Spending	236.8	225.5	220.6	223.2	251.8	12.8%
Domestic Security Spending	118.7	108.4	99.0	99.1	85.3	-14.0%
Justice System Spending and Incarceration	220.9	246.9	225.3	237.7	217.8	-8.4%
Total	3268.6	3703.7	4119.3	4584.6	4573.1	-0.3%

Source: IEP

Combined, violence and the fear of violence generate significant welfare losses in the form of productivity shortfalls, foregone earnings and distorted expenditure. Measuring the scale and cost of violence, therefore, has important implications for assessing the effects it has on economic activity. Figure 3.2 illustrates the share of the total economic impact of violence in 2019 by the categories used in the model. Details on the indicators and sub-indicators can be found in Box 3.1.

FIGURE 3.2

Category breakdown of the total economic impact of violence, 2019

Homicide and violent crime represent 79 percent of the economic impact of violence. The impact of the consequences of violence is far larger than violence containment spending in Mexico.
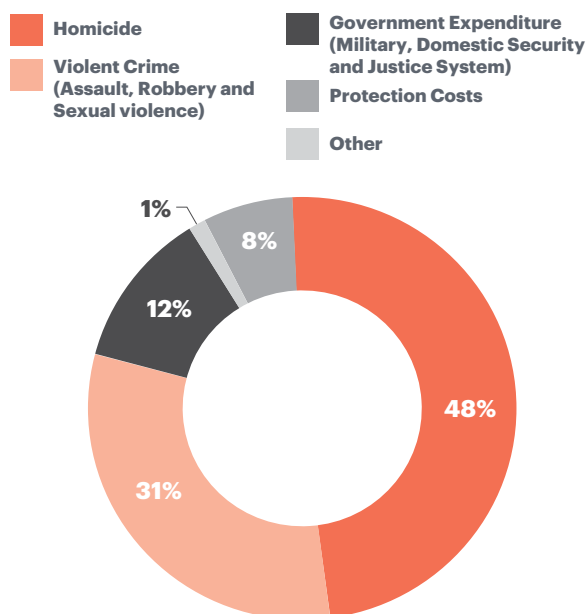
Source: IEP

The data shows that the consequential costs from violence in Mexico are significantly larger than government expenditure on violence containment.

Homicide was the largest category in the model at 48 percent in 2019 and amounted to 2.2 trillion pesos, equivalent to 10.2 percent of Mexico's GDP. Large economic gains could be achieved by reductions in homicide. A ten percent decline in the homicide rate would reduce the economic impact of violence by 219 billion pesos. This is the equivalent of four times government spending on science, technology and innovation in 2019.

*Violent crim*e, which is comprised of robbery, assault and sexual violence, was the second most expensive form of violence, representing 31 percent of the total economic impact at 1.4 trillion pesos. The economic impact of *violent crime* also measures the economic and health-related losses incurred by Mexican households and businesses.

Government spending on activities aimed at reducing violence – domestic security, the military and the justice system – amounted to 552 billion pesos, accounting for 12 percent of the total economic impact.

The economic impact model also includes the costs households and businesses incur in protecting themselves from crime and violence. Protection costs amounted to 342 billion pesos – eight percent of the total. This indicator includes insurance, private security spending, the cost of firearms for protection, changing place of residence or business due to violence and the installation of alarms, locks, doors, windows, bars and fences.

The remaining one percent of economic losses are related to the indirect costs of *organized crime*, indirect costs of *incarceration* and the *fear of violence*. The economic impact of organized criminal activity is calculated for two types of crimes – extortion and kidnapping – and amounted to 17.6 billion pesos in 2019. However, this is a conservative estimate, as the model does not include all of the losses imposed by organized criminal groups, particularly commodity theft or drug trade-related economic activity such as production, transport and distribution. Furthermore, the presence of organized criminal groups can increase costs incurred to businesses due to the risks of kidnapping and extortion.[1] Data on the economic impact of these types of crimes are extremely difficult to capture.

In 2019, the economic impact of *incarceration* was three billion pesos. IEP's model includes the indirect cost of incarceration through loss of wages of those imprisoned. The lost wages for the prisoners are assumed to equal the Mexican minimum wage of 27,107 pesos per year in 2019.

The *fear of violence* distorts consumer and business behavior, which in turn causes economic losses. These losses were calculated at 33 billion pesos in 2019. The *fear of violence* uses the ENVIPE household survey on victimization and perception of public safety to calculate the level of the fear of violence.

BOX 3.1

The MPI Economic Costing Indicators

Indicators are *italicized* which distinguishes them from the sub-indicators which are not italicized. The following defines the sub-indicators contained within each indicator:

- *Homicide*
- *Violent crime*
  - Violent assault
  - Self-reported losses from violent crime
  - Sexual assault
  - Robbery
- *Organized crime*
  - Extortion
  - Human trafficking and kidnapping
- *Fear of violence*
- *Protection costs*
- *Military spending*
- *Domestic security spending*
- *Justice system spending*
- *Incarceration*

THE ECONOMIC IMPACT OF INTERPERSONAL VIOLENCE

Aggregating *homicide*, *violent crime* and *organized crime*, the total economic impact of interpersonal violence is shown in Figure 3.3.

In 2019, there were sharp variations in the rate of change of the various interpersonal violence indicators and the consequential economic impact associated with them. The economic impact of *homicide*, violent assault, sexual assault, kidnapping and extortion increased. The impact of robbery, the self-reported losses from violence and *fear of violence* declined.

In 2019, *homicide* recorded the largest losses at 2,192 billion pesos, an increase of 2.54 billion pesos from the prior year. The Global Burden of Disease Study (GBD) finds interpersonal violence to be the fourth-largest cause of death in Mexico.[2] At 28.1 victims per 100,000 people in 2019, Mexico has one of the highest homicide rates in the Latin America. Whereas Chile had the lowest homicide rate in the region at 2.6 victims per 100,000 people. If Mexico were to reduce its national homicide rate to that of Chile's, Mexico's economic impact of *homicide* would decline by 83 percent to 219 billion pesos. This saving is equivalent to 9.2 percent of Mexico's GDP.

The losses from violent crime were the second-largest within interpersonal violence at 14.7 percent of the total, equaling 542 billion pesos. However, these self-reported losses declined by 13 percent from 2018, the equivalent of 81 billion pesos.

At 11.1 percent, violent assault is the third largest indicator of interpersonal violence, equaling 408 billion pesos. In 2019, violent assault increased by 27.5 billion pesos, a 7.2 percent increase.

Sexual violence had the fourth largest economic impact at 7.3 percent. In 2019, sexual violence increased by 17 percent, the equivalent to 38.7 billion pesos.

The remaining 7.2 percent in interpersonal violence is attributed to robbery, kidnapping, extortion and the *fear of violence*. Combined, their impact is equal to 264.7 billion pesos.

Organized crime is comprised of extortion and kidnapping and increased by 20.7 percent in 2019, whereas robbery and *fear of violence* decreased by 3.1 and 0.7 percent, respectively.

Although the MPI includes data on the number of cases of family violence per year, a lack of research on its economic impact precludes its inclusion in the economic impact of violence model.

FIGURE 3.3

Breakdown of the economic impact of interpersonal violence, 2019

Homicide and assault represent 71 percent of the economic impact of interpersonal violence.

- Homicide
- Losses from violent crime
- Violent assault
- Sexual violence
- Robbery
- Fear
- Kidnapping
- Extortion
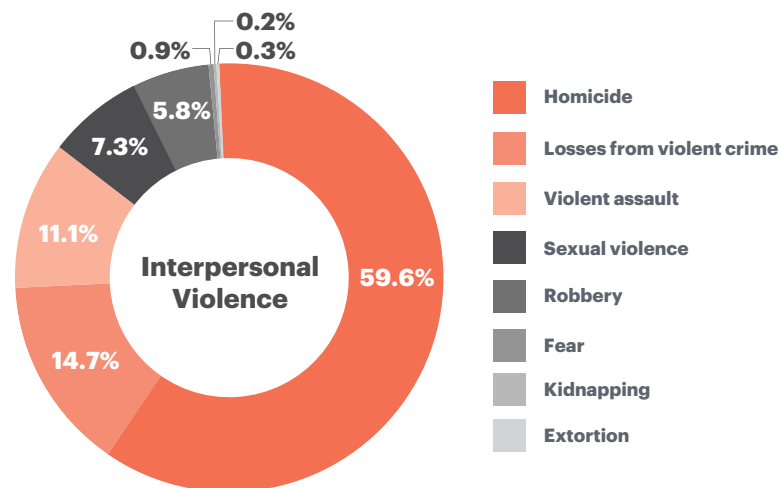
Source: IEP

PER CAPITA

The nationwide economic impact of violence amounted to 36,129 pesos per person in 2019. This is in excess of five months income for an average Mexican worker.[3] Table 3.3 presents the MPI rank, the per capita economic impact of violence by state, and the total by state.

Colima, which ranked as the second least peaceful state in Mexico in 2019, had the highest per capita impact at 83,926 pesos. Yucatán, the most peaceful state in 2019 had the lowest economic impact per person at 11,714 pesos. Yucatán's relatively lower homicide rate accounts for its low economic impact.

TABLE 3.3

The per capita economic cost of violence, 2019, constant 2019 pesos

The per capita economic impact of violence varies significantly from state to state in Mexico, from Yucatán at 11,714 pesos per person to Colima at 83,926 pesos per person.

72,409

11,714

IMPACT PER CAPITA

The per capita economic impact varies significantly from state to state, ranging from 11,714 pesos in Yucatán to 83,926 pesos in Colima.

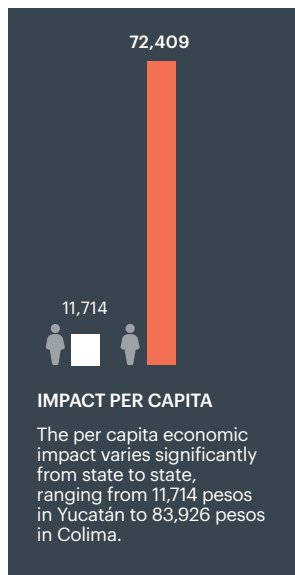| STATE	MPI RANK	PER CAPITA ECONOMIC IMPACT OF VIOLENCE	ECONOMIC IMPACT OF VIOLENCE (BILLIONS)
YUCATÁN	1	11,714	26.2
CHIAPAS	3	15,581	88.0
CAMPECHE	4	21,647	21.3
COAHUILA	7	21,662	68.8
NAYARIT	5	21,978	27.9
DURANGO	8	22,142	41.0
TLAXCALA	2	22,541	30.7
VERACRUZ	9	24,341	206.6
SAN LUIS POTOSÍ	15	26,708	76.0
NUEVO LEÓN	16	27,539	152.4
QUERÉTARO	12	28,018	62.7
HIDALGO	6	28,153	85.9
PUEBLA	10	31,113	203.6
AGUASCALIENTES	11	32,648	46.2
MÉXICO	19	33,338	574.9
SINALOA	18	33,899	106.1
TAMAULIPAS	14	34,289	124.2
OAXACA	13	36,643	151.0
JALISCO	20	37,379	311.2
DISTRITO FEDERAL	23	37,956	342.8
TABASCO	24	39,286	100.0
BAJA CALIFORNIA SUR	17	40,370	31.8
ZACATECAS	25	42,680	70.6
SONORA	21	43,008	130.6
MICHOACÁN	22	45,580	218.4
GUERRERO	27	48,055	175.1
QUINTANA ROO	30	53,556	90.2
GUANAJUATO	28	55,075	340.0
MORELOS	26	56,559	114.4
CHIHUAHUA	29	61,176	230.3
BAJA CALIFORNIA	32	72,409	259.1
COLIMA	31	83,926	64.9

Source: IEP

Figure 3.4 displays the map of the per capita economic impact of homicide by state for 2019.

The extreme disparity between the states is highlighted by a difference between Colima's and Yucatán's per capita impact from *homicide* of 58,705 pesos. Yucatán's per capita impact of *homicide* is equal to 995 pesos per person, the lowest in Mexico, while Colima's is equal to 59,700 pesos, the highest in Mexico.

Baja California Sur, which ranked as the 17th most peaceful state out of the 32, had the highest per capita expenditure on *domestic security*, the *justice system* and the *military*. Baja California Sur also had the second-highest per capita expenditure on *private security and weapons*, exceeded only by Distrito Federal.

The Encuesta Nacional Sobre Inseguridad (ENSI) crime victimization surveys (Crime Victimization Survey) found that households in areas suffering from higher levels of drug violence spend on average US$1,085 (20,880 pesos) more on security than areas not affected by similar violence.[4]

Aguascalientes, which ranks eleventh in the 2020 MPI, had the highest per capita impact from *violent crime*, the consequence of suffering from the highest rate of sexual violence. Aguascalientes' per capita impact from sexual violence equaled 8,412 pesos in 2019.

To illustrate the variation in the economic impact of violence across Mexican states, three scenarios can be modeled:
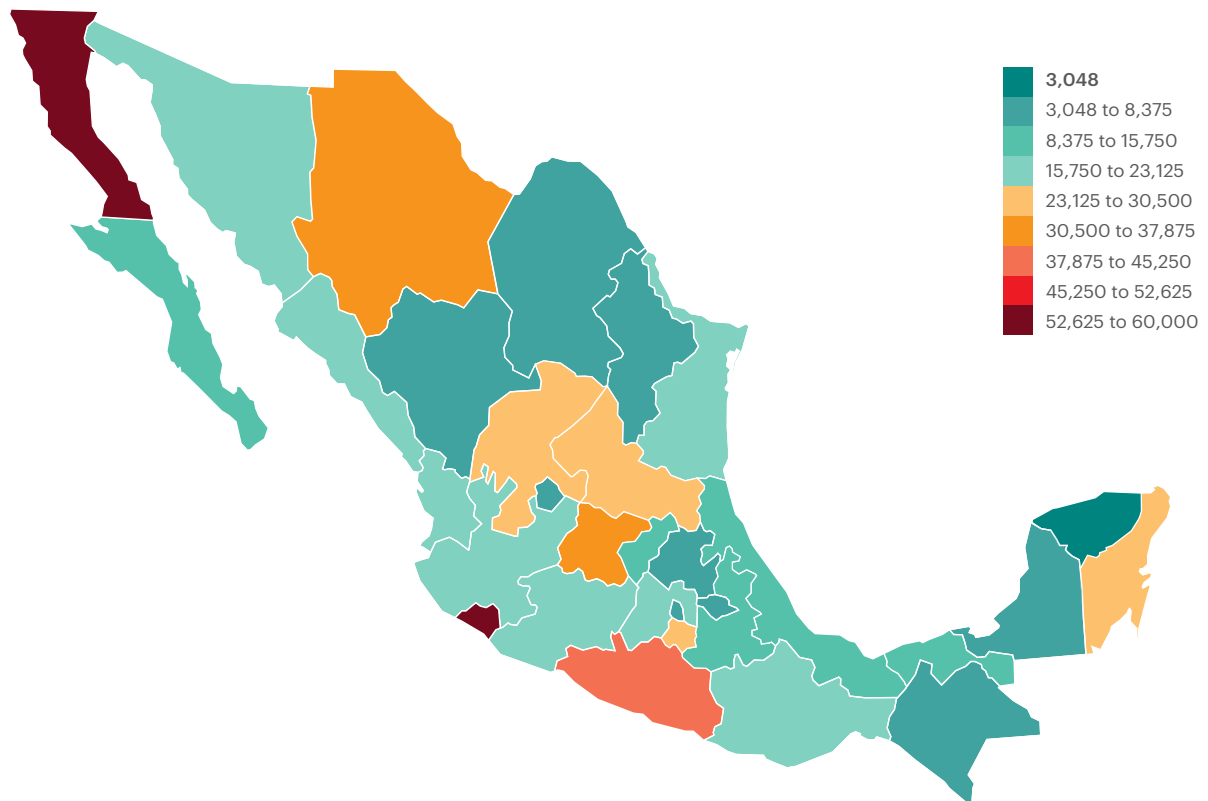
1. Baseline Scenario: All states continue at their current levels of peace.
2. High Peace Scenario: All states improve their levels of peace to the level of the five most peaceful states.
3. Low Peace Scenario: All states deteriorate in peace to the level of the five least peaceful states.

The first scenario assumes that peacefulness in Mexico continues at its current trend. The second scenario is the high peace scenario, which demonstrates the benefits of reducing the economic impact of violence to the level of the five most peaceful states.[5] The five most peaceful states in 2019 were Yucatán, Tlaxcala, Chiapas, Campeche and Nayarit.

FIGURE 3.4

Map of the per capita economic impact of homicide, 2019, constant 2019 pesos

The difference in the per capita economic impact of homicide is largest between Colima and Yucatán and totals 58,705 pesos.

	3,048
	3,048 to 8,375
	8,375 to 15,750
	15,750 to 23,125
	23,125 to 30,500
	30,500 to 37,875
	37,875 to 45,250
	45,250 to 52,625
	52,625 to 60,000

Source: IEP

Figure 3.5 shows the projections for scenarios one and two.

In contrast, the third scenario demonstrates the additional losses that Mexico would incur if the economic impact of violence across all Mexican states increase to the level of the five least peaceful states. The five least peaceful states were Guanajuato, Chihuahua, Quintana Roo, Colima and Baja California. A comparison of scenarios two and three is shown in Figure 3.6.

A reduction in violence to the level of the five most peaceful states in Mexico would result in an average peace dividend of 3.1 trillion pesos per year, or 12.6 trillion pesos over a four-year period. The annual peace dividend is equivalent to 14.6 percent of Mexico's

GDP in 2019. Figure 3.5 shows scenarios one and two in contrast to one another.

The difference in the economic impact between the second and third scenarios is more pronounced – the five least peaceful states compared to the five most peaceful states. The peace dividend in this scenario amounts to 8.7 trillion pesos per year, or 34.8 trillion pesos over a four-year period. The annual peace dividend in this scenario is equivalent to 41 percent of Mexico's 2019 GDP.

Figure 3.6 illustrates the disparity between the low peace scenario and high peace scenario, forecasting for four years.

FIGURE 3.5

Difference in the economic impact of violence, high peace scenario vs. current trend, 2015–2023

Mexico would avoid 12.6 trillion pesos in additional economic losses over four years if peace improved to a level equivalent to the five most peaceful states.
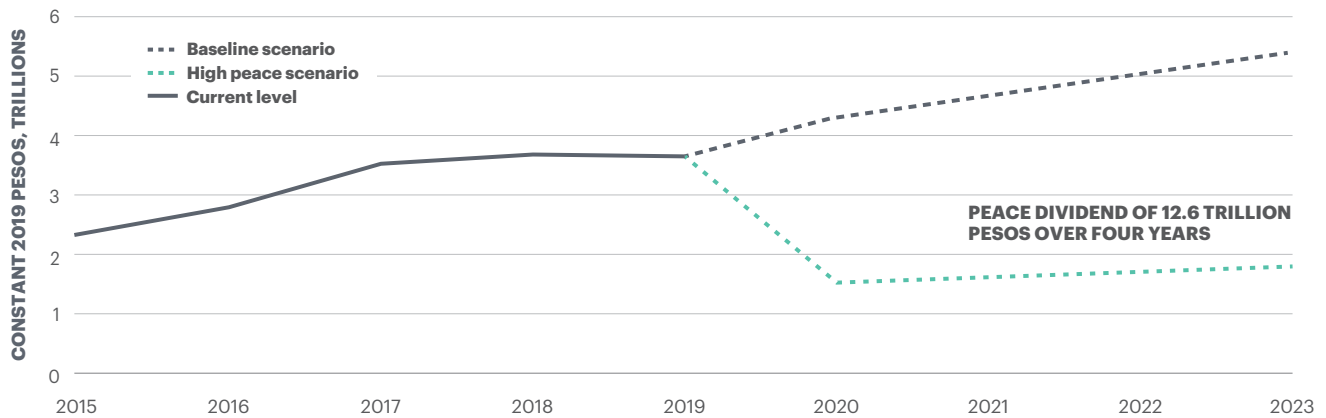
Source: IEP
Note: This analysis only includes homicide, violent crime, organized crime and fear of violence. It does not include government spending, private expenditure on protection or the costs of incarceration.

FIGURE 3.6

Difference in the economic impact of violence, low peace vs. high peace scenarios, 2015–2023

The difference in the economic impact of violence from the level of the five least peaceful states to that of the five most peaceful states amounts to 34.8 trillion pesos.
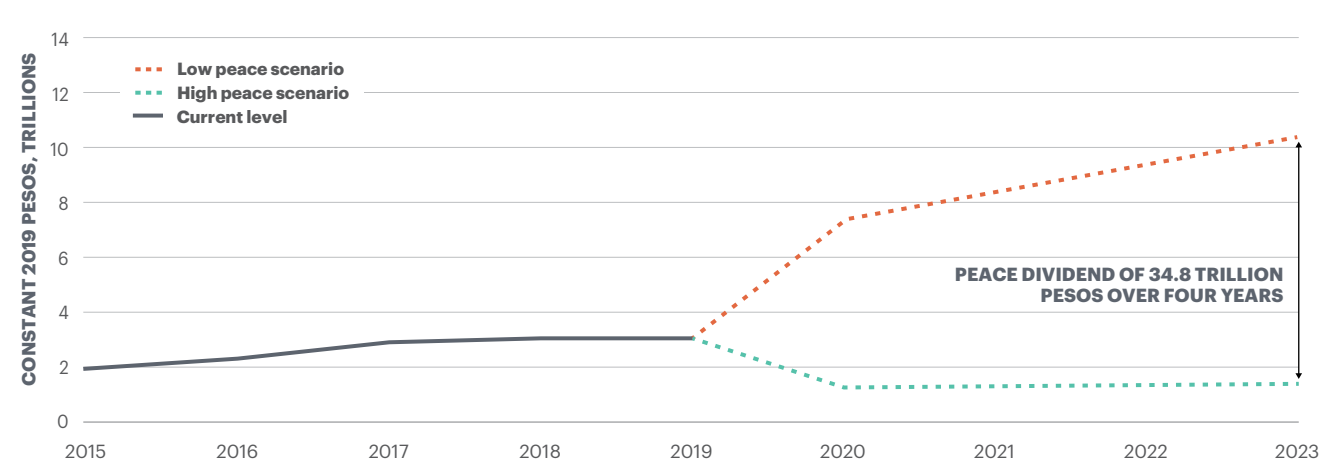

Source: IEP
Note: This analysis only includes homicide, violent crime, organized crime and fear of violence. It does not include government spending, private expenditure on protection or the costs of incarceration.

GOVERNMENT EXPENDITURE ON VIOLENCE CONTAINMENT

Mexico's government spending on domestic security and the judicial system as a percentage of GDP is less than half of the OECD average. Considering Mexico's high levels of violence, considerable gains can be made by increasing funding to match the OECD average.

Direct government expenditure on containing and dealing with violence accounted for 12 percent of the total economic impact in 2019, or 552 billion pesos. Violence containment spending is comprised of spending on domestic security, the military and the justice system and decreased by one percent from 2018 to 2019.

Since 2007 federal violence containment expenditure has increased by 84 percent. The largest increases were in 2009, 2011 and 2014, increasing by 14, 15 and 11 percent respectively.

Since the start of the Global Financial Crisis in 2008 the federal budget in Mexico has recorded deficits greater than two percent of GDP every year. However, the government has recently introduced efforts to balance the country's public finances, with the fiscal deficit improving to 1.4 percent of GDP as of September 2019.[6] This is in line with the government's target of achieving a budget deficit below two percent for 2019.

The austerity measures in government expenditure have resulted in budgetary cuts to domestic security and the justice system in 2019.[7] Domestic security consists of expenditure on the police, protection services, custody and incarceration costs, surveillance and security of persons and respective administration costs.[8] The budgetary cuts have been higher for domestic security than for the justice system. Expenditure on domestic security peaked in 2012 but has since declined, falling by 29 percent by 2019.

Expenditure on the justice system in 2019 was 107 billion pesos, down by 8.6 percent from the previous year. Justice system expenditure peaked in 2016 at 122 billion pesos.

Spending on the military has outpaced other forms of government expenditure, highlighting a greater reliance on their services. Military expenditure is currently at record highs, increasing by 12.8 percent from 2018 to a total of 126 billion. The increases coincide with the increased use of the military to fight organized crime. Mexico's expenditure on the military is equivalent to 0.5 percent of its GDP, well under the global average. Figure 3.7 shows the trend in the government's expenditure on violence containment from 2007 to 2019.

FIGURE 3.7

Trend in government spending on violence containment, 2007–2019

Government expenditure on violence containment in 2019 was 4.5 percent lower than in 2016. As a percentage of GDP, Mexico is the lowest in the OECD.
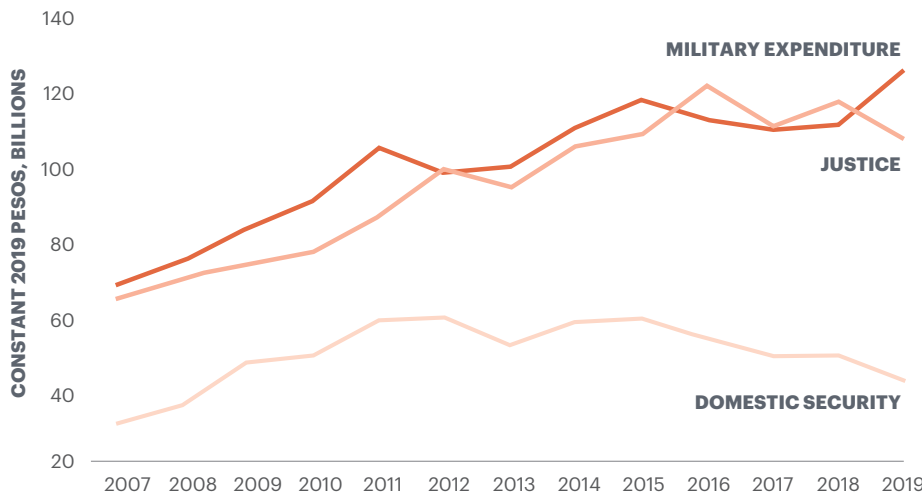
Source: Mexican Secretariat of Finance and Public Credit (SHCP)

KEY FINDINGS

552BN
PESOS
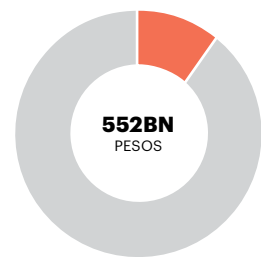
GOVERNMENT EXPENDITURE

12%

Direct government expenditure on containing and dealing with violence accounted for 12 percent of the total economic impact in 2019, or 552 billion pesos.

Mexican public spending on justice and domestic security are well below regional and international levels. Mexico spent 0.7 percent of its GDP on the justice system and domestic security in 2019, less than half of the OECD average. A similar trend emerges when Mexican spending on justice and domestic security is compared with other countries in Latin America and the Caribbean.[9]

Figures 3.8 and 3.9 show the justice system and domestic security spending for countries in the OECD, and for Latin America and the Caribbean, displaying Mexico's relative position in both groups.

Given that magnitude of the direct losses from *homicide* and *violent crime* in Mexico, an increase in violence containment

spending is well justified. Mexico has found it difficult to build sufficient capacity in its judicial system to meet the demand. For example, Mexico has an average of 3.6 judges and magistrates per 100,000 people, and has less than a quarter of the global per capita average. Mexico's least peaceful state, Baja California, had just 2.7 judges per 100,000 people in 2018, a decrease from 2.8 per 100,000 in 2016.[10] This deficit limits the capacity of the judicial system to process cases and creates backlogs of unsolved cases and persons incarcerated without a sentence.[11]

The pattern of federal expenditure on domestic security and justice by state does not match the levels of violence as captured by state MPI scores. States such as Guerrero, Chihuahua and Guanajuato experience high levels of violence and have below-

FIGURE 3.8

Domestic security and justice system spending in OECD countries, percentage of GDP

Mexico spends 0.7 percent of its GDP on public order and safety. This is less than half of the OECD average.

PUBLIC ORDER AND SAFETY EXPENDITURE AS % OF GDP
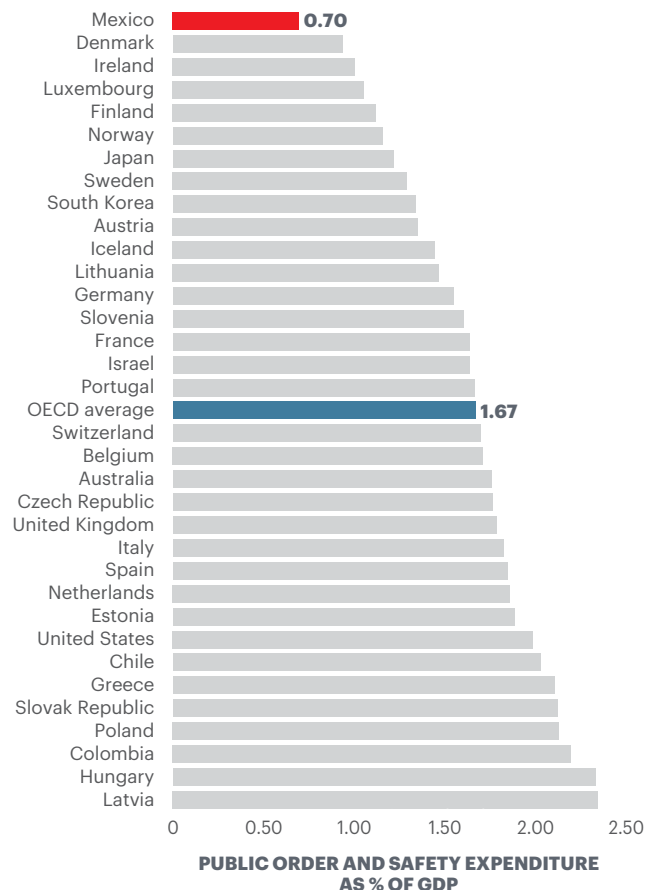
Note: Where data isn't available for the latest year for the OECD countries, the latest available data is used.
Source: OECD, Mexican Secretariat of Finance and Public Credit (SHCP)

FIGURE 3.9

Domestic security and justice system spending in Latin America and Caribbean countries, percentage of GDP

Mexico's expenditure on domestic security and justice as a proportion of GDP is less than half the average for Latin American and Caribbean (LAC) countries.

PUBLIC ORDER AND SAFETY EXPENDITURE AS % OF GDP

Note: Mexico figure calculated by IEP for 2019; other countries reflect 2014 levels from Jaitman (2018).
Source: Jaitman, Laura, 'Frontiers in the Economics of Crime', Inter-American Development Bank, Dec 2018; IEP

❝

Mexico spent 0.70 percent of GDP on its domestic security and the justice system in 2019, the least of any OECD country.

average per capita spending on domestic security. Figure 3.10 shows the level of peacefulness and per capita domestic security expenditure by state.

In evaluating the efficiency and effectiveness of government spending on the justice and public security sectors, spending beyond an optimal level has the potential to constrain a nation's economic development. However, underinvestment can create conditions for higher levels of crime and violence because impunity increases. These trade-offs are not easy to navigate and present an important policy challenge. Limited public resources mean that an increase in spending on containing violence has to be funded by either increased taxes or reallocating funds from other sectors. In Mexico, the lack of capacity in the judicial and security sectors leads to a security gap where the consequential costs of violence far exceed the containment costs. Therefore, achieving the optimal levels of spending on public security expenditure is important for making the most productive use of capital.

FIGURE 3.10
State MPI scores and expenditure on domestic security and justice

States that experience the lowest levels of peace do not necessarily receive higher per capita funds for domestic security.
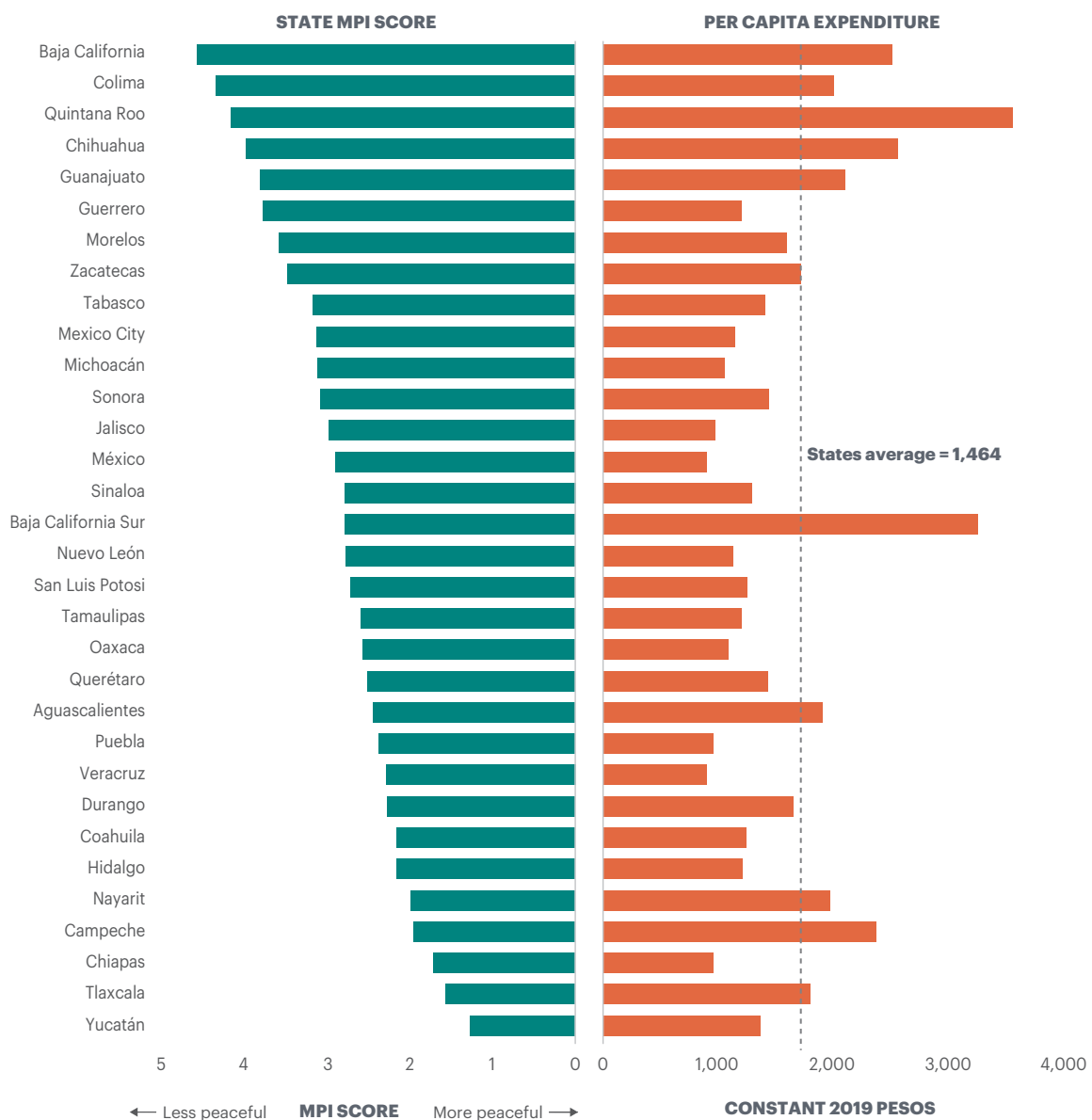
Notes: State MPI Scores for 2019. Per capita expenditure reflects federal expenditures in 2019.
Sources: INEGI; IEP

VIOLENCE AND THE BROADER ECONOMY

Violence and the fear of violence generate significant welfare losses in the form of productivity shortfalls, foregone earnings and distorted expenditure.[12] Fear of crime and violence hinders the ability of people to carry out their daily lives and normal behaviors. For example, the ICESI 2011 survey revealed 66 percent of Mexicans stopped performing at least one activity for fear of becoming a victim of crime.

At a national level, violence affects economic growth and industry, while at a sub-national, micro-level, violence impacts employment, wages and housing. The following section examines the impacts of violence and the consequential indirect costs that inhibit Mexico's economic growth.
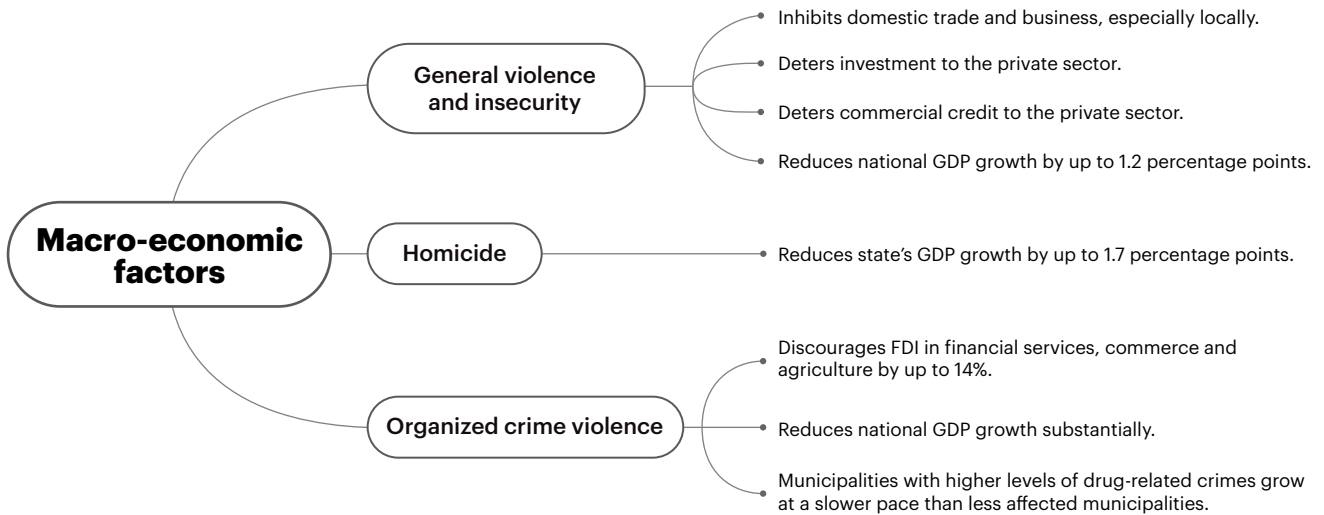
Academic studies and government reports into the economic effects of violence in Mexico can be broadly summarized into three categories:

1. Impact on macro-economic factors, including investment and economic growth.
2. Impact on business and industry.
3. Impact on individuals and households, including employment and income.

Although there is insufficient data to include all of these costs in IEP's economic impact of violence model, the following figures 3.11, 3.12 and 3.13 provide a summary of the areas impacted by violence and insecurity.

FIGURE 3.11
Impact of violence on Mexico's macro-economic factors

Macro-economic factors

- **General violence and insecurity**
  - Inhibits domestic trade and business, especially locally.
  - Deters investment to the private sector.
  - Deters commercial credit to the private sector.
  - Reduces national GDP growth by up to 1.2 percentage points.

- **Homicide**
  - Reduces state's GDP growth by up to 1.7 percentage points.

- **Organized crime violence**
  - Discourages FDI in financial services, commerce and agriculture by up to 14%.
  - Reduces national GDP growth substantially.
  - Municipalities with higher levels of drug-related crimes grow at a slower pace than less affected municipalities.

Source: IEP

TRENDS

DOMESTIC SECURITY, MILITARY EXPENDITURE AND THE JUSTICE SYSTEM

1%

Spending on domestic security, the military and the justice system decreased by one percent in 2019.
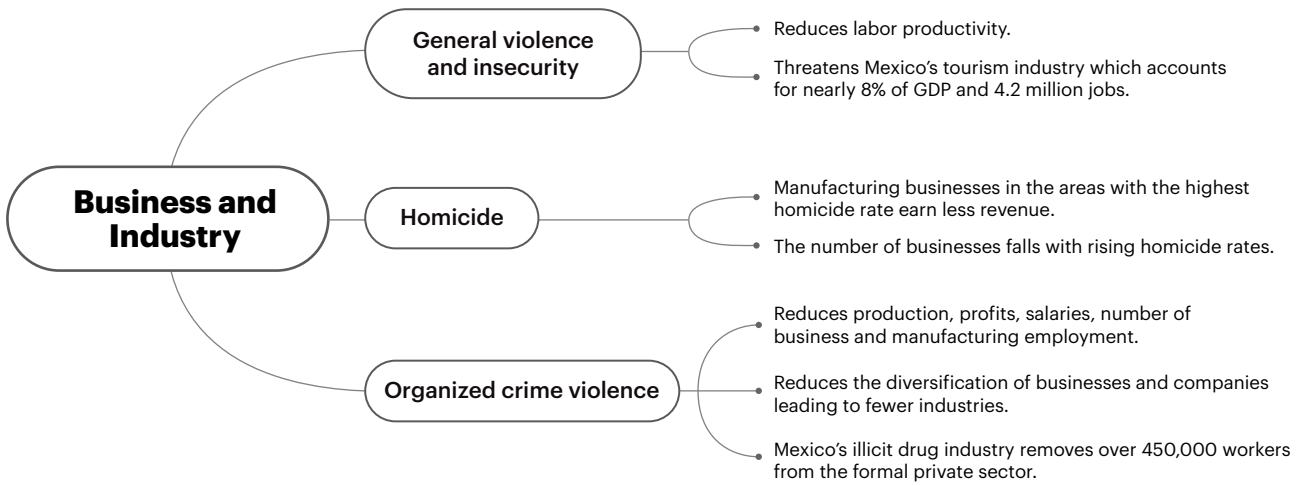
HEALTH & EDUCATION

8x

The economic impact of violence was nearly eight times higher than public investments made in health care and more than six times higher than those made in education in 2019.

SCIENCE & TECHNOLOGY

1%

decline in the economic impact of violence is approximately equal to the federal government's investment in science, technology and innovation in 2018.
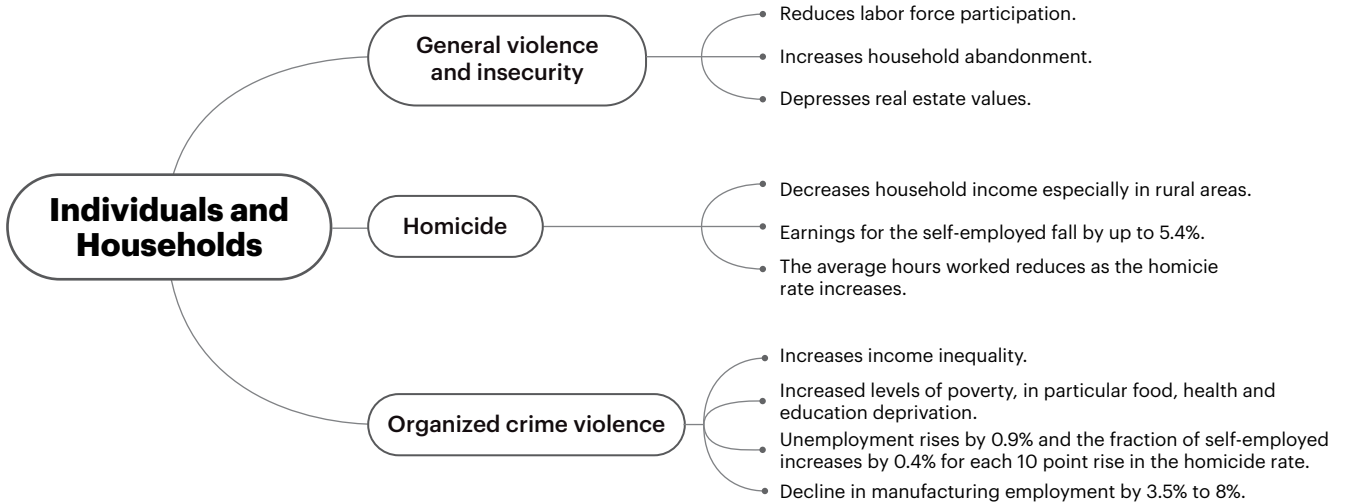
Impact of violence on Mexico's businesses and industry

Business and Industry

General violence and insecurity
- Reduces labor productivity.
- Threatens Mexico's tourism industry which accounts for nearly 8% of GDP and 4.2 million jobs.

Homicide
- Manufacturing businesses in the areas with the highest homicide rate earn less revenue.
- The number of businesses falls with rising homicide rates.

Organized crime violence
- Reduces production, profits, salaries, number of business and manufacturing employment.
- Reduces the diversification of businesses and companies leading to fewer industries.
- Mexico's illicit drug industry removes over 450,000 workers from the formal private sector.

Source: IEP

Impact of violence on Mexico's household and individuals

Individuals and Households

General violence and insecurity
- Reduces labor force participation.
- Increases household abandonment.
- Depresses real estate values.

Homicide
- Decreases household income especially in rural areas.
- Earnings for the self-employed fall by up to 5.4%.
- The average hours worked reduces as the homicie rate increases.

Organized crime violence
- Increases income inequality.
- Increased levels of poverty, in particular food, health and education deprivation.
- Unemployment rises by 0.9% and the fraction of self-employed increases by 0.4% for each 10 point rise in the homicide rate.
- Decline in manufacturing employment by 3.5% to 8%.

Source: IEP

METHODOLOGY

The global economic impact of violence is defined as the expenditure and economic activity related to *"containing, preventing and dealing with the consequences of violence."* The estimates include the direct and indirect cost of violence as well as an economic multiplier.

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, including those associated with policing, medical expenses, funerals or incarceration.

2. **Indirect costs** accrue after the fact. These include physical and psychological trauma and the present value of future costs associated with the violent incident, such as the consequential lost future income. There is also a measure of the impact of fear on the economy, as people who fear that they may become a victim of violent crime alter their behavior.

3. The **multiplier effect** is a commonly used economic concept that describes the extent to which additional expenditure has flow-on impacts in the wider economy. Injections of new income into the economy will lead to more spending, which will in turn create employment, further income and encourage additional spending, thereby increasing GDP. This mutually reinforcing economic cycle explains the "multiplier effect," and why a dollar of expenditure can create more than a dollar of economic activity. The multiplier effect calculates the additional economic activity that would have accrued if the direct costs of violence had been avoided. Refer to Box 3.2 for more detail on the multiplier.

Violence containment expenditure refers to the direct and indirect costs associated with preventing or dealing with the consequences of violence. This includes government spending on domestic security, justice and military.

The **economic impact of violence** refers to the total cost (direct and indirect) of violence containment plus the peace multiplier.

This study uses a cost accounting methodology to measure the economic impact of violence. Expenditures on containing violence are totaled and unit costs are applied to the MPI estimates for the number of crimes committed. 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. The direct costs for violent crime and organized crime are obtained from household and business surveys undertaken by the Mexican statistical office, which assesses economic and health costs to the victim of a crime.

Indirect unit costs include the physical and psychological trauma, and the present value of future costs associated with the violent incident, such as lost lifetime wages for homicide victims.

The cost estimates provided in this report are in constant 2019

pesos, which facilitates the comparison of the estimates over time. The estimate only includes elements of violence in which 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, sexual violence and robbery.

3. Organized crime, which includes extortion, kidnapping and human trafficking.

4. Indirect costs of incarceration.

5. Fear of insecurity.

6. Protections costs, including private security and firearms.

7. Federal spending on violence containment, which includes the military, domestic national security and the justice system.

8. Medical and funeral costs.

The economic impact of violence excludes:

*   State level and municipal public spending on security.

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

*   Population displacement due to violence.

*   Medical expenses due to domestic violence.

Although data is available for some of these categories, it is either not fully available for all states or for each year of analysis.

BOX 3.2
The multiplier effect

The multiplier effect is a commonly used economic concept, which describes the extent to which additional expenditure improves the wider economy. Every time there is an injection of new income into the economy this will lead to more spending, which in turn creates employment, further income and additional spending. This mutually reinforcing economic cycle is known as the "multiplier effect" and is the reason that 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 and corporations would spend less time and resources protecting themselves against violence. Because of this decrease in violence, there are likely to be substantial flow-on effects for the wider economy, as money is diverted towards more productive areas such as health, business investment, education and infrastructure.

When a homicide is avoided, the direct costs, such as the money spent on medical treatment and a funeral, could be

> A dollar of expenditure can create more than a dollar of economic activity

spent elsewhere. The economy also benefits from the inclusion of the lost 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 for 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.

This study assumes that the multiplier is one, signifying that for every dollar saved on violence containment, there will be an additional dollar of economic activity. This is a relatively conservative multiplier and broadly in line with similar studies.[48]

POSITIVE PEACE IN MEXICO

KEY FINDINGS

- Globally, Mexico ranks 67th out of 163 countries in the Positive Peace Index, and ranks fifth in Central America and the Caribbean. This is considerably higher than its ranking on the Global Peace Index, highlighting its potential for improvement.

- *Low Levels of Corruption* is the worst performing Pillar. Improvements in this Pillar would most likely lead to large improvements in Mexico's Global Peace Index score.

- The average state score for Low Levels of Corruption deteriorated by 16 percent from 2014 to 2018.

- Mexico's score in the global Positive Peace Index improved marginally over the past decade, improving by 1.6 percent, which is lower than the average global improvement of 2.6 percent.

- The Pillars showing the greatest improvements in the past ten years were *Free Flow of Information* at 15 percent and *Sound Business Environment* at 11 percent.

- A large deterioration was recorded in *Low Levels of Corruption*, at 13 percent. *Well-Functioning Government* and *Acceptance of the Rights of Others* also deteriorated.

- The sub-national Mexico Positive Peace Index (MPPI) showed substantial variation across Mexico's states. Nuevo León, Colima and Baja California Sur had the strongest levels of Positive Peace, while Guerrero, Chiapas and Puebla had the weakest.

- A total of 28 states – out of 32 – recorded improvements in Positive Peace from 2014 to 2018.

- Some states have high levels of Positive Peace, while also recording high levels of violence. This is in part associated with a strong presence of organized crime, which can distort the conventional direct relationship between levels of violence and Positive Peace.

- *Organized crime* tends to flourish where the *Well-Functioning Government* and *Low Levels of Corruption* Pillars are weak.

INTRODUCTION: WHAT IS POSITIVE PEACE?

Positive Peace is defined as the *attitudes, institutions and structures* that create and sustain peaceful societies, as illustrated in Figure 4.1. The same factors also lead to many other desirable socio-economic outcomes. Higher levels of Positive Peace are statistically linked to greater income growth, better environmental outcomes, higher levels of wellbeing, better developmental outcomes and stronger resilience.

IEP has empirically derived the Positive Peace Index (PPI) through the analysis of almost 25,000 economic and social progress indicators to determine which ones have statistically significant relationships with peace as measured by the Global Peace Index (GPI).

FIGURE 4.1

What is Positive Peace?

Positive Peace is a complementary concept to negative peace.

−
NEGATIVE PEACE
... is the absence of violence or fear of violence.

+
POSITIVE PEACE
... is the attitudes, institutions & structures that create and sustain peaceful societies.

THE PILLARS OF POSITIVE PEACE

Positive Peace is predicated on eight key factors, or Pillars, that describe the workings of the socio-economic system:

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. Business competitiveness and economic productivity are both associated with the most peaceful countries.

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

Acceptance of the Rights of Others – Peaceful countries often have formal laws that guarantee basic human rights and freedoms, and the informal social and cultural norms that relate to behaviors of citizens.

Good Relations with Neighbors – Peaceful relations with other countries are 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.

Free Flow of Information – Free and independent media disseminates information in a way that leads to greater knowledge and helps individuals, businesses and civil society make better decisions. This leads to better outcomes and more rational responses in times of crisis.

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, political participation and social capital.

Low Levels of Corruption – In societies with high levels of corruption, resources are inefficiently allocated, often leading to a lack of funding for essential services and civil unrest. Low corruption can enhance confidence and trust in institutions.

FIGURE 4.2

The Pillars of Positive Peace

All eight factors are highly interconnected and interact in complex ways.
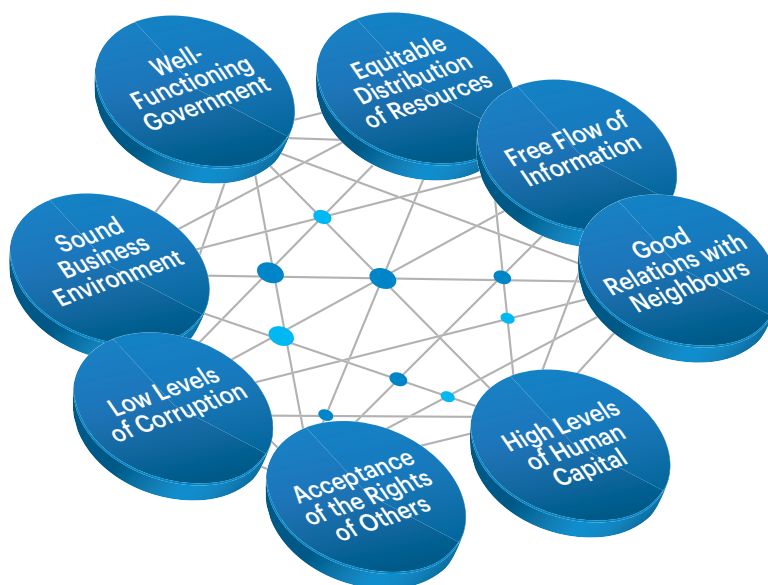
The Pillars of Positive Peace interact systemically to support the *attitudes, institutions* and *structures* that underpin development and peacebuilding. High levels of Positive Peace occur where attitudes make violence less tolerated, institutions are resilient and more responsive to society's needs, and structures create the environment for the nonviolent resolution of grievances.

The Pillars also offer a practical framework for the implementation of small-scale Positive Peace projects. In cooperation with its global partners, IEP implements and supports a number of projects in local communities around the world using the Pillars of Positive Peace as the main framework to plan action and design measurement.

BOX 4.1

Measuring Positive Peace in Mexico

This report assesses the state of Positive Peace in Mexico in two different and complementary ways. The first – presented in the 'Positive Peace in Mexico' section below – is an assessment of where Mexico as a country stands in the global Positive Peace framework. This approach uses data and insight derived from the latest Positive Peace Report.[1] This approach investigates Positive Peace in Mexico against a global context and allows comparisons with neighbors or countries at equivalent stages of development. The objective of comparing and ranking countries is to give policymakers insight into which socio-economic trends, developments and initiatives have been effective in creating and supporting peaceful societies around the world.

The second approach is the development of a sub-national Positive Peace Index for Mexico and is discussed in the section 'Positive Peace by State.' The subnational Mexico Positive Peace Index uses Mexico-specific data, produced by the national statistical agency and third party sources, to assess the level of Positive Peace in each of Mexico's 32 states.

Currently, it is not possible to replicate the 24 indicators of the global Positive Peace Index at the sub-national level in Mexico. For the sub-national analysis section, data has been obtained from various statistical sources and selected based on their ability to, as closely as possible, capture elements of the eight Pillars of Peace. Section 5 contains detail on the two methodologies.

POSITIVE PEACE IN MEXICO:
RESULTS FROM THE GLOBAL
POSITIVE PEACE INDEX

Globally, Mexico ranked 67th out of 163 countries in the 2019 Positive Peace Index (PPI), which uses data from 2018. Mexico was the fifth strongest Positive Peace country in the Central America and the Caribbean region, as shown in Table 4.1.[2] This is much higher than its Global Peace Index ranking and highlights the potential for improvement. The country's weakest Pillar is *Low Levels of Corruption*, which is amongst the worst in Latin America.

Positive Peace in Mexico improved by 1.6 percent from 2009 to 2018. This is below the global average where the improvement was 2.6 percent. As a result, Mexico fell five places in the global Positive Peace ranking over the past decade.

Mexico's PPI score improved rapidly between 2009 and 2012. However, since 2012 this trend was interrupted and the country's score recorded a mild deterioration, as shown in figure 4.3. This corresponds with the increased violence in Mexico.

TABLE 4.1

Positive Peace Index – Central America and Caribbean rankings, 2018

Mexico displayed a high level of Positive Peace in 2018, ranking 5th in Central America and the Caribbean.

| COUNTRY	RGIONAL RANK	GLOBAL RANK	SCORE	POSITIVE PEACE CATEGORY
Costa Rica	1/12	37/163	2.18	Very High
Jamaica	2/12	46/163	2.56	High
Panama	3/12	49/163	2.61	High
Trinidad & Tobago	4/12	57/163	2.74	High
Mexico	5/12	67/163	3	High
Cuba	6/12	72/163	3.04	High
Dominican Republic	7/12	78/163	3.08	High
El Salvador	8/12	90/163	3.23	High
Nicaragua	9/12	93/163	3.27	Medium
Honduras	10/12	103/163	3.39	Medium
Guatemala	11/12	110/163	3.49	Medium
Haiti	12/12	146/163	4	Low

Source:IEP

"

Positive Peace in Mexico improved by
1.6 percent from 2009 to 2018.

Mexico Positive Peace score, 2009–2018

Over the past decade, Mexico's national Positive Peace score improved by 1.6 percent, despite some deterioration from 2012 to 2015.
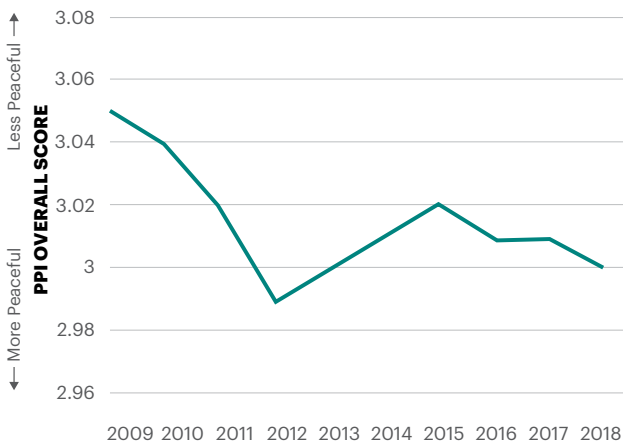
Source: IEP global Positive Peace Index

Figure 4.4 illustrates that since 2009, Mexico's largest improvement was in *Free Flow of Information*, largely driven by an increase in the rate of *individuals using the internet* over the decade shown in figure 4.4. This trend was observed globally and was greatly influenced by the discovery and proliferation of new technologies and the reduction in the cost of telecommunication equipment. However, the trend has been partially offset by *deteriorations in the freedom of the press* over the decade. Mexico has one of the world's highest rate of attacks on journalists.

Sound Business Environment also recorded an improvement over the period. Largely, this reflects economic progress, which saw an increase in income per capita, a decline in unemployment, a reduction in economic inequality and greater access to technology and information. These developments, in part, follow global trends.

In contrast, over the period from 2009 to 2018, the population's assessment of the government, confidence in the political process, and trust in the rule of law deteriorated, especially in regards to corruption. This is reflected in a deterioration in the *Low Levels of Corruption* Pillar over the past decade, largely driven by perceptions of weaker *control of corruption* and a perceived increase in the indicator *irregular payments and bribes*. This latter indicator is calculated by the World Economic Forum (WEF) and conveys the perception of business leaders about corruption in a country.[3]

Mexico is 128th out of 163 countries that are assessed for the *control of corruption* indicator. It has fallen 57 places in the last decade, indicating an area where Mexico needs to improve.

Well-functioning Government also deteriorated over the period. This was largely influenced by a deterioration in the indicator for *government effectiveness* – which captures the quality of public services and the degree to which these services are independent from political pressures. *Acceptance of the Rights of Others* also recorded a deterioration driven by an increase in *exclusion by socio-economic group*.

Change by Pillar of Positive Peace, Mexico, 2009–2018

There were substantial improvements in the *Free Flow of Information* and *Sound Business Environment* Pillars at the national level. *Low Levels of Corruption* had the largest deterioration.
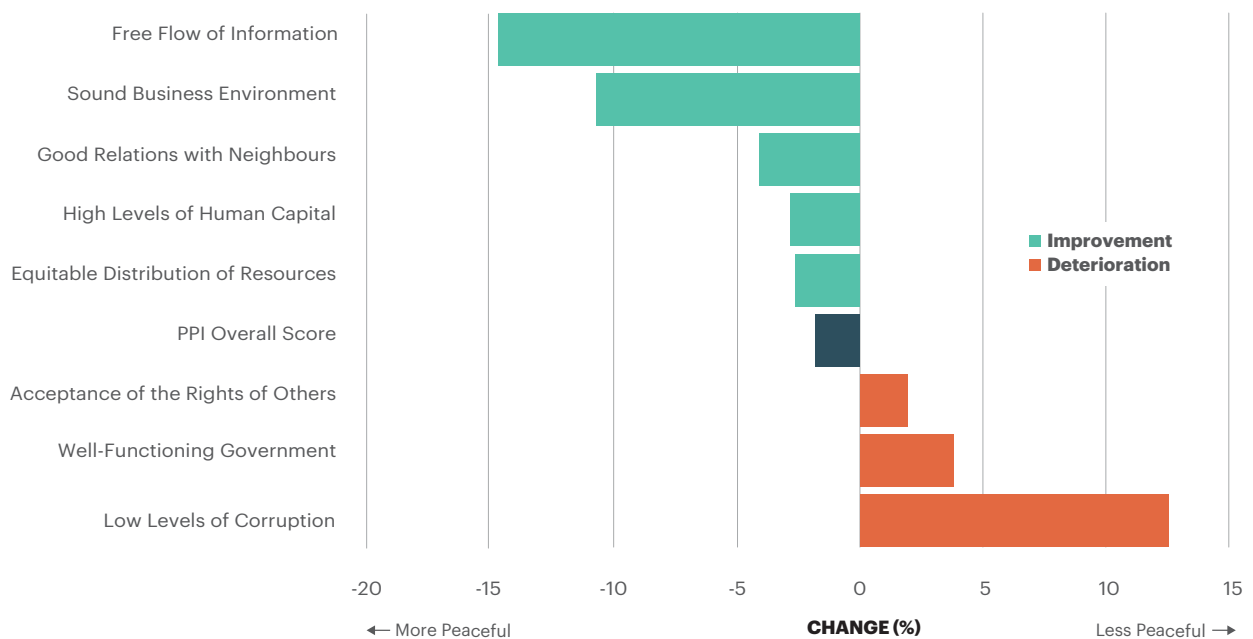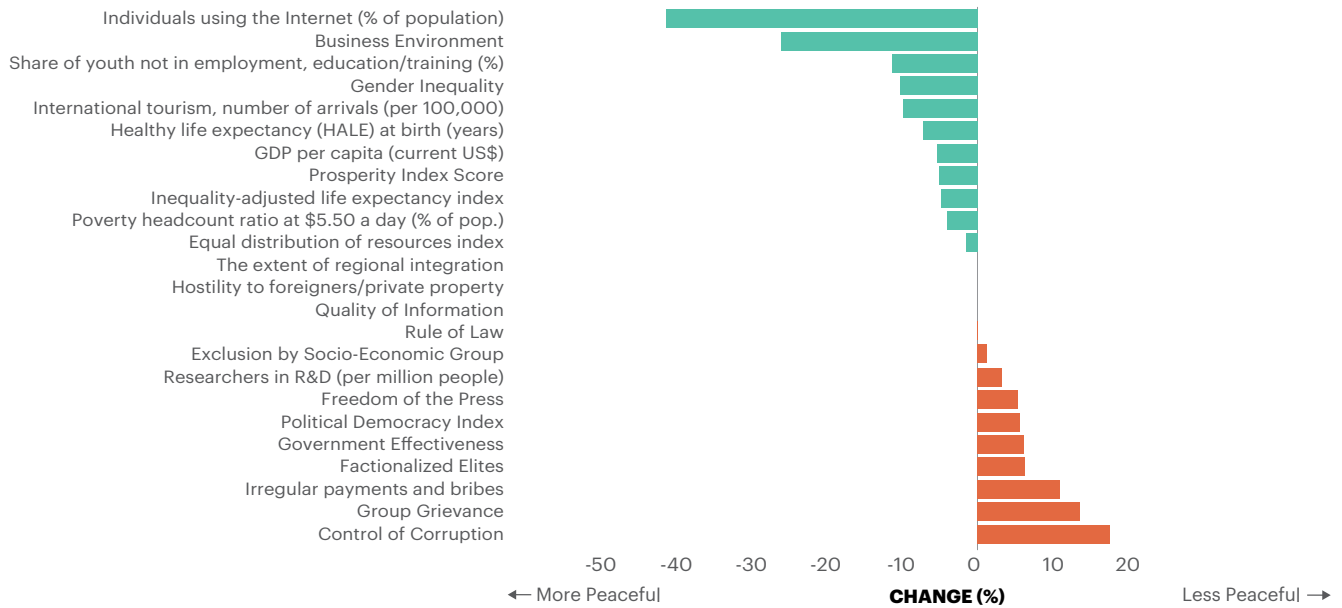

Source: IEP global Positive Peace Index

FIGURE 4.5

Changes in Positive Peace indicators, Mexico, 2009–2018

Positive Peace in Mexico has benefitted from improvements in the business environment and internet access amongst the population. It has been hindered by deteriorations in group grievances and control of corruption.

Source: IEP global Positive Peace Index

PERCEPTIONS OF GOVERNMENT: TRENDS IN *WELL-FUNCTIONING GOVERNMENT* AND *LOW LEVELS OF CORRUPTION*

KEY FINDINGS

- The level of perceived corruption among judges reached its peak in 2019 at over 68 percent of ENVIPE respondents. Judges have become the public security institution perceived as most corrupt for the first time in at least five years.

- Over 60 per cent of respondents perceive Mexico's public security institutions as corrupt, with the exception of the federal police, at 55 per cent.

- Overall awareness of government action to reduce drug trafficking and corruption has declined by five and eight percentage points over the last five years.

The *Well-functioning Government* and *Low Levels of Corruption* Pillars are critical to building peace in Mexico. Historically, the country has struggled to improve in these areas, but showed some signs of progress in early 2019. This progress is welcome although it is too early to tell if it constitutes a reversal of the trend.

This section reviews trends in how Mexicans have perceived corruption in government and how they have rated government performance in key areas over the last five years. It uses survey data collected by the ENVIPE.

Average perceptions of corruption in public security institutions peaked in 2018 at 64 percent. However, 2019 showed a slight improvement of 1.5 percentage points from the previous year.

Figures 4.6 and 4.7 show the five-year trend for citizen perceptions of corruption amongst Mexico's main security and justice institutions. For the last five years, the municipal police have been perceived as the most corrupt. However, the perception of corruption amongst judges increased sharply in 2016 and continued to rise, overtaking the municipal police as the institution perceived as most corrupt in 2019. Perceived corruption in judges has increased by three points since 2015, the greatest overall increase amongst public security institutions.
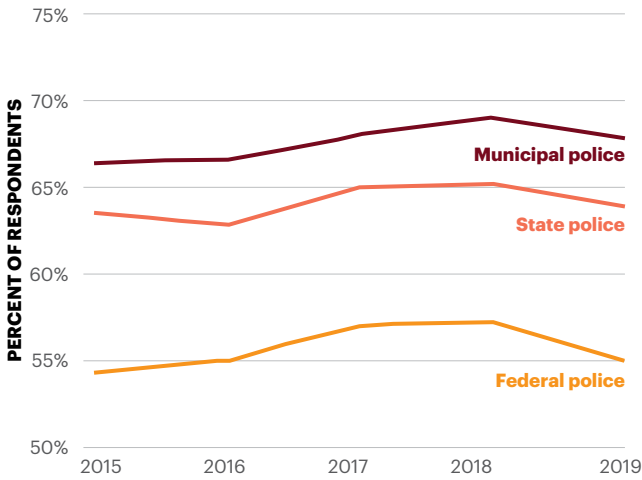
> ❝
> Judges have become the public security institution perceived as most corrupt for the first time in at least five years.

FIGURE 4.6

Perceptions of corruption - police forces, 2015–2019

The proportion of Mexicans that perceive police forces as corrupt has increased continuously from 2015 to 2018, declining slightly over the past year.
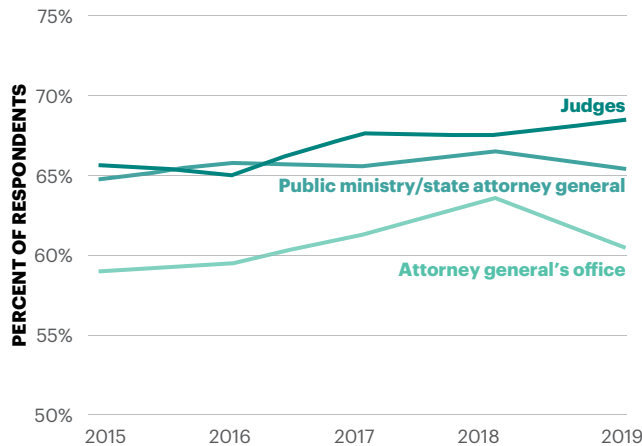

Source: ENVIPE

In addition, concern about impunity in the legal system rose almost five percentage points from 21.4 percent in 2018 to 26.3 percent in 2019, as shown in Figure 4.8. In the years prior to 2018, concern about impunity increased consistently but less rapidly. Despite these increases, fear of insecurity remains the highest concern by the majority of Mexicans, rising nearly ten percentage points in the past five years.

While fear of insecurity has steadily increased, awareness of government actions to counter it have decreased. Figure 4.9 demonstrates that awareness of any government actions to improve the community is below 50 percent and falling. Since 2015, knowledge of government action to reduce corruption and drug trafficking have decreased substantially, by about six and eight percentage points respectively.

FIGURE 4.7

Perceptions of corruption - justice agencies, 2015–2019

Since 2015, an increasing proportion of Mexicans thought that the country's justice agencies were corrupt. But in 2019, perceptions of corruption slightly improved, except for judges.

Source: ENVIPE

FIGURE 4.8

Highest concerns among Mexicans, 2015–2019

Insecurity is the highest concern among Mexicans above unemployment, inflation, corruption and impunity.
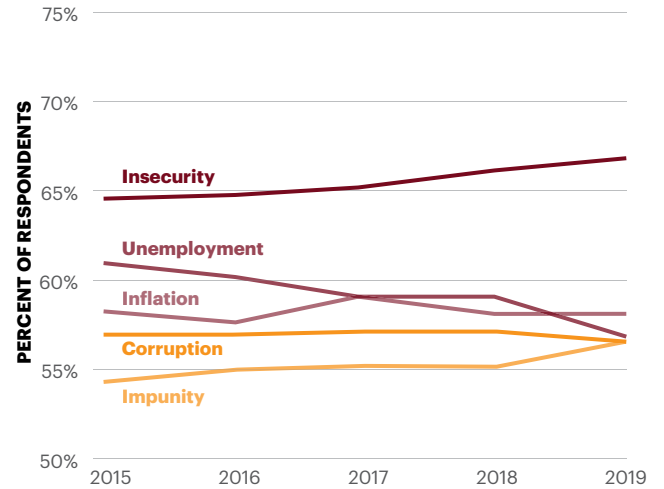
Source: ENVIPE

FIGURE 4.9

Civilian awareness of government actions, 2015–2019

Civilian awareness of government actions to reduce drug trafficking and corruption has declined in the past 5 years.

Source: ENVIPE

❝

Over 60 per cent of respondents perceive Mexico's public security institutions as corrupt.

CORRUPTION IN MEXICO: FINDINGS IN 2019

KEY FINDINGS

- Mexicans are nearly 13 percentage points more likely to trust the federal police to keep them safe than the municipal police.
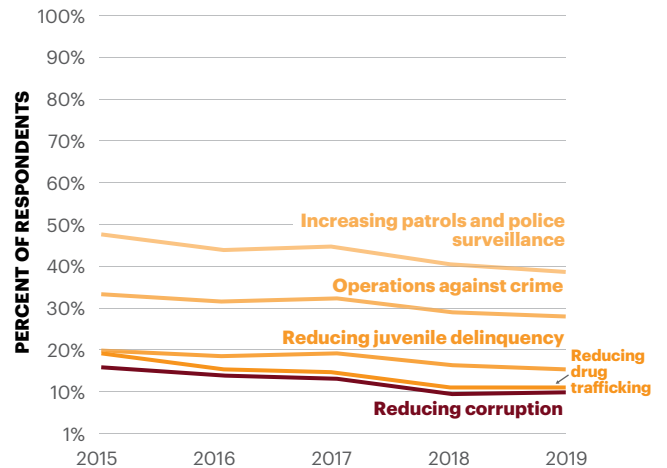
- Municipal police are perceived as the most corrupt police force in Mexico, with 68 percent of Mexicans perceiving corruption in their local force.

- Judges were perceived as the most corrupt amongst government justice institutions in 2019, by over 68 percent of respondents.

- Levels of perceived corruption in nearly every public security institution slightly improved last year with the exception of judges, which deteriorated by one percentage point.

- Despite the perceived high prevalence of corruption in police and judicial systems, most Mexicans are more concerned with insecurity and unemployment.

- Over 40 percent of Mexicans are aware of government efforts to maintain parks and sports facilities, compared to ten percent who are aware of efforts to reduce corruption.

Corruption is arguably the most critical aspect holding back progress in peacefulness. *Low Levels of Corruption* is Mexico's least developed Pillar and one of the few Pillars in which the country underperforms to its neighbors, as shown in Figure 4.4. In light of this, the current section further investigates perceptions of corruption in Mexico using ENVIPE data for 2019. Both the police and judicial system are seen as corrupt by Mexican citizens. This results in lack of trust in the authorities' ability to reduce crime and insecurity in the country.

Figure 4.10 shows that the municipal police are perceived as the most corrupt of Mexico's police forces. Conversely, the federal police are perceived as corrupt least frequently. About seven out of ten respondents recognized judges and the municipal police as corrupt last year, making them the two public security institutions believed to be the most corrupt by the greatest number of people.

Awareness of anti-corruption efforts increased slightly in 2019. However, Mexicans are more aware of government action towards maintaining parks and sports facilities than they are of reducing juvenile delinquency, corruption or drug trafficking. Four out of ten respondents reported awareness of government action to construct or maintain parks, whereas only one out of ten respondents reported awareness of actions like reducing corruption, increasing neighborhood security and reducing drug trafficking, as demonstrated by Figure 4.11.

Figure 4.12 gives the percentage of people who ranked each issue amongst their top three concerns in 2019. Concerns about corruption decreased last year to its lowest point since 2015, which corresponds to the overall decrease in perceived corruption within public security offices. However, insecurity remains Mexico's most worrisome issue. Two-thirds of respondents reported insecurity as one of their top three concerns last year, more than double that of unemployment, inflation, corruption and impunity.

In 2019, one out of three Mexicans did not believe that the local police had the ability to assist in a situation of insecurity. Last year, 71.3 percent of people reported they believed the federal police had the ability to keep them safe, whereas 58.5 percent of people reported they believed the municipal police could keep them safe, as shown in Figure 4.13.

FIGURE 4.10

Perceptions of corruption in police forces and justice agencies, March–April 2019

About seven out of ten people perceive municipal police and judges as corrupt.
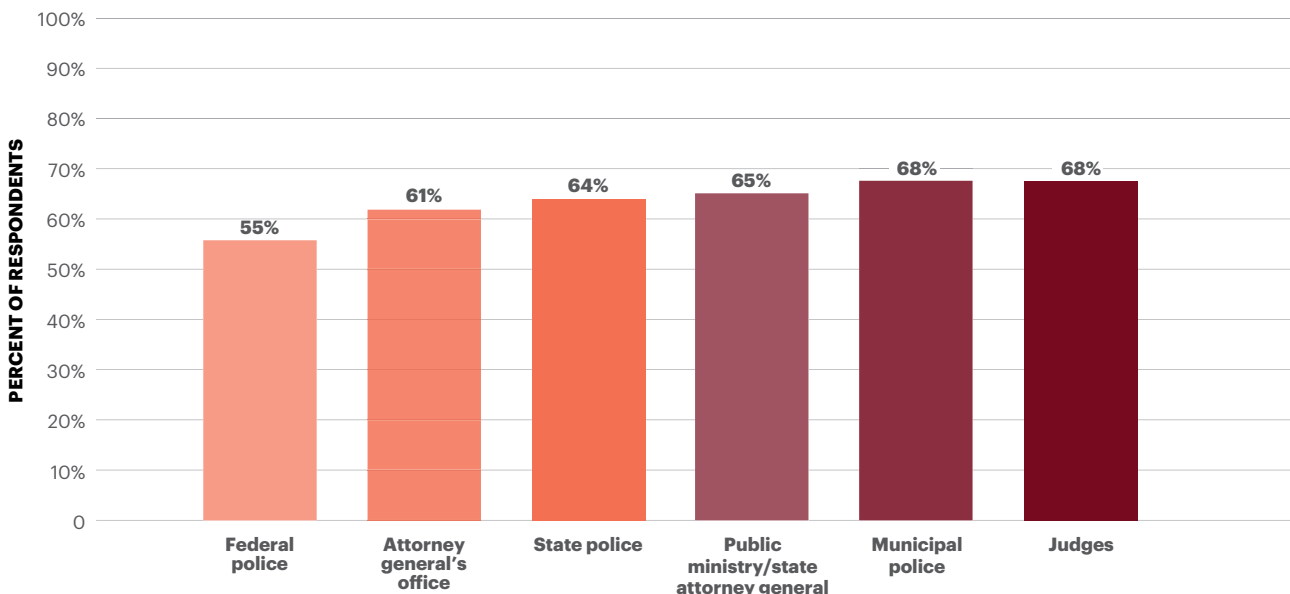
Source: ENVIPE

FIGURE 4.11
Civilian awareness of government actions, March–April 2019

Four times as many people know of government efforts to maintain parks as those aware of efforts to reduce corruption.
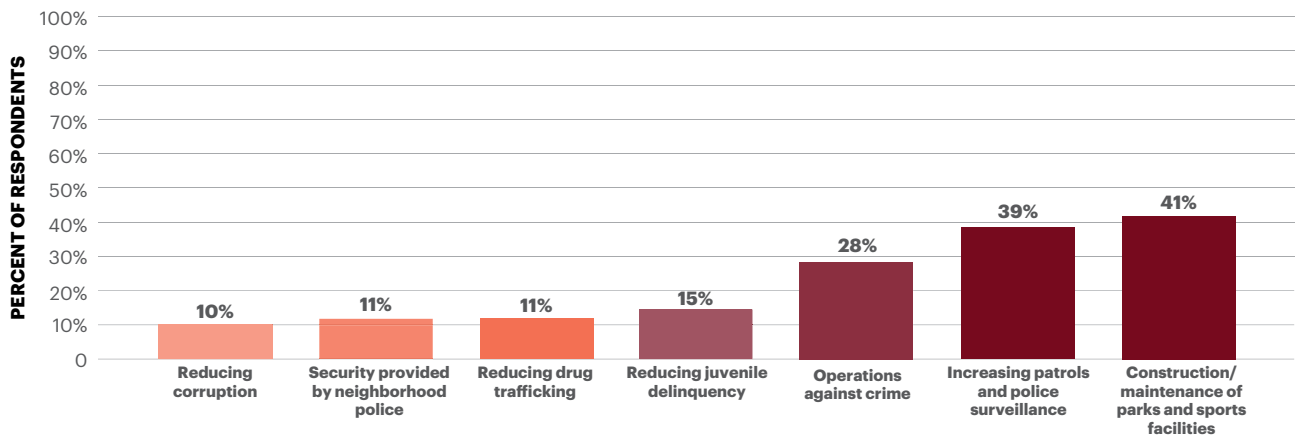
Source: ENVIPE

FIGURE 4.12
Highest concerns among Mexicans, March–April 2019

Two-thirds of respondents reported insecurity as one of their top three concerns.
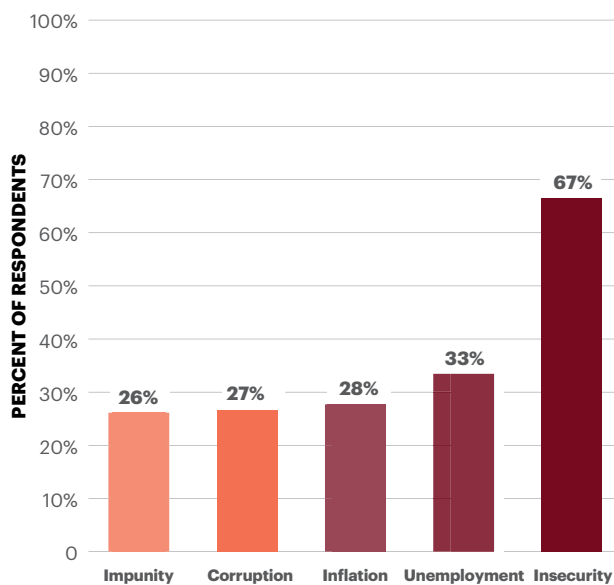
Source: ENVIPE

FIGURE 4.13
Civilian perceptions of ability of police to assist in a situation of insecurity, March–April 2019

More people believe the federal police possess the ability to keep them safe than the municipal police.
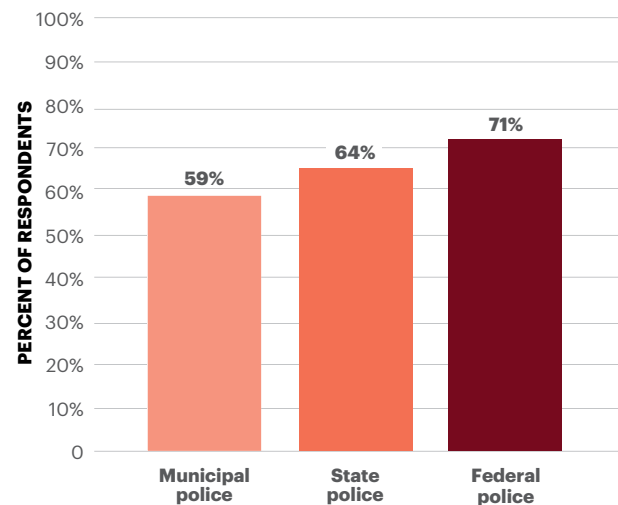
Source: ENVIPE

> **"**
> Insecurity is the highest concern among Mexicans above unemployment, inflation, corruption and impunity.

POSITIVE PEACE BY STATE: THE MEXICO POSITIVE PEACE INDEX

The MPPI is calculated using an adapted version of the global PPI methodology. It uses state-level economic, governance, social and attitudinal data sourced primarily from INEGI, including ENVIPE, and other surveys. It also uses data from the United Nations, the World Bank, the OECD and Article 19.

POSITIVE PEACE IN MEXICO

| Very high | High | Low | Very Low |
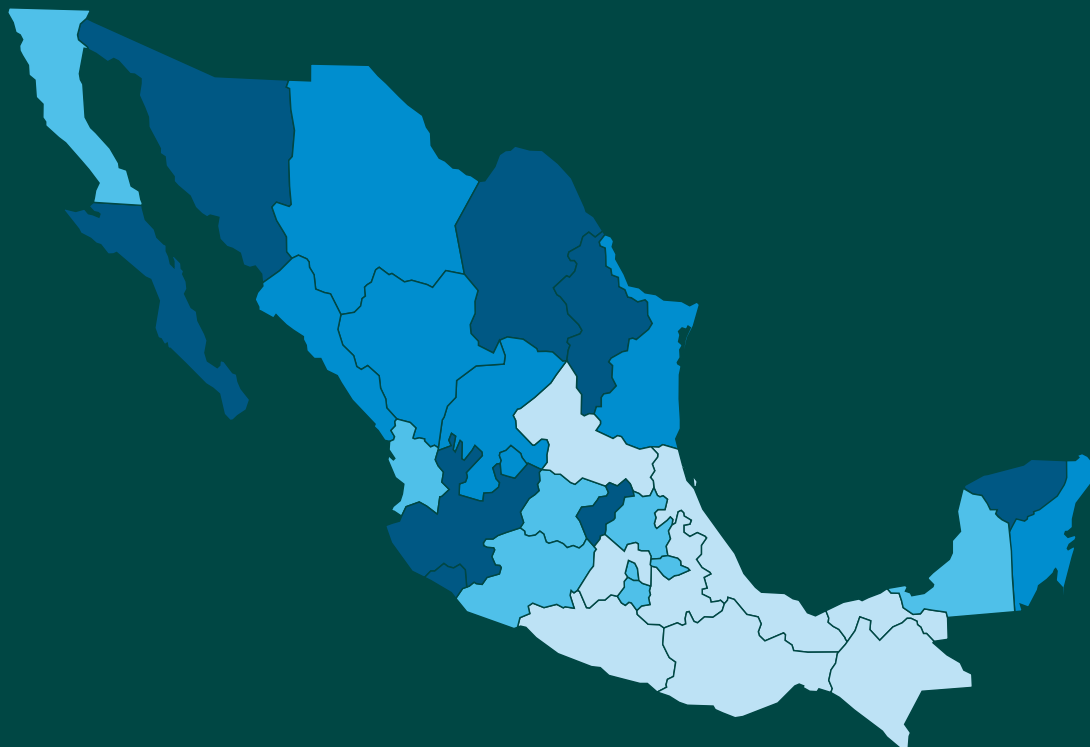
This section of the report develops the sub-national Mexico Positive Peace Index (MPPI), which provides a Positive Peace score for each state. The MPPI uses 24 indicators grouped along the eight Pillars of Positive Peace, which is illustrated in table 4.2. These subnational indicators map to the global Positive Peace Index as closely as possible. However, specific issues in the Mexican subnational context, as well as some data limitations, require a different choice of indicators. The full methodology for both indices is detailed in Section 5.

TABLE 4.2
Indicators in the sub-national Mexico Positive Peace Index, 2018

Mexico's sub-national Positive Peace Index was calculated from 24 indicators produced by local and international agencies.

Pillar	Indicator name	Source
Equitable Distribution of Resources	Socially vulnerable population	CONEVAL
	People living in poverty	CONEVAL
	Average number of people per household	INEGI
High Levels of Human Capital	Human Development Index - Education	UNDP
	Human Development Index - Health	UNDP
	Scientific or technological companies/institutes	RENIECYT
Well-Functioning Government	How would you rate the performance of the municipal police?	ENVIPE
	Are you aware of any actions taken by local authorities to construct or improve schooling	ENVIPE
	Homicide sentencing rate	INEGI CNG
Good Relations with Neighbors	Have most of your neighbors organized themselves to resolve or address theft?	ENVIPE
	Trust in neighbors	ENVIPE
	Proportion of gross state product produced by tourism	INEGI
Low Levels of Corruption	Do you perceive the state police as being corrupt?	ENVIPE
	Do you perceive the municipal police as being corrupt?	ENVIPE
	Do you perceive the public ministry and state attorneys as being corrupt?	ENVIPE
Sound Business Environment	Doing Business	World Bank
	GDP per capita, USD constant prices, PPP	OECD
	Unemployment rate	INEGI
Acceptance of the Rights of Others	Proportion of population affirming ISSSTE health services are provided in respectful manner	INEGI ENCIG
	Proportion of municipal administration staff that is female	INEGI CNGMD
	Reported cases of discrimination per 100K population	INEGI, IEP calculations
Free Flow of Information	Attacks on journalists	Article 19
	Proportion of households with access to the internet	INEGI
	Proportion of public institutions that have a website	INEGI CNGSPSPE

Nuevo León was the highest ranking Positive Peace state in 2018, followed by Colima, Baja California Sur and Sonora. Querétaro and Yucatán were tied in fifth place. Guerrero recorded the weakest level of Positive Peace, followed by Tabasco, Oaxaca, Puebla and Chiapas.

Mexico Positive Peace by state

Nuevo León, Colima and Baja California Sur posted the highest state levels of Positive Peace in 2018.

RANK IN 2018	STATE	SCORE IN 2018	CHANGE IN SCORE, 2014-2018	RANK IN 2014
1	Nuevo León	2.37	-0.12	1
2	Colima	2.53	-0.06	2
3	Baja California Sur	2.64	-0.03	3
4	Sonora	2.67	-0.08	5
=5	Querétaro	2.69	-0.23	8
=5	Yucatán	2.69	-0.10	6
7	Coahuila	2.75	-0.17	=9
=8	Jalisco	2.77	-0.20	11
=8	Sinaloa	2.77	-0.15	=9
10	Aguascalientes	2.82	0.09	4
11	Chihuahua	2.88	-0.01	7
12	Tamaulipas	2.89	-0.16	15
13	Durango	2.90	-0.10	12
14	Nayarit	2.91	-0.16	16
15	Quintana Roo	2.95	-0.29	23
16	Zacatecas	2.96	-0.07	=13
17	Hidalgo	2.99	-0.24	22
18	Mexico City	3.03	-0.19	21
19	Campeche	3.05	0.02	=13
=20	Baja California	3.06	-0.06	18
=20	Guanajuato	3.06	-0.03	17
22	Morelos	3.10	-0.08	20
23	Michoacán	3.17	-0.24	26
24	Tlaxcala	3.21	-0.16	25
25	México	3.24	-0.27	=27
26	San Luis Potosí	3.25	0.10	19
27	Veracruz	3.27	-0.03	24
28	Tabasco	3.37	-0.14	=27
29	Oaxaca	3.39	-0.15	29
30	Puebla	3.44	-0.19	31
31	Chiapas	3.48	-0.10	30
32	Guerrero	3.69	0.00	32
	Average	**3.00**	**-0.11**	

* An equal (=) sign means multiple states share the same ranking.
** In index points. A decline in score indicates an improvement in Positive Peace.
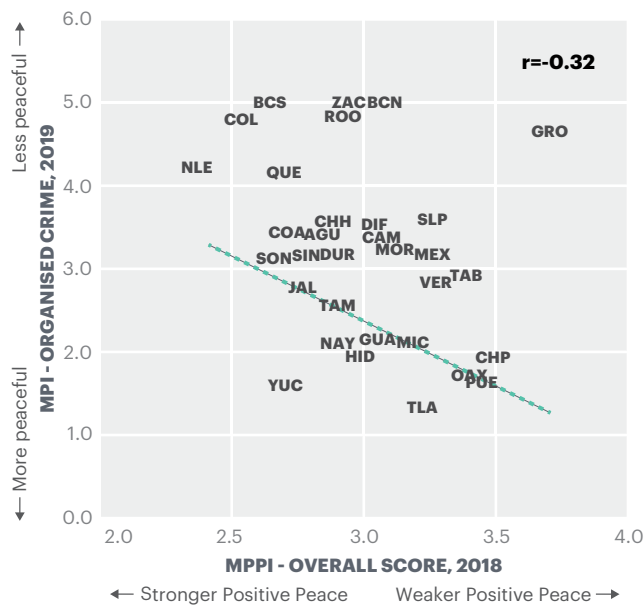
Source:IEP

SUB-NATIONAL POSITIVE PEACE AND THE MPI

Organized crime in Mexico has distorted the relationship between levels of violence and Positive Peace in Mexico. The established finding in the analysis of global patterns of Positive Peace is that high levels of socio-economic and institutional development are usually associated with greater levels of peacefulness. This translates into a direct correlation between measurements of negative peace and Positive Peace. However, within Mexico, this correspondence is not found. State-level Positive Peace as measured by the MPPI and actual peace gauged by the MPI are not correlated. This means that states with higher levels of socio-economic development are not necessarily the most peaceful. Of the four crime subcomponents of the MPI – *homicide, violent crime, firearms crime* and *organized crime* – only *organized crime* is correlated with Positive Peace. However, as shown in figure 4.15, this correlation is inverted, in that states with higher levels of Positive Peace also tend to be the most affected by organized crime activity.

FIGURE 4.15

Positive Peace and organized crime in Mexico

Positive Peace and organized crime are inversely related in Mexico. States with stronger levels of Positive Peace tend to record higher levels of organized crime activity.

Source: IEP

This inverse relationship is likely because criminal organizations tend to operate in regions with higher wealth and more developed infrastructure. These organizations are usually involved in large-scale drug trafficking and money laundering and need to operate in places with well-developed infrastructure (ports, roads, border crossings) or intense economic activity (business centers, tourism zones, logistic corridors, trade hubs). Such places also tend to display higher levels of Positive Peace. Indeed, high Positive Peace states in Mexico tend to be situated close to the northern border where substantial trade with the US takes place, in the high-tourism Yucatán Peninsula, and in the industrialized western states where large logistical assets such as the Manzanillo Port are located.[4,5,6]

This does not mean that Positive Peace is any less important to reducing violence in Mexico. Rather, it shows how weaknesses in the *Low Levels of Corruption* and *Well-Functioning Government*

Pillars create a framework where criminal organizations have an outsized influence in society.

Previous research by IEP demonstrated that pursuing socio-economic development without first improving administrative efficiency and transparency is an ineffective way to build peace. Analysis published in the Mexico Peace Index 2018 showed that developing the *Sound Business Environment* or *High Levels of Human Capital* without improving the *Well-Functioning Government* and *Low Levels of Corruption* Pillars may in effect lead to increases – not reductions – in violence.[7] This result helps explain the dynamics of peace in Mexico, where economic development in certain states was not accompanied by the strengthening of robust institutions.

> **"**
> Previous research by IEP demonstrated that pursuing socio-economic development without first improving administrative efficiency and transparency is an ineffective way to build peace.
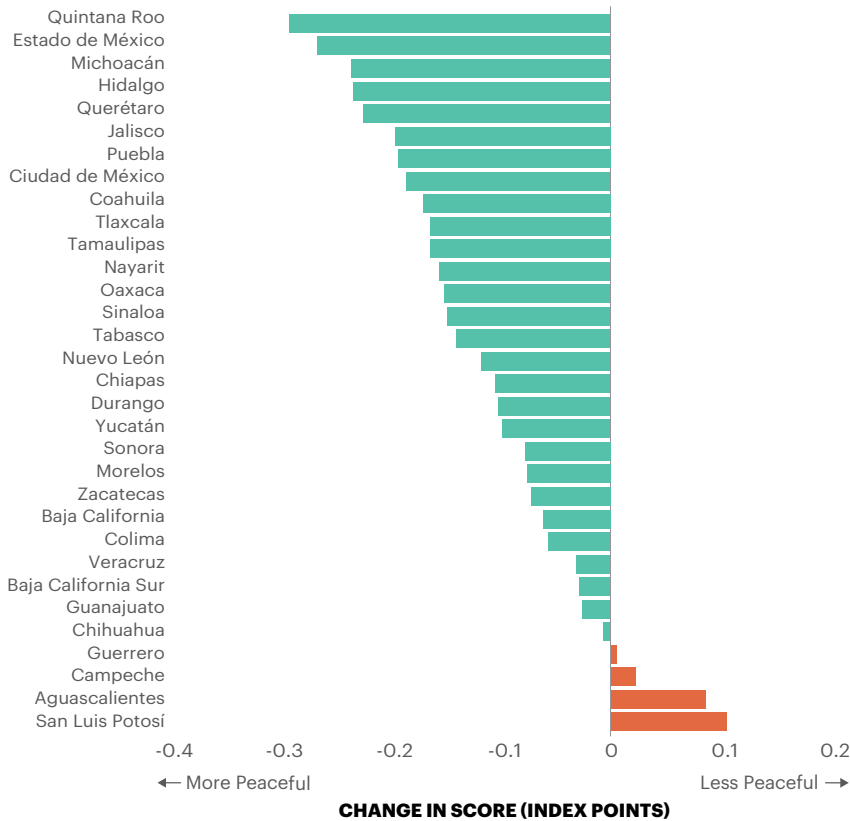
CHANGES IN POSITIVE PEACE BY STATE

Figure 4.16 illustrates that a total of 28 states, out of 32, recorded improvements in Positive Peace from 2014 to 2018. As a result, Positive Peace improved in Mexico over this period. This is consistent with the national Positive Peace results discussed in the preceding section.

Quintana Roo recorded the largest improvement in score. San Luis Potosí recorded the sharpest decline. This section details the trends driving the largest state improvements and deteriorations.

The following two sections discuss the largest state improvements and deteriorations in Positive Peace. Some indicators may record large variations over a short time frame, such as *attacks on journalists*, which have risen or fallen by an average of 19 percent each year since 2010.[8] In contrast, systemic changes and improved institutions develop slowly over time.

Changes in Positive Peace by state, 2014–2018

28 out of the total 32 states improved in Positive Peace since 2014.

CHANGE IN SCORE (INDEX POINTS)

← More Peaceful   Less Peaceful →

Source: IEP

KEY FINDINGS

IMPROVEMENTS IN POSITIVE PEACE BY STATE

A total of 28 states – out of 32 – recorded improvements in Positive Peace from 2014 to 2018.

Some states have high levels of Positive Peace, while also recording high levels of violence. This is in part associated with a strong presence of organized crime, which can distort the conventional direct relationship between levels of violence and Positive Peace.

FIVE LARGEST IMPROVEMENTS IN POSITIVE PEACE

Quintana Roo

The state's MPPI overall score improved by 0.29 points – or nine percent – from 2014 to 2018, the largest rise in Positive Peace rankings over the period. A key contributor to this was a sharp improvement in the *Acceptance of the Rights of Others* Pillar based on a substantial increase in the proportion of women in the public service, which rose from 20 percent to over 33 percent in 2017. The state has made substantial strides in equal opportunities in recent years, culminating with the recent unanimous approval by the state legislature of laws promoting gender equality in public service.[9]

There was also a reduction in reported cases of discrimination by gender, ethnicity and otherwise.

The proportion of households with an internet connection also increased, supporting an improvement in the *Free Flow*

Quintana Roo

INDEX POINT CHANGE IN SCORE, 2014–2018

← More Peaceful   Less Peaceful →

Source: IEP

of Information Pillar. In contrast, *Low Levels of Corruption* and *Well-Functioning Government* deteriorated by more than ten percentage points over the period, reflecting the difficulties in curtailing corruption and improving local social services.[10]

Mexico State

INDEX POINT CHANGE IN SCORE, 2014–2018
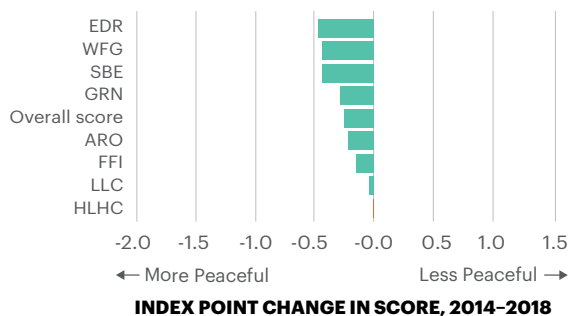
Source: IEP

Mexico state

The MPPI improved by 0.27 points – 7.6 percent – in México. This movement was broad based, with seven Pillars recording improvements. Widespread improvement across the Pillars is the most conducive to systemic progress in Positive Peace, and could lead to further improvements in the state.

There was substantial progress in the World Bank's assessment of business conditions in México, which contributed to the improvement in the *Equitable Distribution of Resources* and *Sound Business Environment* Pillars. México is the largest exporter of vehicles and parts, electronic equipment, chemicals, plastics and textiles. It has a large workforce and consumer base, which further support busin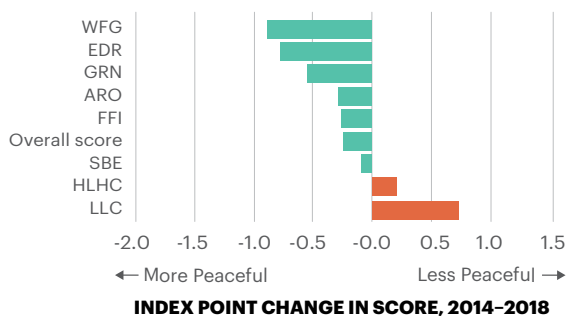ess activity.[11] Potential bottlenecks for continued social development are the high – and increasing – incidences of attacks on journalists curbing the flow of information and the weak investment in scientific and technological business innovation.[12]

Michoacán

INDEX POINT CHANGE IN SCORE, 2014–2018
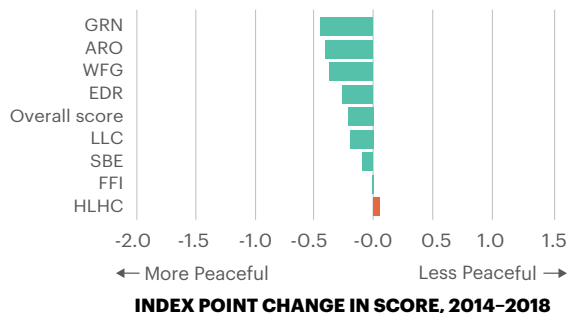
Source: IEP

Michoacán

Despite being a comparatively low Positive Peace state, Michoacán has recorded substantial social progress over the past four years. Its overall score improved by 0.24 points, or seven percent since 2014, and improvements were made across most Pillars. This type of widespread improvement in Positive Peace generally leads to sustainable, long-term improvements in living standards and social development.

Perceptions of corruption, however, have deteriorated, especially in regards to the public ministry, state attorney and state police. These results have dragged down the *Low Levels of Corruption* Pillar, which deteriorated substantially in the four years to 2018.

In response to this issue, Michoacán was one of the states to adopt the State Anti-Corruption System (Sistema Estatal Anticorrupción, SEA), a set of laws seeking to increase transparency and accountability in public administration.[14]

Another impediment to further growth is the low level of investment in scientific and technological businesses in the state suppressing *High Levels of Human Capital*.

Hildago

INDEX POINT CHANGE IN SCORE, 2014–2018

Source: IEP

Hildago

Hidalgo's Positive Peace score (2.99) remains around the national average, after improving by 0.24 points – or 7.3 percent – since 2014. The state rose five places to rank 17th in 2018. Similar to neighboring México, progress in Hidalgo has been across most Pillars, suggesting that the state is developing in a consistent, sustainable and comprehensive manner.

Hidalgo is one of the very few states in which the *Low Level of Corruption* Pillar improved in recent years. In fact, Hidalgo is the state with the highest improvement in this Pillar (Table 4.4).

The only Pillar to deteriorate in the state in recent years was *High Levels of Human Capital*, although the deterioration was small relative to some other states. This Pillar would benefit from further investment in education and scientific research, which could consolidate the recent progress in Positive Peace. Indeed, some proposed initiatives such as the construction of a particle accelerator in the state (*Complejo Científico y Tecnológico Sincrotrón de Hidalgo*) could boost future technical and scientific output in the state and the country.[15]

Querétaro

INDEX POINT CHANGE IN SCORE, 2014–2018
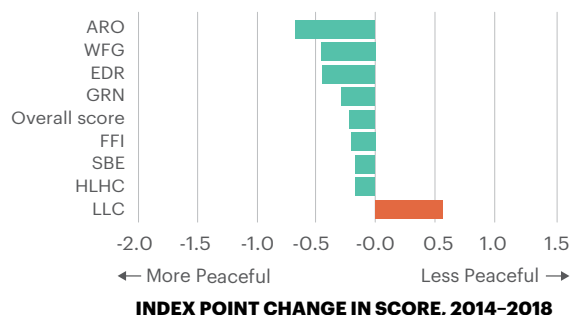
Source: IEP

Queretaro

The state recorded an improvement in overall Positive Peace of around 0.23 points – 7.7 percent – in the four years to 2018. All *Acceptance of the Rights of Others* indicators improved, with particular progress being recorded in the quality of health services provided by the Institute for Social Security and Services for State Workers (ISSSTE).

There have also been positive reports about municipal actions to improve local schooling. This is consistent with the state's good performance in national academic evaluations such as the National Assessment of Academic Achievement in Schools / *Evaluación Nacional de Logro Académico en Centros Escolares* (ENLACE).[16] However, partly offsetting these results, *Low Levels of Corruption* deteriorated markedly as the population reported having less trust in both state and municipal police forces.[17]

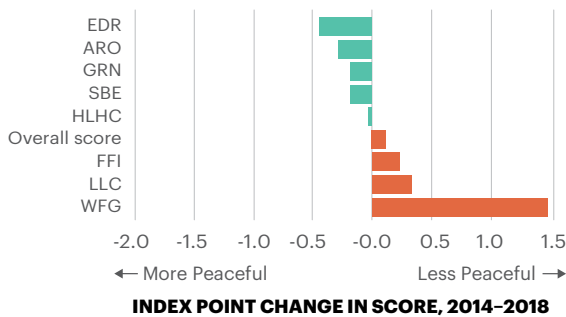## FIVE LARGEST DETERIORATIONS IN POSITIVE PEACE

San Luis Potosi

INDEX POINT CHANGE IN SCORE, 2014–2018
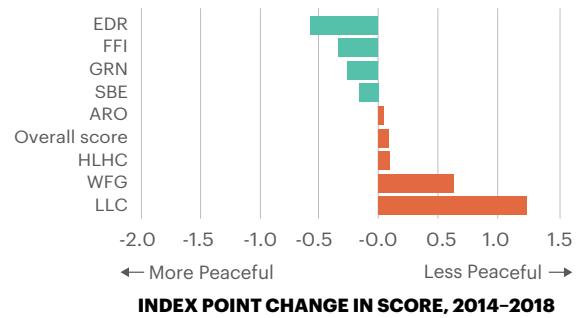
Source: IEP

San Luis Potosi

The state recorded a 0.10 point – 3.3 percent – deterioration in Positive Peace over the four years to 2018, resulting in a fall in seven places in the rankings. The sharp decline in the number of homicide sentences proportionate to the number of investigations dragged down the performance of the W*ell-Functioning Government* Pillar, resulting in this deterioration. There has been a recent increase in homicides and authorities are having difficulties in reversing this trend.[18]

Other *Well-Functioning Government* indicators also deteriorated in the period, albeit less sharply. A marked increase in the number of attacks on journalists, suppressing *Free Flow of Information*, also contributed to a deterioration in Positive Peace.[19] These attacks largely reflect the activities of organized crime, but in some cases, journalists may have been harassed by public officials, contributing to weaker *Low Levels of Corruption*.[20] This has prompted a discussion about tightening the laws protecting free press and journalists in the state legislature.[21]

> "
> The sharp decline in the number of homicide sentences proportionate to the number of investigations dragged down the performance of the Well-Functioning Government Pillar in San Luis Potosi.

Aguascalientes

INDEX POINT CHANGE IN SCORE, 2014–2018

Source: IEP

Aguascalientes

Despite a 0.09 point deterioration – 3.1 percent – in its overall score, Aguascalientes remains one of the highest Positive Peace states in Mexico. The state posted strong improvements in the *Equitable Distribution of Resources* and *Free Flow of Information* Pillars due to reductions in poverty and social deprivation and improvements in households' access to the internet. However, these developments were offset by steep deteriorations in all three indicators in the *Low Levels of Corruption* Pillar. The perceived incidence of corruption within public administration and the judiciary appears to be higher than the national average by some margin.[22,23] In addition, the population's trust in the state and municipal police forces appears to have declined substantially, according to the ENVIPE survey. This could be partly related to a lack of coordination among the different institutions in charge of public safety.[24] The decline in the population's trust further suppressed the *Low Levels of Corruption* Pillar.

Campeche

INDEX POINT CHANGE IN SCORE, 2014–2018
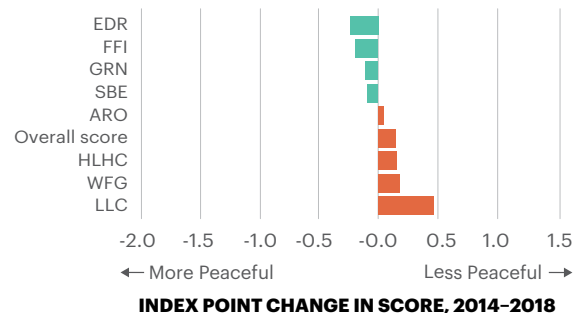
Source: IEP

Campeche

The state of Campeche recorded a small net deterioration, 0.7 percent, in Positive Peace, resulting from offsetting influences affecting individual Pillars. On one hand, the state recorded improvements in *Well-Functioning Government* and *Acceptance of the Rights of Others*. On the other, a sharp reduction in per capita state income has contributed to a 0.45 point deterioration in the *Sound Business Environment* score from 2014. This was the largest deterioration for this Pillar across all states in the period.

The deterioration was partly influenced by falling oil prices in the global market from 2014 through to 2016. With 68 percent of the

state's economy relying on oil production, Campeche is particularly susceptible to international commodity price fluctuations.[25] To mitigate this vulnerability, the state plans to set up special economic zones (*Zona Económica Especial, ZEE*) to develop alternative activities to oil extraction and refining. Authorities hope this will reverse the weak economic performance of the state over the past five years.[26]

Guerrero

EDR
GRN
FFI
SBE
WFG
Overall score
ARO
LLC
HLHC

-2.0 -1.5 -1.0 -0.5 -0.0 0.5 1.0 1.5

← More Peaceful   Less Peaceful →

INDEX POINT CHANGE IN SCORE, 2014–2018
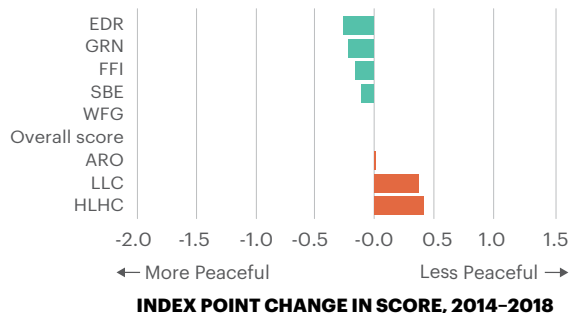
Source: IEP

Guerrero

Guerrero has maintained its low Positive Peace rank from 2014 to 2018. Over the period, the state's overall score was broadly unchanged, suggesting that Guerrero is facing major difficulties in promoting internal peacefulness and social development. With low levels of both negative and Positive Peace, it is possible that Guerrero is in a conflict trap.[27] This condition is characterized by a cycle of mutually reinforcing violence and socio-economic underdevelopment, from which a nation, state or community finds it difficult to emerge without external support.

One important driver of Guerrero's decline in Positive Peace in recent years has been the relatively high incidence of corruption in the state, which suppressed the *Low Levels of Corruption* Pillar.[28] The Pillar *High Levels of Human Capital* has also been subdued as measured by a decline in scientific and technological activity.

Chihuahua

EDR
ARO
FFI
SBE
Overall score
HLHC
GRN
WFG
LLC

-2.0 -1.5 -1.0 -0.5 -0.0 0.5 1.0 1.5

← More Peaceful   Less Peaceful →

INDEX POINT CHANGE IN SCORE, 2014–2018
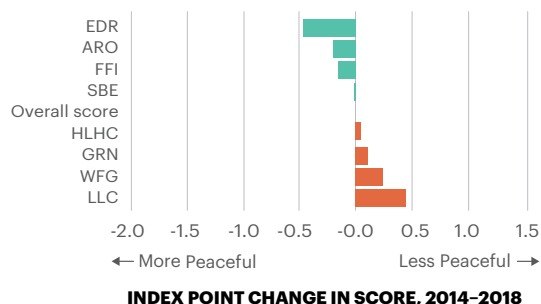
Source: IEP

Chihuahua

The overall Positive Peace score for the state recorded a small improvement – around 0.2 percent – from 2014 to 2018. However, this improvement was substantially below the average improvement among states, causing Chihuahua to post the fifth worst change in Positive Peace over the period. Progress in some Pillars in the state was cancelled out by deteriorations in others. It is very difficult for a nation or state to improve in Positive Peace if progress among its Pillars is uneven. Consistent with this, Chihuahua declined in Mexico's Positive Peace ranking from 7th in 2014 to 11th in 2018. The state has grappled with a high incidence of corruption, which was a key contributor to the below-average growth in Positive Peace in recent years.[29,30,31] There has also been a decline in the homicide sentencing rates, suggesting the state is having difficulties delivering justice and curbing impunity.[32]

"

Guerrero has maintained its low Positive Peace rank from 2014 to 2018.

STATE POSITIVE PEACE CHANGES BY PILLAR

Mexican states are at different levels of socio-economic development. Some states are highly industrialized and have large infrastructure assets such as ports, power plants and manufacturing complexes. Others remain relatively agricultural and with a relatively high proportion of rural population. Despite these differences, there are common themes on how Mexican states have developed in the Pillars of Positive Peace in recent times. Almost all states have improved in the *Equitable Distribution of Resources* and *Sound Business Environment* Pillars. This suggests Mexico's economic performance has reduced inequality and lifted living standards. *Good Relations with Neighbors* is also a Pillar in which virtually all states improved, suggesting that Mexicans have somewhat greater trust in and cooperation with others in their local communities.

In contrast, *Low Levels of Corruption* deteriorated across all states, with very few exceptions. This indicates that corruption needs to be addressed at the national as well as the state level. It will need to be a concerted and well-planned effort. *High Levels of Human Capital* have also deteriorated widely, suggesting the need for a country-wide focus on education and worker training.

TABLE 4.4

State Positive Peace changes by Pillars, 2014–2018

Equitable Distribution of Resources, Good Relations with Neighbors and Sound Business Environment were the Pillars with the most state improvements. Low Levels of Corruption and High Levels of Human Capital recorded the most deteriorations.

STATE	INDEX POINT CHANGES IN SCORES, 2014 TO 2018 (SORTED BY OVERALL SCORE IMPROVEMENT)								
	EDR	GRN	SBE	ARO	FFI	WFG	HLHC	LLC	OVERALL
Quintana Roo	-0.60	-0.09	-0.35	-1.74	-0.74	0.66	0.16	0.35	-0.29
México	-0.48	-0.30	-0.45	-0.23	-0.17	-0.46	0.01	-0.06	-0.27
Michoacán	-0.77	-0.53	-0.10	-0.28	-0.27	-0.89	0.21	0.73	-0.24
Hidalgo	-0.27	-0.47	-0.12	-0.42	-0.03	-0.39	0.04	-0.22	-0.24
Querétaro	-0.45	-0.28	-0.17	-0.67	-0.21	-0.46	-0.11	0.56	-0.23
Jalisco	-0.53	-0.26	-0.58	-0.68	0.02	0.12	-0.16	0.51	-0.20
Puebla	-0.45	-0.34	-0.57	-1.07	0.19	-0.11	0.28	0.51	-0.19
Mexico City	-0.24	0.01	-0.21	-0.71	-0.91	0.24	0.18	0.15	-0.19
Coahuila	-0.32	-0.23	-0.40	-0.13	0.40	-0.71	-0.17	0.19	-0.17
Tlaxcala	-0.63	-0.63	-0.11	-0.55	-0.18	0.07	0.20	0.51	-0.16
Tamaulipas	-0.11	-0.21	-0.38	-0.34	-0.24	-0.85	0.30	0.52	-0.16
Nayarit	-0.35	-0.82	-0.18	-0.46	-0.11	-0.22	-0.44	1.32	-0.16
Oaxaca	-0.54	-0.54	-0.01	-0.49	0.04	0.08	0.05	0.19	-0.15
Sinaloa	-0.82	-0.17	-0.22	-0.49	-0.45	-0.09	0.01	1.04	-0.15
Tabasco	-0.28	-0.21	0.04	-0.26	-0.42	-0.53	0.23	0.31	-0.14
Nuevo León	-0.36	-0.08	-0.17	0.33	-0.27	-0.58	-0.06	0.25	-0.12
Chiapas	-0.37	-0.69	-0.06	-0.40	-0.13	0.14	0.25	0.43	-0.10
Durango	-0.62	-0.32	-0.25	-0.53	-0.50	-0.10	0.28	1.23	-0.10
Yucatán	-0.34	-0.35	-0.27	-0.46	0.10	0.09	-0.10	0.55	-0.10
Sonora	-0.37	-0.20	-0.41	-0.07	-0.39	0.39	-0.22	0.65	-0.08
Morelos	-0.09	-0.26	-0.29	0.16	-0.28	-0.05	0.33	-0.14	-0.08
Zacatecas	-0.53	-0.10	0.04	-0.55	-0.21	-0.08	0.03	0.82	-0.07
Baja California	-0.24	-0.13	-0.29	-0.27	-0.16	0.36	0.27	-0.04	-0.06
Colima	-0.25	0.02	-0.13	-0.51	-0.18	0.02	0.20	0.37	-0.06
Veracruz	0.21	-0.48	-0.20	-0.03	0.08	0.00	0.18	-0.02	-0.03
Baja California Sur	-0.62	-0.28	-0.28	1.70	-0.17	-0.34	-0.12	-0.12	-0.03
Guanajuato	-0.24	-0.05	-0.26	-0.08	0.14	0.01	-0.14	0.42	-0.03
Chihuahua	-0.49	0.12	-0.04	-0.22	-0.17	0.25	0.06	0.45	-0.01
Guerrero	-0.28	-0.23	-0.13	0.03	-0.17	0.00	0.43	0.38	0.00
Campeche	0.14	-0.13	0.45	-0.21	0.13	-0.26	0.16	-0.11	0.02
Aguascalientes	-0.58	-0.27	-0.16	0.05	-0.34	0.63	0.10	1.26	0.09
San Luis Potosí	-0.45	-0.20	-0.19	-0.30	0.22	1.47	-0.04	0.32	0.10
Average**	**-0.38**	**-0.27**	**-0.20**	**-0.31**	**-0.17**	**-0.05**	**0.07**	**0.41**	**-0.11**
Number of state improvements	**30**	**29**	**29**	**27**	**23**	**16**	**10**	**7**	**28**

* Negative changes denote improvements in Positive Peace.
** The average of the states does not match exactly to national Pillar changes due to differences between the national and subnational methodologies.

Source:IEP

2020 MEXICO PEACE INDEX METHODOLOGY

The Mexico Peace Index (MPI) is based on the work of the Global Peace Index (GPI), the leading global measure of peacefulness, produced annually by IEP since 2007. The MPI follows a similar methodology to the UKPI and the USPI, also produced by IEP, and measures negative peace, defined as "the absence of violence or fear of violence."

This 2020 edition is the seventh iteration of the MPI and uses data published by SESNSP.

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 based on those used in the USPI and UKPI, using 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 *firearms 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.

All data used to calculate the MPI comes from government bodies in Mexico. IEP then uses survey data collected by the national statistics office to adjust the crime figures for underreporting.

2020 MPI INDICATORS

DATA SOURCES

The MPI is composed of the following five indicators, scored between 1 and 5, where 1 represents the most peaceful score and 5 the least peaceful. Population data is used for estimating rates per 100,000 people. The data runs from 2015 to 2019.

Homicide

The number of victims of intentional homicide per 100,000 people.

Source: SESNSP

Violent Crime

The number of robbery, sexual assault, and family violence cases and the number of violent assault victims per 100,000 people, adjusted for underreporting. Robbery cases must meet one of two criteria to be included:

- types of robbery that rely on the threat of violence, such as a mugging, or

- robbery incidents where the database indicates violence was used.

Source: SESNSP

Organized Crime

The number of extortions, drug trade related crimes, and kidnapping or human trafficking investigations per 100,000 people. Extortion, kidnapping and human trafficking rates are adjusted for underreporting. Drug trade and major organized crime offenses include:

- the federal crimes of production, transport, trafficking, trade, supply, or possession of drugs or other crimes under the *Crimes Against Public Health* law

- retail drug crimes, as a proxy indicator of the size of the market fueled by illegal drug production and distribution

- and crimes classed under the *Law Against Organized Crime*, which includes all of the above crimes when three or more people conspire to commit them.

Source: SESNSP

Firearms Crime

The number of victims of an intentional or negligent homicide or assault committed with a firearm per 100,000 people.

Source: SESNSP

Detention without a Sentence

The ratio of persons in prison without a sentence to the number of homicides and violent crimes.

Source: CNG

Population data

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.

Source: National Population Council / *Consejo Nacional de Población* (CONAPO)

UNDERREPORTING

Only about ten percent of crimes in Mexico are reported to the authorities.[1]

Two of the MPI indicators – *violent crime* and *organized crime* – are adjusted for underreporting. IEP uses ENVIPE data to calculate underreporting rates for each state and adjusts the official statistics for robbery, assault, family violence, sexual violence, extortion and kidnapping and human trafficking to better reflect actual rates of violence. This approach helps to counterbalance the high rates of underreporting in Mexico.

IEP calculated the underreporting rates for each state and crime 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 reported it to the authorities. IEP sources this data from each victimization survey for the years 2015 to 2019 and takes the total number of each crime in each state for the five years. 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 robbery, assault, family violence, sexual violence, extortion and kidnapping and human trafficking.

The underreporting rates use five years of data because, in some states, there were crimes where none of the victims reported the crime to the authorities. If none of the crimes were reported, the reporting rate of zero percent cannot be used to adjust the police-recorded numbers. Additionally, combining the data over time smooths out any large fluctuations in underreporting rates that may be the result of complex and imperfect surveying

methodologies, rather than a true change in reporting. Reporting rates have not changed significantly in Mexico over the last five years.

Underreporting rate

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.

Source: National Survey of Victimization and Perceptions of Public Security (ENVIPE), 2015-2019

IMPUTATIONS

The 2020 MPI was calculated based on data to the end of October 2019, as the data for November and December 2019 was not yet available at the time of producing the report. To estimate the figures for these two months IEP has used a simple moving average (SMA) methodology.

A moving average uses the average value of a set of previous months to estimate the value for the current month. In this case,

IEP generated a statistical model for crime trends in each state that estimated the number of months needed to arrive at an accurate state-specific average.[2] This process was used to project the number of each type of crime in each state for the months of November and December of 2019. The projection for the total number of homicides nationwide in 2019 was 99.75 percent accurate.

INDICATOR SCORE & OVERALL 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 2015 to 2019. First, the average value for each state over the five 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:

$$Banded\ score_x = \left(\frac{raw\ value_x - min_{sample}}{max_{sample} - min_{sample}} \times 4 \right) + 1$$

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.

There is one additional step used to calculate the *organized crime* score: in the case of the *organized crime* indicator, raw values are

multiplied by the indicator sub-weights listed in Table 5.1. The sub-weights are used so that the indicator score reflects the more serious societal impact of particular crimes and to correct for the uneven distribution of offenses. In 2018, extortion and retail drug crimes made up 88.6 percent of crimes, which means that the trend in these offenses would overshadow any changes in kidnapping, human trafficking or major drug crime rates.

Major organized crime offenses, such as drug trafficking and kidnapping and human trafficking have the highest weights in the *organized crime* score. These crimes reflect more severe acts of violence and provide an indication of the strength and presence of major criminal organizations. Retail drug crimes serve as a proxy indication of the size of the drug market. However, some portion of the retail drug market will represent small individual sellers or reflect personal drug use, both of which are of less concern. Human trafficking and major drug trafficking offenses are more destabilizing to Mexican society because these crimes:

- reflect large revenue sources for criminal organizations
- absorb more human and physical resources into violent, illicit economic activity
- depend upon a greater level of corruption
- indicate the presence of organizations that pose a greater threat to the Mexican state.

After the score for each indicator has been calculated, weights are applied to each of the five 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 weights for the GPI indicators were agreed upon by an international panel of independent peace and conflict experts and are 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. With direction from the expert panel at the time of the design of the index, 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. The final weights as determined by the IEP research team and the expert panel are shown in Table 5.1.

TABLE 5.1
Indicator Weights in the MPI

INDICATOR	WEIGHT	% OF INDEX
Homicide	4	30%
Violent Crime	3	21%
Weapons Crime	3	20%
Detention without a Sentence	1	8%
Organized Crime	3	21%

TABLE 5.2
Composition of the MPI organized crime score

MPI Indicator	Description	Weight as % of overall MPI score	Indicator sub-type	Variables included	Sub-weight relative to other crimes in the indicator
Organized crime	Extortions, kidnappings and cases of human trafficking, and narcotics crimes per 100,000 people	21%	Extortion (adjusted for underreporting)	Extortion	3
			Kidnapping & human trafficking (adjusted for underreporting)	Kidnapping	5
				Human trafficking	
				Trafficking of minors	
			Retail drug crimes	Possession, commerce and supply in small amounts	1
			Major organized crime offenses	Violations of the law prohibiting crimes against public health, which criminalizes drug trafficking	20
				Violations of the organized crime law, which criminalizes organized crime related offenses committed by three or more people	

Source: IEP

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METHODOLOGY FOR CALCULATING THE ECONOMIC IMPACT OF VIOLENCE

The global economic impact of violence is defined as the expenditure and economic activity related to "*containing, preventing and dealing with the consequences of violence.*" The estimates include the direct and indirect cost of violence as well as an economic multiplier.

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, including those associated with policing, medical expenses, funerals or incarceration.

2. **Indirect costs** accrue after the fact. These include physical and psychological trauma and the present value of future costs associated with the violent incident, such as the consequential lost future income. There is also a measure of the impact of fear on the economy, as people who fear that they may become a victim of violent crime alter their behavior.

3. The **multiplier effect** is a commonly used economic concept that describes the extent to which additional expenditure has flow-on impacts in the wider economy. Injections of new income into the economy will lead to more spending, which will in turn create employment, further income and encourage additional spending, thereby increasing GDP. This mutually reinforcing economic cycle explains the "multiplier effect," and why a dollar of expenditure can create more than a dollar of economic activity. The multiplier effect calculates the additional economic activity that would have accrued if the direct costs of violence had been avoided. Refer to box 5.1 for more detail on the multiplier.

Violence containment expenditure refers to the direct and indirect costs associated with preventing or dealing with the consequences of violence. This includes government spending on domestic security, justice and military.

The **economic impact of violence** refers to the total cost (direct and indirect) of violence containment plus the peace multiplier.

This study uses a cost accounting methodology to measure the economic impact of violence. Expenditures on containing violence are totalled and unit costs are applied to the MPI estimates for the number of crimes committed. 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. The direct costs for violent crime and organized crime are obtained from

household and business surveys undertaken by the Mexican statistical office, which assesses economic and health costs to the victim of a crime.

Indirect unit costs include the physical and psychological trauma and the present value of future costs associated with the violent incident, such as lost lifetime wages for homicide victims.

The cost estimates provided in this report are in constant 2019 pesos, which facilitates the comparison of the estimates over time. The estimate only includes elements of violence in which 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, violence within the family, sexual violence and robbery**
3. **Organized crime, which includes extortion, kidnapping and human trafficking**
4. **Indirect costs of incarceration**
5. **Fear of insecurity**
6. **Protections costs, including private security and firearms**
7. **Federal spending on violence containment, which includes the military, domestic security and the justice system**
8. **Medical and funeral costs**

The economic impact of violence excludes:

- State level and municipal public spending on security
- The cost of drug trade related crimes such as the production, possession, transport and supply of drugs
- Population displacement due to violence
- Medical expenses due to family violence

Although data is available for some of these categories, it is either not fully available for all states or for each year of analysis.

The multiplier effect

The multiplier effect is a commonly used economic concept, which describes the extent to which additional expenditure improves the wider economy. Injections of new income into the economy will lead to more spending, which in turn creates employment, further income and additional spending. This mutually reinforcing economic cycle is known as the "multiplier effect" and is the reason that a peso of expenditure can create more than one peso 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 and corporations would spend less time and resources protecting themselves against violence. Due to this decrease in violence, there would likely be substantial flow-on effects for the wider economy, as money is diverted towards more productive areas such as health, business investment, education and infrastructure.

The potential economic benefits from increased peace can be significant. When a homicide is avoided, the direct costs, such as the money spent on medical treatment and a funeral, can be spent elsewhere. The economy also benefits from the victim's lifetime income and expenditure. More generally, there is strong evidence to suggest that violence and the fear of violence can fundamentally alter the incentives for business. For example, Brauer and Tepper-Marlin (2009) argue that violence or the fear of violence may result in some economic activities not occurring at all. Their analysis of 730 business ventures in Colombia from 1997 to 2001 found that amidst higher levels of violence, new ventures were less likely to survive and profit. Consequently, with greater levels of violence, it is likely that employment rates and economic productivity will fall long-term, due to the disincentives around job creation and long-term investments.

This study assumes that the multiplier is one, 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.[3]

ESTIMATION METHODS

A combination of approaches are used to estimate the economic cost of violence to Mexico's economy. The analysis involved two 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. The MPI data is used for the number of homicides, sexual assaults, violent assaults, robberies, kidnappings and extortions.

IEP uses federal government expenditure data for military, domestic security and the justice system as federal government violence containment costs. 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 the state level. Therefore, a combination of state population size and the state funding allocation from the Public Security Contribution Fund/ *Fondo de Aportaciones para la Seguridad Pública* (FASP) 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. Unit costs for the homicide, violent crimes and organized crimes are based on a study by McCollister (2010) that estimated the tangible and intangible cost of violent crimes in the United States. The McCollister (2010) direct and indirect costs are applied to the number of homicides to calculate the total cost of homicide. Only the McCollister (2010) intangible (indirect) costs are applied to violent crime and organized crime. The direct costs of violent crime are taken from the nationally representative victimization surveys (ENVIPE and ENVE) administered by the National Institute of Statistics and Geography (INEGI). Both surveys collect data on economic and health-related direct costs due to violent crime.

1. Direct costs or tangible costs of crime include medical expenses, cash losses, property theft or damage, and productivity losses.

2. 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 the cost of perceptions of insecurity in Mexico.

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 2019 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 $20,870 for Mexico as compared to $65,110 for the US in 2019. This is called the adjusted unit cost.

All the costs are adjusted to constant 2019 pesos using GDP deflator data from the World Bank. The base year of 2019 was chosen because it is the most recent year for which GDP deflator data was available. Estimating the economic impact in constant prices facilitates comparisons over time.

Any GDP-related analysis uses the most recently available GDP data from INEGI.

CALCULATING THE COST OF HOMICIDE, VIOLENT CRIME AND 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. Homicides are multiplied by adjusted unit costs to calculate the total cost of homicide in Mexico.

Violent crime, which includes incidents of sexual violence, 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 xx. 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 or human trafficking. 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 for the indirect costs are sourced from McCollister (2010) and applied to extortion and kidnapping. The direct cost for violent and organized crime are sourced from ENVIPE, a national household survey of victimization and perception of public safety and ENVE, a national survey of business victimization. These surveys collect data on the economic and health-related losses to the victim of violent and organized crime.

COST OF FEAR OF INSECURITY

ENVIPE data 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 conducted yearly and are available from 2011 to 2019. 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.

PROTECTION COSTS

Protection costs represent spending by households and businesses on measures that reduces victimization from violent and organized crime. Both households and businesses take measures such as hiring private security, purchasing firearms or insurance, installing alarms, locks and changing place of residence or business to protect themselves in the face of high levels of crime and violence. This category replaces private security expenditure

and the cost of firearms.

Data for protection costs are sourced from INEGI, both for households and businesses. INEGI provides state level summaries of protection costs developed from the ENVIPE (household survey) and ENVE (business survey).

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 the Department of Labor and Social Welfare (*Secretaría del Trabajo y Previsión Social, STPS*). For 2019, the minimum wage of 102.68 pesos is used. This is calculated for a yearly wage of 27,108 pesos. 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 60 percent of the inmates would have been in full time employment. The minimum wage lost is calculated for 60 percent of the prison population in Mexico.

ECONOMIC IMPACT OF VIOLENCE CONTAINMENT

To estimate the total economic impact of violence, IEP uses a peace multiplier to estimate the additional economic activity that would have resulted if 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.

POSITIVE PEACE
METHODOLOGY

Positive Peace is defined as the *attitudes, institutions and structures that create and sustain peaceful societies.* IEP has measured Positive Peace at both the state and national levels in Mexico. The MPPI is based on the methodology for the global PPI, described in full in the 2019 Positive Peace Report, available at www.visionofhumanity.org.

MEXICO PEACE INDEX

The methodology for measuring Positive Peace at the state level is the same as that for the global index, but the indicators in the subnational MPPI differ slightly for two reasons:

• Subnational data on Positive Peace is limited
• Considerations specific to the Mexican context require some changes in indicators.

The sub-national index was derived from a different set of indicators using information sourced from reputable Mexican and international sources (Table 5.3).

Correlations between sub-national Positive Peace indicators and negative peace are relatively low (Table 5.3). For this reason, all indicators were weighted equally in building the Pillars and the overall score. Correlations are low presumably because most policies influencing socio-economic outcomes are set up at the national rather than state level. Thus, sub-national data may be more prone to statistical noise, that is, variations in the measurement statistic that reflect mostly methodological issues and data-gathering limitations rather than actual differences in the underlying social phenomenon being measured.

Further, in some countries – and this appears to be the case in Mexico – the states or regions with the highest standards of living are sometimes those with greater urbanization and interpersonal violence. In Mexico there is an added issue in that the most socio-economically developed states are also those where criminal organizations are more active.

TABLE 5.3

Indicators in the sub-national Mexico Positive Peace Index, 2018

Mexico's sub-national Positive Peace Index was calculated from 24 indicators. Of these, 18 – or three quarters – had been used in the sub-national Index published in IEP's 2018 Mexico Peace Index Report.

Pillar	Indicator name	Source	Correlation coefficient (to the MPI)	Indicators used in the 2018 MPI Report
Equitable Distribution of Resources	Socially vulnerable population	CONEVAL	-0.16	Same
	People living in poverty	CONEVAL	-0.24	Same
	Average number of people per household	INEGI	-0.42	Same
High Levels of Human Capital	Human Development Index - Education	UNDP	0.18	Same
	Human Development Index - Health	UNDP	-0.02	Same
	Scientific or technological companies/institutes	RENIECYT	-0.23	Same
Well-Functioning Government	How would you rate the performance of the municipal police?	ENVIPE	-0.17	Same
	Are you aware of any actions taken by local authorities to construct or improve schooling	ENVIPE	-0.24	Are you aware of any actions taken by local authorities to construct or improve public lighting? (ENVIPE)
	Homicide sentencing rate	INEGI CNG	-0.53	Same but this indicator was called 'impunity rate for homicides'
				Are you aware of any actions taken by local authorities to construct or improve parks and sports facilities? (ENVIPE)

Good Relations with Neighbors	Have most of your neighbors organized themselves to resolve or address theft?	ENVIPE	-0.54	Safety in public locations (ENVIPE)
	Trust in neighbors	ENVIPE	0.13	Same
	Proportion of gross state product produced by tourism	INEGI compiled and normalized by IMCO	0.32	Net state immigration (INEGI)
Low Levels of Corruption	Do you perceive the state police as being corrupt?	ENVIPE	-0.23	Same
	Do you perceive the municipal police as being corrupt?	ENVIPE	0.08	Same
	Do you perceive the public ministry and state attorneys as being corrupt?	ENVIPE	-0.24	Same
				Is there anticorruption training for public administration personnel? (INEGI CNG)
				How often do you perceive acts of corruption? (ENCIG)
Sound Business Environment	Doing Business	World Bank	-0.32	Same
	GDP per capita, USD constant prices, PPP	OECD	-0.09	Same
	Unemployment rate	INEGI	-0.09	Same
Acceptance of the Rights of Others	Proportion of population affirming ISSSTE health services are provided in respectful manner	INEGI ENCIG	-0.14	Social mobility - additional years of school for this generation compared to the last (ENMOVI CEEY)
	Proportion of municipal administration staff that is female	INEGI CNGMD	0.13	Same
	Reported cases of discrimination per 100K population	INEGI, IEP calculations	0.06	Indigenous development gap - difference between HDI for indigenous and non-indigenous populations (UNDP)
Free Flow of Information	Attacks on journalists	Article 19	0.01	Same
	Proportion of households with access to the internet	INEGI	0.36	Same
	Proportion of public institutions that have a website	INEGI CNGSPSPE	-0.04	Proportion of population reporting being able to access public information very quickly (INEGI)

Source: IEP

CALCULATING STATE SCORES

The process for calculating state Positive Peace scores is similar to that described for calculating the MPI, but all indicators in the MPPI are evenly weighted. Thus, the indicators are normalized and banded, and then the arithmetic mean of indicator score is calculated as the score for each Pillar. The arithmetic mean of the Pillar scores is used for each state's overall score.

COMPARING PREVIOUS INDICES

The Positive Peace indicators in this report are different from that used in the Mexico Peace Index report published in 2018. This was necessary to guarantee the currency of the data, to update the constituents of the pillars, and to be able to observe changes over time. For this reason, the Positive Peace index presented in this report is not directly comparable with that of the 2018 report. However, the scores for each state are correlated to one another, as shown in Figure 5.1.

FIGURE 5.1

Difference in rankings using the old and new methodologies
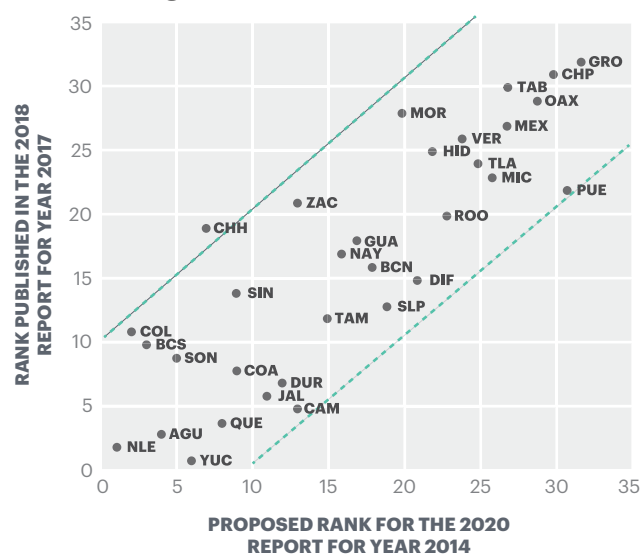
Source: IEP

RESULTS TABLES

MPI RESULTS

Table A.1

Overall Scores, 2015–2019

A lower score indicates a better level of peacefulness.

State	2015	2016	2017	2018	2019
AGUASCALIENTES	1.901	1.783	2.133	2.303	2.436
BAJA CALIFORNIA	3.380	3.376	4.279	4.485	4.572
BAJA CALIFORNIA SUR	2.892	3.610	4.478	3.176	2.797
CAMPECHE	1.719	1.703	1.677	1.575	1.959
CHIAPAS	1.835	1.739	1.737	1.795	1.726
CHIHUAHUA	2.750	3.056	3.610	3.721	3.977
COAHUILA	2.475	1.875	1.892	2.044	2.163
COLIMA	2.595	3.876	3.906	4.111	4.357
DURANGO	2.308	2.258	2.359	2.258	2.281
GUANAJUATO	2.286	2.356	2.675	3.646	3.817
GUERRERO	3.688	4.050	3.954	4.001	3.783
HIDALGO	1.514	1.595	1.819	1.948	2.161
JALISCO	2.407	2.405	2.649	2.994	2.977
MÉXICO	2.306	2.346	2.586	2.641	2.910
CIUDAD DE MÉXICO	2.474	2.471	2.686	2.981	3.124
MICHOACÁN	2.319	2.536	2.675	2.813	3.118
MORELOS	2.880	2.969	2.813	2.958	3.583
NAYARIT	1.856	1.583	2.339	2.552	2.001
NUEVO LEÓN	2.407	2.646	2.724	2.662	2.773
OAXACA	1.649	2.165	2.280	2.578	2.572
PUEBLA	1.952	1.786	2.010	2.226	2.378
QUERÉTARO	1.697	1.741	1.929	2.137	2.521
QUINTANA ROO	2.477	2.086	2.687	3.670	4.165
SAN LUIS POTOSÍ	1.937	2.158	2.451	2.530	2.718
SINALOA	3.232	3.014	3.444	2.991	2.798
SONORA	2.823	2.919	2.698	2.500	3.093
TABASCO	2.400	2.458	2.732	3.231	3.161
TAMAULIPAS	2.945	2.901	3.119	2.956	2.594
TLAXCALA	1.427	1.437	1.502	1.540	1.579
VERACRUZ	1.571	1.883	2.349	2.242	2.292
YUCATÁN	1.485	1.446	1.343	1.256	1.272
ZACATECAS	2.265	2.682	3.311	3.459	3.473
NATIONAL	**2.290**	**2.364**	**2.633**	**2.794**	**2.914**

Source: IEP

Table A.2

Indicator Scores, 2019

A lower score indicates a better level of peacefulness.

State	Homicide	Violent crime	Firearms crime	Organized crime	Detention without a sentence
AGUASCALIENTES	1.492	3.948	1.718	3.415	1.225
BAJA CALIFORNIA	5	4.206	5	5	1.732
BAJA CALIFORNIA SUR	1.666	4.107	1.357	5	1.419
CAMPECHE	1.526	1.299	1.279	3.375	3.296
CHIAPAS	1.669	1.823	1.491	1.923	1.752
CHIHUAHUA	5	3.052	4.773	3.558	1.675
COAHUILA	1.596	2.776	1.428	3.418	1.227
COLIMA	5	3.452	5	4.804	1.536
DURANGO	1.643	3.115	1.466	3.184	2.157
GUANAJUATO	4.645	4.252	4.928	2.149	1.169
GUERRERO	4.300	2.845	4.044	4.655	1.369
HIDALGO	1.793	3.423	1.791	2.091	1.340
JALISCO	3.104	3.795	2.723	2.777	1.523
MÉXICO	2.091	5	2.332	3.165	1.268
CIUDAD DE MÉXICO	2.142	5	2.987	3.517	1.195
MICHOACÁN	3.806	2.453	4.455	2.102	1.611
MORELOS	4.431	3.871	3.326	3.226	1.231
NAYARIT	1.973	1.308	1.628	2.107	4.574
NUEVO LEÓN	2.152	3.086	2.431	4.227	1.312
OAXACA	2.936	3.049	2.893	1.722	1.388
PUEBLA	2.300	3.599	2.347	1.695	1.333
QUERÉTARO	1.602	3.425	1.745	4.162	1.229
QUINTANA ROO	4.087	5	3.669	5	1.310
SAN LUIS POTOSÍ	2.155	3.623	2.256	3.603	1.283
SINALOA	2.957	2.917	2.649	3.146	1.348
SONORA	3.937	2.008	3.149	3.118	2.562
TABASCO	2.834	4.993	2.747	2.908	1.280
TAMAULIPAS	2.615	3.670	2.021	2.553	1.230
TLAXCALA	1.861	1.428	1.506	1.326	1.758
VERACRUZ	2.372	1.995	2.180	2.843	1.605
YUCATÁN	1.104	1.322	1.041	1.601	1.490
ZACATECAS	3.449	3.041	3.214	5	1.333
NATIONAL	**2.817**	**3.615**	**2.778**	**3.070**	**1.364**

Source: IEP

MPPI RESULTS

Table B.1

Overall Scores, 2014 & 2018

A lower score indicates a better level of peacefulness.

State	2014	2018
AGUASCALIENTES	2.737	2.823
BAJA CALIFORNIA	2.665	2.636
BAJA CALIFORNIA SUR	3.126	3.064
CAMPECHE	3.025	3.047
CHIAPAS	3.582	3.477
CHIHUAHUA	2.891	2.885
COAHUILA	2.921	3.026
COLIMA	2.588	2.750
DURANGO	3.000	2.532
GUANAJUATO	3.084	2.898
GUERRERO	3.691	3.241
HIDALGO	3.224	3.059
JALISCO	2.963	3.695
MÉXICO	3.508	2.988
CIUDAD DE MÉXICO	3.214	2.766
MICHOACÁN	3.403	3.166
MORELOS	3.178	3.100
NAYARIT	3.066	2.910
NUEVO LEÓN	2.492	2.374
OAXACA	3.537	3.385
PUEBLA	3.630	3.437
QUERÉTARO	2.917	2.691
QUINTANA ROO	3.239	2.946
SAN LUIS POTOSÍ	3.150	3.254
SINALOA	2.924	2.775
SONORA	2.753	2.674
TABASCO	3.512	3.372
TAMAULIPAS	3.057	2.892
TLAXCALA	3.378	3.213
VERACRUZ	3.306	3.275
YUCATÁN	2.791	2.692
ZACATECAS	3.031	2.957
NATIONAL	**3.112**	**3.000**

Source: IEP

Table B.2

MPPI Domain Scores, 2018

A lower score indicates a better level of peacefulness.

State	Acceptance of the Rights of Others	Equitable Distribution of Resources	Free Flow of Information	Good Relations with Neighbors	High Levels of Human Capital	Low Levels of Corruption	Sound Business Environment	Well-functioning Government
AGUASCALIENTES	2.896	2.142	2.041	3.346	2.873	3.229	2.649	3.407
BAJA CALIFORNIA	3.360	1.642	1.424	2.996	2.583	2.197	3.652	3.232
BAJA CALIFORNIA SUR	2.634	2.057	2.072	3.719	2.813	3.062	3.858	4.295
CAMPECHE	2.408	3.418	3.184	4.094	3.045	2.843	2.629	2.755
CHIAPAS	2.732	4.760	2.499	3.077	4.274	2.839	3.293	4.342
CHIHUAHUA	1.846	1.729	2.064	3.851	3.345	2.937	3.636	3.669
COAHUILA	2.300	1.715	2.264	4.118	2.392	4.408	3.558	3.452
COLIMA	2.001	1.869	2.717	3.725	2.853	2.950	3.121	2.763
DURANGO	1.560	2.324	1.812	3.610	3.087	1.948	2.775	3.137
GUANAJUATO	1.993	2.537	1.646	3.607	3.598	3.486	3.287	3.030
GUERRERO	1.860	3.108	2.144	3.920	3.270	4.499	2.868	4.260
HIDALGO	2.344	3.311	2.088	3.829	3.611	2.596	2.982	3.710
JALISCO	2.807	4.359	3.728	4.135	4.232	2.541	3.603	4.153
MÉXICO	2.659	3.387	2.095	3.501	2.833	2.815	3.297	3.320
CIUDAD DE MÉXICO	1.709	2.356	2.126	3.423	3.024	2.971	2.978	3.541
MICHOACÁN	2.550	3.254	2.351	3.293	3.370	3.280	3.496	3.729
MORELOS	2.007	3.213	1.971	3.824	2.629	3.593	3.415	4.152
NAYARIT	2.348	2.432	2.760	2.615	2.960	3.150	3.706	3.305
NUEVO LEÓN	2.207	1.668	1.469	3.575	3.237	1.619	2.973	2.247
OAXACA	2.646	4.082	2.875	3.697	3.779	2.662	3.741	3.600
PUEBLA	1.841	3.826	3.958	3.740	3.833	3.490	2.740	4.070
QUERÉTARO	2.249	2.484	2.158	3.398	2.981	2.685	3.018	2.560
QUINTANA ROO	1.922	1.963	1.922	3.061	3.149	3.538	3.602	4.413
SAN LUIS POTOSÍ	2.474	3.009	2.372	3.975	3.673	3.465	3.107	3.957
SINALOA	2.180	2.302	2.458	3.668	2.758	2.898	2.896	3.039
SONORA	1.517	1.768	1.550	3.725	2.450	3.778	3.135	3.466
TABASCO	2.055	3.616	1.962	4.279	2.771	3.810	4.248	4.234
TAMAULIPAS	2.334	2.248	2.599	4.032	2.764	2.170	3.352	3.638
TLAXCALA	2.264	3.679	2.012	3.315	3.213	3.469	3.784	3.968
VERACRUZ	1.890	3.665	2.867	4.087	3.423	2.694	3.198	4.377
YUCATÁN	1.649	3.046	2.280	3.528	2.746	2.426	3.368	2.493
ZACATECAS	1.443	3.098	2.116	3.571	3.605	2.292	3.684	3.850
NATIONAL	**2.209**	**2.815**	**2.300**	**3.635**	**3.162**	**3.011**	**3.302**	**3.568**

Source: IEP

ECONOMIC IMPACT OF VIOLENCE

Table C.1

Economic impact of violence by state, 2015–2019

State	2015	2016	2017	2018	2019
AGUASCALIENTES	31.56	32.73	37.87	42.04	46.21
BAJA CALIFORNIA	148.86	159.10	228.77	276.46	259.12
BAJA CALIFORNIA SUR	31.57	39.94	73.07	33.46	31.82
CAMPECHE	16.80	20.97	19.09	20.39	21.30
CHIAPAS	91.07	88.89	89.36	95.80	88.00
CHIHUAHUA	129.26	155.03	187.51	212.91	230.35
COAHUILA	67.29	66.64	65.98	71.93	68.79
COLIMA	23.04	53.09	69.32	62.84	64.86
DURANGO	268.36	269.13	279.99	358.68	342.79
GUANAJUATO	45.99	47.02	43.76	41.84	41.03
GUERRERO	162.51	177.33	199.26	323.53	340.02
HIDALGO	191.69	206.45	218.10	213.23	175.11
JALISCO	51.70	58.58	67.02	74.65	85.89
MÉXICO	496.49	509.10	546.56	567.44	574.93
CIUDAD DE MÉXICO	268.36	269.13	279.99	358.68	342.79
MICHOACÁN	134.27	166.24	174.15	190.21	218.42
MORELOS	82.62	93.32	87.62	103.39	114.39
NAYARIT	19.70	15.42	34.86	39.21	27.93
NUEVO LEÓN	117.90	140.07	137.99	164.87	152.38
OAXACA	53.80	129.24	126.62	150.95	151.00
PUEBLA	129.89	148.51	155.54	193.57	203.55
QUERÉTARO	52.14	51.10	53.57	63.16	62.74
QUINTANA ROO	47.17	39.66	53.71	85.12	90.22
SAN LUIS POTOSÍ	55.15	62.61	76.94	90.23	76.01
SINALOA	111.65	125.25	153.94	118.45	106.14
SONORA	88.20	98.14	100.04	103.77	130.65
TABASCO	62.65	69.96	80.42	93.06	99.96
TAMAULIPAS	124.17	135.55	146.93	139.96	124.16
TLAXCALA	23.50	23.53	25.58	28.12	30.75
VERACRUZ	136.42	185.25	223.05	215.89	206.62
YUCATÁN	36.79	40.67	34.62	36.79	26.17
ZACATECAS	42.36	61.51	70.71	70.31	70.62
NATIONAL	**3,268.64**	**3,703.75**	**4,119.33**	**4,584.62**	**4,535.26**

Source: IEP

Table C.2

Economic impact per capita, 2019

State	Per capita impact
AGUASCALIENTES	32,168
BAJA CALIFORNIA	72,052
BAJA CALIFORNIA SUR	39,552
CAMPECHE	21,050
CHIAPAS	60,842
CHIHUAHUA	15,338
COAHUILA	21,351
COLIMA	83,156
DURANGO	21,726
GUANAJUATO	47,753
GUERRERO	54,815
HIDALGO	27,846
JALISCO	37,133
MÉXICO	33,113
CIUDAD DE MÉXICO	37,668
MICHOACÁN	45,316
MORELOS	56,158
NAYARIT	21,482
NUEVO LEÓN	27,258
OAXACA	36,368
PUEBLA	30,871
QUERÉTARO	27,661
QUINTANA ROO	53,118
SAN LUIS POTOSÍ	33,574
SINALOA	26,394
SONORA	42,646
TABASCO	38,934
TAMAULIPAS	33,988
TLAXCALA	22,090
VERACRUZ	24,117
YUCATÁN	11,372
ZACATECAS	42,248
NATIONAL	**36,129.00**

Source: IEP

ENDNOTES

SECTION 1: RESULTS

1 INEGI. 2019. Encuesta Nacional de Victimización sobre Seguridad Pública (ENVIPE). Retrieved from <https://www.inegi.org.mx/contenidos/programas/envipe/2019/doc/envipe2019_presentacion_nacional.pdf>

2 Congressional Research Service (20 Dec 2019). "Mexico: Organized Crime and Drug Trafficking Organizations". Retrieved from: <https://fas.org/sgp/crs/row/R41576.pdf>.

3 Contrares, R.A.R. (30 Jan 2020). "Tlaxcala lidera en crecimiento económico nacional". El Economista. Retrieved from: <https://www.eleconomista.com.mx/estados/Tlaxcala-lidera-en-crecimiento-economico-nacional-20200130-0016.html>.

4 Contrares, R.A.R. (30 Jan 2020). "Tlaxcala lidera en crecimiento económico nacional". El Economista. Retrieved from: <https://www.eleconomista.com.mx/estados/Tlaxcala-lidera-en-crecimiento-economico-nacional-20200130-0016.html>.

5 Dalby, C. (12 Dec 2019). "Gulf of Mexico Oil Industry Reeling From Hundreds of Pirate Attacks in 2019". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/gulf-mexico-oil-industry-pirate-attacks/>.

6 Mexico News Daily (23 Dec 2019). "16 tourism projects worth over US $3 billion under way in Riviera Nayarit". Retrieved from: <https://mexiconewsdaily.com/news/16-tourism-projects-under-way-in-riviera-nayarit/>.

7 ENVIPE 2019

8 Congressional Research Service (20 Dec 2019). "Mexico: Organized Crime and Drug Trafficking Organizations". Retrieved from: <https://fas.org/sgp/crs/row/R41576.pdf>.

9 Asmann, P & Corcoran, P & Dalby, C. (16 Jan 2020). "GameChangers 2019: Mexico's Body Count Soars as AMLO Out of Ideas". Retrieved from: <https://www.insightcrime.org/news/analysis/gamechangers-2019-mexico-body-count-amlo/>.

10 Latin Post (8 Jan 2020). "Tijuana Earns Title as 'Most Violent City in the World' With Alarming Death Rate". Retrieved from: <https://www.latinpost.com/articles/143202/20200108/tijuana-death-rate-still-alarming-despite-a-drop-from-2018.htm>.

11 Woody, C. (24 Jan 2017). "Mexico's bloody cartel realignment is intensifying in one of the country's smallest states". Business Insider Australia. Retrieved from: <https://www.businessinsider.com.au/mexico-sinaloa-jalisco-cartel-fighting-violence-in-colima-2017-1?r=US&IR=T>.

12 Bonello, D. (3 June 2019). "How One of Mexico's Biggest Cartels is Trying to Dominate the Country's Wildest West". Vice. Retrieved from: <https://www.vice.com/en_au/article/evy5wj/how-one-of-mexicos-biggest-cartels-is-trying-to-dominate-in-mexicos-wildest-west>.

13 Yucatan Times (30 Jan 2019). "Organized crime related violence on the rise in Cancun". Retrieved from: <https://www.theyucatantimes.com/2019/01/organized-crime-related-violence-on-the-rise-in-cancun/>.

14 Dudley, S. (3 June 2011). "Zetas-La Linea Alliance May Alter Balance of Power in Mexico". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/zetas-la-linea-alliance-may-alter-balance-of-power-in-mexico/>.

15 Grant, W. (8 Nov 2019). "Mexico ambush: How a US Mormon family ended up dead". BBC News, Mexico City. Retrieved from: <https://www.bbc.com/news/world-latin-america-50339377>.

16 Semple, K. (6 Nov 2019). "Mormon Massacre in Mexico May Be Tied to Gang War, officials say". The New York Times. Retrieved from: <https://www.nytimes.com/2019/11/06/world/americas/Lebaron-Family-killed-Mexico.html?searchResultPosition=1>.

17 Dalby, C. (15 Feb 2019). "Mexico's Santa Rosa de Lima Cartel Risks Burning Too Bright, Too Fast". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/mexicos-santa-rosa-de-lima-cartel-el-marro/>.

18 Mexico News Daily (27 Jan 2020). "Guanajuato 'is complicated,' says AMLO as violence continues". Retrieved from: < https://mexiconewsdaily.com/news/guanajuato-is-complicated-says-amlo-as-violence-continues/>.

19 Calderón, L.Y. & Heinle, K. & Ferreira, O.R. & Shirk, D.A. (April 2019). Organized Crime and Violence in Mexico. Retrieved from: <https://justiceinmexico.org/wp-content/uploads/2019/04/Organized-Crime-and-Violence-in-Mexico-2019.pdf>.

20 Asmann, P. (5 June 2019). "Morelos, Mexico's Latest Hotspot for Fragmented Criminal Showdowns". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/morelos-mexico-latest-hotspot-fragmented-criminal-showdowns/>.

21 Mexico News Daily (17 May 2017). "Another deployment to Tierra Caliente". Retrieved from: <https://mexiconewsdaily.com/news/another-deployment-to-tierra-caliente/>.

22 Milenio (21 May 2019). "Homicidios en Guerrero se redujeron hasta 44 por ciento". Retrieved from: <https://www.milenio.com/estados/homicidios-en-guerrero-se-redujeron-hasta-44-por-ciento>.

23 Congressional Research Service (20 Dec 2019). "Mexico: Organized Crime and Drug Trafficking Organizations". Retrieved from: <https://fas.org/sgp/crs/row/R41576.pdf>.

24 Santiago, A. (22 Jan 2020). "Indigenous Musicians in Mexico Burned to Death by Drug Cartel". Latin Post. Retrieved from: <https://www.latinpost.com/articles/143340/20200122/indigenous-musicians-in-mexico-burned-to-death-by-drug-cartel.htm>.

25 Based on data published by SESNSP as of 20 January 2020.

26 Lott Jr., J.R. (21 Oct 2019). "Mexico's Soaring Murder Rate Proves Gun Control is Deadly". Wall Street Journal. Retrieved from: <https://www.wsj.com/articles/mexicos-soaring-murder-rate-proves-gun-control-is-deadly-11571696723>.

27 Linthicum, K. (6 Oct 2019). "Mexicans are killing each other at record rates. The U.S. provides the guns". Los Angeles Times. Retrieved from: <https://www.latimes.com/world/mexico-americas/la-fg-mexico-guns-20190430-story.html>.

28 Grillo, N. (6 Nov 2019). "What Trump Didn't Say About the Massacre in Mexico". The New York Times. Retrieved from: <https://www.nytimes.com/2019/11/06/opinion/mormons-mexico.html>.

29 Tabasco Hoy (3 Oct 2018). "Tabasco, en la mira del CJNG". Retrieved from: <https://www.tabascohoy.com/nota/455833/tabasco-en-la-mira-del-cjng>.

30 Mexico News Daily (16 Nov 2019). "In first 6 months, there have been 18,000 suspected extortion calls by phone". Retrieved from: <https://mexiconewsdaily.com/news/18000-suspected-extortion-calls-by-phone/>.

31 Stevenson, M. (10 Oct 2019). "Once wealthy Mexican state plagued by killings, extortion". ABC News. Retrieved from: <https://abcnews.go.com/International/wireStory/wealthy-mexican-state-plagued-killings-extortion-66164491>.

32 ENVIPE 2019

33 Blankstein, A. & Romero, D. (20 Mar 2019). "'Virtual kidnapping' calls may be coming from Mexico, U.S. officials say". NBC News. Retrieved from: <https://www.nbcnews.com/news/crime-courts/virtual-kidnapping-calls-may-be-coming-mexico-u-s-officials-n985186>.

34 WorldAware (4 Apr 2018). "Virtual Kidnapping in the US and Mexico". Retrieved from: <https://www.worldaware.com/resources/blog/virtual-kidnapping-us-and-mexico>.

35 ENVIPE 2019

36 National Survey on Business Victimization (ENVE) (2018). Retrieved from: <https://en.www.inegi.org.mx/programas/enve/2018/default.html#Documentation>.

37 Linthicum, K. (30 Jan 2019). "Must Reads: Meth and murder: A new kind of drug war has made Tijuana one of the deadliest cities on Earth". Los Angeles Times. Retrieved from: <https://www.latimes.com/world/mexico-americas/la-fg-mexico-tijuana-drug-violence-20190130-htmlstory.html>.

38 Villalba, J. (27 Aug 2019). "Internal Strife Within the CJNG in Baja California, Mexico". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/brief/internal-strife-cjng-baja-california-mexico/>.

39 Villalba, J. (27 Aug 2019). "Internal Strife Within the CJNG in Baja California, Mexico". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/brief/internal-strife-cjng-baja-california-mexico/>.

40 Linthicum, K. (30 Jan 2019). "Must Reads: Meth and murder: A new kind of drug war has made Tijuana one of the deadliest cities on Earth". Los Angeles Times. Retrieved from: <https://www.latimes.com/world/mexico-americas/la-fg-mexico-tijuana-drug-violence-20190130-htmlstory.html>.

41 Linthicum, K. (30 Jan 2019). "Must Reads: Meth and murder: A new kind of drug war has made Tijuana one of the deadliest cities on

Earth". Los Angeles Times. Retrieved from: <https://www.latimes.com/world/mexico-americas/la-fg-mexico-tijuana-drug-violence-20190130-htmlstory.html>.

42 Ríos, A. (2 Sep 2017). "Acecha la trata de migrantes en Coahuila". Vanguardia. Retrieved from: <https://vanguardia.com.mx/articulo/acecha-la-trata-migrantes-en-coahuila>. (Accessed 4 Feb 2019).

43 Dibble, S. (20 Mar 2018). "Rise of new cartel leading to more violence, USD study shows". The San Diego Union-Tribune. Retrieved from: <https://www.sandiegouniontribune.com/news/border-baja-california/sd-me-usd-cjng-20180320-story.html>.

44 Mexico News Daily. (1 Jan 2020). "Sinaloa finishes the year with 934 homicides, down 17% from 2018". Retrieved from: <https://mexiconewsdaily.com/news/sinaloa-finishes-the-year-with-934-homicides/>.

45 Congressional Research Service (20 Dec 2019). "Mexico: Organized Crime and Drug Trafficking Organizations". Retrieved from: <https://fas.org/sgp/crs/row/R41576.pdf>.

46 Congressional Research Service (20 Dec 2019). "Mexico: Organized Crime and Drug Trafficking Organizations". Retrieved from: <https://fas.org/sgp/crs/row/R41576.pdf>.

47 Asmann, P. (16 Jan 2019). "Fragmentation: The Violent Tailspin of Mexico's Dominant Cartels". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/violence-spikes-criminal-groups-fragment-mexico/>.

48 Asmann, P. (16 Jan 2019). "Fragmentation: The Violent Tailspin of Mexico's Dominant Cartels". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/violence-spikes-criminal-groups-fragment-mexico/>.

49 Asmann, P. (16 Jan 2019). "Fragmentation: The Violent Tailspin of Mexico's Dominant Cartels". InSight Crime. Retrieved from: <https://www.insightcrime.org/news/analysis/violence-spikes-criminal-groups-fragment-mexico/>.

50 Senado de la República Mexicana. (4 Dec 2018). Dictamen de las Comisiones Unidas de Puntos Constitucionales y de Estudios Legislativos Segunda, con Proyecto de Decreto por el que se Reforma el Artículo 19 de la Constitución Política de los Estados Unidos Mexicanos, en Materia de Prisión Preventiva Oficiosa. Retrieved from: <http://infosen.senado.gob.mx/sgsp/gaceta/64/1/2018-12-04-1/assets/documentos/Dict_PC_art_19_CPEUM_prision_preventiva.pdf>. (Accessed 8 Mar 2019).

51 Judiciary of Mexico. Article 19 of the Mexican Constitution. Retrieved from: <http://www.ordenjuridico.gob.mx/Constitucion/articulos/19.pdf >. (Accessed 27 Feb 2019).

52 Judiciary of Mexico. Article 19 of the Mexican Constitution. Retrieved from: <http://www.ordenjuridico.gob.mx/Constitucion/articulos/19.pdf >. (Accessed 27 Feb 2019).

53 Fernández, V. (21 Feb 2019). "Prisión preventiva oficiosa: la desconfianza manda". Nexos. Retrieved from: <https://anticorrupcion.nexos.com.mx/?p=799>. (Accessed 1 Mar 2019).

54 Sinaloa Secretaría de Seguridad Pública. (2017). Programa Sectorial de Seguridad Pública 2017-2021. Retrieved from: <https://media.transparencia.sinaloa.gob.mx/uploads/files/1/Version%20Final%20Sectorial_SSP%2001mar2018.pdf>.

55 Sinaloa Secretaría de Seguridad Pública. (2017). Programa Sectorial de Seguridad Pública 2017-2021. Retrieved from: <https://media.transparencia.sinaloa.gob.mx/uploads/files/1/Version%20Final%20Sectorial_SSP%2001mar2018.pdf>.

56 Resendiz, J. (3 Jan 2020). "Police get upper hand over cartel hitmen after 3 days of gun battles in Nuevo Laredo". Border Report. Retrieved from: <https://www.borderreport.com/hot-topics/border-crime/police-get-upper-hand-over-cartel-hitmen-after-3-days-of-gun-battles-in-nuevo-laredo/>.

57 Gonzalez, R.H. (June 2017). "Governor of Tamaulipas Pledges to End Organized Crime in His State". Texas Border Business. Retrieved from: <https://texasborderbusiness.com/governor-tamaulipas-pledges-end-organized-crime-state/>.

58 Flannery, N.P. (6 Nov 2018). "Splinter Groups of Cartel Gunmen Drive Rising Violence in Tamaulipas, Mexico". Forbes. Retrieved from: <https://www.forbes.com/sites/nathanielparishflannery/2018/11/06/splinter-groups-of-cartel-gunmen-drive-rising-violence-in-tamaulipas-mexico/#41afea12407d>.

59 IHS Markit. (13 Feb 2018). "Drug-related violence on a downward trend in Mexico's Coahuila state but 'narco-messages' highlight organised crime presence". Retrieved from: <https://ihsmarkit.com/country-industry-forecasting.html?ID=10659123043>.

60 IHS Markit. (13 Feb 2018). "Drug-related violence on a downward trend in Mexico's Coahuila state but 'narco-messages' highlight organised crime presence". Retrieved from: <https://ihsmarkit.com/country-industry-forecasting.html?ID=10659123043>.

61 Sundber, R. & Melander, E. (2013). "Introducing the UDP Georeferenced Event Dataset". Journal of Peace Research. 50(4):523–532.

62 Olson, E.L. & Hinojosa, G. (12 July 2017). "What's Behind Rising Violence in Colima?: A Brief Look at 2016's Most Violent Mexican State". Wilson Center. Retrieved from: <https://www.wilsoncenter.org/article/whats-behind-rising-violence-colima-brief-look-2016s-most-violent-mexican-state>.

63 BBC News (24 Oct 2019). "Mexico cartels: Which are the biggest and most powerful?" Retrieved from: <https://www.bbc.com/news/world-latin-america-40480405>.

64 Associated Press (17 Feb 2019). "Cancún shooting: five people gunned down in Mexico's tourist hotspot". The Guardian. Retrieved from: <https://www.theguardian.com/world/2019/feb/17/cancun-shooting-five-people-gunned-down-in-mexicos-tourist-hotspot>.

65 Justice in Mexico (25 Dec 2019). "Attacks Against Police Highlight Violence in Guanajuato". Retrieved from: <https://justiceinmexico.org/attacks-against-police-highlight-violence-in-guanajuato/>.

66 Calderón, L.Y. & Heinle, K. & Ferreira, O.R. & Shirk, D.A. (April 2019). Organized Crime and Violence in Mexico. Retrieved from: <https://justiceinmexico.org/wp-content/uploads/2019/04/Organized-Crime-and-Violence-in-Mexico-2019.pdf>.

67 Calderón, L.Y. & Heinle, K. & Ferreira, O.R. & Shirk, D.A. (April 2019). Organized Crime and Violence in Mexico. Retrieved from: <https://justiceinmexico.org/wp-content/uploads/2019/04/Organized-Crime-and-Violence-in-Mexico-2019.pdf>.

68 Ramos, M. (2 Jan 2020). "Guanajuato rompe record en homicidios en 2019". Milenio. Retrieved from: < https://www.milenio.com/policia/guanajuato-rompe-record-en-homicidios-en-2019>.

69 Calderón, L.Y. & Heinle, K. & Ferreira, O.R. & Shirk, D.A. (April 2019). Organized Crime and Violence in Mexico. Retrieved from: <https://justiceinmexico.org/wp-content/uploads/2019/04/Organized-Crime-and-Violence-in-Mexico-2019.pdf>.

70 Congressional Research Service (20 Dec 2019). "Mexico: Organized Crime and Drug Trafficking Organizations". Retrieved from: <https://fas.org/sgp/crs/row/R41576.pdf>.

SECTION 2: EXPLAINING THE DYNAMICS OF VIOLENCE IN MEXICO

1 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: Abril. Pg. 6.

2 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: Abril. Pg. 3.

3 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: Abril. Pg. 15.

4 A homicide rate above 10 per 100,000 people is generally considered an epidemic. Mexico's homicide rate is nearing 30, and rates of victimization from all forms of violence are significantly higher.

5 INEGI. 2018. "Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2018: Principales Resultados." Ciudad de México: 25 Septiembre. Disponible de: https://www.inegi.org.mx/contenidos/programas/envipe/2018/doc/envipe2018_presentacion_nacional.pdf

6 Institute for Economics & Peace. 2019. "Mexico Peace Index 2019: Identifying and Measuring the Factors that Drive Peace." Sydney: April. Available from: http://visionofhumanity.org/reports; INEGI. 2018. Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública. Ciudad de México. Available from: https://www.inegi.org.mx/programas/envipe/2018/.

7 INEGI. 2019. Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública. Ciudad de México. Disponible de: https://www.inegi.org.mx/programas/envipe/2019/.

8 INEGI. 2018. "Características de las Defunciones Registradas en México durante 2017." Comunicado de Prensa Núm. 525/18. Ciudad de México: 31 octubre. Disponible de: https://www.inegi.org.mx/contenidos/saladeprensa/boletines/2018/EstSociodemo/DEFUNCIONES2017.pdf

9 In 2018, 36.7 percent of homicide victims were between the ages of 15 and 29. On average, from 1990 to 2018, this share was 38.4 percent each year.

10 "Extreme" homicide rates are defined in Section 1 of this report.

11 UNODC has recently implemented training programs in several states to help law enforcement officers protect victims of sexual violence and violence within the family. Programs focused on youth around the country have established alternative justice programs for young people, in order to prevent them from becoming trapped in cycles of crime and incarceration.

12 Estimated based on the following: INEGI has recorded roughly 260,000 intentional homicides over the 13 years from 2007 to 2018, inclusive. SESNSP has thus far recorded at least 35,500 deaths in 2019. IEP has estimated that 60 percent of these can be attributed to organized crime related violence, based on the annual dataset produced by Lantia Consultores.

13 Semáforo Delictivo. "Semáforo de Ejecuciones." Ciudad de México. Disponible de: http://www.semaforo.mx/content/semaforo-de-ejecuciones

14 Congressional Research Service, 2019, "Mexico: Organized Crime and Drug Trafficking Organizations," Washington, D.C.: 20 December, R41576.

15 Croicu, M. and R. Sundberg. 2016. "UCDP GED Codebook version 5.0", Uppsala Conflict Data Program (UCDP), Department of Peace and Conflict Research, Uppsala University. Available from: https://ucdp.uu.se/downloads/ged/ucdp-ged-50-codebook.pdf

16 The UCDP data also records a conflict between the Government of Mexico and "Civilians," but this conflict has been omitted here as the analysis focuses on conflict within and between criminal organizations. The use of the term "civilians" indicates that it is unclear who specifically the Mexican military was fighting against.

17 Congressional Research Service, 2019, "Mexico: Organized Crime and Drug Trafficking Organizations," Washington, D.C.: 20 December, R41576.

18 Security analysts report a formal split in 2008. Congressional Research Service, 2019, "Mexico: Organized Crime and Drug Trafficking Organizations," Washington, D.C.: 20 December, R41576. However, conflict events between the Sinaloa DTO and the Juarez DTO are recorded by UCDP as early as 2006.

19 UCDP GED data, high estimate. UCDP publishes three estimates for conflict fatalities: a high estimate of deaths, a low estimate of deaths, and what they term the "best" estimate. In most cases, the best estimate is most reliable, but organized crime violence is especially difficult to track and UCDP advises that all estimates of fatalities in Mexico can be considered conservative.

20 Wilkinson, T. 2012. "Sinaloa cartel, Zetas push Mexico's drug violence to new depths." Los Angeles Times. 27 May. Available from: https://web.archive.org/web/20121101074757/http://articles.latimes.com/2012/may/27/world/la-fg-mexico-cartel-war-20120528/2

21 UCDP. 2018. "Dyad summary: Beltrán Leyva Cartel – Beltrán Leyva Cartel-Valdez Villareal faction." Available from: https://ucdp.uu.se/nonstate/5544

22 UCDP. 2018. "Dyad summary: Beltrán Leyva Cartel – Beltrán Leyva Cartel-Valdez Villareal faction." Available from: https://ucdp.uu.se/nonstate/5544

23 CNN México. 2011. "El origen de 'Los Zetas': brazo armado del cártel del Golfo." Ciudad de México: 5 julio. Disponible de: https://web.archive.org/web/20130128174447/http://mexico.cnn.com/nacional/2011/07/05/el-origen-de-los-zetas-brazo-armado-del-cartel-del-golfo

24 CNN México. 2011. "El origen de 'Los Zetas': brazo armado del cártel del Golfo." Ciudad de México: 5 julio. Disponible de: https://web.archive.org/web/20130128174447/http://mexico.cnn.com/nacional/2011/07/05/el-origen-de-los-zetas-brazo-armado-del-cartel-del-golfo

25 Congressional Research Service, 2019, "Mexico: Organized Crime and Drug Trafficking Organizations," Washington, D.C.: 20 December, R41576, pg. 21.

26 Ramsey, G. 2011. "'Acapulco Cartel' Emerges to Compete with Mexico's Disorganized Crime." InSight Crime. 3 February. Available from: https://www.insightcrime.org/news/analysis/acapulco-cartel-emerges-to-compete-with-mexicos-disorganized-crime/

27 Ramsey, G. 2011. "'Acapulco Cartel' Emerges to Compete With Mexico's Disorganized Crime." InSight Crime. 3 February. Available from: https://www.insightcrime.org/news/analysis/acapulco-cartel-emerges-to-compete-with-mexicos-disorganized-crime/

28 Congressional Research Service, 2019, "Mexico: Organized Crime and Drug Trafficking Organizations," Washington, D.C.: 20 December, R41576.

29 Congressional Research Service, 2019, "Mexico: Organized Crime and Drug Trafficking Organizations," Washington, D.C.: 20 December, R41576.

30 UCDP. 2018. Georeferenced Event Dataset (GED). Presented in: Sundberg, R. and E. Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." Journal of Peace Research, vol. 50, no. 4, 523-532.

31 Ramsey, G. 2011. "Mexico captures 'leader' of Independent Cartel of Acapulco." InSight Crime. 6 December. Available from: https://www.insightcrime.org/news/brief/mexico-captures-leader-of-independent-cartel-of-acapulco/

32 UCDP. 2018. "Actor summary: Los Caballeros Templarios." Available from: https://ucdp.uu.se/actor/1150

33 Etellekt Consultores. 2018. "Informe de Violencia Política en México, julio-agosto 2018." Ciudad de México: septiembre. Pg. 34.

34 Graham, D. 2018. "RIP PRI? Mexico's ruling party in 'intensive care' after drubbing." Reuters. Mexico City: 4 July. Available from: https://www.reuters.com/article/us-mexico-election-pri/rip-pri-mexicos-ruling-party-in-intensive-care-after-drubbing-idUSKBN1JU1H1

35 Etellekt Consultores. 2018. "Informe de Violencia Política en México, julio-agosto 2018." Ciudad de México: septiembre.

36 Morena. "Declaración de principios de Morena." 2014. Ciudad de México. Disponible de: http://morena.si/wp-content/uploads/2014/12/declaracion-de-principios-de-morena1.pdf

37 Etellekt Consultores. 2018. "Informe de Violencia Política en México, julio-agosto 2018." Ciudad de México: septiembre.

38 Etellekt Consultores. 2019. "Informe de Violencia Política en v: 1er Trimestre 2019." Ciudad de México: Abril. Pg. 6.

39 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 3.

40 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 15.

41 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 16.

42 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 7.

43 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 7.

44 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 10.

45 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 13.

46 World Bank. 2019. "Proportion of seats held by women in national parliaments (%)." Washington, D.C. Available from: https://data.worldbank.org/indicator/SG.GEN.PARL.ZS?most_recent_value_desc=true

47 INEGI. 2019. "Censo Nacional de Poderes Legislativos Estatales 2019." Ciudad de México. Disponible de: https://www.inegi.org.mx/programas/cnple/2019/

48 Etellekt Consultores. 2019. "Informe de Violencia Política en México: 1er Trimestre 2019." Ciudad de México: abril. Pg. 25.

49 The visualizations in this section of the report use the fewest possible variables in order to arrive at the same conclusions with the least amount of complexity. However, when the rate of kidnapping and human trafficking is included in the analysis, it corresponds to opportunistic violence. Kidnapping and human trafficking are usually associated with criminal organizations. Kidnapping is used as a ransom or intimidation tactic, while human trafficking includes forced labor, sex slavery, and smuggling undocumented migrants.

50 Using a KNN methodology for five clusters, based on the four crime indicators included in the Index.

51 Meza, A. 2019. "The School of Terror: Inside a Jalisco Cartel training camp in Mexico." InSight Crime. 13 June. Available from: https://www.insightcrime.org/news/analysis/training-grounds-mexico-jalisco-cartel/

SECTION 3: THE ECONOMIC VALUE OF PEACE IN MEXICO

1 Ravelo, R. (2012). Narcomex, Historia e Historias de una Guerra. Mexico: Vintage Español.

2 Global Burden Of Diseases (2017). GBD Profile: Mexico. Retrieved from: <https://www.healthdata.org/sites/default/files/files/country_profiles/GBD/ihme_gbd_country_report_mexico.pdf>. (Accessed 15 Jan 2020).

3 Comisión Nacional de los Salarios Mínimos (2018). Salarios. Retrieved from: <https://www.gob.mx/cms/uploads/attachment/file/311161/Salarios-marzo2018.pdf>. (Accessed 15 Jan 2020).

4 Gutierrez-Romero, R. (2015). "Estimating the impact of Mexican drug cartels and drug-related homicides on crime and perceptions of safety. Journal of economic geography". 16(4):941–973.

5 This analysis only includes homicide, violent crime, organized crime and fear of violence. It does not include government spending, private expenditure on protection or the costs of incarceration.

6 Muller, A. (29 Mar 2018). "Mexico – Fiscal deficit widened a bit in February". Itaú BBA. Retrieved from: <https://www.itau.com.br/itaubba-en/economic-analysis/publications/macro-latam/mexico-fiscal-deficit-widened-a-bit-in-february>. (Accessed 29 Mar 2018).

7 Ruiz, J. (2019). "MEXICO – 3Q19 Public Finances supported by one-off revenues". Itaú BBA. Retrieved from: <https://www.itau.com.br/itaubba-en/economic-analysis/publications/macro-latam/mexico-3q19-public-finances-supported-by-one-off-revenues>. (Accessed 30 Dec 2019).

8 See http://www.diputados.gob.mx/sedia/sia/se/SAE-ISS-20-19.pdf for an itemization of domestic security expenditure.

9 Jaitman, L. (2017). "The Costs of Crime and Violence: New Evidence and Insights in Latin America and the Caribbean, Inter-American Development Bank." Retrieved from: <https://publications.iadb.org/

publications/english/document/The-Costs-of-Crime-and-Violence-New-Evidence-and-Insights-in-Latin-America-and-the-Caribbean.pdf> (Accessed 15 Jan 2019).

10 Ortega, J.A.L.C. & Lara, G.R.S. (2018). "La Impunidad Subnacional en México y sus Dimensiones". Índice Global de Impunidad México 2018. Retrieved from: <https://www.udlap.mx/igimex/assets/files/2018/igimex2018_ESP.pdf>.

11 IMCO (2018). Índice Global de Impunidad México 2018 vía UDLAP. Retrieved from: <https://imco.org.mx/temas/indice-global-impunidad-mexico-2018-via-udlap/>. (Accessed 15 Jan 2019).

12 Iqbal, M. & Bardwell, H. & Hammond, D. (2019). "Estimating the Global Economic Cost of Violence: Methodology Improvement and Estimate Updates". Defence and Peace Economics, pp.1-24.

13 Ashby, N.J. & Ramos, M.A. (2013). "Foreign direct investment and industry response to organized crime: The Mexican case". European Journal of Political Economy. 30:80–91.

14 Utar, H. (2018) Firms and Labor in Times of Violence: Evidence from the Mexican Drug War.

15 De la Miyar, J.R.B. (2016). "The economic consequences of the mexican drug war". Peace Economics, Peace Science and Public Policy. 22(3):213–246.

16 Jiménez, I.M. (1 Sep 2010). "La inseguridad cuesta 1.2 puntos del PIB". Expansion. Retrieved from: <https://expansion.mx/economia/2010/09/01/hacienda-cordero-inseguridad-dolares>.

17 Bel, G., Holst, M. (2018). "Assessing the effects of the Mexican Drug War on economic growth: An empirical analysis". Southern Economic Journal. 85(1):276–303.

18 Enamorado, T. & López-Calva, L.F. & Rodríguez-Castelán, C. (2014). "Crime and growth convergence: Evidence from Mexico". Economics Letters. 125(1):9–13.

19 De la Miyar, J. (2016). "The economic consequences of the Mexican drug war". Peace Economics, Peace Science and Public Policy. 22(3):213–246.

20 Gutiérrez-Romero, R. & Oviedo, M. (2017). "The good, the bad and the ugly: the socioeconomic impact of drug cartels and their violence". Journal of Economic Geography.18(6):1315–1338.

21 Ríos, V. (21 Dec 2017). "Crime and violence effects on economic diversity: The case of Mexico's drug war". Department of Government, Harvard University.

22 Robles, G. & Calderón, G. & Magaloni, B. (2013). "The economic consequences of drug trafficking violence in Mexico". Poverty and Governance Series Working Paper, Stanford University.

23 Velásquez, A. (2019). "The economic burden of crime: Evidence from Mexico". Journal of Human Resources.

24 Holst, M. (10 Apr 2019). "Las cuatro regions turísticas más violentas del país". México Evalúa. Retrieved from: <https://www.mexicoevalua.org/2019/04/10/las-cuatro-regiones-turisticas-violentas-del-pais/>.

25 Cabral, R. & Mollick, A.V. & Saucedo, E. (2016). "Violence in Mexico and its effects on labor productivity". The Annals of Regional Science. 56(2):317–339.

26 Ríos, V. (2008). "Evaluating the economic impact of Mexico's drug trafficking industry". Department of Government, Harvard University.

27 De la Miyar, J. (2016). "The economic consequences of the mexican drug war". Peace Economics, Peace Science and Public Policy. 22(3):213–246.

28 Enamorado, T. & López-Calva, L.F. & Rodríguez-Castelán, C. (2014). "Crime and growth convergence: Evidence from Mexico". Economics Letters. 125(1):9–13.

29 Gutiérrez-Romero, R., Oviedo, M. (2017). "The good, the bad and the ugly: the socioeconomic impact of drug cartels and their violence". Journal of Economic Geography. 18(6):1315–1338.

30 Enamorado, T. & López-Calva, L.F. & Rodríguez-Castelán, C. & Winkler, H. (2016). "Income inequality and violent crime: Evidence from Mexico's drug war". Journal of Development Economics. 120:128–143.

31 De la Miyar, J. (2016). "The economic consequences of the mexican drug war". Peace Economics, Peace Science and Public Policy. 22(3):213–246.

32 Robles, G. & Calderon, G. & Magaloni, B. (2013). "The economic consequences of violence and crime in Mexico - IDB Working Paper No. 426". Inter-American Development Bank.

33 Leo, L.A., Jurado, A., Ramírez-Álvarez A.A. (Nov 2019). Internal Migration and Drug Violence in Mexico. Brown University. Retrieved from: <https://www.brown.edu/academics/economics/candidates/sites/brown.edu.academics.economics.candidates/files/Job%20Market%20Paper.pdf>.

34 BenYishay, A., Pearlman, S. (1 June 2013). Homicide and Work: The Impact of Mexico's Drug War on Labor Market Participation.

35 Robles, G. & Calderón, G. & Magaloni, B. (2013). "The economic consequences of drug trafficking violence in Mexico". Poverty and

36 Enamorado, T. & López-Calva, L.F. & Rodríguez-Castelán, C. (2014). "Crime and growth convergence: Evidence from Mexico". Economics Letters. 125(1):9–13.

37 Arias, J. & Esquivel, G. (2012). A note on the side effects of the war on drugs: labor market outcomes in Mexico.

38 Robles, G. & Calderón, G. & Magaloni, B. (2013). "The economic consequences of drug trafficking violence in Mexico". Poverty and Governance Series Working Paper, Stanford University.

39 Gutiérrez-Romero, R. & Oviedo, M. (2017). "The good, the bad and the ugly: the socioeconomic impact of drug cartels and their violence". Journal of Economic Geography. 18(6):1315–1338.

40 Utar, H. (2018). Firms and Labor in Times of Violence: Evidence from the Mexican Drug War.

41 Velásquez, A. (2019). "The economic burden of crime: Evidence from Mexico". Journal of Human Resources. 0716–8072.

42 Dell, M. (2015). "Trafficking networks and the Mexican drug war". American Economic Review. 105(6):1738–79.

43 Enamorado, T. & López-Calva, L.F. & Rodríguez-Castelán, C. (2014). "Crime and growth convergence: Evidence from Mexico". Economics Letters. 125(1):9–13.

44 Gutiérrez-Romero, R. & Oviedo, M. (2017). "The good, the bad and the ugly: the socioeconomic impact of drug cartels and their violence". Journal of Economic Geography. 18(6):1315–1338.

45 Jaitman, L. (12 Nov 2015). "¿Qué impacto tiene la delincuencia en el precio de su vivienda? El caso de México". Sin Miedos. Retrieved from: <https://blogs.iadb.org/seguridad-ciudadana/es/que-impacto-tiene-la-delincuencia-en-el-precio-de-su-vivienda-el-caso-de-mexico/>.

46 Díaz Perez, M. C. y R. R. Viramontes. (2019). "La violencia como causa de desplazamiento interno forzado. Aproximaciones a su análisis en México." Consejo Nacional de Población, Ciudad de México.

47 Ajzenman, N. & Galiani, S. & Seira, E. (2015). "On the distributive costs of drug-related homicides". The Journal of Law and Economics. 58(4):779–803.

48 Brauer, J. & Marlin, J. (2009). "Defining Peace Industries and Calculating the Potential Size of a Gross World Product by Country and by Economic Sector". Institute for Economics and Peace, Sydney.

SECTION 4: POSITIVE PEACE IN MEXICO

1 Institute for Economics and Peace (July 2019). Positive Peace Report 2019. Retrieved from: <http://visionofhumanity.org/>

2 Mexico is included in the Central America and Caribbean region in the global Positive Peace Index based on the regional grouping of the underlying index data sources. In terms of peace and security, Mexico has more in common with its Central American neighbors than with the US and Canada, making Central America a more useful analytical category.

3 Schwab, K. (2017). "The Global Competitiveness Report 2017-2018". World Economic Forum. Retrieved from: <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf>.

4 El Economista (7 Feb 2018). "Comercio Récord entre México y Estados Unidos". Retrieved from: <https://www.eleconomista.com.mx/empresas/Comercio-record-entre-Mexico-y-Estados-Unidos-20180207-0087.html>.

5 iContainers (12 June 2018). "Ranking: los 5 Puertos más importantes en México". Retrieved from: <https://www.icontainers.com/es/2018/06/12/ranking-5-puertos-mas-importantes-mexico/>.

6 El Economista (20 Feb 2018). "Setor Hotelero en Península de Yucatán Detonará Próximamente". Retrieved from: <https://www.eleconomista.com.mx/estados/Sector-hotelero-en-peninsula-de-Yucatan-detonara-proximamente-20180220-0029.html>.

7 Institute for Economics and Peace (2017). Mexico Peace Index 2018, table 3.1, page 45. Retrieved from: <http://visionofhumanity.org/reports/>.

8 IEP calculations based on data provided in Article 19 reports from 2015, 2016, 2017 and 2018.

9 Verdades Quintana Roo (8 May 2019). "Aprueba Congreso de Quintana Roo por unanimidad, paridad de género en el servicio público". Retrieved from: <https://verdadesquintanaroo.com/aprueba-congreso-quintana-roo-unanimidad-paridad-genero-en-servicio-publico/>.

10 Aquino, E. (27 June 2018). "De norte a sur, la corrupción que arrebata vidas y niega futuros se sofistica y permanece impune en México". Animal Politico. Retrieved from: <https://www.animalpolitico.com/2018/06/atlas-corrupcion-mexico/>.

11 Latinamerica Meetings (22 Nov 2017). "Estado de México: gran destino para turismo de negocios". Retrieved from: <http://lmmexico.com/estado-mexico-gran-destino-turismo-negocios/>.

12 Amedi Notiias (20 Oct 2016). "Edomex suma 16 ataques a la prensa en

2016: Artículo 19; gobiernos, principales agresores, alerta". Retrieved from: <https://www.amedi.org.mx/edomex-suma-16-ataques-a-la-prensa-en-2016-articulo-19-gobiernos-principales-agresores-alerta/>.

13 Piña, I. (17 June 2017). "Michoacán, de los estados más corruptos". Retrieved from: <https://www.contramuro.com/michoacan-de-los-estados-mas-corruptos/>.

14 Arrieta, C. (17 Jul 2017). "Michoacán alista Sistema Estatal Anticorrupción". El Universal – Estados. Retrieved from: <https://www.eluniversal.com.mx/articulo/estados/2017/07/17/michoacan-alista-sistema-estatal-anticorrupcion>.

15 CC News (5 Apr 2019). "Construirán en Hidalgo el primer acelerador de partículas de México". Retrieved from: <https://news.culturacolectiva.com/mexico/construiran-en-hidalgo-el-primer-acelerador-de-particulas-de-mexico/>.

16 Revista de Educación y Cultura (17 June 2014). "Querétaro es Puntero en Educación Nacional". Retrieved from: <https://educacionculturaaz.com/queretaro-es-puntero-en-educacion-nacional/>.

17 Aguilar, J.B. (28 December 2017). Confianza en las policías. El Universal – Opinión, Querétaro. Retrieved from: <https://www.eluniversalqueretaro.mx/content/confianza-en-las-policias>.

18 Código San Luis – Periódico en Línea (5 Apr 2019). San Luis Potosí, Tierra de la Muerte. Retrieved from: <https://www.codigosanluis.com/muerte-tierra-slp/>.

19 El Universal – Nación, San Luis Potosí (8 Dec 2019). "Impunidad, factor común en ataques a periodistas". Retrieved from: <https://sanluis.eluniversal.com.mx/nacion/03-05-2018/impunidad-factor-comun-en-ataques-periodistas>.

20 Código San Luis (4 Dec 2019). "Periodistas en SLP sufren campañas de desprestigio y amenazas por parte de funcionarios públicos, denuncia Artículo 19". Retrieved from: <https://www.codigosanluis.com/periodistas-slp-sufren-desprestigio-amenazas-funcionarios-articulo-19/>.

21 Medrano, M. (4 Dec 2019). "Proponen ampliar Lay de Estatal de Protección a Periodistas". El Universal. Retrieved from: <https://sanluis.eluniversal.com.mx/politica/07-06-2019/proponen-ampliar-ley-de-estatal-de-proteccion-periodistas>.

22 González, L. (26 Mar 2018). "Aguascalientes, Edomex y Guerrero superan media nacional en corrupción de trámites". El Economista. Retrieved from: <https://www.eleconomista.com.mx/empresas/Aguascalientes-Edomexy-Guerrerosuperan-media-nacional-en-

corrupcion-de-tramites-20180326-0051.html>.

23 MartÍnez, L. (17 Apr 2019). "Aguascalientes ocupa segundo lugar en México en temas de corrupción". SDP Notícias – Estados. Retrieved from: <https://www.sdpnoticias.com/estados/aguascalientes-segundo-mexico-lugar-ocupa.html>.

24 Nieves, A. J. F. (1 Oct 2019). "Gobierno de Aguascalientes no Confía and la Policía Municipal". A Jornada Aguascalientes. Retrieved from: <https://www.lja.mx/2019/10/gobierno-del-estado-de-aguascalientes-no-confia-en-la-policia-municipal/>.

25 Patiño, D. (3 May 2018). "Campeche busca 'despetrolizar' su economía con zona económica". Expansión. Retrieved from: <https://expansion.mx/economia/2018/05/03/campeche-busca-despetrolizar-su-economia-con-zona-economica>.

26 Animal Politico (1 Nov 2017). "#SemáforoEconómico: 9 estados sufren caída económica en el segundo trimestre de 2017". Retrieved from: <https://www.animalpolitico.com/2017/11/economia-9-estados-cae-segundo-trimestre-2017-tabasco-campeche-los-mas-afectados/>.

27 Institute for Economics and Peace (July 2019). Positive Peace Report 2019. Retrieved from: <http://visionofhumanity.org/>.

28 González, L. (26 Mar 2018). "Aguascalientes, Edomex y Guerrero superan media nacional en corrupción de trámites". El Economista. Retrieved from: <https://www.eleconomista.com.mx/empresas/Aguascalientes-Edomexy-Guerrerosuperan-media-nacional-en-corrupcion-de-tramites-20180326-0051.html>.

29 Morga, B. M. (19 Jan 2018). "Chihuahua y la Lucha Contra la Corrupción". El Universal – Opinión. Retrieved from: <https://www.eluniversal.com.mx/articulo/beatriz-mojica-morga/nacion/chihuahua-y-la-lucha-contra-la-corrupcion>.

30 Ochoa, S. (24 Dec 2017). "Chihuahua, en el 'Top 3' de corrupción en el país". El Diário MX – Estado. Retrieved from: <https://diario.mx/Estado/2017-12-24_9551d919/chihuahua-en-el-top-3-de-corrupcion-en-el-pais/>.

31 Aquino, E. (27 June 2018). "De norte a sur, la corrupción que arrebata vidas y niega futuros se sofistica y permanece impune en México". Animal Politico. Retrieved from: <https://www.animalpolitico.com/2018/06/atlas-corrupcion-mexico/>.

32 Álvarez, J. (9 August 2018). "Impunidad en Chihuahua es del 78%: México Evalúa". YoCiudadano. (https://yociudadano.com.mx/noticias/impunidad-en-chihuahua-es-de-78-mexico-evalua/).

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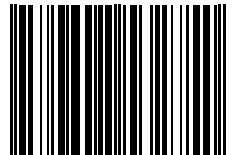**GlobalPeaceIndex**

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