

# MEXICO PEACE INDEX 2023

○ National and  
State Results

○ Eight-Year  
Trends

○ The Economic  
Impact of Violence

○ Positive Peace  
in Mexico



Identifying and measuring the factors that drive peace



## **Quantifying Peace and its Benefits**

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# EXECUTIVE SUMMARY

This is the tenth edition of the Mexico Peace Index (MPI), produced by the Institute for Economics and Peace (IEP). It provides a comprehensive measure of peacefulness in Mexico, including trends, analysis and estimates of the economic impact of violence in the country. The MPI is based on the Global Peace Index, the world's leading measure of global peacefulness, produced by IEP every year since 2007. The MPI consists of 12 sub-indicators aggregated into five broader indicators.

Mexico's peacefulness improved by 0.9 percent in 2022. This was the third straight year of improvement following four consecutive years of deteriorations. Seventeen states improved, while 15 deteriorated.

Last year was marked by continuing shifts in Mexico's organized criminal landscape. The market for illicit marijuana in the United States continued to decline, leading to a growing reliance on other forms of organized crime, including extortion, domestic retail drug sales, and the manufacture and trafficking of the synthetic opioid fentanyl. Against this backdrop, there has been increased competition in recent years between organized crime groups. This is especially the case for the country's two most powerful cartels, the Jalisco New Generation Cartel (CJNG) and the Sinaloa Cartel, who are in conflict over critical distribution routes to the United States as well as control of local rackets. According to data from the Uppsala Conflict Data Program, 4,890 casualties resulted from their conflict alone in 2021.<sup>1</sup>

In 2022, three of the five indicators in the MPI improved. Most notably, *homicide* experienced its largest improvement in the last eight years, with its rate dropping by 7.9 percent. As organized criminal groups have driven the changes in the homicide rate since at least 2015, it is likely that last year's drop was associated with a decline in organized crime-related homicides. The homicide rate fell to 24.5 deaths per 100,000 people in 2022, its lowest level since 2017. This fall marks the third straight year of improvement for *homicide* following steep increases between 2015 and 2019. Despite this, homicides continue to be widespread in Mexico, with more than 30,000 victims each year since 2018.

Both the *firearms crime* and *detention without sentence* indicators improved. The rate of firearms crime has been decreasing annually since it peaked in 2019. In 2022, the rate declined by 5.5 percent. Similarly, the score for *detention without a sentence* improved slightly, by 2.8 percent. In 2022, there were

about 78,000 unsentenced detainees, compared to approximately 79,000 in 2021.

Despite improvements over the past three years, Mexico was substantially less peaceful in 2022 than in 2015. In that time, peace in Mexico has deteriorated by 14.8 percent, with many crime indicators significantly higher than they were eight years prior. The homicide rate, for example, was 62.6 percent higher in 2022 than in 2015, while the firearms crime rate was 68.3 percent higher.

Two MPI indicators deteriorated in 2022: *violent crime* and *organized crime*. Last year, the violent crime rate increased by three percent, which was driven by increases in three out of its four subindicators. The rates of sexual assault, family violence and assault registered deteriorations. In the past eight years, the violent crime sub-indicators have followed divergent patterns. Assault and robbery rates have not varied more than 35 percent from their 2015 levels. However, the rates of reported family violence and sexual assault have increased each year, with both rates more than doubling over the period. It is difficult to know whether the underlying rate has increased or if heightened awareness of family violence and sexual assault has contributed to these crimes being reported more frequently.

In 2022, the organized crime rate reached its highest recorded level, with 167 crimes per 100,000 people. Deteriorations were driven by increases in the rates of extortion and retail drug crimes, which rose by 14.9 and 4.1 percent, respectively. The rate of kidnapping and human trafficking also registered a slight increase of 2.2 percent in 2022, after it had more than halved between 2015 and 2021. In contrast, the rate of major organized crime offenses, which include federal drug trafficking violations, fell by 15.3 percent.

Organized criminal activity has continued to be the main driver of homicides and gun violence in Mexico. Recent estimates of the proportion of homicides associated with organized crime have ranged from 68 to 80 percent, up from approximately 44 percent in 2015.<sup>2</sup> This means that, over the past eight years, the annual number of organized crime-related homicides rose from about 8,000 to more than 23,500, while the number not linked to organized crime stayed roughly the same.

In 2022, the states with the highest homicide rates were Colima, Zacatecas, Baja California, Morelos and Sonora. In Colima, the epicenter of the violence shifted from the port city of Manzanillo to the inland capital of Colima City. The upsurge of violence in the capital occurred

after the dissolution of an alliance between two criminal groups.

Colima ranked as the country's least peaceful state, followed by Zacatecas, Baja California, Guanajuato and Morelos. Last year, Colima recorded both the worst overall score and the highest homicide rate of any state in the history of the MPI. It had a homicide rate of 110 per 100,000 people.

In contrast, Yucatán was once again the most peaceful state in Mexico, followed by Tlaxcala, Chiapas, Tamaulipas and Nayarit. Reflecting the great divergence in violence levels across the country, the average homicide rate in the most peaceful states was 9.2 deaths per 100,000 people, compared to an average rate of 74.6 in the least peaceful states.

In 2022, the largest improvements in peacefulness occurred in Chihuahua, Sonora, Michoacán, San Luis Potosí and Durango. In contrast, Colima, Nuevo León, Campeche, Hidalgo and the State of México recorded the largest deteriorations.

Violence against security forces, journalists and social activists in Mexico has been on the rise in recent years. In 2022, a total of 403 police officers were killed, with Zacatecas being the deadliest state for police. Last year also witnessed the killing of 13 journalists, making Mexico the second most deadly country for journalists, behind only Ukraine. This number is the highest on record in Mexico and represents nearly 20 percent of the global total. Further, a 2022 study found that there has been an increasing number of environmental activists killed in Mexico over the past decade, with a record 54 killed in 2021.

In the past eight years, guns have become the primary cause of homicide for both men and women in Mexico. Between 2015 and 2022, the proportion of male homicides committed with a firearm rose from 60.9 percent to 71.9 percent, while the proportion used in female homicides – including the gender-based killings of women known as femicides – from 37.8 percent to 59.7 percent.

In 2022, the economic impact of violence in Mexico was estimated to be 4.6 trillion pesos (US\$230 billion), equivalent to 18.3 percent of Mexico's GDP. On a per capita basis, the economic impact of violence was 35,705 pesos, more than twice the average monthly salary of a Mexican worker. The economic impact of violence improved for the third year in a row in 2022, decreasing by 5.5 percent or 271 billion pesos from the previous year. The decrease in homicides drove the improvement nationwide, as its impact fell by 11 percent or 245 billion pesos.

In 2022, the Mexican government reduced spending on domestic security and the military, by 6.6 and 8.6 percent, respectively, which also contributed to the lowered overall impact. Spending on the justice system decreased, but only marginally, by 0.5 percent. Mexico's spending on its criminal justice system was equivalent to 0.6 percent of GDP, which is the least of any Latin American country or member of the Organization for Economic Cooperation and Development (OECD). In 2022, spending on domestic security was lower than it was in 2008. Furthermore, spending on domestic security decreased by 29.7 percent from 2019 to 2022, while spending on the justice system decreased by 14.6 percent in the same period.

To tackle crime and violence more effectively, Mexico's judicial system is especially in need of increased investment. The country has an average of 4.4 judges and magistrates per 100,000 people, one-fourth the global average. This has resulted in backlogs of unsolved cases and large numbers of people incarcerated without being sentenced. Strengthening the judiciary is of particular importance for combatting Mexico's high levels of impunity.

Mexico's socio-economic resilience, as measured by its Positive Peace Index (PPI) score, has deteriorated by 3.1 percent since 2009. This contrasts with an average improvement of 1.2 percent for the wider Central America and the Caribbean region. Positive Peace is a measure of the *attitudes,*

*institutions and structures* that create and sustain peaceful societies. At the national level, Mexico's deterioration since 2009 has been mostly driven by deteriorations in four Pillars of Positive Peace: *Well-Functioning Government, Low Levels of Corruption, High Levels of Human Capital and Sound Business Environment*. At the state level, high levels of corruption and poor governance are statistically related to crime and violence.

Effective peacebuilding strategies require a full understanding of the system dynamics associated with organized crime, policing, judicial processes, government decision-making, budgeting, corruption and more. IEP has developed a product known as Halo, which provides a 24-step, building-block approach to analyzing societal systems. This and other system mapping tools could be used to better understand how various social ills interact and to identify entry points to improve peacefulness in Mexico.

“  
The improvement in 2022 was driven by a sizable reduction in homicides, with the national rate falling by 7.9 percent.

# KEY FINDINGS

## SECTION 1: RESULTS

- In 2022, peacefulness in Mexico improved by 0.9 percent. This was the third consecutive year of improvement following sharp deteriorations in peacefulness from 2015 to 2019.
- Three out of five MPI indicators improved in 2022. They were *homicide*, *firearms crime* and *detention without a sentence*.
- The improvement in 2022 was driven by a sizable reduction in homicides, with the national rate falling by 7.9 percent, the largest drop since at least 2015.
- Twenty-four states in 2022 recorded improvements in *homicide*, compared to eight which recorded deteriorations. Each year since 2020, more states have recorded annual improvements in *homicide* than deteriorations, a reversal of the trend in the four years prior.
- Despite these improvements, the homicide rate remains high, at 24.5 deaths per 100,000 people, resulting in about 32,000 victims. This equates to approximately 87 killings per day.
- Homicides have become increasingly concentrated in certain parts of Mexico, with more than half of all 2022 cases taking place in just seven states – Guanajuato, Baja California, the State of México, Michoacán, Jalisco, Chihuahua and Sonora.
- Seventeen of Mexico's 32 states improved in peacefulness, while 15 states deteriorated.
- The five states that deteriorated most in peacefulness overall were the same that deteriorated most in *organized crime*.
- In 2022, Colima experienced the largest deterioration in peacefulness in the country. As a result, it recorded the worst peace score – and the highest homicide rate – of any state since the inception of the MPI.
- Zacatecas, Baja California, Guanajuato and Morelos also ranked among the five least peaceful states in Mexico in 2022.
- Since 2015, Yucatán and Tlaxcala have consistently ranked as the most peaceful states in the country. Chiapas, Nayarit and Tamaulipas were also among the five most peaceful states in 2022.

## SECTION 2: TRENDS

- Mexico's peacefulness has deteriorated by 14.8 percent over the last eight years. However, in the past three years, peacefulness in the country has improved by 3.6 percent.
- Public health measures and stay-at-home orders implemented in response to the COVID-19 pandemic coincided with the beginning of some of these improvements, with a large reduction in opportunistic crimes like robbery recorded in 2020.

- Despite some positive gains, many crime indicators are still much higher today than in 2015. The national homicide rate has recorded a 63 percent increase, from 15.1 to 24.5 deaths per 100,000 people between 2015 and 2022.
- Nine states recorded improvements in their homicide rates since 2015, while the remaining 23 deteriorated.
- Over two-thirds of homicides since 2015 have been the result of gun violence.
- In the past decade, Mexico has become a much more dangerous place for social activists. A 2022 report ranked Mexico as the deadliest place in the world to be an environmental activist, with 54 activists killed in the year prior.
- Mexico also ranked as the second deadliest place in the world to be a journalist in 2022, just behind Ukraine. Thirteen journalists were killed in the country last year.
- Violence against police officers also remains a concern across Mexico. In 2022, a total of 403 police officers were killed.
- The organized crime rate has risen by 64.2 percent since 2015. The deterioration in the organized crime rate was driven by a 149 percent increase in the rate of retail drug crime.
- The past decade has seen major shifts in the drugs produced by criminal actors in order to adapt to changing consumption patterns in the United States, with synthetic opioids like fentanyl becoming increasingly central to their operations.
- Between 2019 and 2022, the number of seizures of fentanyl at the Mexico-US border rose by 300 percent. Moreover, the total volume of fentanyl seized at all US points of entry was more than 200 times greater in 2022 than it was in 2015.
- Organized crime continues to drive high levels of homicide in Mexico. The states that recorded the largest deteriorations in their homicide rates were home to ongoing conflicts between cartels.
- In 2015, clashes involving at least one of the two most powerful cartels in the country, the Sinaloa Cartel and the Jalisco New Generation Cartel (CJNG), accounted for 42 percent of all deaths from cartel conflict, but by 2021 they accounted for 95 percent of such deaths.
- The violent crime rate increased by 18.1 percent from 2015 to 2022, driven by widespread deteriorations in the rates of family violence and sexual assault. In contrast, the rates of assault and robbery declined by 0.2 and 12 percent, respectively.
- *Detention without a sentence* is the only indicator to have improved in the last eight years. There were roughly 78,000 detainees without a sentence in 2022, compared to over 80,000 in 2015.

- Colima recorded the largest overall deterioration in peacefulness between 2015 and 2022, followed by Zacatecas, Guanajuato, Baja California and Nuevo León.
- Tamaulipas has experienced the largest overall improvement over the last eight years, followed by Sinaloa, Guerrero, Durango and Baja California Sur.

### SECTION 3: ECONOMIC VALUE OF PEACE

- The economic impact of violence in Mexico was 4.6 trillion pesos (US\$230 billion) in 2022, equivalent to 18.3 percent of the country's GDP.
- For the third year in a row, the economic impact of violence improved, decreasing by 5.5 percent or 271 billion pesos from the previous year.
- The impact was six times higher than public investments made in health care and more than five times higher than those made in education in 2022.
- Mexico's spending on domestic security and the justice system in 2022 was equal to 0.6 percent of GDP, the least of any Latin American country or member of the OECD.
- The difference in economic impact between the least and most peaceful states has doubled since 2015.
- The amount of money spent by businesses to protect themselves against crime dropped by 51 percent or 76 billion pesos between 2019 and 2021.
- Between 2015 and 2022, the impact of increased homicides resulted a loss of 324 billion pesos (US\$16 billion) in foreign direct investment.
- Spending on domestic security decreased by 41.3 percent from 2015 to 2022, while spending on the justice system decreased by 7.9 percent.
- In 2022, homicide accounted for 44.7 percent of the economic impact of violence. This was equivalent to two trillion pesos (US\$103 billion).
- Spending on violence containment in Mexico represents approximately 11 percent of total government spending, almost as much as the 13 percent spent on health care or the 14 percent spent on education.
- The economic impact of violence was 35,705 pesos per person in 2022, more than double the average monthly salary in Mexico.
- The per capita economic impact varied significantly across states last year, ranging from 11,377 pesos in Yucatán to 102,659 pesos in Colima.
- In 2022, Michoacán saw the largest per capita improvement, with a near 20 percent or 12,500 peso decrease in the economic per capita impact of violence.
- Over the last eight years, Tamaulipas has seen the largest per capita improvement, with a 43 percent or 4,649 pesos reduction in the per capita economic impact of violence.
- In 2022, the economic impact of organized crime recorded the largest increase of all the indicators in the model. Homicide recorded the largest decrease.

- Since 2015, 26 states recorded deteriorations in their economic impact, with these states deteriorating on average by 68 percent. In contrast, six states have recorded improvements, with these states improving by an average of 21.6 percent.

### SECTION 4: POSITIVE PEACE

- Mexico's Positive Peace Index (PPI) score has deteriorated by 3.1 percent since 2009. In contrast, the average score of the countries in the wider Central America and the Caribbean region improved by 1.2 percent during the same period.
- Positive Peace in Mexico broadly improved in the first half of the 2010s, but then recorded substantial deteriorations between 2016 and 2022, undoing the gains made in the previous years. This coincided with the substantial increases in violence across the country.
- Since 2009, the Pillar of Positive Peace to record the largest improvement was *Free Flow of Information*, on the back of national policies to improve internet access and the use of information technologies.
- Despite the improvement in *Free Flow of Information*, this Pillar faces serious challenges in Mexico, particularly in relation to violence against journalists.
- The *Acceptance of the Rights of Others* Pillar also improved, mainly driven by Mexico's achievement of near gender parity in the federal legislature.
- The net deterioration since 2009 was driven by four Pillars of Positive Peace: *Well-Functioning Government*, *Low Levels of Corruption*, *Sound Business Environment* and *High Levels of Human Capital*.
- The deterioration in the *High Levels of Human Capital* Pillar comes in the context of the impact of the COVID-19 pandemic in Mexico, which significantly affected the country's *healthy life expectancy* score.
- In addition, Mexico has witnessed a steep decline in the *Attitudes and Institutions* domains that began in 2017, against the backdrop of rising political polarization. This was mainly driven by deterioration in *law to support equal treatment of population segments* and *government openness and transparency*.
- At the sub-national level, the Mexico Positive Peace Index (MPPI) shows that Querétaro, Baja California Sur, Aguascalientes, Sonora and Tlaxcala recorded the best levels of Positive Peace.
- In contrast, Guerrero, Oaxaca, Morelos, Veracruz and Michoacán recorded the worst levels of Positive Peace in the MPPI.
- The MPPI Pillars with the strongest associations with actual peace, as measured by the MPI, are *Low Levels of Corruption* and *Well-Functioning Government*. This suggests that corruption and administrative ineffectiveness are key drivers of violence in Mexico.



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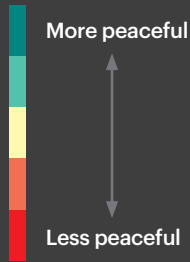
Explore the data on the interactive Mexico Peace Index map: see how peace changes over time, compare levels of peace between states and discover how the states fare according to each indicator of peace.



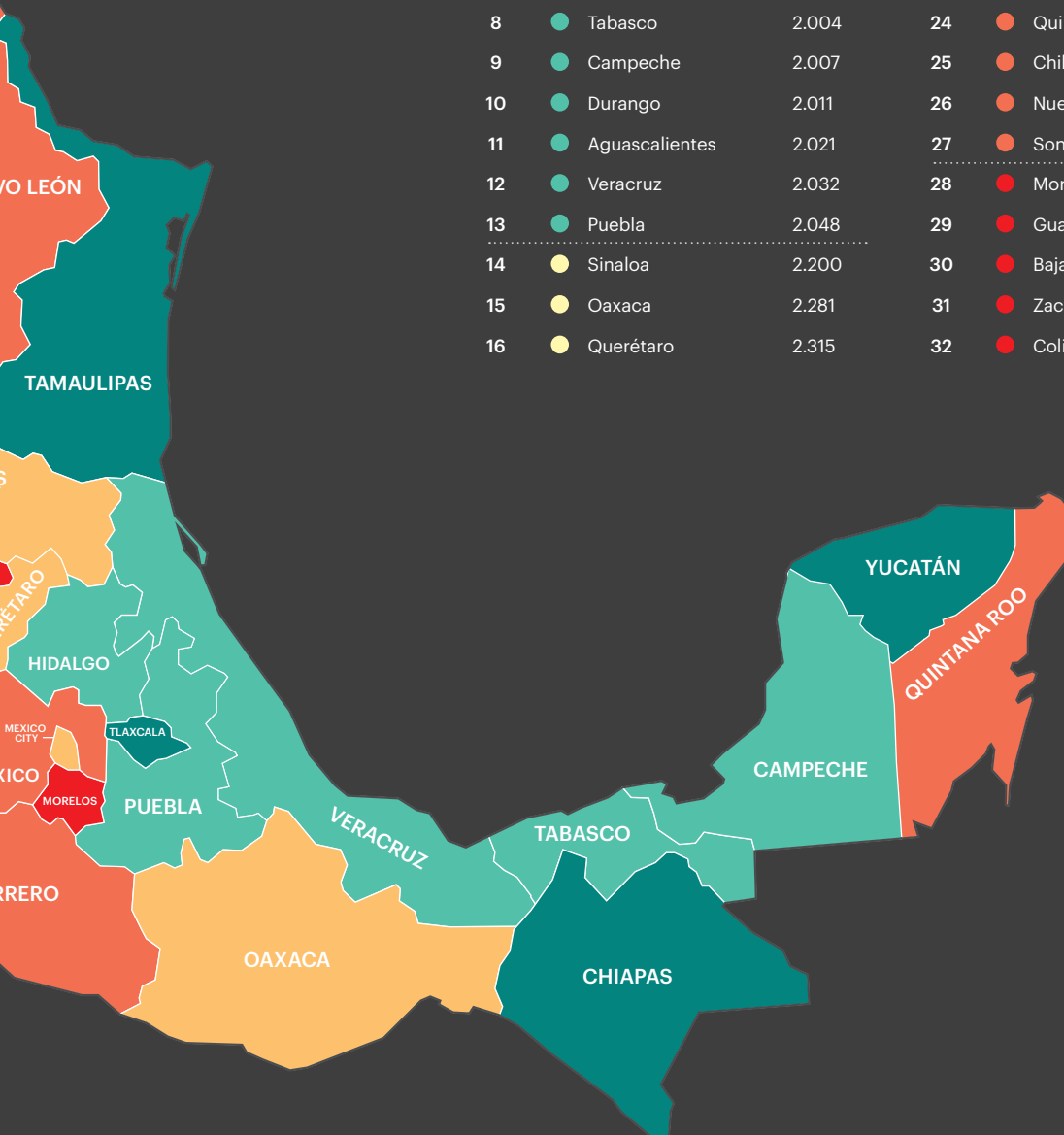
# 2023 MEXICO PEACE INDEX

A SNAPSHOT OF THE STATE OF PEACE IN MEXICO

MPI SCORE



RANK	STATE	SCORE	RANK	STATE	SCORE
1	Yucatán	1.449	17	Mexico City	2.319
2	Tlaxcala	1.661	18	Jalisco	2.424
3	Chiapas	1.686	19	Baja California Sur	2.448
4	Tamaulipas	1.905	20	San Luis Potosí	2.461
5	Nayarit	1.936	21	Guerrero	2.813
6	Hidalgo	1.958	22	Michoacán	2.937
7	Coahuila	1.998	23	State of México	2.948
8	Tabasco	2.004	24	Quintana Roo	2.996
9	Campeche	2.007	25	Chihuahua	3.053
10	Durango	2.011	26	Nuevo León	3.083
11	Aguascalientes	2.021	27	Sonora	3.176
12	Veracruz	2.032	28	Morelos	3.333
13	Puebla	2.048	29	Guanajuato	3.472
14	Sinaloa	2.200	30	Baja California	4.102
15	Oaxaca	2.281	31	Zacatecas	4.226
16	Querétaro	2.315	32	Colima	4.499



# 1

# RESULTS

## 2022 RESULTS

- In 2022, peacefulness in Mexico improved by 0.9 percent. This was the third consecutive year of improvement following sharp deteriorations in peacefulness from 2015 to 2019.
- Three out of five MPI indicators improved in 2022. They were *homicide*, *firearms crime* and *detention without a sentence*.
- The improvement in 2022 was driven primarily by a reduction in homicides, with the national homicide rate falling by 7.9 percent, the largest drop since at least 2015.
- Twenty-four states in 2022 recorded improvements in *homicide*, compared to eight which recorded deteriorations. Each year since 2020, more states have recorded annual improvements in *homicide* than deteriorations, a reversal of the trend in the four years prior.
- Despite these improvements, the homicide rate remains high, at 24.5 deaths per 100,000 people, resulting in about 32,000 victims. This equates to approximately 87 killings per day.
- Homicides have become increasingly concentrated in certain parts of Mexico, with more than half of all 2022 cases taking place in just seven states – Guanajuato, Baja California, the State of México, Michoacán, Jalisco, Chihuahua and Sonora.
- Seventeen of Mexico's 32 states improved in peacefulness, while 15 states deteriorated.
- The five states that deteriorated most in peacefulness overall were the same that deteriorated most in *organized crime*.
- In 2022, Colima experienced the largest deterioration in peacefulness in the country. As a result, it recorded the worst peace score – and the highest homicide rate – of any state since the inception of the MPI.
- Zacatecas, Baja California, Guanajuato and Morelos also ranked among the five least peaceful states in Mexico in 2022.
- Since 2015, Yucatán and Tlaxcala have consistently ranked as the most peaceful states in the country. Chiapas, Nayarit and Tamaulipas were also among the five most peaceful states in 2022.

TABLE 1.1

**Mexico Peace Index results, 2022**

A lower score indicates a higher level of peacefulness.

MPI RANK	STATE	OVERALL SCORE	HOMICIDE	VIOLENT CRIME	Firearms CRIME	ORGANIZED CRIME	DETENTION WITHOUT A SENTENCE	OVERALL CHANGE, 2021-2022	
1	Yucatán	1.449	1.091	1.068	1.038	1.378	5	0.006	↔
2	Tlaxcala	1.661	1.496	1.352	1.318	1.261	5	0.037	↔
3	Chiapas	1.686	1.385	1.512	1.349	1.350	5	-0.049	↑1
4	Tamaulipas	1.905	1.636	2.740	1.413	1.940	1.855	-0.151	↑6
5	Nayarit	1.936	1.605	1.979	1.515	1.626	4.932	0.060	↑1
6	Hidalgo	1.958	1.529	2.969	1.585	1.826	2.186	0.108	↓1
7	Coahuila	1.998	1.229	2.849	1.141	2.724	2.877	0.019	↑1
8	Tabasco	2.004	1.628	2.932	1.694	1.705	2.537	-0.169	↑4
9	Campeche	2.007	1.487	3.039	1.834	2.035	1.609	0.297	↓6
10	Durango	2.011	1.373	3.014	1.451	2.123	2.879	-0.174	↑3
11	Aguascalientes	2.021	1.290	3.087	1.427	2.516	2.152	0.064	↓4
12	Veracruz	2.032	1.585	2.475	1.832	2.177	2.670	-0.048	↓1
13	Puebla	2.048	1.744	2.905	1.879	1.508	2.777	0.053	↓4
14	Sinaloa	2.200	1.745	3.132	1.820	2.420	1.831	-0.105	↑2
15	Oaxaca	2.281	2.160	2.702	2.581	1.697	2.415	0.065	↓1
16	Querétaro	2.315	1.376	3.504	1.682	3.285	1.747	0.023	↓1
17	Mexico City	2.319	1.464	4.613	1.812	1.860	1.984	-0.127	↔
18	Jalisco	2.424	2.178	2.882	2.303	2.151	3.171	-0.141	↑1
19	Baja California Sur	2.448	1.361	3.474	1.167	4.292	2.188	-0.020	↓1
20	San Luis Potosí	2.461	2.092	3.490	2.334	2.253	2.011	-0.194	↔
21	Guerrero	2.813	2.788	2.339	3.036	3.265	2.403	0.023	↑1
22	Michoacán	2.937	3.419	2.257	4.215	1.704	2.954	-0.213	↑3
23	State of México	2.948	1.740	5	2.291	3.717	1.708	0.105	↔
24	Quintana Roo	2.996	2.716	4.384	2.577	2.501	2.753	-0.001	↔
25	Chihuahua	3.053	3.493	2.791	3.599	2.106	3.212	-0.414	↑2
26	Nuevo León	3.083	2.190	3.255	2.850	4.704	2.314	0.346	↓5
27	Sonora	3.176	3.702	2.585	3.305	2.545	4.083	-0.313	↑2
28	Morelos	3.333	3.783	4.193	3.531	2.172	1.939	0.065	↓2
29	Guanajuato	3.472	3.484	2.905	4.609	3.504	1.986	-0.013	↓1
30	Baja California	4.102	4.523	3.743	4.336	3.879	3.471	-0.156	↑1
31	Zacatecas	4.226	4.837	2.715	5	5	1.939	-0.059	↑1
32	Colima	4.499	5	3.866	5	5	1.710	0.706	↓1
	<b>NATIONAL</b>	<b>2.556</b>	<b>2.176</b>	<b>3.236</b>	<b>2.435</b>	<b>2.621</b>	<b>2.328</b>	<b>-0.009</b>	

Source: IEP



## METHODOLOGY AT A GLANCE

The Mexico Peace Index (MPI) is based on the concepts and framework of the Global Peace Index (GPI), the leading global measure of peacefulness produced annually by the Institute for Economics & Peace (IEP) since 2007. However, as an internal analysis of a single country, the MPI adapts the GPI methodology for a sub-national application. Both indices measure negative peace according to its definition as “the absence of violence or fear of violence.”

This is the tenth iteration of the MPI and uses data primarily published by the Executive Secretary of the National System for Public Security / *Secretariado Ejecutivo de Sistema Nacional de Seguridad Pública* (SESNSP). Wherever possible, the official data is adjusted for underreporting and contextualized using other datasets. A detailed review 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. Throughout most of the report, indicators are *italicized*, which distinguishes them from rates, which are not.



GLOBAL PEACE  
INDEX 2022

### 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

Organized crime is made up of the following sub-indicators: extortions, major offenses, retail drug crime offenses, and kidnapping or human trafficking investigations.

Extortion, kidnapping and human trafficking rates are adjusted for underreporting.

Major organized crime offenses include:

- the federal crimes of production, transport, trade, supply, or possession of drugs or other crimes under the Crimes Against Public Health Law / *Los Delitos contra La Salud Pública*; 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.

Retail drug crimes are used as a proxy of the size of the market fueled by illegal drug production and distribution.

Each *organized crime* sub-indicator is weighted and averaged to form the indicator score. Sub-indicator

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 in a particular state of the country.

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: Secretariat of Security and Civilian Protection / *Secretaría de Seguridad y Protección Ciudadana* (SSPC)

### UNDERREPORTING AND ADJUSTMENT

Two of the indicators – *violent crime* and *organized crime* – are adjusted for underreporting. In 2021, 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. IEP uses the National Survey of Victimization and Perceptions of Public Security / *Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública* (ENVIPE) of the National Institute of Statistics and Geography / *Instituto Nacional de Estadística y Geografía* (INEGI) to calculate underreporting rates for each state and crime, and adjusts the official statistics for robbery, assault, sexual violence, extortion, kidnapping and human trafficking to approximate actual rates of violence.



# NATIONAL RESULTS

Mexico's peacefulness improved by 0.9 percent in 2022, marking the third consecutive year of improvements, following sharp deteriorations between 2015 and 2019.

Of the five MPI indicators, *homicide*, *firearms crime* and *detention without a sentence* improved in 2022. In contrast, *violent crime* and *organized crime* deteriorated. This is the third consecutive year in which the rates of homicide and firearms crime improved, which is significant given that these two indicators have driven Mexico's overall deterioration in peacefulness since 2015.

Seventeen of Mexico's states recorded improvements in peacefulness in 2022, while 15 recorded deteriorations. The improvements in scores for most states were due to reductions in *homicide*. As shown in Figure 1.1, the national *homicide* score improved by 4.4 percent in 2022. This equates to a 7.9 percent drop in the national homicide rate, the largest decrease in at least the past eight years. Since 2020, more states have been experiencing improvements in their homicide rates than deteriorations, which can be seen in Figure 1.2, with 21 states improving in both 2020 and 2021, and 24 states improving in 2022.

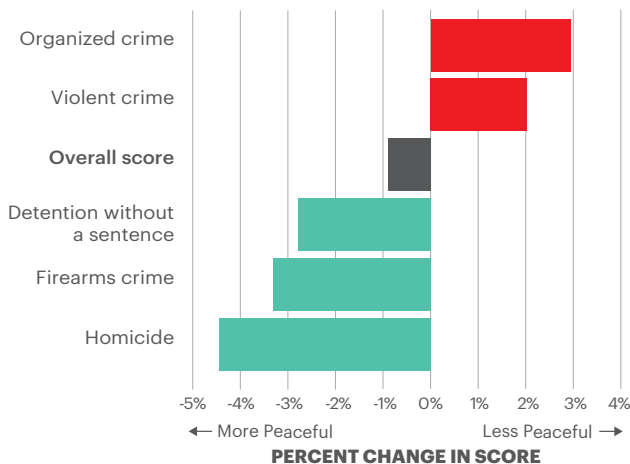
While *homicide* improved nationally, it has become increasingly concentrated in certain parts of Mexico. In 2022, more than half of all homicides took place in just seven states – Guanajuato, Baja California, the State of México, Michoacán, Jalisco, Chihuahua and Sonora. Over the past eight years, the number of homicides in

these states grew from about 8,100 – or 44 percent of the national total – to over 17,100 – or 54 percent of the national total. The average homicide rate in Mexico's five least peaceful states was 74.6 cases per 100,000 people, compared to 9.2 cases per 100,000 people in its five most peaceful states, demonstrating the disproportionate levels of violence across the country.

For the second consecutive year, both the *homicide* and *firearms crime* indicators experienced the largest improvements. These two indicators typically correlate strongly, as *homicide with a firearm* is one of the sub-indicators of *firearms crime*. In 2022, 68.6 percent of homicides were committed with a firearm. The rise in gun violence across Mexico is largely connected to the growth of *organized crime*, as territorial disputes between criminal groups over drug trafficking routes and other illicit rackets have risen in recent years. In 2022, three of the five states with the highest organized crime rates were also among the five states with the highest rates of firearms crime.

FIGURE 1.1  
**Changes in peacefulness by indicator, 2021–2022**

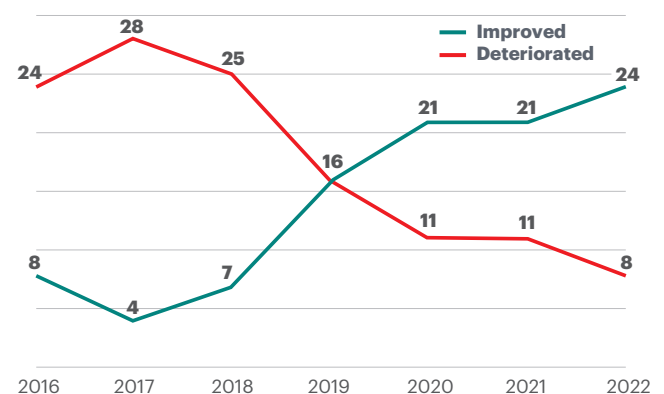
Peacefulness in Mexico improved by 0.9 percent from 2021 to 2022.



Source: IEP  
Note: A lower score indicates a higher level of peacefulness.

FIGURE 1.2  
**Number of states recording improvements and deteriorations in peacefulness, 2016–2022**

Since 2019, homicides have been declining in most states.



Source: IEP

Figure 1.3 shows the sub-indicator rate changes from 2021 to 2022 compared to those from 2020 to 2021. Strikingly, all sub-indicators but one, *kidnapping and human trafficking*, continued in the same trajectory as the year prior. Interpersonal and gender-based violence, as measured by *family violence* and *sexual assault*, continued to deteriorate in 2022, but at slower rates than in 2021. In contrast, both the overall homicide rate and the rate of homicides with a firearm both continued to improve, and at even greater rates than the year prior.

Property crimes, measured by robbery and extortion rates, moved in opposing directions, with robbery improving by 4.3 percent and extortion deteriorating by 14.9 percent in 2022. This divergence may be due to the distinct nature and primary offenders associated with each type of crime. Typically, robbery is perpetrated by an individual or a small number of people, whereas extortion is commonly carried out by organized crime groups.<sup>1</sup> Therefore, as cartels diversify away from drug trafficking into different forms of extortion,<sup>2</sup> the rates have significantly increased. Conversely, in situations where organized crime groups exert control over a particular region, they may seek to reduce street-level crimes such as robbery to gain support from the local population.<sup>3</sup>

The *detention without a sentence* score improved slightly in 2022, by 2.8 percent. Other than in 2020, when the partial shutdown of criminal courts caused by the COVID-19 pandemic led to a substantial rise in the number of unsentenced detainees in the country, the *detention without a sentence* indicator has improved in each of the past eight years.

In 2022, the *violent crime* score deteriorated by two percent, marking the second year of deterioration. In 2020, reductions in movement associated with COVID-19 decreased the rates of violent crime activity across Mexico, but in the past two years rates have largely rebounded. In 2022, they were close to their pre-pandemic levels, which peaked in 2019. Twenty-one states deteriorated last year, compared to 11 that improved. The rates of three of the four *violent crime* sub-indicators increased by more than five percent, while the fourth sub-indicator, *robbery*, experienced a rate decrease of 4.3 percent.

*Organized crime* was the other indicator to deteriorate in 2022, with a three percent rise in score. However, the four sub-indicators of *organized crime* have shown very different trends in the past eight years. Since 2015, the rates of extortion and retail drug crimes have risen significantly, increasing by 59.5 and 149 percent, respectively, and they continued to rise in 2022. In contrast, the major offenses rate and the kidnapping and human trafficking rate have both substantially declined since 2015. In 2022, while the rate of kidnapping and human trafficking did increase slightly, by 2.2 percent, the major offenses rate continued its trend of decline, falling by 15.3 percent.

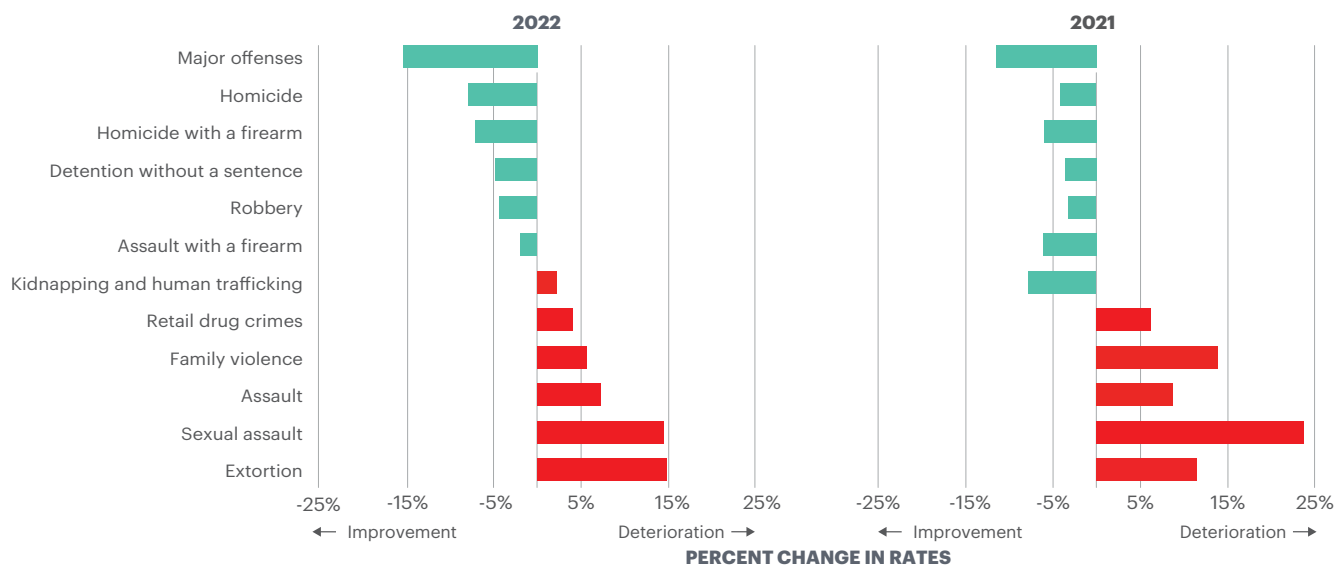
### POLITICAL POLARIZATION IN MEXICO

Political polarization in Mexico has become a topic of increasing national concern in recent years. As with many countries around the world, there has been a growing divide in Mexico's political landscape along partisan lines. There are long-standing factors that fuel polarization, including economic inequality and corruption. In recent years, however, polarization has also been intensified by particularly contentious and even violent election cycles,<sup>4</sup> as well as increasingly adversarial relationships between voices within government, on the one hand, and the news media and other private sectors, on the other.<sup>5</sup> The latter trend has led to a more polarized media environment,<sup>6</sup> which in turn feeds polarization within the citizenry at large. A global survey conducted in 2022 found that 52 percent of Mexicans believed their country was very or extremely divided and that 65 percent believed it was unlikely that the divisions could be overcome.<sup>7</sup>

Polarization has been found to undermine the government's ability to operate effectively and cohesively, as well as diminish the citizens' trust and willingness to engage in civic processes.<sup>8</sup> The lack of trust in the government and its institutions also leads to less willingness to report criminal activity to the police. According to national survey data, 14.8 percent of Mexicans saying they do not report crimes because of lack of trust in institutions.<sup>9</sup> Only 51.4 percent of Mexicans trust the federal government, while less than half trust their municipal or state governments.<sup>10</sup> Polarization often manifests itself in protests and demonstrations, which in some cases turn violent as demonstrators clash with police.<sup>11</sup>

FIGURE 1.3  
**Changes in peacefulness by sub-indicator, 2022 and 2021**

In 2022, all sub-indicators moved in the same direction as the previous year, except for *kidnapping and human trafficking*.



Source: IEP

**MEXICO PEACE INDEX**

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2022  
STATE  
RESULTS

# IMPROVEMENTS IN PEACEFULNESS

Seventeen states experienced improvements in peacefulness in 2022, while 15 states experienced deteriorations, marking the third year in a row in which most states improved. As shown in Table 1.2, the five states with the largest improvements experienced moderate to significant improvements in peacefulness.

The largest improvements occurred in some of Mexico's least peaceful states. Chihuahua and Sonora, which experienced the two largest improvements, are respectively ranked 25<sup>th</sup> and 27<sup>th</sup> in overall peacefulness. Except for Durango, which is ranked tenth, all of the most improved states are ranked in the bottom half of states.

In line with the national trend, all five states recorded improvements in *firearms crime*, with four out of the five

recording the largest improvements in the country for this indicator. But in contrast to the national trend, all five states also recorded improvements in *organized crime*, with four out of the five again recording the largest improvements in the country.

Three of the states with the largest improvements – Chihuahua, Sonora, and Durango – are in northern Mexico. The states alongside the Mexico-US border usually have some of the highest *organized crime* and homicide rates in the country, as cartels compete for dominance to traffic drugs across the border. The 2022 improvements may reflect long-term shifts in who the dominant actors are, how they operate, and where current cartel conflict is occurring.

TABLE 1.2

## Five most improved states, 2021–2022

In contrast to the national trend, the most improved states all saw improvements in their organized crime scores.

STATE	CHANGE IN SCORE	2021 RANK	2022 RANK	CHANGE IN RANK
Chihuahua	-0.414	27	25	↑ 2
Sonora	-0.313	29	27	↑ 2
Michoacán	-0.213	25	22	↑ 3
San Luis Potosí	-0.194	20	20	↔
Durango	-0.174	13	10	↑ 3

Source: IEP

Note: A negative change is an improvement in peacefulness.





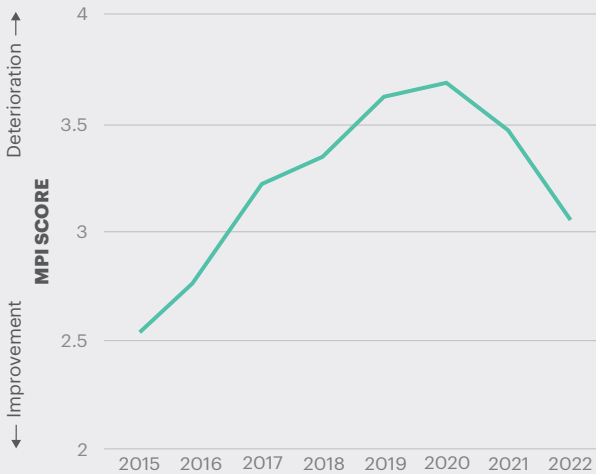
3.053

↑ 2

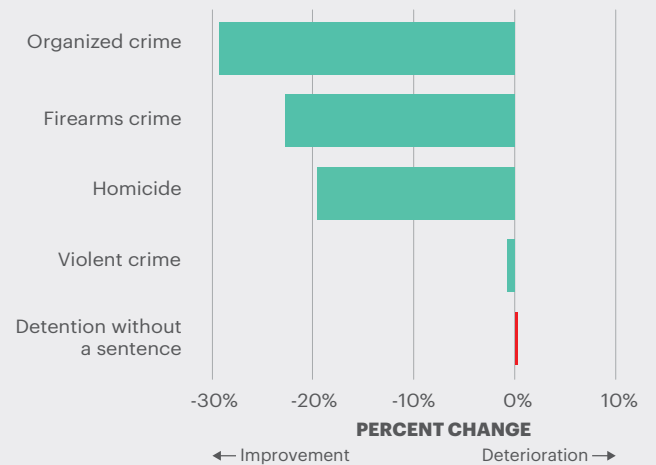
CHANGE IN SCORE 21/22:

-0.414

OVERALL SCORE, 2015-2022



CHANGE IN INDICATOR RATES, 2021-2022



Chihuahua recorded the largest improvement in peacefulness of any Mexican state in 2022, marking its second consecutive year of improvement following five years of deteriorations. It improved in all MPI indicators except for *detention without a sentence*. Reductions in Chihuahua's rates of organized crime and firearms crime mostly drove the state's improvement.

Chihuahua's organized crime rate fell by 29.3 percent, making it the largest improvement in the country. Except for *kidnapping and human trafficking*, all the state's *organized crime* sub-indicators improved. The state experienced a 70.3 percent decrease in the rate of extortion, a 31.5 percent decrease in the rate of retail drug crimes, and a 27.8 decrease in the rate of major offenses.

Chihuahua had the largest improvement in firearms crime rate in the country. Both *firearms crime* sub-indicators recorded significant improvements, with the assault with a firearm rate falling 20.6 percent and the homicide with a firearm rate falling 23.5 percent. For the second consecutive year, the homicide rate improved, with a 19.5 percent decrease in 2022, leading to a rate of 52 deaths per 100,000 people.

Of all the sub-indicators, Chihuahua's kidnapping and human trafficking rate experienced the largest deterioration, increasing by 47 percent. In 2022, Chihuahua had the third highest rate of kidnapping and human trafficking in the country, with 9.7 cases per 100,000 people. Corresponding with the increase in *kidnapping and human trafficking*, Chihuahua also experienced increases in its rate of people reported missing or disappeared. It had a rate of 1.4 disappearances per 100,000 people in 2022, a 63 percent increase from 2021.

Chihuahua's current ranking as the eighth least peaceful state in Mexico aligns with its violent history, which dates to the early years of the Mexican drug trade. Its vast size, its long border with the US states of New Mexico and Texas, and its location within the "Golden Triangle" of opium poppy cultivation have made it a strategic and disputed territory for drug cartels.<sup>12</sup>

In recent years, the cartels operating in Chihuahua have started to diversify their operations due to a decline in the market value of marijuana and heroin. This decrease in value can be attributed to the legalization or decriminalization of marijuana in a majority of US states and a shift in consumer preferences towards synthetic opioids, such as fentanyl, as opposed to heroin. Partially in response to the decline in revenues from these sources, cartels have expanded into other criminal activities such as illegal logging in southwest Chihuahua,<sup>13</sup> extortion and theft in the mining industry,<sup>14</sup> kidnapping and smuggling of migrants crossing the Mexico-US border,<sup>15</sup> and control and theft of water in the drought-prone territory.<sup>16</sup>

Chihuahua's largest city, Ciudad Juárez, is an epicenter of violence, with high levels of human trafficking, homicide, and drug trafficking. A decade ago, the city was referred to as the "murder capital of the world",<sup>17</sup> and still has one of the highest homicide rates in the country as of 2022, with nearly 70 homicides per 100,000 people. It is also the base of operations of the once-dominant Juárez Cartel, which was one of the most powerful cartels in the country from the 1980s until its decline around 2014, with the death of its former leader, Vicente Carrillo Fuentes.<sup>18</sup>

Though the Juárez Cartel has lost some of its dominance in recent years, it is still active and has been engaged in a decade-long conflict with the Sinaloa Cartel for control of the state and its crucial drug trafficking routes. This conflict has continued to pose a severe threat to the safety and security of the state's inhabitants. An example of this occurred in August 2022 when Ciudad Juárez witnessed a violent surge of attacks between "Los Mexicles", a faction of the Sinaloa Cartel, and "La Línea", the armed wing of the Juárez Cartel. These attacks were initiated by the killing of three inmates in a Juárez prison and resulted in widespread terror and more than ten fatalities, including a pregnant woman who died in a burning convenience store.<sup>19</sup>

## Sonora

Rank: 27

MPI SCORE IN 2022

CHANGE IN RANK 2021-2022

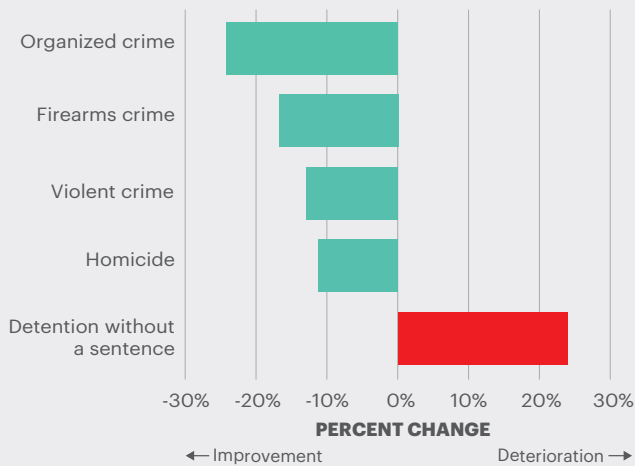
3.176

↑ 2

CHANGE IN SCORE 21/22:

-0.313

CHANGE IN INDICATOR RATES, 2021-2022



Sonora had the second largest improvement in 2022, moving up two places to 27<sup>th</sup> in the rankings. Four of the five MPI indicators improved. Sonora's improvement in score marks the end of a three-year trend of deterioration. Except for *detention without a sentence*, the years between 2019 and 2021 saw a rise in the rates of all MPI indicators. These trends reversed in 2022.

*Organized crime* had the largest improvement, with the rate decreasing by 24.2 percent. This was a result of improvement in all *organized crime* sub-indicators, particularly *kidnapping and human trafficking* and *major offenses*, the rates of which decreased by 39.2 percent and 27.6 percent, respectively. *Firearms crime* had the second largest improvement, with its rate decreasing by 16.7 percent. *Violent crime* and *homicide* also improved, with their rates declining by 12.8 and 11.2 percent, respectively.

Despite these improvements, Sonora still ranked as one of Mexico's more violent states in 2022, particularly in relation to *organized crime*, *firearms crime*, and *homicide*, for which it placed 22<sup>nd</sup>, 25<sup>th</sup>, and 28<sup>th</sup>, respectively. Sonora's deteriorations in the last several years have coincided with the emergence of the Caborca Cartel and its ensuing violent clashes with the Sinaloa Cartel.<sup>20</sup> Most recently, a faction of the Sinaloa Cartel linked with the sons of Joaquín "El Chapo" Guzmán (known as "Los Chapitos") has been making incursions into territory in Sonora controlled by the Caborca Cartel.<sup>21</sup>

The Chapitos faction has reportedly been gaining the upper hand in their fight with the Caborca Cartel, spurred by the July 2022 arrest of Rafael Caro Quintero, the cartel's founder.<sup>22</sup> After his arrest, the Chapitos faction targeted the city of Caborca and several other towns in northern Sonora, resulting in the death of 28 people.<sup>23</sup> The faction also expanded operations into Mexico City and Chihuahua in 2022. While the Chapitos have not taken over the Sinaloa Cartel, they are reportedly growing in influence via social media.<sup>24</sup>

## Michoacán

Rank: 22

MPI SCORE IN 2022

CHANGE IN RANK 2021-2022

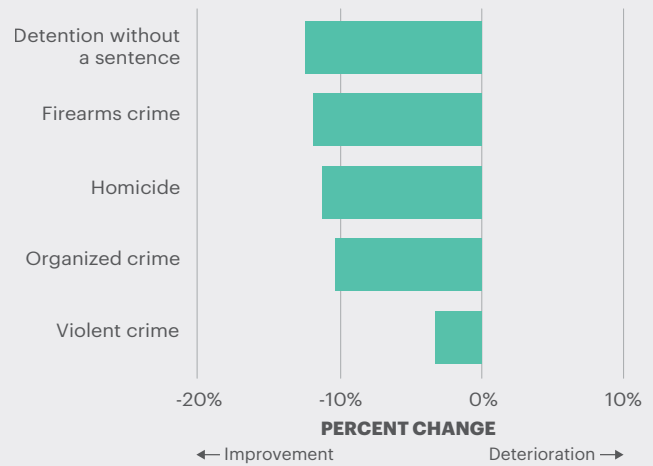
2.937

↑ 3

CHANGE IN SCORE 21/22:

-0.213

CHANGE IN INDICATOR RATES, 2021-2022



Michoacán had the third largest improvement in peacefulness in 2022, moving up three places to the 22<sup>nd</sup> position. The state had substantial improvements in *homicide*, *firearms crime*, and *detention without a sentence*, and slight improvements in *organized crime* and *violent crime*.

The homicide rate in Michoacán fell by 11.3 percent, from 56.9 to 50.5 homicides per 100,000 people. The drop in homicides also drove the large improvements in *firearms crime*, as the rate of homicides with a firearm fell by 14 percent in 2022. Although the homicide rate saw significant improvements in 2022, the number of people reported missing or disappeared jumped by 40 percent in 2022, from a rate of 6.2 to 8.7 cases per 100,000 people.

Narco-graves, a type of clandestine grave, serve as a means for cartels nationwide to hide the bodies of their victims. In Michoacán, there were over 100 bodies and 30 narco-graves discovered in 2022 alone. The graves are often of considerable size with numerous bodies, such as the one uncovered in August 2022 in Uruapan which held 12 victims.<sup>25</sup>

Despite improvements in peace, the municipality of Zamora had the highest homicide rate of any city in Mexico in 2022, with an estimated 200 deaths per 100,000 people. In recent years, Zamora has become an epicenter of cartel conflict in Michoacán. Across the state, criminal groups have engaged in a fierce competition over the production of methamphetamines and heroin in clandestine labs, as well as the reception and distribution of precursor chemicals from Asia for synthesizing fentanyl via Mexico's second-largest port in the city of Lázaro Cárdenas.<sup>26</sup>

Furthermore, Michoacán's avocado industry, responsible for 85 percent of Mexico's avocado exports,<sup>27</sup> along with its lime industry, have been significantly impacted by high extortion rates and cartel influence. The presence of cartels has had a detrimental effect on the farming sector, as demonstrated by the temporary suspension of Mexican avocado exports to the United States after threats were made by the cartel to a US Agricultural Department inspector in Michoacán. The burden of cartel activity, together with economic and weather-related events, led to a 167 percent increase in lime prices and 57 percent increase in avocado prices in 2021.<sup>28</sup> In response, several communities, such as the avocado-producing town of Tancitaro, have established self-defense groups to counter kidnapping and extortion.<sup>29</sup>

## San Luis Potosí

Rank: 20

MPI SCORE IN 2022

2.461

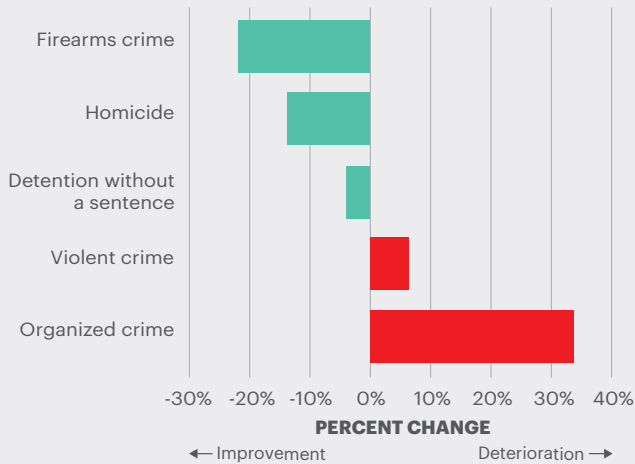
CHANGE IN RANK 2021-2022

0

CHANGE IN SCORE 21/22:

-0.194

### CHANGE IN INDICATOR RATES, 2021-2022



San Luis Potosí had the fourth largest improvement in peacefulness in Mexico in 2022, marking its second consecutive year of improvement. The state's overall score improved by 7.3 percent, with improvements in *homicide*, *firearms crime*, *organized crime* and *detention without a sentence*. The largest improvements were in the firearms crime and homicide rates, which decreased by 21.7 percent and 13.9 percent, respectively.

The improvement in peace was driven by a large reduction in the rate of assaults with a firearm, which decreased by 31.2 percent. Likewise, homicides with a firearm, which account for 72.5 percent of all homicides in the state, experienced a 17.4 percent reduction. Accordingly, the homicide rate experienced its second consecutive year of improvement, falling from a rate of 26.5 to 22.8 deaths per 100,000 people between 2020 and 2022.

Despite the improvement in peacefulness in 2022, San Luis Potosí continued to have high crime levels and experienced deteriorations in *violent crime*. Its deterioration in this indicator was driven by a 27.5 percent increase in the robbery rate, the third largest rate increase in the country. The robbery rate in the state has increased from 310 to 955 cases per 100,000 people in the past eight years, driven in part by high levels of impunity, with 99 percent of robberies going unpunished.<sup>30</sup>

Large declines in the rates of major offenses and kidnapping and human trafficking drove an overall improvement in San Luis Potosí's *organized crime* score. Despite this, the state experienced a 134 percent increase in its rate of retail drug crimes.

As with several states in central Mexico, San Luis Potosí is a key transit point for drugs moving into the United States and it is the gateway to the northeastern states of Mexico. Its capital city is a major inland shipping hub, where products like fentanyl, produced in western states, can be smuggled with other goods across the border. For this reason, San Luis Potosí represents a strategic location for cartels and is a frequently disputed territory.<sup>31</sup> While the Jalisco New Generation Cartel (CJNG), Los Zetas, and the Gulf Cartel are the main cartels in the region, there are more than 18 cartels in the state, located in 70 percent of the territory.<sup>32</sup>

## Durango

Rank: 10

MPI SCORE IN 2022

2.011

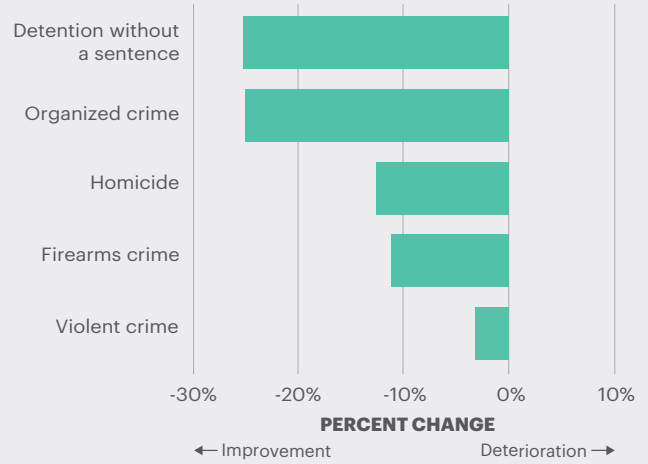
CHANGE IN RANK 2021-2022

↑ 3

CHANGE IN SCORE 21/22:

-0.174

### CHANGE IN INDICATOR RATES, 2021-2022



Durango had the fifth largest improvement in overall score last year, moving up three places to rank as the tenth most peaceful state in Mexico. In 2022, Durango recorded its best peace score since at least 2015. All five MPI indicators improved, but the state's reductions in its *detention without a sentence* and *organized crime* rates were the most significant. The rate of detentions without a sentence fell by 25.2 percent and the organized crime rate fell by 25 percent, making it the second largest improvement in organized crime rate in the country.

Across MPI sub-indicators, only three registered deteriorations: *robbery*, *sexual assault*, and *assault with a firearm*. The *organized crime* sub-indicators experienced improvements across the board, with a 32.5 percent decline in the extortion rate, a 13.7 percent decline in the retail drug crimes rate, and an 18.2 percent decline in the major offenses rate. In 2022, Durango also held the lowest rate of kidnapping and human trafficking and the fifth lowest homicide rate in the country, with rates of 0.3 kidnappings and 7.8 deaths per 100,000 people, respectively.

Durango is part of what has been historically known as the "Golden Triangle" for criminal groups. This is the mountain region in the northwest of the country, and it also includes parts of the states of Sinaloa and Chihuahua. It has been a hotspot for arms trafficking as well as the production of drugs. This area was highly contested between rival criminal organizations and once led to very high rates of violence in Durango.<sup>34</sup> With the emergence of the Sinaloa Cartel as the dominant criminal organization in the state, cartel clashes have declined and several of Durango's indicators have improved. Since 2015, the state's homicide and firearms crime rates have declined by 41.7 percent and 49.3 percent, respectively. The state has experienced the third largest improvement in its overall score and has moved up ten places in the rankings since 2015.

# DETERIORATIONS IN PEACEFULNESS

In 2022, the five states with the largest overall deteriorations in peace all experienced deteriorations in *firearms crime*, *organized crime* and *violent crime*. The deteriorations in these states appear to have all been driven by the activities of organized criminal groups. Notably, these five states were the same five that deteriorated the most in *organized crime* scores. On average, their organized crime rates increased by 44.6 percent, in line with – but substantially greater than – the national increase of 8.9 percent.

Last year, Colima recorded the worst overall peace score of any state on record. It also experienced the country's largest

deteriorations in both overall peacefulness and *organized crime* score. All five states saw notable increases in their rates of extortion and retail drug crimes, with the states' average rates increasing by 70.4 and 31.9 percent, respectively.

The states that deteriorated the most in 2022 stretch across of Mexico's territory, representing the western, northern, southern, eastern, and central parts of the country. While these regions are diverse and show very different levels of violence, the five states have all experienced increases in conflict between rival criminal groups.

TABLE 1.3

## Five states with the largest deteriorations, 2021–2022

After experiencing the largest improvement in peacefulness in 2021, Colima experienced the largest deterioration in 2022.

STATE	CHANGE IN SCORE	2021 RANK	2022 RANK	CHANGE IN RANK
Colima	0.706	30	32	↓ 2
Nuevo León	0.346	21	26	↓ 5
Campeche	0.297	3	9	↓ 6
Hidalgo	0.108	5	6	↔
State of México	0.105	23	23	↓ 1

Source: IEP

Note: A negative change is an improvement in peacefulness.



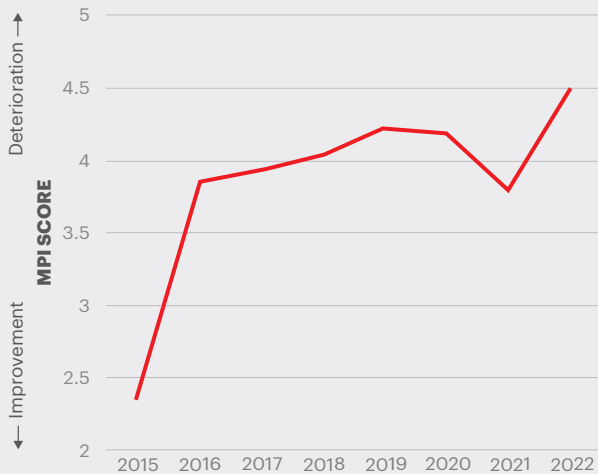
4.499

2

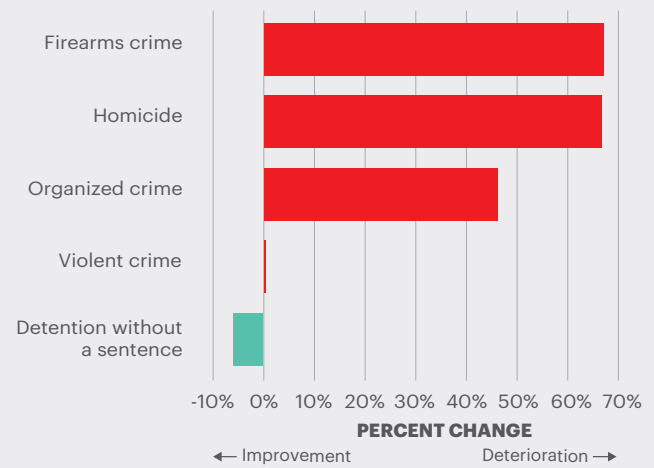
CHANGE IN SCORE 21/22:

0.706

OVERALL SCORE, 2015-2022



CHANGE IN INDICATOR RATES, 2021-2022



In 2022, Colima experienced the largest deterioration in peacefulness in Mexico, resulting in the worst peace score of any state since the inception of the MPI. The state deteriorated across all indicators but *detention without a sentence*. The most significant changes were in the *homicide* and *firearms crime* indicators, whose rates rose by 66.8 percent and 67.3 percent, respectively. This is noteworthy given that in 2021, Colima recorded the largest improvement in the overall score, which was driven by reductions in homicides and firearms crimes.

In 2022, the rates of four out of five indicators in Colima were at their highest levels since at least 2015. Colima's deterioration is primarily driven by its rise in firearms homicides, which last year accounted for 80.5 percent of all homicides in the state. Between 2021 and 2022, the number of homicides carried out with a firearm increased by 70.3 percent, from 413 to 714. Partially as a result of this change, Colima recorded the highest overall homicide rate ever recorded in the MPI, at 110 homicides per 100,000 people.

Colima's peacefulness score has deteriorated substantially since 2015. *Violent crime* has deteriorated in seven of the last eight years, resulting in vast changes in peacefulness, from a rate of 716 crimes per 100,000 people in 2015 to 3,122 crimes per 100,000 people in 2022.

Last year, Colima had the worst possible score of 5 in *organized crime*, *firearms crime* and *homicide*. It also had the country's fifth worst *violent crime* score, driven by the highest family violence rate in the country, with 1,775 cases per 100,000 people, nearly three times the national rate.

Colima's rise in violence escalated in the last decade after Mexican cartels shifted their interests from plant-based drugs, such as marijuana and heroin, to synthetic drugs. The shift became increasingly evident in 2022, when authorities at the Mexico-US border confiscated 9.4 times more fentanyl than heroin and 6.4 times more methamphetamine than cocaine.<sup>35</sup> As a result, Colima has become an extremely desirable location for cartels, owing to its strategic positioning along drug trafficking routes. The state's largest town, Manzanillo, has the biggest port in Mexico and serves as an arrival point for precursor chemicals from Asia for synthesizing drugs.<sup>36</sup>

The struggle for dominance over the port of Manzanillo between the Sinaloa Cartel, the CJNG, and Los Zetas can be traced back to 2016.<sup>37</sup> This conflict has resulted in Colima becoming a focal point of violence, with a 169 percent increase in the rate of organized crime between 2016 and 2022. The deterioration of the *organized crime* indicator between 2021 and 2022 was largely driven by the increasing rates of kidnapping and human trafficking and major offenses, which increased by 83 percent and 166 percent, respectively. Colima holds the third-highest organized crime rate in Mexico, at a rate of 426 cases per 100,000 people.

As of 2021, the CJNG had largely consolidated control of both the port and the state,<sup>38</sup> resulting in a drop in the rates of homicide and firearm crimes, by 19.1 and 20.1 percent, respectively. However, in early 2022, the region's armed wing of the CJNG, Los Mezcales, broke out of their coalition after a dispute in a Colima prison that left ten inmates dead.<sup>39</sup> This new rivalry resulted in a turf war between the two groups, prompting a series of clashes and mass killings in the municipalities of Colima and Villa de Álvarez, which both form part of the Colima City metropolitan area.<sup>40</sup>

The attacks demonstrated a shift in the epicenter of cartel violence in the state from the port city of Manzanillo to the inland capital. In 2021, the municipality of Manzanillo registered the highest homicide rate in the state, but it experienced a 27 percent decline in homicides in 2022. Conversely, the municipalities of Colima and Villa de Álvarez registered the highest homicide rates in the state after experiencing rate increases of 214 percent and 168 percent, respectively. As a result, these two municipalities registered the second and third highest murder rates in the country in 2022.<sup>41</sup>

The recent increase in violence in Colima has resulted in a decline in perceptions of safety. According to national survey data, 85.8 percent of the adult population in the state of Colima perceive their state as unsafe. Residents of both Colima City and Manzanillo report lower safety perceptions compared to the national average across Mexico's urban centers, with 75.6 and 67.1 percent of their respective populations feeling unsafe.<sup>42</sup>

## Nuevo León

Rank: 26

MPI SCORE IN 2022

CHANGE IN RANK 2021-2022

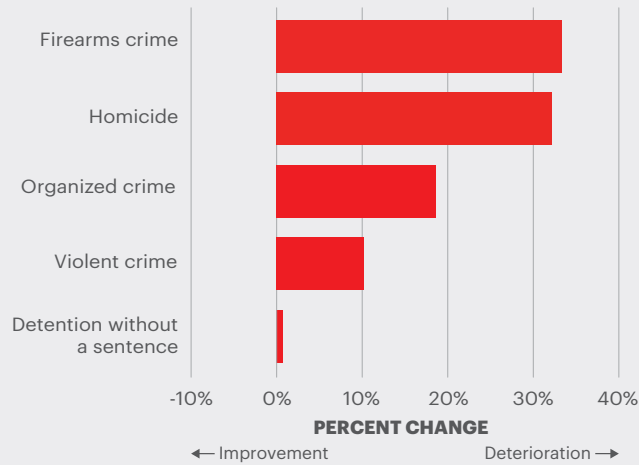
3.083

↓ 5

CHANGE IN SCORE 21/22:

0.346

CHANGE IN INDICATOR RATES, 2021-2022



Nuevo León experienced the second largest deterioration in overall peacefulness in 2022. It dropped five places from the previous year to become the seventh least peaceful state in the country. This decline was driven by deteriorations across all five MPI indicators, with the rates of firearms crime and homicide experiencing the most significant deteriorations, rising by 33.3 and 32 percent, respectively. Last year, Nuevo León recorded its worst homicide, firearms crime, and organized crime rates since at least 2015.

Nuevo León had the second largest increase in homicide rate in the country. The vast majority of these homicides, 76.8 percent, were committed with a firearm, leading *firearms crime* to also deteriorate. Of the 1,430 recorded homicides in the state last year, 102 were classified as femicides, giving Nuevo León the second highest number in the country. In 2022, four of Nuevo León's municipalities placed in the top ten municipalities with the highest number of femicides, and the city of Ciénega de Flores had the highest femicide rate of any municipality in the country, with 27 cases per 100,000 women.<sup>43</sup>

In 2022, Nuevo León also had the country's fifth highest rate of family violence and the fourth highest rate of sexual assault. Despite these numbers, Nuevo León had the lowest rate in Mexico of emergency calls for violence against women, at 50.8 calls per 100,000 women, which falls significantly under the national rate of 511.<sup>44</sup>

Despite improving in 2022, Nuevo León still held the highest rate of kidnapping and human trafficking in the country, with 15.7 cases per 100,000 people. Because it borders the United States, over the past decade it has been among the five states with the highest number of cases of kidnapped migrants in the country. In 2022, four out of five victims of kidnapping and human trafficking in Nuevo León were women. This is significantly higher than the rate nationally, where about half of victims were women.

These high rates of gender-based violence have sparked protests that have brought thousands of women to the streets and outside government buildings, calling for government action. This is particularly true in the state's capital, Monterrey, where the annual march on International Women's Day attracts tens of thousands of participants.<sup>45</sup>

## Campeche

Rank: 9

MPI SCORE IN 2022

CHANGE IN RANK 2021-2022

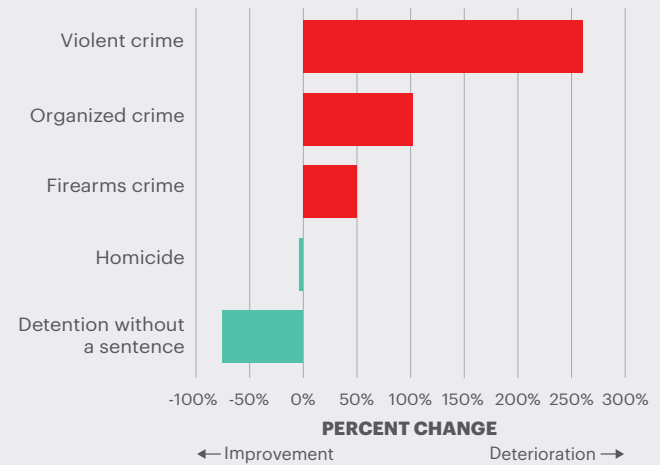
2.007

↓ 6

CHANGE IN SCORE 21/22:

0.297

CHANGE IN INDICATOR RATES, 2021-2022



Campeche experienced the third largest deterioration in overall peace score. It fell six places in the rankings, from the third to the ninth most peaceful state between 2021 and 2022. As a result, Campeche recorded both its ever worst score and its ever worst ranking since the inception of the MPI. This deterioration was primarily driven by a sharp increase in the state's rates of violent crime, organized crime and firearms crime.

Campeche's deterioration in the *violent crime* indicator was the largest in the country, with its rate jumping by 261 percent from the previous year. The state went from having the lowest violent crime rate in the country in 2015 to placing 20<sup>th</sup> in 2022. Prior to 2021, Campeche's violent crime rate had never increased by more than 20 percent in a single year.

In 2020, in the context of the onset of the COVID-19 pandemic, the rate slightly improved, but since that time it has experienced an eight-fold increase, rising from 264 to 2,221 cases per 100,000 people. In 2022 alone, the rates of each of the *violent crime* sub-indicators increased by over 100 percent, but the rise in the rates of family violence was the most significant, rising by 513 percent from the previous year.

Campeche also recorded 11 femicides in 2022, resulting in the fourth highest femicide rate in the country, with 2.1 cases per 100,000 women.<sup>46</sup> According to national survey data, 67 percent of women in Campeche have experienced some form of violence in their lives, with psychological and sexual violence being the most common.<sup>47</sup>

In 2022, Campeche's organized crime rate rose by 103 percent, with a 146 percent increase in the extortion rate driving this change. The Sinaloa Cartel, the CJNG, and the Gulf Cartel are all active in the state, driving higher levels of violence associated with activities such as drug trafficking, extortion, and protection rackets.<sup>48</sup>

## Hidalgo

Rank: 6

MPI SCORE IN 2022

CHANGE IN RANK 2021-2022

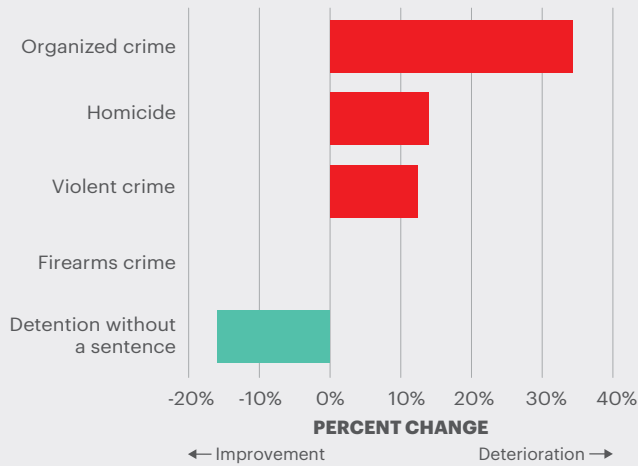
1.958

↓ 1

CHANGE IN SCORE 21/22:

0.108

CHANGE IN INDICATOR RATES, 2021-2022



Hidalgo had the fourth largest deterioration in the country in 2022. Its overall score fell by 5.8 percent, a drop that forced the state out of the five most peaceful states in the country. The state recorded deteriorations in three indicators – *organized crime*, *homicide* and *violent crime* – while its *firearms crime* score remained virtually unchanged and its *detention without a sentence* score registered an improvement.

While traditionally regarded as a peaceful state, Hidalgo has experienced a significant rise in crime, particularly by oil thieves, known locally as “huachicoleros”. Mexico has long struggled with oil theft, but the recent rise in oil prices, coupled with economic downturns, has exacerbated the problem. As a result, oil theft in Mexico increased by 27 percent from the first half of 2021 to the first half of 2022.<sup>49</sup> Hidalgo, which is the site of the country's busiest refinery and where the tragic Tlahuelilpan Pipeline Explosion claimed 137 lives in 2019,<sup>50</sup> has the highest rate of oil theft in the country.<sup>51</sup>

As there is a high demand for oil on the black market, cartels have been gaining a foothold in Mexico's oil theft business as a way to diversify their revenue sources beyond the drug trade. Consequently, numerous armed groups – including the CJNG, Los Zetas, La Familia Michoacana and Pueblos Unidos – have established a significant presence in Hidalgo.<sup>52</sup> Although conflicts between organized crime groups are comparably rare in Hidalgo, their activities resulted in a 34.2 percent increase in the organized crime rate in 2022. This was driven by a 112 percent rise in the extortion rate and a 20.4 percent rise in the major offenses rate.

Hidalgo also experienced significant increases in its rates of homicide and violent crime in 2022, which rose by 14 and 12.4 percent, respectively. The deterioration of the *violent crime* indicator was mostly driven by a 29.6 percent increase in the sexual assault rate and 16.8 percent increase in the rate of family violence. Both sexual assaults and family violence have been rapidly increasing over the past eight years, with both rates almost tripling since 2015.

## State of México

Rank: 23

MPI SCORE IN 2022

CHANGE IN RANK 2021-2022

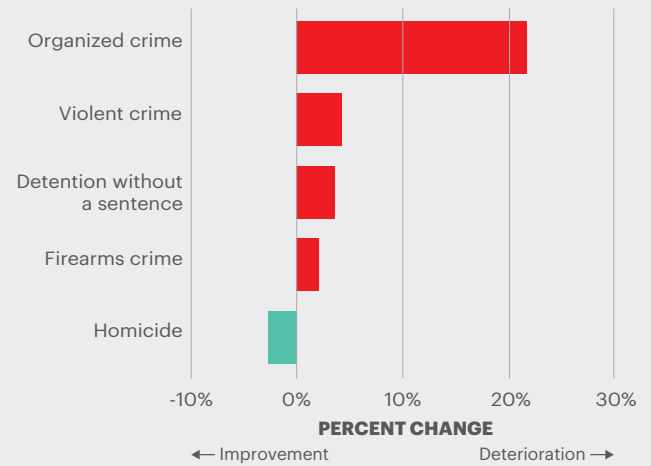
2.948

0

CHANGE IN SCORE 21/22:

0.105

CHANGE IN INDICATOR RATES, 2021-2022



The State of México experienced the fifth largest deterioration in the country in 2022, marking its sixth consecutive year of deterioration in overall score. While the state's ranking did not change from last year, the 3.7 percent increase in its score has led to its worst peace score on record. Four of the five MPI indicators deteriorated, but the overall deterioration was driven almost entirely by the increase in *organized crime*, the rate of which rose by 21.8 percent.

The deterioration in *organized crime* was in turn driven exclusively by an increase in the extortion rate. Extortions are by far the most common form of organized crime in the state and the state's 27 percent rise in rate more than offset the declines experienced in the other three sub-indicators. In 2022, the State of México had an extortion rate of 230 cases per 100,000 people.

Last year was the third year in a row in which the State of México's extortion rate was among the top five worst rates in the country. Four of ten victims of extortion in the country were in the state of México.<sup>53</sup> Among businesses, the main victims of extortion tend to be transporters, distributors, producers and merchants, many of whom have shut down their companies in order to protect themselves and their families.<sup>54</sup> In the parts of the state that border Mexico City, such as Ixtapaluca and Nezahualcóyotl, groups have targeted minors through phone calls and even through video games, threatening to harm their families if they do not comply with their demands.<sup>55</sup> Both the state and federal government have launched campaigns to educate people about how to guard against falling victim to extortion.

According to national survey data, 90.6 percent of the adult population in the State of México consider their state unsafe.<sup>56</sup> In addition to its high organized crime rates, the state has had the highest rate of violent crime in the country since 2020, with 4,509 cases per 100,000 people in 2022. While the rate of violent crime rose only 4.1 percent last year, there were significant deteriorations in the rates of sexual assault and family violence, which increased by 56.5 percent and 22.8 percent, respectively. There are 11 municipalities in the state that have declared “gender-based violence alerts” – a special mechanism that aims to protect women in the face of situations of extreme violence and vulnerability. Ten of these municipalities form part of the Greater Mexico City area.<sup>57</sup>

# 2

## TRENDS

### KEY FINDINGS

- Mexico's peacefulness has deteriorated by 14.8 percent over the last eight years. However, in the past three years, peacefulness in the country has improved by 3.6 percent.
- Public health measures and stay-at-home orders implemented in response to the COVID-19 pandemic coincided with the beginning of some of these improvements, with a large reduction in opportunistic crimes like robbery recorded in 2020.
- Despite some positive gains, many crime indicators are still much higher today than in 2015. The national homicide rate has recorded a 63 percent increase, from 15.1 to 24.5 deaths per 100,000 people between 2015 and 2022.
- Nine states recorded improvements in their homicide rates since 2015, while the remaining 23 deteriorated.
- Over two-thirds of homicides since 2015 have been the result of gun violence.
- In the past decade, Mexico has become a much more dangerous place for social activists. A 2022 report ranked Mexico as the deadliest place in the world to be an environmental activist, with 54 activists killed in the year prior.
- Mexico also ranked as the second deadliest place in the world to be a journalist in 2022, just behind Ukraine. Thirteen journalists were killed in the country last year.
- Violence against police officers also remains a concern across Mexico. In 2022, a total of 403 police officers were killed.
- The organized crime rate has risen by 64.2 percent since 2015. The deterioration in the organized crime rate was driven by a 149 percent increase in the rate of retail drug crime.
- The past decade has seen major shifts in the drugs produced by criminal actors in order to adapt to changing consumption patterns in the United States, with synthetic opioids like fentanyl becoming increasingly central to their operations.
- Between 2019 and 2022, the number of seizures of fentanyl at the Mexico-US border rose by 300 percent. Moreover, the total volume of fentanyl seized at all US points of entry was more than 200 times greater in 2022 than it was in 2015.
- Organized crime continues to drive high levels of homicide in Mexico. The states that recorded the largest deteriorations in their homicide rates were home to ongoing conflicts between cartels.
- In 2015, clashes involving at least one of the two most powerful cartels in the country, the Sinaloa Cartel and the Jalisco New Generation Cartel (CJNG), accounted for 42 percent of all deaths from cartel conflict, but by 2021 they accounted for 95 percent of such deaths.
- The violent crime rate increased by 18.1 percent from 2015 to 2022, driven by widespread deteriorations in the rates of family violence and sexual assault. In contrast, the rates of assault and robbery declined by 0.2 and 12 percent, respectively.
- *Detention without a sentence* is the only indicator to have improved in the last eight years. There were roughly 78,000 detainees without a sentence in 2022, compared to over 80,000 in 2015.
- Colima recorded the largest overall deterioration in peacefulness between 2015 and 2022, followed by Zacatecas, Guanajuato, Baja California and Nuevo León.
- Tamaulipas has experienced the largest overall improvement over the last eight years, followed by Sinaloa, Guerrero, Durango and Baja California Sur.





## EIGHT-YEAR TRENDS

Mexico's peacefulness has witnessed a sharp decline of 14.8 percent since 2015. However, this decline was only experienced between 2015 and 2019. Over the past three years, there has been a positive shift in the country's peacefulness, attributed to improvements in all indicators except for *organized crime*.

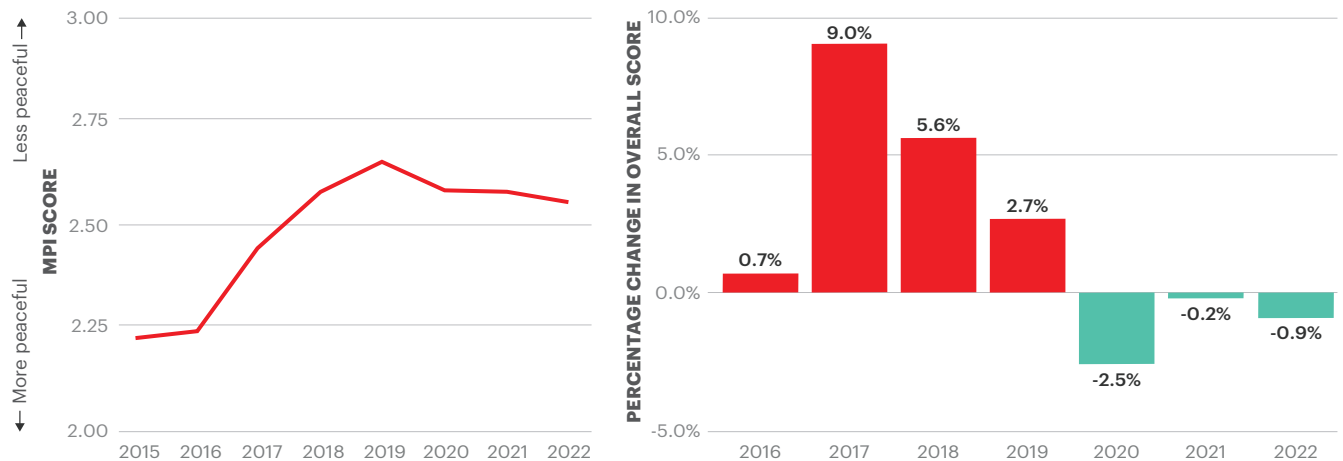
Despite the recent improvements in peacefulness, it is important to note that the gap between Mexico's most peaceful and least peaceful states has significantly widened over the last eight years. In fact, the disparity between the average scores of the top half and the bottom half of states has grown by 162 percent.

Figure 2.1 displays the changes in overall peacefulness since 2015. Notably, the largest single-year deterioration was observed in 2017, when there was a nine percent decrease in peacefulness. Following this, the rates of deterioration gradually slowed. In 2020, the country experienced its first overall improvement, which was followed by marginal progress in both 2021 and 2022. However, the improvements in the past three years have been relatively minor when compared to the significant deteriorations experienced prior to 2020. As of 2022, most crime rates remained significantly worse than their 2015 levels.

Figure 2.2 highlights that the significant deterioration in peacefulness over the last eight years was primarily caused by an upsurge in *homicide* and *firearms crime*. Of all the indicators, *firearms crime* experienced the largest deterioration, with its rate increasing by 94.3 percent. In 2015, 57.4 percent of homicides were committed with a firearm, and this increased to 68.6 percent by 2022. However, both the absolute number of firearms homicides and the proportion of homicides committed with a firearm have declined since reaching their peak in 2019. Additionally, the rate of firearms assaults has experienced a significant decline in the past three years, dropping by 23.7 percent since 2019.

FIGURE 2.1  
**Change in overall peacefulness, 2015–2022**

Peacefulness has improved slightly in each of the past three years, following four consecutive years of deteriorations.

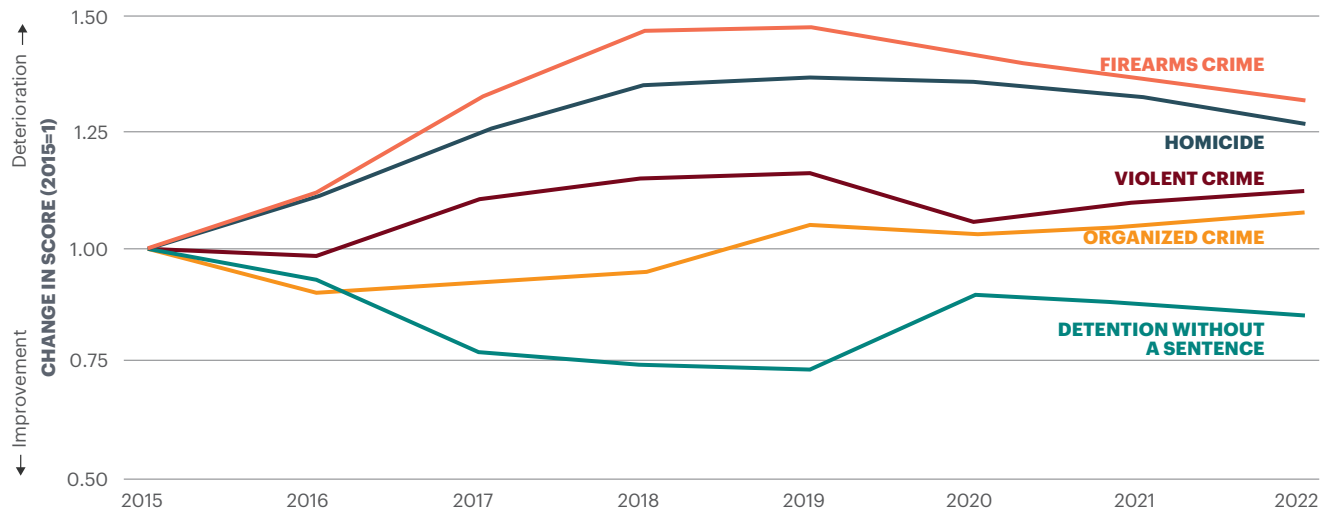


Source: IEP

FIGURE 2.2

## Indexed trend in peacefulness by indicator, 2015–2022

Since 2020, three indicators have consistently improved, while *violent crime* and *organized crime* have deteriorated.



Source: IEP

Overall, the homicide rate has risen by 62.6 percent since 2015. Mexico has recorded more than 30,000 homicides in each of the past four years. The country’s 2022 rate of 24.5 deaths per 100,000 people gives it the 16<sup>th</sup> worst rate in the world.<sup>1</sup> Despite this, the rate has improved by 12.9 percent since peaking in 2019.

Except for 2020, the *organized crime* indicator has deteriorated every year since 2016, and its rate has increased by 64.2 percent in the past eight years. This large deterioration was mainly driven by a 149 percent increase in the rate of retail drug crimes.

As with the organized crime rate, the rate of violent crime fell in 2020 and then rose in both 2021 and 2022. Overall, the violent crime rate has recorded an 18.1 percent rise since 2015. However, the sub-indicators of *violent crime* have followed divergent patterns. Specifically, both *assault* and *robbery* have fluctuated within fairly regular ranges. The assault rate has consistently stood between 500 and 600 cases per 100,000 people over the past eight years. Similarly, the robbery rate has been relatively consistent, dropping from just over 1,000 cases per 100,000 people in 2015 to just under 900 in 2022, though it did experience an eight-year high in 2018, when there were about 1,360 cases per 100,000 people.

In contrast, *sexual assault* and *family violence* have both consistently increased in the past eight years. As a result, the rates of both have more than doubled since 2015. On average, the rate of family violence has increased each year by 10.6 percent, while the sexual assault rate has increased each year by 13.6 percent.

*Detention without a sentence* is the only indicator to register an improvement since 2015, with its score having improved by 14.9 percent. In 2020, the partial shutdown of criminal courts during the first several months of the COVID-19 pandemic contributed to a rise in the number of unsentenced detainees for the first time since 2015. As of 2022, there were roughly 78,000 detainees without a sentence, up from a low of about 60,000 in 2019.

Since 2015, 23 states have deteriorated in peacefulness, while nine have improved. The largest improvement was recorded in Tamaulipas, where peacefulness improved by 32.4 percent. Tamaulipas also recorded by far the largest rank change over the period, climbing 25 places to go from Mexico’s fourth least peaceful state in 2015 to its fourth most peaceful state in 2022. After Tamaulipas, the states to register the largest improvements in peacefulness in the past eight years were Sinaloa, Guerrero, Durango and Baja California Sur.

In contrast, Colima recorded the largest deterioration in peacefulness between 2015 and 2022, deteriorating by 91.1 percent. Zacatecas, Guanajuato, Baja California and Nuevo León recorded the next largest deteriorations. The five states with the largest deteriorations all recorded substantial increases in their *homicide* and *firearms crime* scores.

“

Mexico’s peacefulness has deteriorated by 14.8 percent over the last eight years. However, in the past three years, peacefulness in the country has improved by 3.6 percent.



# HOMICIDE

Over the past eight years, there have been about a quarter million homicides in Mexico. Between 2015 and 2019, the homicide rate experienced a dramatic rise, nearly doubling from 15.1 to 28.2 deaths per 100,000 people. However, over the past three years, there has been a modest but steady decline in killings.

Last year, the homicide rate experienced its most significant drop, falling by 7.9 percent to 24.5 homicides per 100,000 people. Despite these recent improvements, homicidal violence remains widespread in Mexico. In 2022, there were approximately 32,000 homicide victims, equivalent to an average of about 87 killings per day.

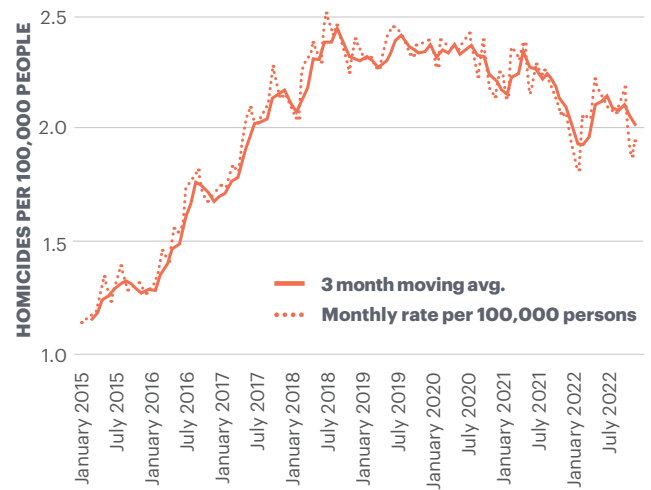
Figure 2.3 depicts the national trend using monthly data. Following three years of significant increases, the monthly homicide rate peaked in July 2018 at 2.52 deaths per 100,000 people, after which it declined slightly but remained near that level until mid-2021. At that point, the rate began a more significant pattern of decline, falling from 2.41 deaths per 100,000 people in May 2021 to 2.00 deaths per 100,000 people in December 2022.

Organized criminal groups have driven the rise in homicides over the past eight years. Drawing on 2015-2021 figures from Lantia Intelligence,<sup>2</sup> the number estimated to be linked to organized crime rose by 190 percent, while all other homicides rose by just 6.4 percent. This means that, even as organized crime-related homicides rose from about 8,000 to more than 23,500,<sup>3</sup> the number of homicides not linked to organized crime has shown comparatively little change, consistently hovering between 10,000 and 12,500 per year, as shown in Figure 2.4. As a result, organized crime-related homicides have gone from representing less than half of all homicides in 2015 to more than two-thirds of homicides in the past few years.<sup>4</sup>

FIGURE 2.3

## Monthly homicide rate, 2015–2022

The monthly homicide rate peaked in July 2018 at 2.5 deaths per 100,000 people.

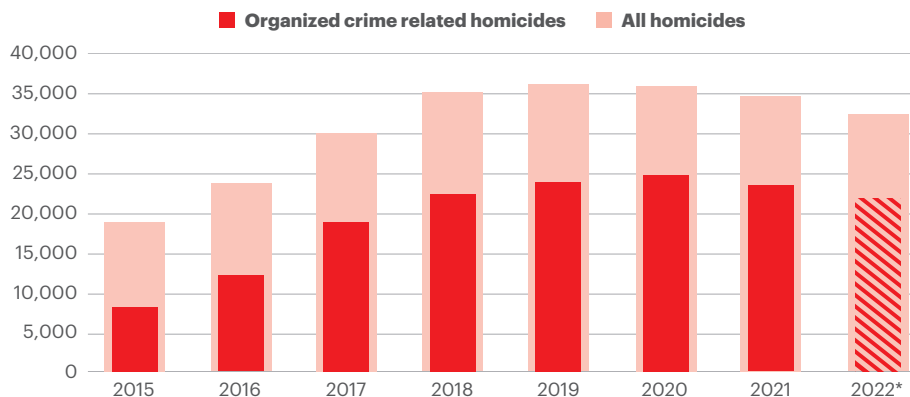


Source: SESNSP

FIGURE 2.4

## Annual homicides, overall and estimated number associated with organized crime, 2015–2022

Killings associated with organized crime have been the driver of the overall increase in homicides across Mexico.



Sources: SESNSP; Lantia Intelligence; Congressional Research Service; IEP calculations

Note: The organized crime-related homicides figure for 2022 is an estimate based on trends from the previous three years.

### KEY FINDINGS ↗

#### HOMICIDE

Nine states recorded improvements in their homicide rates since 2015, while the remaining 23 deteriorated.

**63%** ↗

The national homicide rate has recorded a 63 percent increase, from 15.1 to 24.5 deaths per 100,000 people between 2015 and 2022.

The states that recorded the largest deteriorations are home to conflicts between organized crime groups. The battles between these groups, often over strategic transit points and routes for the movement of drugs, have led violence to become more concentrated in recent years. High homicide states have also increasingly tended to be associated with organized criminal activity more generally, with state homicide rates correlating strongly ( $r=0.58$ ) with state organized crime rates in 2022, up from a lower level of correlation ( $r=0.40$ ) in 2015.

### CHANGES IN HOMICIDE BY STATE, 2015-2022

Despite the moderate national improvement in the past three years, most states' homicide rates have increased since 2015. This is because the deteriorations between 2015 and 2019 significantly outweigh the improvements experienced since then. In all, only nine states recorded improvements in their homicide rates over the entire eight-year period, while 23 deteriorated.

Table 2.1 details the number of states with homicide rates in the low, moderate, high, and extreme ranges by year. The ranges 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 13.5, a high rate is between 13.5 to 48.9, and an extreme rate is more than 48.9 homicides per 100,000 people. Homicide rates at the extreme level are more than three times higher than the national average in 2015. For comparison, the global homicide rate is 5.6 per 100,000 people and the rate for the Latin America and the Caribbean region is 21.2.<sup>5</sup>

It is worth noting that in 2015, eight states had low homicide rates. However, by 2022, only four states remained in this category, while eight states had escalated to the extreme level. This is significant because, despite recent improvements at the national level, 2021 and 2022 had the greatest number of states in the extreme homicide category. Moreover, 2022 witnessed the highest number of states in the moderate category and the lowest number of states in the high category. These trends demonstrate a growing divergence between the relatively moderate levels of homicide in most states and the extreme levels observed in a minority of states.

TABLE 2.1

### Number of Mexican states by homicide level, 2015–2022

A quarter of Mexican states recorded an extreme homicide rate in 2022.

	Low (<7.6 homicides per 100,000)	Moderate (7.6–13.5 homicides per 100,000)	High (13.5–48.9 homicides per 100,000)	Extreme (>48.9 homicides per 100,000)
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
2020	2	8	15	7
2021	4	7	13	8
2022	4	11	9	8

Source: SESNSP; IEP calculations

Yucatán, Coahuila, Aguascalientes and Baja California Sur were the four states to record a low homicide rate in 2022. Both Yucatán and Aguascalientes have consistently recorded low rates since 2015, with Yucatán registering by far the country's lowest rate each year. In 2022, Yucatán's homicide rate was 1.9 deaths per 100,000 people, which was less than half the rate of the state with the next lowest rate, Coahuila.

The same eight states recorded extreme homicide rates in 2022 and 2021. They were Colima, Zacatecas, Baja California, Morelos, Sonora, Chihuahua, Guanajuato and Michoacán. Since 2015, the rates in Colima and Zacatecas have more than quadrupled, and in five of the remaining six the rates have more than doubled. The only exception is Chihuahua, where the homicide rate rose less dramatically, by 63.4 percent. During the same period, the organized crime rate across these eight states increased by 201 percent, more than three times the rate increase nationally.

In 2022, the state of Colima recorded the single highest homicide rate of any state over the past eight years, with 110 deaths per 100,000 people. This rate represents a major resurgence of violence after Colima experienced a comparatively peaceful year in 2021, during which homicides fell by 17.9 percent. Since 2015, however, Colima has generally recorded extreme homicide rates, with its rate being the highest in the country in five of the past eight years.

Colima's violence has largely been tied to fighting between drug cartels for control of Mexico's busiest port in the city of Manzanillo, which is a key point of entry for precursor chemicals from Asia for synthesizing fentanyl and methamphetamines.<sup>6</sup> However, in 2022, the locus of the conflict appears to have shifted from the coast to the inland capital of the state, Colima City, which recorded a homicide rate of approximately 192 deaths per 100,000 people. This is a more than threefold increase over the previous year and the second highest rate of any major municipality in the country.<sup>7</sup> Moreover, the adjacent municipality of Villa de Álvarez, which forms part of the capital's metropolitan area, recorded the third highest rate nationally, at about 148 deaths per 100,000 people. Meanwhile, the homicide rate in Manzanillo fell from approximately 113 to 87 deaths per 100,000 people between 2021 and 2022.<sup>8</sup>

### GEOGRAPHIC CONCENTRATION OF HOMICIDES

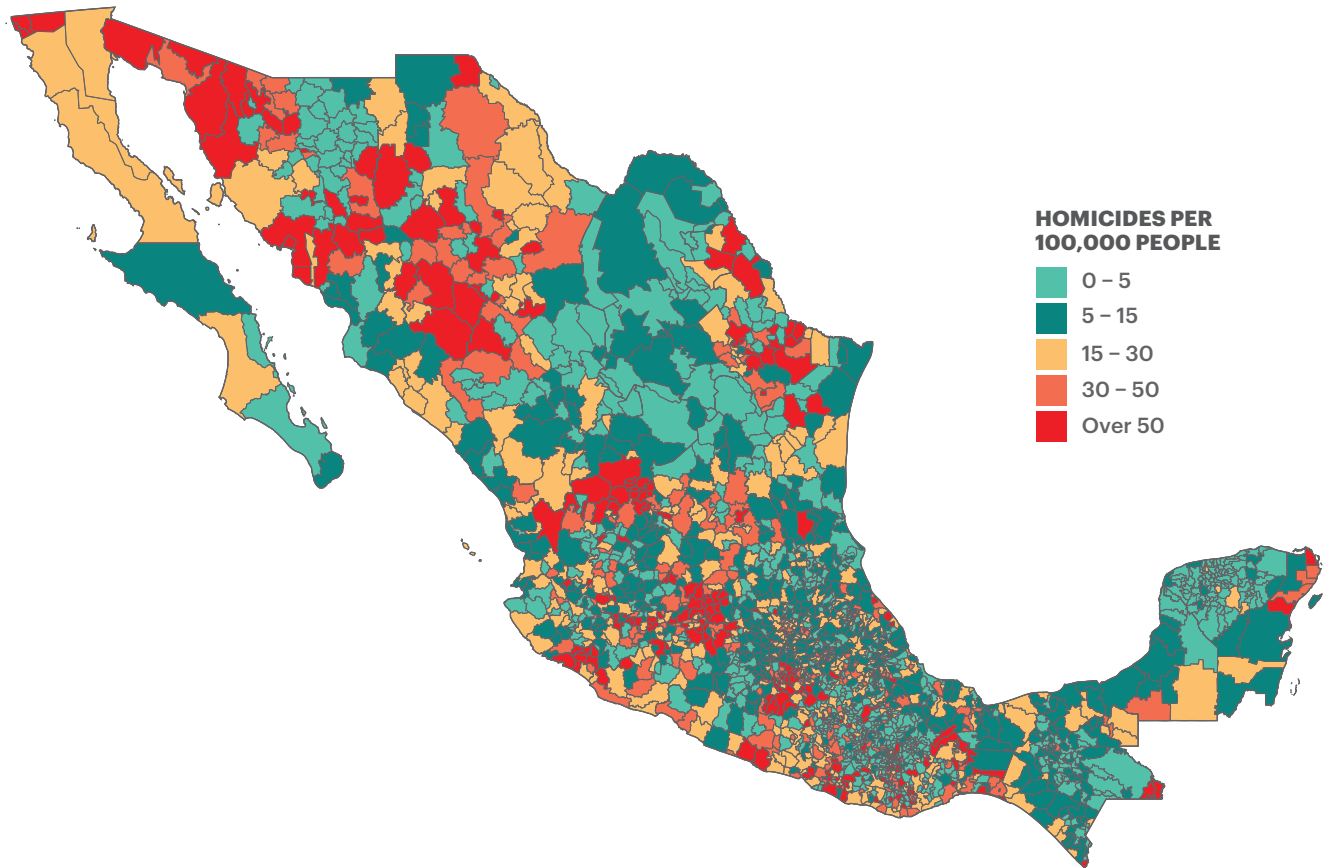
Mexico's high levels of homicide are primarily driven by violence in a relatively small number of urban centers. In 2022, half of all homicides were recorded in just 50 of Mexico's 2,478 municipalities, almost all of which represent major cities. However, high homicide rates – calculated relative to a municipality's overall population – are not limited to major cities, but are rather present in urban, semi-urban and rural settings across the country.

Figure 2.5 depicts the homicide rate across all of Mexico's municipalities. At the municipal level, Mexico's National System for Public Security (SESNSP) only provides the number of homicide cases, which is often distinct from the number of homicide victims, as a single homicide case may involve multiple victims. However, both figures are provided at the state level. To estimate the municipal homicide rate, therefore, each municipal homicide case rate has been adjusted based on the level of state-wide discrepancy between victims and cases – differences which range widely across states. In Nuevo León and Yucatán, for example, every homicide victim is associated with a unique case and there are therefore no discrepancies. In contrast, Baja California Sur and Zacatecas had the highest discrepancies between the two figures in 2022, with the total number of victims being, respectively, 40 and 36 percent higher than the total number of cases.

FIGURE 2.5

## Municipal Homicide Rates, 2022

In 2022, about one in nine municipalities had a homicide rate of at least 50 deaths per 100,000 people.



Sources: SESNSP; IEP calculations

In 2022, there were about 280 municipalities with a homicide rate of at least 50 deaths per 100,000 people, meaning that approximately one in nine municipalities nationally suffer from extreme levels of homicidal violence. In contrast, about 980 municipalities had a rate of less than five deaths per 100,000 people, including more than 850 with zero deaths, meaning that in about two-fifths of municipalities there were either no recorded murders or relatively few murders last year. The remaining municipalities, constituting about half of the total, fall roughly within the moderate to high homicide level ranges: about 23 percent of all municipalities recorded a rate of 5-15 deaths per 100,000 people, about 17 percent recorded a rate of 15-30, and about ten percent recorded a rate of 30-50.

As shown in Figure 2.5, municipalities experiencing extreme levels of homicidal violence are often clustered together in the same geographic area. These clusters commonly cross state boundaries and represent strategic places for the production or trafficking of illegal drugs. They tend to be in areas in dispute by two or more criminal organizations, whose turf wars drive up homicide rates.

Among other places, extreme homicide clusters of this kind are visible in the Northwest region of the country (including within and across the states of Baja California, Chihuahua, Durango and Sonora), the Western and North-Central regions (including within and across the states of Colima, Guanajuato, Jalisco, Michoacán, Nayarit and Zacatecas), and the Northeast region (including within and across the states of Coahuila, Nuevo León and Tamaulipas). Another noteworthy cluster stretches across the

central state of Morelos and into northern Guerrero and western Puebla.

Naturally, Mexico's least peaceful states are home to many of its least peaceful municipalities. There may, however, be large differences in the levels of violence within states. For example, the city of Zamora in Michoacán recorded 332 homicide cases in 2022, giving it the highest estimated homicide rate of any municipality with a population over 150,000 – a distinction it also held in 2021. The small municipality of Ixtlán, which borders Zamora, however, had no recorded murders in 2022, after recording just one in 2021.<sup>9</sup>

The factors driving the extreme rates of homicide in Zamora are multifaceted, with analysts signaling that the city has become the epicenter of disputes in the state of Michoacán between rival drug cartels. Such groups include La Familia Michoacana, Los Caballeros Templarios, the Jalisco New Generation Cartel (CJNG) and the Sinaloa Cartel, which find the city and the state attractive because of a variety of criminal enterprises, including the production of methamphetamines and the extortion of the lucrative avocado and lime industries that form part of Zamora's agriculture-based economy.<sup>10</sup>

Table 2.2 lists the 20 mid-sized and large-population municipalities with the highest homicide rates in 2022, along with the 20 with the lowest rates.<sup>11</sup> Collectively, the highest homicide municipalities accounted for 26.1 percent of all homicide cases in Mexico. While Zamora recorded the highest homicide rate in the country, Tijuana had by far the highest number of homicides overall, with over 1,800 registered cases. Tijuana has had the highest number of total homicides since 2017, when it overtook Acapulco, Guerrero, which held the record in 2015 and 2016.

In contrast, there are a number of major cities and municipalities across Mexico that recorded low homicide rates in 2022, including the state capitals of Chiapas (Tuxtla Gutiérrez), Coahuila (Saltillo), Baja California Sur (La Paz) and Aguascalientes (Aguascalientes City). However, it was Mérida, the capital of Yucatán, that had the lowest homicide rate, recording only 10 homicides in 2022. With a population of just under one million, representing nearly half of the state's total population, these 10 deaths resulted in a homicide rate of about one per 100,000 people.

There are several analyses that have sought to explain why Mérida and the state of Yucatán in general are so much more peaceful than the rest of the country. One recent study has credited Yucatán's political and security institutions with playing a decisive

role in the prevention and containment of violence. In particular, the state has reportedly been able to maintain cooperative intergovernmental relationships over the last several decades, even as the parties in power at the state and federal levels came to differ. This is significant because organized criminal groups have been found to effectively exploit – often through the intensification of high-profile acts of violence – fissures in government at the local, state and federal levels in order to increase their influence. In addition, there has been a high degree of continuity in the leadership of the security forces. This was the case even amid changes in government. The study posits that this consistency in leadership has contributed to permanence and cohesion within and across security agencies.<sup>12</sup>

TABLE 2.2

## Major municipalities with the highest and lowest homicide rates, 2022

Homicide rates in Mexican cities range from one to 200 deaths per 100,000 people.

HIGHEST HOMICIDE RATES				
Rank	Municipality	State	Homicide Rate*	Homicide Cases
1	Zamora	Michoacán	200.0	332
2	Colima	Colima	191.7	289
3	Villa de Álvarez	Colima	148.2	196
4	Zacatecas	Zacatecas	143.7	160
5	Guaymas	Sonora	143.5	213
6	Fresnillo	Zacatecas	143.4	250
7	Guadalupe	Zacatecas	138.8	200
8	Cajeme	Sonora	124.8	503
9	Tijuana	Baja California	109.5	1830
10	Celaya	Guanajuato	106.9	453
11	Iguala	Guerrero	90.6	117
12	San Luis Río Colorado	Sonora	90.1	162
13	Uruapan	Michoacán	88.3	256
14	Manzanillo	Colima	87.0	151
15	Salamanca	Guanajuato	74.4	173
16	El Salto	Jalisco	73.2	99
17	Juárez	Chihuahua	69.5	885
18	Cuatla	Morelos	61.1	110
19	Acapulco	Guerrero	60.6	441
20	Tlajomulco de Zúñiga	Jalisco	58.1	280

LOWEST HOMICIDE RATES				
Rank	Municipality	State	Homicide Rate*	Homicide Cases
1	Mérida	Yucatán	1.03	10
2	Corregidora	Querétaro	2.22	4
3	Ciudad Madero	Tamaulipas	2.23	4
4	Tampico	Tamaulipas	2.28	6
5	Cuajimalpa de Morelos	Mexico City	2.30	4
6	Monclova	Coahuila	2.52	6
7	Ocosingo	Chiapas	2.80	6
8	Mineral de la Reforma	Hidalgo	3.70	6
9	Tuxtla Gutiérrez	Chiapas	3.74	22
10	Coyoacán	Mexico City	3.94	21
11	Benito Juárez	Mexico City	4.06	14
12	Metepc	State of México	4.07	9
13	Torreón	Coahuila	4.18	30
14	Saltillo	Coahuila	4.63	38
15	Lerdo	Durango	4.77	7
16	Ahome	Sinaloa	4.81	21
17	Altamira	Tamaulipas	4.86	11
18	La Paz	Baja California Sur	4.88	12
19	Aguascalientes	Aguascalientes	5.05	42
20	Acuña	Coahuila	5.22	8

Source: SESNSP; IEP calculations

Note: The municipal homicide rate\* has been estimated by adjusting the municipal homicide case rate based on state-wide discrepancies between the recorded numbers of victims and the recorded number of cases. This table only includes municipalities with a population of at least 150,000.

TABLE 2.3

## Homicides by sex, 2015–2022

Both male and female homicides peaked in 2019. While male homicides have since experienced a notable decline, female homicides have only decreased minutely.

Year	Total Homicides	Male Homicides	Female Homicides	% Male	% Female	Femicides	% Female Homicides Identified as Femicides
2015	18,312	15,158	2,161	87.5%	12.5%	427	19.8%
2016	23,189	20,007	2,835	87.6%	12.4%	648	22.9%
2017	26,636	25,898	3,301	88.7%	11.3%	766	23.2%
2018	34,656	30,420	3,678	89.2%	10.8%	919	25.0%
2019	35,687	31,008	3,844	89.0%	11.0%	969	25.2%
2020	35,539	30,893	3,776	89.1%	10.9%	976	25.8%
2021	34,367	29,677	3,766	88.7%	11.3%	1,017	27.0%
2022	31,936	27,219	3,775	87.8%	12.2%	968	25.6%
<b>% Change, 2015–2022</b>	<b>79%</b>	<b>80%</b>	<b>75%</b>	-	-	<b>127%</b>	-

Source: SESNSP; IEP calculations

Note: Female homicides includes femicides. Total homicides include homicides where the sex of the victim is unknown, but the male and female percentages do not.

### HOMICIDE RATES DISAGGREGATED BY SEX

Men are much more likely than women to be victims of homicide in Mexico, consistently accounting for nearly nine in ten victims over the past eight years.<sup>13</sup> Male homicides can be linked to organized crime trends, with a strong positive relationship between organized crime, gun violence and male homicide. Conversely, female deaths are more frequently associated with intimate partner violence.<sup>14</sup> Since 2015, nearly one in four female homicides occurred in the home, compared to one in 11 for male homicides.<sup>15</sup>

Table 2.3 shows that since 2015 male homicides have gone up by 80 percent, increasing by a larger percentage than female homicides. However, since both male and female homicides peaked in 2019, the two categories of killings have shown different trends. Male homicides have experienced a notable decline of 12.2 percent over the past three years, while female homicides have declined only marginally, by 1.8 percent. This divergence further highlights how the factors driving male and female deaths are often distinct. The dynamics of homicides by sex highlights the necessity for tailored approaches to address distinct patterns of violence affecting men and women in Mexico.

Femicides, defined in Mexican law as the murder of a woman for gender-based reasons, also rose significantly in this period, from 427 reported victims in 2015 to 968 in 2022, a 127 percent increase. While femicides are usually included in female homicide figures, not all female homicides can be considered femicides. At present, about one in four female killings in Mexico are classified as femicides. However, the rates at which the 2015–2022 murders of women have been classified as femicides vary substantially across states, from as high as 75.8 percent in Sinaloa to as low as 6.9 percent in Guanajuato. In this analysis, femicide data is presented as separate from female homicide to assess the different dynamics of reported femicides compared to female homicide. Box 2.1 outlines the legal definition of femicide in Mexico and current limitations in data collection.

#### BOX 2.1

### Femicide in Mexico

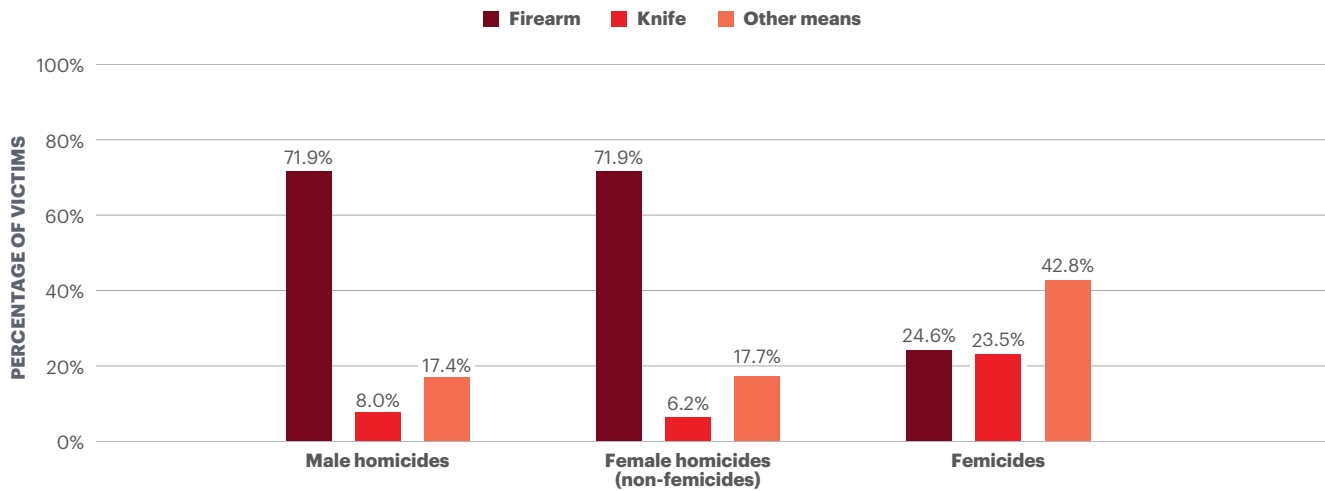
Femicide is defined as the criminal deprivation of the life of a female victim for reasons based on gender.<sup>16</sup> The murder of a woman or girl is considered gender based and included in femicide statistics when one of seven criteria is met, including evidence of sexual violence prior to the victim's death; a sentimental, affective or trusting relationship with the perpetrator; or the victim's body being displayed in public.<sup>17</sup>

The number of femicides reported in Mexico has grown rapidly over the past eight years. While they represented 19.8 percent of female homicides in 2015, this proportion had increased to 25.6 percent by 2022. As a relatively new crime category that requires added levels of investigation and analysis to identify, femicides have not been uniformly classified as such by different law enforcement institutions since the category's introduction. It is therefore difficult to determine with certainty the true number of femicides in Mexico over time.<sup>18</sup> The recorded rise in reported femicides is in line, however, with increases in recorded cases of family violence and sexual assault in Mexico.<sup>19</sup>

FIGURE 2.6

## Homicides by weapon and sex, 2022

Male homicides and non-femicide female homicides show very similar patterns in relation to weapons used, while femicides show distinct patterns.



Source: SESNSP

Note: Excludes homicides in which the sex of the victim is unknown. Victims killed by unspecified means are not displayed.

Figure 2.6 shows the types of weapons used in different forms of murder in 2022. While male homicides and non-femicide female homicides show almost identical patterns, with seven in 10 deaths resulting from a gun, femicides were mostly carried out without firearms. About a quarter of femicide victims were killed with knives, while the largest share – more than two-fifths – were killed by “other means”. These latter cases likely include beatings and strangulations, though official records do not provide additional detail, highlighting the need for more granular data to understand the unique dynamics driving violence against men and women across the country.

Femicide is often discussed in the context of the rise in Mexico’s overall rates of homicides and generalized violence over the past decade,<sup>20</sup> which have been especially driven by increased rates of both firearms crime and organized crime. Considering the relative infrequency of registered femicides being carried out with a firearm, it is therefore noteworthy that there has been a growing relationship between the prevalence of firearms crime and the prevalence of femicides across states. In 2015, there was no correlation between the two ( $r=0.04$ ), but over the past eight years the strength of the statistical relationship has grown, reaching its highest ever level ( $r=0.54$ ) in 2022. A similar trend is observable in relation to organized crime, despite femicides typically representing a form of interpersonal violence distinct from the coordinated actions of criminal groups. Between 2015 and 2022, the level of correlation between *organized crime* and femicide rates rose from weak ( $r=0.13$ ) to moderate (0.35).

The shifting relationships between femicides and these two more pervasive types of criminality highlight the reciprocal dynamics of violence within a society. They demonstrate the ways in which a rising climate of violence and associated increases in levels of impunity can have flow-on effects within a population, including in seemingly unrelated forms of violence, such as gender-based violence.

### VIOLENCE AGAINST POLICE, JOURNALISTS AND ACTIVISTS

High levels of violence in Mexico have also been characterized by increasing violence targeting security forces, journalists and social activists. Table 2.4 shows the number of police deaths across

Mexico in 2022. A total of 403 officers were killed in 2022, two more than in the previous year, but substantially fewer than the 524 killed in 2020, the highest number in at least the past five years.<sup>21</sup>

In 2022, the majority of those killed (63 percent) were municipal police officers, followed by state police officers (33 percent) and members of the National Guard (four percent). For the first time, Zacatecas recorded the highest number of police deaths, with 60 officers killed. Zacatecas has become a key battleground in the bloody multi-state conflict between the CJNG, the Sinaloa Cartel and their respective allies, with the state’s highways of particular importance for the transportation of drugs northward to the United States. Across Mexico, these groups have repeatedly shown themselves willing to target government security forces in pursuit of heightened influence.<sup>22</sup> In Zacatecas, this was seen in several attacks in 2022 that left multiple police officers dead, including one in September in which a group armed with assault rifles entered a sports training facility and killed six police officers as they were exercising.<sup>23</sup>

Police and members of the National Guard are not the only security forces to fall victim to homicidal violence in Mexico in recent years. In 2022, the government reported that 306 military personnel had been killed in the fight against organized crime since Mexico’s war on drugs was launched in 2006, with most of these deaths coming in the first few years of the conflict.<sup>24</sup>

“

In the past decade, Mexico has become a much more dangerous place for social activists. A 2022 report ranked Mexico as the deadliest place in the world to be an environmental activist, with 54 activists killed in the year prior.



TABLE 2.4

**Police killings by state, 2022**

More than 400 police officers have been killed in Mexico in each of the past five years.

State	Police Homicides
Zacatecas	60
Guanajuato	50
Guerrero	24
Michoacán	24
Veracruz	24
Jalisco	22
State of México	21
Chihuahua	19
Sonora	18
Nuevo León	17
Oaxaca	17
Baja California	15
Colima	15
Morelos	14
Puebla	13
Mexico City	10
San Luis Potosí	7
Tabasco	7
Hidalgo	6
Sinaloa	4
Chiapas	3
Nayarit	3
Quintana Roo	3
Tamaulipas	3
Coahuila	2
Campeche	1
Tlaxcala	1
Aguascalientes	0
Baja California Sur	0
Durango	0
Querétaro	0
Yucatán	0
<b>National</b>	<b>403</b>

Source: Causa en Común

In 2022, Mexico also ranked as the second most deadly country in the world to be a journalist, falling just behind Ukraine. According to data from the Committee to Protect Journalists, there were 13 journalists killed in the country in 2022, which is the highest number on record and represents nearly 20 percent of the global total.<sup>25</sup>

In addition, a 2022 report by Global Witness ranked Mexico as the deadliest country in the world to be an environmental activist, with 54 killed in 2021. About two in three of these deaths occurred in just two states, Oaxaca and Sonora, which are both sites of major mining projects. Indigenous activists were particularly vulnerable owing to the large number of projects in their territories. More than 40 percent of those killed were from

indigenous groups, and more than a third of all deaths came in the form of forced disappearances.<sup>26</sup>

The 54 activists killed in 2021 also reflects a continuing upward trend seen over the past decade. While there were on average about five killings of this kind each year between 2012 and 2016, there have been about 26 killings per year in the years since then. Moreover, the number of deaths in 2021 represents an 80 percent increase from the previous year.<sup>27</sup>

As for 2022, another source recorded a total of 72 activists killed. While this latter list included non-partisan activists engaged in a range of social issues, those focused on environmental concerns – and especially those from indigenous communities – made up the largest share of the victims.<sup>28</sup>

**MISSING PERSONS**

The homicide rate in Mexico is likely underestimated. There are significant numbers of missing people in the country, a proportion of which may have been victims of homicide, especially given the growing trend of victims' bodies being later discovered in mass and unmarked graves. Analysts have suggested that cartels sometimes carry out forced disappearances – rather than open homicides – as a tactic to maintain political control.<sup>29</sup>

In 2017, the Mexican government established the National Search Commission / *Comisión Nacional de Búsqueda* (CNB) in an effort to better track the number of missing and disappeared people in the country, as historical and contemporary figures on these cases had long been viewed as unreliable.<sup>30</sup> A 2022 CNB report found that, in the 15-year period between 2006 and 2021, more than 4,800 clandestine graves were found and that these contained more than 8,250 bodies. Approximately 2,000 of these graves and 3,300 of the bodies were found in just the three years between 2019 and 2021. Over the course of the full 15-year period, the state registering the highest number of graves was Veracruz, with 296, and the state registering the highest number of exhumed bodies was Jalisco, with 1,107.<sup>31</sup>

While the number of missing people that end up the victims of homicide is not known, there have been similarly alarming increases in disappearances in recent years. Since 2000, there have been more than 94,000 reported cases of missing and disappeared persons in Mexico. Approximately 70 percent of these have been recorded in the past eight years, and the number has gradually been rising during that time. It climbed from around 4,200 in 2015 to more than 10,000 in both 2021 and 2022.

Not all states have been equally affected by this rising pattern of disappearances. Table 2.5 shows the total recorded number of people reported missing in each state between 2015 and 2022. With more than 10,000 cases, Jalisco has by far the largest number, nearly twice as many as the second-ranking state, Tamaulipas. In contrast, Tlaxcala had fewer than 100 recorded cases.<sup>32</sup>

TABLE 2.5

### Recorded cases of missing or disappeared people by state, 2015–2022

Jalisco has by far the largest number of people reported missing.

State	Missing People
Jalisco	10,481
Tamaulipas	5,614
México	5,314
Nuevo León	3,729
Veracruz	3,703
Sinaloa	3,692
Mexico City	3,682
Michoacán	3,452
Sonora	3,447
Guanajuato	2,630
Zacatecas	2,428
Guerrero	2,191
Morelos	2,020
Chihuahua	1,684
Puebla	1,393
Chiapas	1,122
Nayarit	1,074
Baja California	1,039
Coahuila	815
Colima	797
Quintana Roo	740
Baja California Sur	537
San Luis Potosí	528
Hidalgo	491
Durango	357
Querétaro	353
Oaxaca	327
Aguascalientes	210
Tabasco	179
Yucatán	161
Campeche	158
Tlaxcala	96
<b>National</b>	<b>64,587</b>

Source: Comisión Nacional de Búsqueda

Note: Figures accurate as of March 6, 2023. The national total includes cases for which the state is unknown.

There have also been large differences in the change in levels of disappearances over the past eight years. Figure 2.7 shows the percent change in the number of people reported missing in each state between 2015 and 2022. Twenty-five states experienced increases, while six experienced decreases and one remained unchanged. Baja California saw the largest relative increase, with the recorded number of people reported missing rising nearly 30-fold, from 11 in 2015 to 310 in 2022. In contrast, Aguascalientes saw the largest decline in recorded cases, with the number falling from 43 to nine between 2015 and 2022.<sup>33</sup>

FIGURE 2.7

### Percent change in number of missing people by state, 2015–2022

Baja California saw its recorded number of people reported missing increase nearly 30-fold.



Source: Comisión Nacional de Búsqueda



## FIREARMS CRIME

Since 2015, more than 160,000 people have been killed with a gun in Mexico. The rise in gun violence has been a principal driver of Mexico's widespread increases in homicides.

In the past eight years, the national rate of homicide with a firearm rose by 94.3 percent, while the rate of assault with a firearm increased 30.5 percent. The share of homicides committed with a firearm rose from 57.4 percent in 2015 to 68.6 percent in 2022, with a total of 21,915 homicides committed with a gun in 2022. However, since peaking in 2019, the overall firearms crime rate has been improving, declining 17 percent in the past three years.

The growth of organized crime activity has fueled the rise in gun violence across Mexico. In 2022, three of the five states with the highest levels of organized crime activity were also among the five states with the highest rates of firearms crime. Similarly, the growing correlation between firearms crime and organized crime rates is largely a result of territorial disputes between criminal groups over drug trafficking routes and local illicit rackets, which tend to substantially increase gun violence. This can be seen in states with strategic cross-country trafficking routes such as Zacatecas, states with critical border-crossings such as Baja California, and states with crucial sea access such as Colima.

According to multiple analyses, the illegal import of firearms from the United States factors into gun violence in Mexico.<sup>34</sup> From 2016 to 2021, annual assessments by the US Bureau of Alcohol, Tobacco, Firearms and Explosives of guns recovered at crime scenes in Mexico have consistently found that 67-69 percent come from the United States, compared to 16-18 percent of non-US origin and 13-17 percent of unknown origin.<sup>35</sup> While the exact number of guns

arriving via the northern border is unknown, a 2021 Mexican government lawsuit against US gun manufacturers stated that more than half a million guns are estimated to be trafficked from the United States into Mexico each year.<sup>36</sup> Researchers have traced the beginnings of the rise of US guns in Mexico to the expiration of a US federal assault weapons ban in 2004, before which fewer than 90,000 firearms were estimated to be trafficked across the border each year.<sup>37</sup> A 2013 study determined that there was an immediate uptick in firearms homicides in Mexican municipalities close to the US border following the expiration of the ban, except for municipalities bordering California, which was the only US border state to have a state-level assault weapons ban still in place.<sup>38</sup>

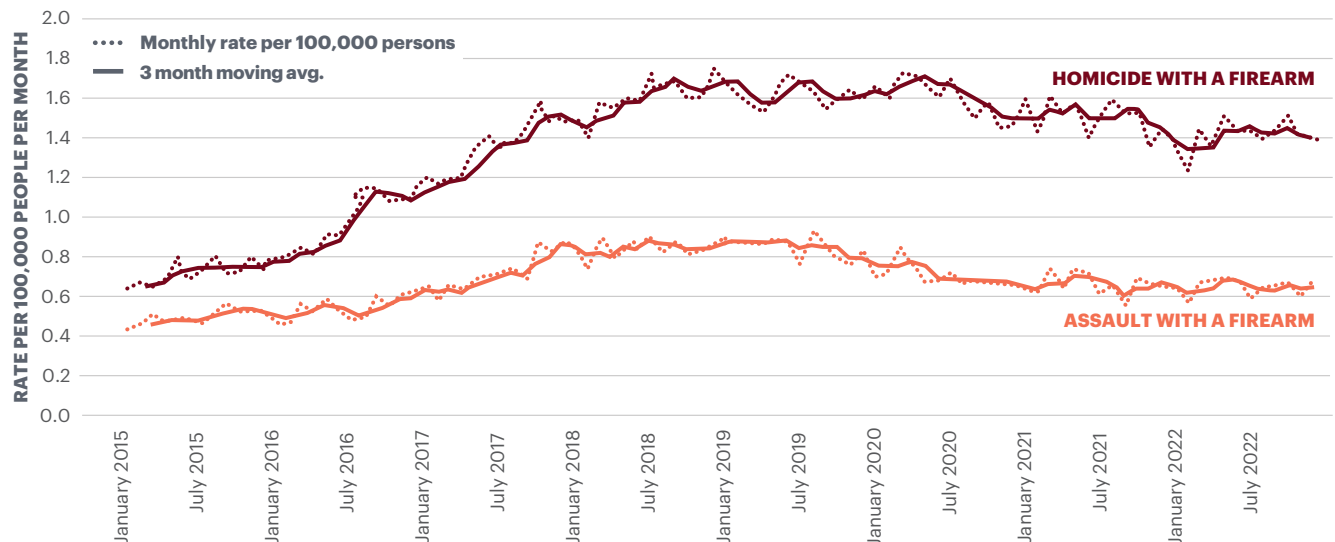
Despite the net increase in the rate of firearms crime since 2015, both homicides and assaults carried out with firearms have been declining over the past three years. Both sub-indicators peaked in 2019; firearms assaults have since declined by 23.7 percent and firearms homicides by 13.5 percent. This trend continued in 2022, as the overall firearms crime rate decreased by 5.5 percent from the previous year, with nine states deteriorating and 23 improving.

The 2022 improvements were mainly driven by a seven percent decrease in the rate of homicide with a firearm, which dropped from 18.1 to 16.8 deaths per 100,000 people. Assaults with a firearm remained mostly unchanged, declining by less than two percent from 2021. A monthly comparison of the two firearms crime rates from 2015 to 2022 is shown in Figure 2.8.

FIGURE 2.8

### Trends in gun violence, 2015–2022

The combined rate of firearms homicides and assaults has increased by 68.3 percent since 2015.



Source: SESNSP

The state of Yucatán continued to have the lowest firearms crime rate in the country, at 0.7 crimes per 100,000 people, followed by Coahuila and Baja California Sur, with rates of 2.4 and 2.9 crimes, respectively. Yucatán also recorded the largest improvement in assaults with a firearm over the last eight years, with the rate decreasing by 86.7 percent. Baja California Sur had the largest reduction in rates of both firearms homicides and overall firearms crime, with the state improving by more than 80 percent in both cases.

In 2022, Colima recorded the largest annual increase in *firearms crime*. Colima was also the least peaceful state in the country last year and the state that experienced the largest overall deterioration in peacefulness. Its firearms crime rate jumped from 54.4 to 91.1 per 100,000 people between 2021 and 2022. The large deterioration was mainly a result of a 70.3 percent increase in its rate of homicides with a firearm. Since 2015, the state has seen its firearms homicide rate rise from 19.8 to 88.2 deaths per 100,000 people.

In the same period, Campeche recorded the largest increase in the rate of assaults with a firearm, which rose 18-fold from 0.4 to 7.9 firearms assaults per 100,000 people.

National survey data reveals the changing rates at which Mexicans have acquired firearms over recent years. Household acquisitions of firearms, defined as the number of households that obtained a firearm as a protective measure within the previous 12 months, rose between 2015 and 2018, but has declined in the years since, as shown in Figure 2.9.

The number of Mexican households acquiring a firearm reached an all-time high of about 352,000 in 2018, equivalent to one

percent of all households. By 2021, this number had dropped to around 196,000 households, equivalent to about 0.5 percent of all households. As shown in Figure 2.9, the acquisition of firearms has largely trended with firearms crimes, with a moderate level of correlation ( $r=0.42$ ) between the number of guns acquired and the firearms crime rate over the seven-year period.

This likely reflects the complex and reciprocal dynamics that the increased prevalence of guns within a society can entail. As criminals increasingly have access to and make use of guns to carry out crime, non-criminals may perceive a greater need to acquire firearms to protect themselves against armed assailants, which may then further encourage criminals to arm themselves. This dynamic is particularly visible in the rate of assaults carried out with a firearm, which shows a higher level of correlation ( $r=0.66$ ) with household firearms acquisitions. It is also likely at play in the national robbery rate, which shows an even higher level of correlation ( $r=0.81$ ). In contrast, the rate of homicides with a firearm shows a lower level of correlation ( $r=0.32$ ) with household firearms acquisitions.

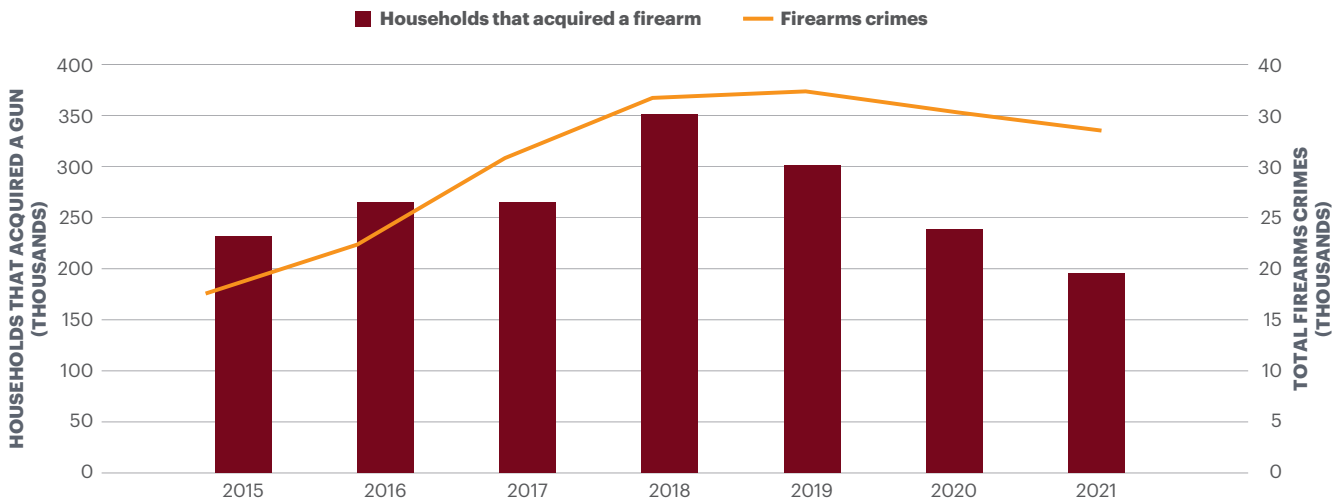
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The state of Yucatán continued to have the lowest firearms crime rate in the country, at 0.7 crimes per 100,000 people, followed by Coahuila and Baja California Sur, with rates of 2.4 and 2.9 crimes, respectively.

FIGURE 2.9

### Household acquisitions of firearms and firearms crimes, 2015–2021

The acquisition of firearms has largely trended with the prevalence of firearms crime.



Sources: ENVIPE; SESNSP; IEP calculations

Note: Excludes homicides in which the sex of the victim is unknown. Victims killed by unspecified means are not displayed.



## VIOLENT CRIME

Over the past eight years, Mexico's violent crime rate has deteriorated by 18.1 percent, driven by increases in the rates of family violence and sexual assault in all but two states.

Nationally, sexual assault and family violence rates have both more than doubled since 2015. In contrast, assault and robbery rates improved modestly in the same period, with declines of 0.2 and 12 percent, respectively.

Over the eight-year period, nine states recorded improvements in *violent crime*, while 23 states deteriorated. Tabasco recorded the largest improvement in overall score, while Colima recorded the largest deterioration. Tabasco's improvement was driven by the country's largest decline in robbery rate, registering a 67 percent drop. In contrast, Colima experienced a country-leading increase in its rate of sexual assault, with the rate rising 10-fold between 2015 and 2022.

In Mexico, *violent crime* was one of the categories of violence most impacted by the changes in daily life brought on by the COVID-19 pandemic, with assaults and robberies both registering substantial declines in 2020. The increasing resumption of pre-pandemic patterns of activity, however, appears to have led to a major rebounding in the rate of assault. It has increased by 16.7 percent

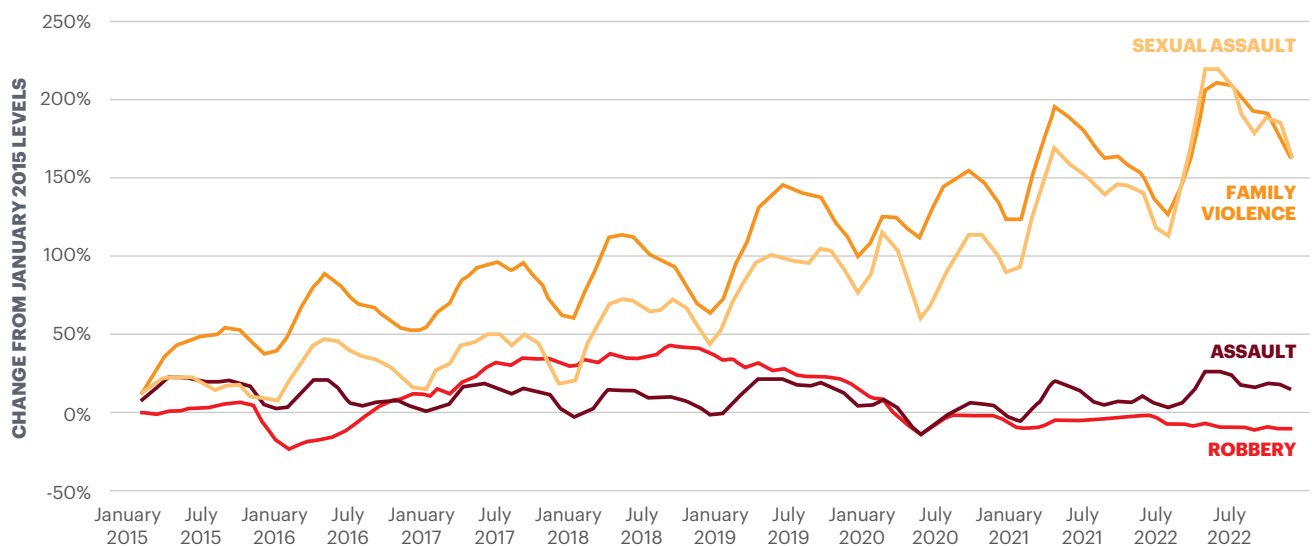
in the last two years as restrictions on movement have been lifted. Unexpectedly, the robbery rate has moved in the opposite direction, continuing to drop modestly in both 2021 and 2022. Figure 2.10 illustrates the indexed trend in *violent crime* sub-indicators between January 2015 and December 2022.

The robbery rate peaked in 2018, at 1,358 robberies per 100,000 people. Following a 33.8 percent fall over the past four years, it stood at 899 cases per 100,000 people in 2022. Despite this, national survey data indicates that various forms of robbery were still the most common crime for Mexicans across the country in 2022, making up a third of all crimes experienced.<sup>39</sup> According to official crime data, vehicular theft was the type of robbery that was most widely reported, making up 32.5 percent of all robberies, while robbery of a business made up 19.8 percent. Robbery on public transport, robbery of a business, and home theft all improved between 2021 and 2022. The State of México has had the highest robbery rate since 2015 and Mexico City has the second highest rate since 2017.

FIGURE 2.10

### Indexed monthly change in violent crime rates, 2015–2022

The rates of family violence and sexual assault have both more than doubled since 2015, while the rates of assault and robbery have remained relatively unchanged.



Sources: SESNSP; IEP calculations

Note: This figure shows the three-month moving average of the indexed trend.

In contrast to robbery and assaults, which have remained relatively close to their 2015 levels over the past eight years, family violence and sexual assault rates have consistently increased each year. As a result, both rates have more than doubled since 2015, with family violence rising by 102 percent and sexual assaults rising by 141 percent. Given the increased levels of awareness about family violence and sexual assault in Mexico, it is difficult to determine whether improved reporting and police recording of crimes have influenced these trends. Family violence has deteriorated in all but one state, Yucatán, and sexual assault has deteriorated in all but two states, Yucatán and Tlaxcala.

In 2022, Colima had the worst rate of family violence in the country for the fifth consecutive year, with 1,775 cases per 100,000 people, almost triple the national rate. According to national survey data, 21.6 percent of the adult population in Colima report feeling unsafe in their own home.<sup>40</sup>

Across the country, the survey data also reveals that 70.1 percent of women over the age of 15 had experienced some form of violence in their lifetimes, including 39.9 percent who had experienced it from their partner. At the same time, 42.2 percent of married women did not have their own income, meaning that they most likely would have lacked the resources to leave an abusive relationship if they were in one.

Despite this, of the four forms of household-based violence measured in the survey – physical, sexual, economic and psychological – economic violence is the only form for which rates have decreased for women over the past decade. Between 2011 and 2021, the prevalence of women experiencing economic violence fell from 35.3 to 27.4 percent, which may reflect an increased level of financial independence among Mexican women.<sup>41</sup>

Sexual assault makes up about two-thirds of the violence that women experience in public spaces, and about two-thirds of those acts are committed by strangers.<sup>42</sup> In 2022, the country hit a new record in the number of emergency calls reporting incidents of sexual assault, with 6,977 calls. This equates to a 13.1 percent increase from 2021 and is nearly twice the number received in 2017.<sup>43</sup> For the eighth consecutive year, Morelos had the highest rate of sexual assault in the country, with 724 cases per 100,000 people, almost three times the national average.

Global survey data on levels of worry and experience with different forms of harm show that violent crime is a much greater

source of concern in Mexico than it is in most of the world. According to the Lloyd's Register Foundation's World Risk Poll, 46.3 percent of Mexicans identified violent crime as the top safety risk in their daily lives, the fifth highest percentage of any country, as shown in Table 2.6.

This rate is especially noteworthy given that out of the 121 countries surveyed, only two had a single safety concern identified by at least half of the population. In response to other questions in the poll, 56.3 percent of Mexican citizens reported a high level of worry about violent crime, the 23rd highest rate in the world, and 10.6 percent reported having personally experienced serious harm from violent crime in the previous two years, the 16th highest rate in the world.<sup>44</sup>

TABLE 2.6

### Countries with the highest rates of ranking violent crime as the biggest threat to daily life, 2021

Mexico had the fifth highest rate in the world of people ranking violent crime as their top safety concern.

Rank	Country	Percentage ranking violent crime as top concern
1	Venezuela	59.7%
2	Ecuador	49.6%
3	Argentina	48.5%
4	Colombia	46.8%
5	Mexico	46.3%
6	Dominican Republic	43.3%
7	South Africa	43.0%
8	Chile	41.8%
9	Brazil	41.4%
10	Paraguay	38.6%

Source: World Risk Poll



## ORGANIZED CRIME

Over the past eight years, the national organized crime rate has risen by 64.2 percent. With the exception of a minor decline in 2020, the rate has risen each year since 2016. This rise was driven by deteriorations in two organized crime sub-indicators: *extortion* and *retail drug crimes*.

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 offenses* include federal drug trafficking crimes and criminal offenses committed by three or more people. Figure 2.11 shows the monthly indexed trends in the rates of each of these sub-indicators from their levels in January 2015.

The deterioration in the organized crime rate was driven by a 149 percent increase in the retail drug crime rate, with the rate increasing each year since 2016. The deterioration for this sub-indicator has been widespread, with only eight states recording an improvement in the past eight years. According to national survey data, the rate of people reporting knowledge of drug dealing in their neighborhood rose from 27.3 percent in 2015 to 34 percent in 2022.<sup>45</sup> During the same period, knowledge of drug use in the residents' neighborhood rose from 43.5 percent to 50 percent.

In 2022, Guanajuato held the highest retail drug crime rate in the country for the second consecutive year, with 353 crimes per 100,000 people. Guanajuato is located along the fentanyl and

cocaine smuggling routes between Pacific ports and the United States, making it a prime location for drug trafficking organizations. The overall increase in violence in Guanajuato is a result of an ongoing turf war between the Jalisco New Generation Cartel (CJNG) and the Santa Rosa de Lima Cartel (CRSL). The CRSL challenged the CJNG's dominance of fuel theft in the state in 2017, which has driven extreme levels of homicide and firearms crime, as well as significant increases in the rates of extortion, major offenses and retail drug crimes. Government officials have stated that the majority of the homicides that occur in the state are related to drug trafficking.<sup>46</sup>

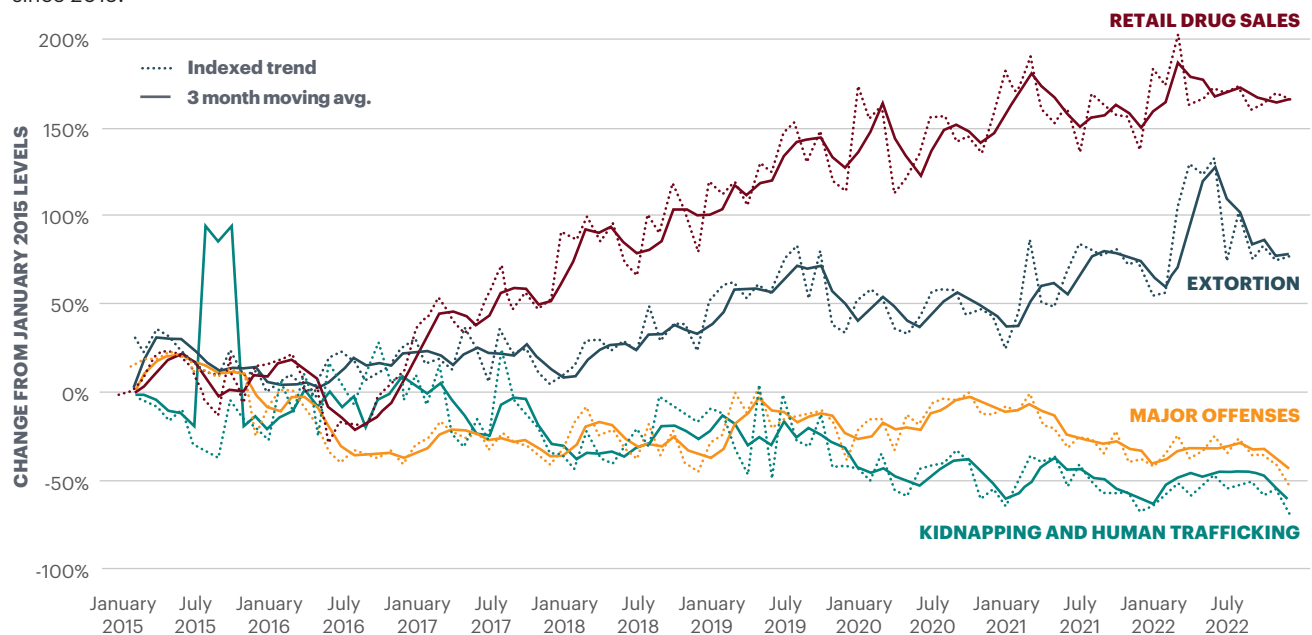
Coahuila and Baja California recorded the second- and third-highest rates of retail drug crimes for the second year in a row, at 334 and 258 offenses per 100,000 people, respectively. Coahuila, a border state with the United States, is a strategic trafficking route for various organized crime groups and has witnessed the incursion of the CJNG in recent years.<sup>47</sup>

Over the eight-year period, the national rate of extortions has followed a similar pattern as the rate of retail drug crimes, with their trends showing a high degree of correlation ( $r=0.92$ ). Since 2015, the extortion rate has risen from 57.5 to 91.7 offenses per

FIGURE 2.11

### Indexed change in organized crime offenses, 2015–2022

The rise in the organized crime rate has been driven by significant increases in retail drug crimes, which have risen by 149 percent since 2015.



Sources: SESNSP; IEP calculations

100,000 people. With the exception of 2020, the rate has increased each year since 2016.

While the northern region of Mexico had the highest average rates of extortion from 2015 to 2017, with a high of 83.1 cases per 100,000 people in 2017, the central region has had the highest average rates in the years since, peaking at 150 cases per 100,000 people in 2022. This has been driven by five years of major increases in Zacatecas and the State of México. In contrast, Chihuahua experienced a 70.3 percent decline in its extortion rate between 2021 and 2022, resulting in the lowest rate in the country.

According to 2022 national survey data, monetary losses from extortion decreased by 70 percent, despite a 14.9 percent increase in the extortion rate in the last year, suggesting that the average act of extortion may have become less profitable. The total monetary loss was recorded at about 27 trillion pesos (US\$1.5 billion) in 2021 and about eight trillion pesos (US\$450 million) in 2022.<sup>48</sup> The mining industry is reportedly the sector most affected by extortion, with 25.9 percent of mining companies reporting being victimized, followed by the restaurant and hotel industry, at 23.5 percent, and the health services sector, at 22.6 percent.<sup>49</sup>

Extortion committed through fraudulent phone calls remains by far the most common type of extortion in the country, with 92 percent of all extortion crimes conducted this way.<sup>50</sup> Such extortions often take the form of “virtual kidnappings”, in which offenders cold-call victims, falsely claim to have taken a loved one hostage, and demand a ransom payment.<sup>51</sup>

Even though phone call extortions are by far the most prevalent form of extortion, they tend to be the least successful. A recent study suggests that just 5.4 percent of phone call extortions are successful, compared to 66.7 percent for protection rackets (“cobro de piso”).<sup>52</sup> In states where “cobro de piso” is most common, such as Quintana Roo, Zacatecas, and Guanajuato, paying to be “protected” by organized crime groups has become the norm rather than the exception, especially when the organization has exerted dominance over the territory.<sup>53</sup>

With regard to the *kidnapping and human trafficking* sub-indicator, its rate has declined by 55.4 percent since 2015, dropping from 9.5 to 4.3 cases per 100,000 people. This sub-indicator increased in 2022 slightly after sharp decreases in five of the last seven years. The state of Colima saw the largest increase in the human trafficking and kidnapping rate, with an 83 percent increase from 2022, while the state of Tamaulipas experienced the largest reduction, at 49 percent.

One of the groups most vulnerable to kidnapping and human trafficking are international migrants, mostly from Central America, who pass through Mexico to reach the United States. The offenders often exploit the low rates at which migrants report crimes and sometimes engage in mass kidnapping operations to extort ransom from their relatives at home. In December 2022, the Mexican National Guard rescued over 250 kidnapped migrants in Durango, where busloads of migrants, mostly from Nicaragua, were being held for ransom.<sup>54</sup> This was among the largest kidnappings in Mexico’s history and came during a recent influx of Nicaraguan immigrants seeking asylum in the United States.<sup>55</sup> Such acts of kidnapping and human trafficking have contributed to northern Mexico having the highest rates of such crimes, at 5.25 per 100,000 people. Three of the five states with the highest rates are in the northern region.

In relation to *major offenses*, its rate has declined markedly in the past eight years. After two consecutive years of declines, it reached its lowest level on record in 2022, with 4.8 cases per 100,000 people. Mexico’s major offenses disproportionately occur in the

northern border states where drugs are trafficked to the United States. The four states with the highest average major offenses rates over the past eight years have all been northern states located along or near the Mexico-US border. Baja California and Sonora have registered the worst average major offenses rates since 2015, with the vast majority of offenses related to the possession and transportation of drugs.

## A DECADE OF CHANGE IN MEXICO’S ORGANIZED CRIMINAL LANDSCAPE

When the first Mexico Peace Index was published in 2013, conflicts between Mexican criminal organizations were relatively low, following the major increases in violence in the first few years of the war on drugs. According to data from the Uppsala Conflict Data Program, in 2013 there were just 160 recorded incidents of cartel clashes that resulted in at least one death. However, by 2021, the number of such clashes had surged to 3,722, marking a 23-fold increase.

The increase in conflict between organized crime groups follows the fragmentation of Mexican cartels after the launch of the war on drugs and the implementation of the kingpin strategy, which sought to combat organized crime by targeting the leadership of criminal organizations. While drug trafficking operations were formerly controlled by a handful of dominant criminal organizations, in several instances the kingpin strategy contributed to such organizations breaking up into smaller but more violent groups.<sup>56</sup> Throughout the 2010s, this trend was seen, for example, in the emergence of Los Caballeros Templarios as an offshoot of La Familia Michoacana,<sup>57</sup> the independence of Los Zetas from the Gulf Cartel,<sup>58</sup> the separation of the CJNG from the Sinaloa Cartel,<sup>59</sup> and the subsequent split of the Santa Rosa de Lima Cartel (CSRL) from the CJNG.<sup>60</sup>

With the larger number of organized crime groups, the nation experienced a surge in cartel disputes over territory and power, which led to a greater number of turf wars and casualties across the country. In 2013, the deadliest conflicts were between the Gulf Cartel and Los Zetas and between the CJNG and Los Caballeros Templarios, with death tolls of 339 and 129, respectively. By 2021, the deadliness of the disputes had risen dramatically. That year, the two most lethal conflicts were connected to the CJNG, with the CJNG-Sinaloa Cartel rivalry resulting in 4,890 recorded deaths and the CJNG-CSRL rivalry resulting in 2,225 recorded deaths.<sup>61</sup>

The heavily militarized CJNG, considered by the US Department of Justice to be one of the world’s five most dangerous transnational criminal organizations,<sup>62</sup> rose to prominence in the past decade through a violent expansion campaign and by catering to the high demand for fentanyl and methamphetamine in the US market.<sup>63</sup> The CJNG now has a presence in 28 of the 32 Mexican states, with operations spanning the country’s southern, western, and northeastern regions.<sup>64</sup> The CJNG’s expansion increased cartel conflict across Mexico, with the organization associated with 81 percent of all homicides from cartel clashes since 2013, according to the records of the Uppsala Conflict Data Program.

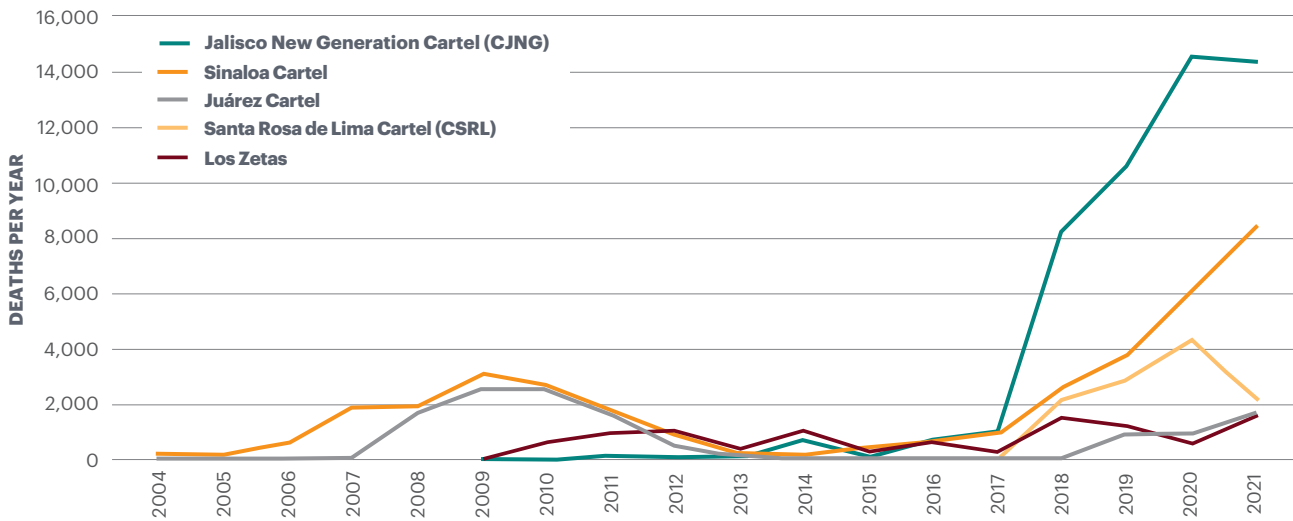
As shown in Figure 2.12, cartel clashes involving the two most powerful cartels in the country, the Sinaloa Cartel and the CJNG – including their clashes with each other and those with other cartels – have increased dramatically since an alliance between them broke down in 2017. In 2015, clashes involving at least one of these two groups accounted for 42 percent of all cartel conflict deaths, but by 2021 they accounted for 95 percent of such deaths. In recent years, it has been estimated that between 68 and 80 of all the homicides that occur in Mexico are associated with organized crime, up from approximately 44 percent in 2015.<sup>65</sup>



FIGURE 2.12

## Cartel conflict deaths associated with Mexico's five most lethal groups, 2004–2021

Deaths from cartel conflict have risen steeply since 2017, largely owing to conflicts associated with the CJNG and the Sinaloa Cartel.



Source: Uppsala Conflict Data Program

Note: Included are the five cartels whose clashes with other groups have resulted in the most total deaths since 2004. Deaths associated with clashes between two of these cartels are shown in the totals of both.

Each of the five cartels shown in Figure 2.13 is associated with a total of more than 10,000 deaths from conflicts with other groups since 2004. However, more than 72 percent of all the recorded cartel conflict deaths have occurred since 2017. The rise that began in 2017 was mainly fueled by the geographical expansion of the CJNG and the power vacuum created by the arrest and extradition of Joaquín “El Chapo” Guzmán, leader of the Sinaloa Cartel.<sup>66</sup> The Sinaloa Cartel, which controlled an estimated 40 to 60 percent of Mexico’s drug trafficking market in 2012,<sup>67</sup> has recently experienced internal divisions and infighting between El Chapo’s sons (known as “Los Chapitos”) and his former second-in-command, Ismael “El Mayo” Zambada.<sup>68</sup>

### CHANGES IN THE INTERNATIONAL AND DOMESTIC DRUG MARKETS

In the past decade, Mexico’s drug trafficking organizations have faced major shifts in the drugs that they produce to adapt to the significant changes in the United States market. Most notably, these changes include the decreased demand for Mexican marijuana and a massive upsurge in the demand for synthetic opioids.

The decreasing demand for Mexican marijuana can be attributed to the legalization and decriminalization of marijuana in three-quarters of US states, three of which are states that lie on the southwest border. In 2022, about 60 percent of the US population had at least a limited form of legally accessing marijuana, compared to about 12 percent in the late 1990s.<sup>69</sup>

In 2013, when only a few US states had legalized the recreational use of marijuana, the volume of marijuana seizures at all US points of entry totaled just under 1,350 metric tons. By 2022, however, the volume of seizures had declined to 70.2 metric tons, a 95 percent drop.<sup>70</sup> This also reflects a substantial decline in marijuana’s profitability, which has led drug trafficking organizations to expand their trafficking of other drugs, with fentanyl being the most prevalent. As shown in Figure 2.13, the number of seizures of fentanyl made by US officials at the Mexico-US border increased by 300 percent over the past four years.

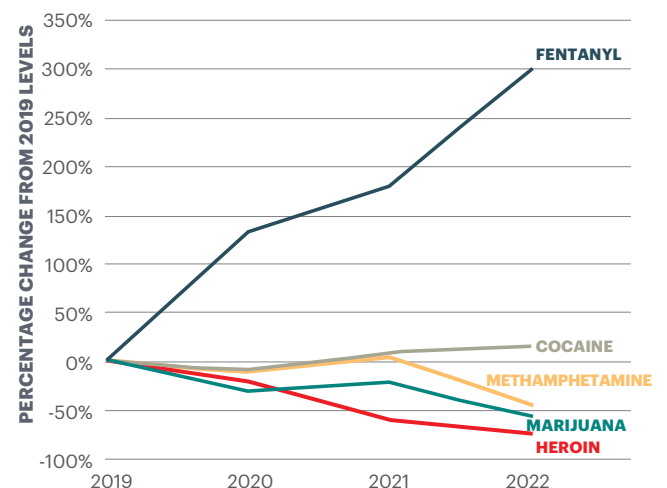
Moreover, between 2015 and 2022, the total volume of fentanyl seized at all US points of entry rose from 31.8 kilograms to 6,668 kilograms, a 209-fold increase.<sup>71</sup> An almost identical trend was observed within Mexico during a comparable period. From 2016 to 2022, the volume of fentanyl seized by Mexican authorities across all states rose from 11 kilograms to 2,114 kilograms, a 192-fold increase.<sup>72</sup> Most of these seizures took place in the Northwest region of the country.<sup>73</sup>

The shift to fentanyl production has been highly lucrative, as fentanyl is extremely potent, relatively cheap to produce and is often sold in pill form, meaning that crime groups are able to profit far more, relative to the volume of the drug that is

FIGURE 2.13

## Indexed change in drug seizure events at the Mexico-US border, by drug type, 2019–2022

Between 2019 and 2022, the number of seizures of fentanyl rose by 300 percent.



Sources: U.S. Customs and Border Protection; IEP calculations

trafficked. The markup of fentanyl prices when it is being sold and distributed can be as much as 2,700 times the price it takes to produce.<sup>74</sup> Because of its low price, fentanyl is often laced into other drugs such as heroin or cocaine in order to make them more powerful and cheaper to produce. The potency of the drug has led to a spike in overdose deaths in both the United States and Mexico over the past few years. According to data from the US Centers for Disease Control, synthetic opioids, primarily fentanyl, were involved in over two-thirds of the approximately 108,000 overdose deaths in the United States in 2022.<sup>75</sup>

While Mexico has traditionally been seen as a producer or transit point for drugs destined for the United States, its internal drug market has also been growing in recent years. The rate of retail drug crimes was not only the *organized crime* sub-indicator to experience by far the largest increase over the past eight years; it was also the only sub-indicator to consistently rise each year since 2016. This trend highlights the growing reliance on sales to local consumers.

As in the United States, there has also been a sharp increase in the number of fentanyl overdoses in Mexico in recent years, though the scale of problem is dramatically lower. Between 2019 and 2021, the number of people treated for fentanyl overdoses in Mexico rose by 636 percent. Most of those overdoses took place in Sonora, Baja California and Sinaloa, which together accounted for 115 of the 184 cases experienced nationally.<sup>76</sup> Both Baja California and Sonora are border states, while Sinaloa is the base of the Sinaloa Cartel and a main point of production for fentanyl.<sup>77</sup>

Across all illicit drug types, the estimated percentage of Mexicans that have reported consuming drugs in their lifetimes has almost doubled in the past 15 years, from 5.1 percent in 2008 to 9.9 percent in 2016.<sup>78</sup> Data on Mexico's recent domestic drug consumption is limited, as the most recent National Survey of Alcohol and Tobacco Drug Consumption (ENCODAT) is from 2016 and the survey has been discontinued due to lack of funding.

Despite the unavailability of more current ENCODAT data, the increase in rates of national drug consumption can be seen through other means. Data from the Mexican Observatory for Mental Health and Drug Consumption reveals that, over the past few years, the drugs for which people have sought treatment have shifted from predominantly alcohol and marijuana toward amphetamine-type substances, which includes methamphetamines and ecstasy. Between 2013 and 2020, the rate of people seeking treatment for amphetamine-type substances increased by 218 percent, compared to a 32 percent decline in the rate for alcohol.<sup>79</sup>

The rise in domestic consumption of amphetamine-type substances is a result of the market shift to synthetic drugs. Mexican organized crime groups became the primary producers and suppliers of methamphetamines to the United States after 2005, when the US government passed legislation to limit the legal import of certain precursor chemicals that are used in methamphetamine production. The surge in synthetic drug consumption, both in Mexico and the United States, has been driven by their extreme addictiveness; the ease with which they can be produced, transported and sold; and their high levels of profitability for organized crime groups.<sup>80</sup>



## DETENTION WITHOUT A SENTENCE

Except for 2020, the *detention without a sentence* indicator has improved in each of the past eight years.

The years between 2015 and 2019 showed a consistent trend of improvement for this indicator. However, the partial shutdown of criminal courts during the first few months of the COVID-19 pandemic led to a significant increase in the number of unsentenced detainees in 2020. Although the rate fell by 4.7 percent in 2022, it remained 32.1 percent higher than its record low year in 2019. There were roughly 78,000 detainees without a sentence in 2022 out of a total incarcerated population of more than 200,000. This compares with approximately 79,000 unsentenced detainees in 2021 and to a low of about 60,000 in 2019.

Despite the number of detainees declining only slightly in 2022, the *detention without a sentence* score, which represents the ratio of unsentenced detainees relative to levels of homicide and violent crime in the country, improved by 2.8 percent. The increase in violent crime offenses in 2022 therefore contributed to a larger overall improvement in the *detention without a sentence* score than the decline in unsentenced detainees alone.

In the past eight years, the state of Colima recorded the largest reduction in the number of detainees without a sentence, from 1,598 in 2015 to 341 in 2022, a 79 percent decline. In relative terms, Colima also experienced the largest reduction and had the second lowest number of detainees without a sentence in the country, behind Campeche. Conversely, Mexico City registered the largest absolute increase and the second largest percentage increase in the number of unsentenced detainees, from 3,851 in 2015 to 6,412 in 2022, a 67 percent increase. The State of México had the greatest number of unsentenced detainees in 2022, with about 10,500.

A number of legal reforms in recent years have sought to reduce the use of pre-trial detention. The introduction of the presumption of innocence as a legal standard in Mexico is intended to protect the rights of the accused and prevent the majority of presumed criminals from being detained without a conviction. In addition, in September 2022, the Supreme Court made the use of pre-trial detention unconstitutional for certain financial crimes.<sup>81</sup> It is unclear how this constitutional change will affect the number of unsentenced detainees in the coming years.

Article 19 of the Mexican constitution prescribes preventative prison for nine “grave” crimes, which include organized crime related offenses, rape and homicide.<sup>82</sup> In February 2019, the national legislature voted to include an additional eight crimes, including corruption and abuse of a minor. The article 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 legal proceedings;
- prevent obstruction of justice;
- protect victims, witnesses or the community.<sup>84</sup>

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.

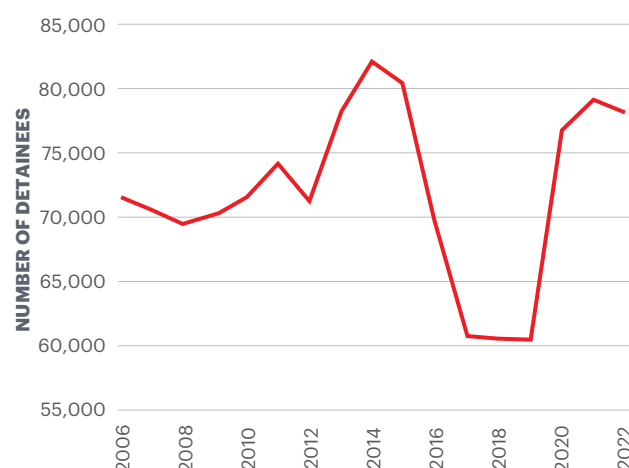
As more and more states implemented reforms to the justice system, there was a steady decline in the overall number of detainees without a sentence until 2020. Figure 2.14 displays the trend in the number of detainees without a sentence since 2006.

According to the 2021 national survey data of prison populations, among sentenced inmates it took more than one year for 48 percent to be given a sentence and more than two years for 23.9 percent to get a sentence. This is up from 2016, when it took more than one year for 45 percent and more than two years for 20.2 percent.<sup>85</sup>

FIGURE 2.14

### Total number of detainees without a sentence, 2006–2022

The number of detainees without a sentence declined slightly in 2022, following a substantial rise in 2020 and a moderate rise in 2021.



Source: Secretariat of Security and Civilian Protection / Secretaría de Seguridad y Protección Ciudadana (SSPC)

Note: Includes prisoners charged with state level crimes and incarcerated in state prisons; federal crimes not included.

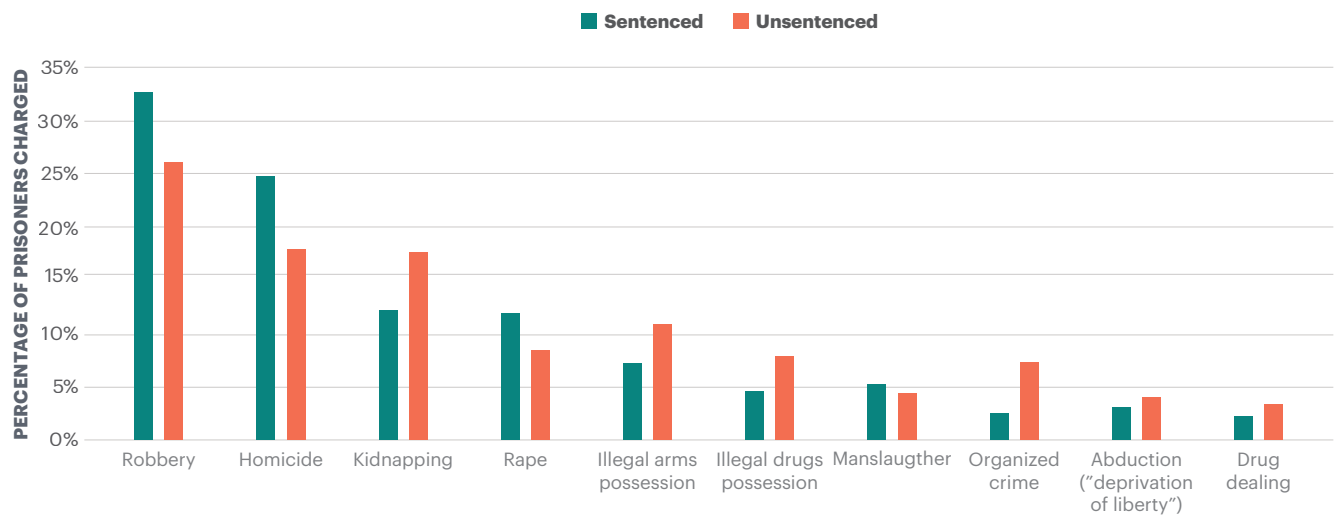
The rates at which people are incarcerated for specific crimes are similar, though not identical, for sentenced and unsentenced inmates. Among both groups, various forms of robbery constitute the most common charge, representing over 30 percent of the total population. This is followed by homicide, kidnapping, rape, and illegal arms possession. Figure 2.15 displays the ten most common charges among the prison population and their relative rates among sentenced and unsentenced inmates. It is noteworthy that charges typically associated with organized crime, such as kidnapping, illegal arms possession, and the movement of drugs have relatively higher rates of people detained without a sentence.

National survey data on institutional performance in combatting violence shows that most Mexican citizens have low levels of trust

in the country's prison system. In 2022, more than half of Mexicans, 52.4 percent, reported being mostly distrustful of the prison system, while about one-fifth, 20.9 percent, mostly trusted it. People in Mexico City expressed the highest level of distrust in prisons, with 68.6 percent mostly distrusting them, while people in Aguascalientes expressed the highest level of trust, with 31.4 percent mostly trusting prisons.<sup>86</sup> It is unclear from the survey responses whether these high levels of distrust stem from perceptions of corruption or unfair treatment within the prison system, from the view that prisons have been ineffective at curbing patterns of criminality, or from some other factor or combination of factors.

FIGURE 2.15  
**Sentenced and unsentenced detainees by top crime charges, 2021**

Robberies are the most common charge against both sentenced and unsentenced detainees.



Sources: ENPOL; IEP calculations

# 3

## THE ECONOMIC VALUE OF PEACE IN MEXICO

### KEY FINDINGS

- The economic impact of violence in Mexico was 4.6 trillion pesos (US\$230 billion) in 2022, equivalent to 18.3 percent of the country's GDP.
- For the third year in a row, the economic impact of violence improved, decreasing by 5.5 percent or 271 billion pesos from the previous year.
- The impact was six times higher than public investments made in health care and more than five times higher than those made in education in 2022.
- Mexico's spending on domestic security and the justice system in 2022 was equal to 0.6 percent of GDP, the least of any Latin American country or member of the OECD.
- The difference in economic impact between the least and most peaceful states has doubled since 2015.
- The amount of money spent by businesses to protect themselves against crime dropped by 51 percent or 76 billion pesos between 2019 and 2021.
- Between 2015 and 2022, the impact of increased homicides resulted in a loss of 324 billion pesos (US\$16 billion) in foreign direct investment.
- Spending on domestic security decreased by 41.3 percent from 2015 to 2022, while spending on the justice system decreased by 7.9 percent.
- In 2022, homicide accounted for 44.7 percent of the economic impact of violence. This was equivalent to two trillion pesos (US\$103 billion).
- Spending on violence containment in Mexico represents approximately 11 percent of total government spending, almost as much as the 13 percent spent on health care or the 14 percent spent on education.
- The economic impact of violence was 35,705 pesos per person in 2022, more than double the average monthly salary in Mexico.
- The per capita economic impact varied significantly across states last year, ranging from 11,377 pesos in Yucatán to 102,659 pesos in Colima.
- In 2022, Michoacán saw the largest per capita improvement, with a near 20 percent or 12,500 peso decrease in the economic per capita impact of violence.
- Over the last eight years, Tamaulipas has seen the largest per capita improvement, with a 43 percent or 4,649 pesos reduction in the per capita economic impact of violence.
- In 2022, the economic impact of organized crime recorded the largest increase of all the indicators in the model. Homicide recorded the largest decrease.
- Since 2015, 26 states recorded deteriorations in their economic impact, with these states deteriorating on average by 68 percent. In contrast, six states have recorded improvements, with these states improving by an average of 21.6 percent.



# THE ECONOMIC IMPACT OF VIOLENCE IN 2022

In 2022, the estimated economic impact of violence in Mexico was 4.6 trillion pesos in constant 2022 terms (US\$230 billion). This is equivalent to 18.3 percent of Mexico's GDP or 35,705 pesos per person.<sup>1</sup>

The economic impact of violence improved for the third year in a row in 2022, falling by a record 5.5 percent, or 270 billion pesos, from the previous year. The worst year was 2019, with an estimated cost of 5.5 trillion pesos. Since then, the economic impact of violence has steadily declined and in 2022 it was back to its lowest levels since 2017.

Although the impact of violence declined in 2022, it is still equivalent to more than three times the government's economic development expenditure.<sup>2</sup> Box 3.1 gives a brief explanation of the

economic costing model. 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: Methodology.

Table 3.2 presents a full breakdown of the 2022 economic impact of violence cost estimates. This outlines the direct costs, indirect costs and multiplier effect for each indicator that, combined, gives the total economic impact of violence.

## BOX 3.1

### The economic impact of violence – definition and model

The economic impact of violence is defined as the expenditure and economic effect related to “containing, preventing and dealing with the consequences of violence.” It comprises the **economic cost of violence** – both direct and indirect – plus a multiplier effect (Table 3.1).

**Direct costs** are incurred by the victim, the government and the perpetrator. These include medical expenses, policing costs and expenses associated with the justice system. **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.

The **multiplier effect** represents the economic benefits that would have been generated if all relevant expenditure had been directed into more productive alternatives.

TABLE 3.1

### Components of the economic impact of violence model

The economic impact of violence comprises the economic cost of violence plus a multiplier effect.

Impact			Commentary
Economic impact of violence	Economic cost of violence	i) Direct costs	Costs directly attributable to violence or its prevention
		ii) Indirect costs	Medium- and long-term losses arising from acts of violence
	iii) Multiplier effect		Economic benefits forgone by investing in violence containment and not in other more productive activities

Source: IEP

TABLE 3.2

### The economic impact of violence in 2022, billions of pesos

The total economic losses amounted to 4.6 trillion pesos in 2022.

Indicator	Economic cost of violence (billions pesos)		Multiplier effect	The economic impact of violence (billions pesos)
	Direct	Indirect		
Homicide	180.34	1,716.88	180.34	2,077.57
Violent Crime	224.68	1,071.86	224.68	1,521.21
Organized Crime	-	20.50	-	20.50
Fear	-	44.02	-	44.02
Protection Costs	174.47	-	174.47	348.94
Military Spending	160.91	-	160.91	321.83
Domestic Security Spending	39.47	-	39.47	78.94
Justice System Spending and Incarceration	113.66	5.56	113.66	232.87
<b>Total</b>	<b>893.53</b>	<b>2,858.83</b>	<b>893.53</b>	<b>4,645.89</b>

Source: IEP

Note: Totals may not be exact due to rounding.

Between 2020 and 2022, Mexico recorded annual improvements in the economic impact of violence following four consecutive years of deteriorations, and 2022 marked the most significant drop in the economic impact of violence since 2015.

In 2022, the significant decline in homicides contributed to the 5.5 percent reduction in the economic impact of violence. Despite this improvement, in 2022 there was an increase in organized criminal activity, resulting in a 9.3 percent increase for this category compared to 2021. This is largely due to increases in both kidnappings and extortion, the latter being particularly pronounced in 2022. The Mexican government also reduced its military expenditures as well as its spending on domestic security, contributing to the lower overall impact of violence on the economy.

Figure 3.1 displays the economic impact of violence by state as a percentage of state GDP in 2022. Zacatecas, Colima and Morelos all have a cost of violence that exceeds 40 percent of GDP. All three states recorded large increases in extortion, kidnapping and human trafficking.

Violence and the fear of violence create significant economic disruptions. Violent incidents incur costs in the form of property damage, physical injury and psychological trauma. Fear of violence also alters economic behavior, primarily by changing investment and consumption patterns, which diverts public and private resources away from productive activities and towards protective measures. Violence and the fear of violence generate significant losses in the form of productivity shortfalls, foregone earnings and distorted expenditure. Therefore, measuring the scale and cost of violence has important implications for assessing its effects on economic activity. Figure 3.3 illustrates the share of the total economic impact of violence in 2022 by the categories used in the model.

FIGURE 3.1

### Economic cost of violence by state, percentage of state's GDP, 2022

The economic cost of violence ranges from 3.8 percent of GDP in Yucatán to 45 percent of GDP in Zacatecas.

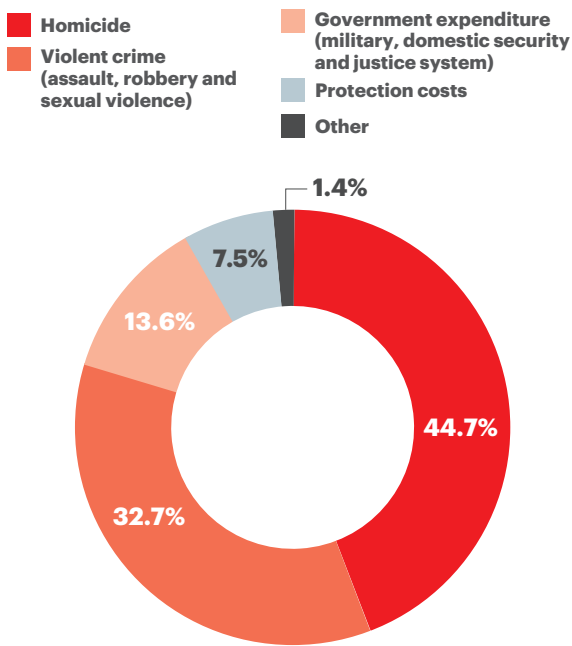


Source: IEP

In 2022, 21 percent of Mexico's economic impact of violence was in government expenditures and private protection expenditures, whereas 77.5 percent was from homicide, violent crime, organized crime and fear of violence. This differs significantly from the global economic impact of violence, in which 73.7 percent of the impact comprises government and private expenditures aimed at preventing violence.<sup>3</sup> Moreover, spending on violence containment in Mexico (633 billion pesos) represents approximately 11 percent of total government spending. In contrast, health care and education represent 13 percent and 14 percent of total government spending respectively.

**FIGURE 3.2**  
**Breakdown of the economic impact of violence, 2022**

Homicide and violent crime represent 77.5 percent of the economic impact of violence.



Source: IEP

In 2022, nearly half of the economic impact of violence was a result of homicide, costing the country 2 trillion pesos (US\$103 billion). This is equivalent to eight percent of Mexico's GDP. By contrast, in the global economic impact model, homicide is 6.5 percent of the total, equal to 0.73 percent of global GDP.<sup>4</sup> If Mexico were to achieve a ten percent decline in its homicide rate, the economic impact of violence would decrease by 213.9 billion pesos – more than ten times government spending on housing and community services in 2022.<sup>5</sup>

Violent crime, which comprises robbery, assault, family violence and sexual violence, was the second most expensive form of violence, representing 32.7 percent of the total economic impact or 1.5 trillion pesos. This includes Mexican households' and businesses' financial and health-related losses from violent crime.

Government spending on activities aimed at reducing violence – domestic security, the military and the justice system – amounted to 634 billion pesos, accounting for 13.6 percent of the total economic impact. Also included in government spending on incarceration, calculated as the lost wages of those imprisoned. The prisoners' lost wages are assumed to equal the Mexican

minimum wage of 45,637 pesos per year in 2022. In 2022, the cost of incarceration was estimated at 5.5 billion pesos.

The economic impact model includes the costs that households and businesses incur in protecting themselves from crime and violence. Protection costs amounted to 348 billion pesos in 2022 – eight percent of the total.<sup>6</sup> 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. Protection costs peaked in 2019 and dropped in 2022 to a level similar to 2015.

The remaining 1.4 percent of economic losses are related to the costs of organized crime 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 20.5 billion pesos in 2022. However, this is a conservative estimate as the model does not include all 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.<sup>7</sup> Data on the economic impact of these crimes is extremely difficult to capture.

Fear of violence affects consumer and business behavior, which in turn causes economic losses. These losses were calculated at 44 billion pesos in 2022.<sup>8</sup>



In 2022, nearly half of the economic impact of violence was a result of homicide, costing the country 2 trillion pesos (US\$103 billion).







## TRENDS IN THE ECONOMIC IMPACT OF VIOLENCE

Since 2015, the economic impact of violence has increased by 18.1 percent, reflecting the deterioration in peacefulness in Mexico over the same period. Having peaked in 2019 at 5.5 trillion pesos (US\$273 billion), the economic impact of violence has since declined by 871 billion pesos.

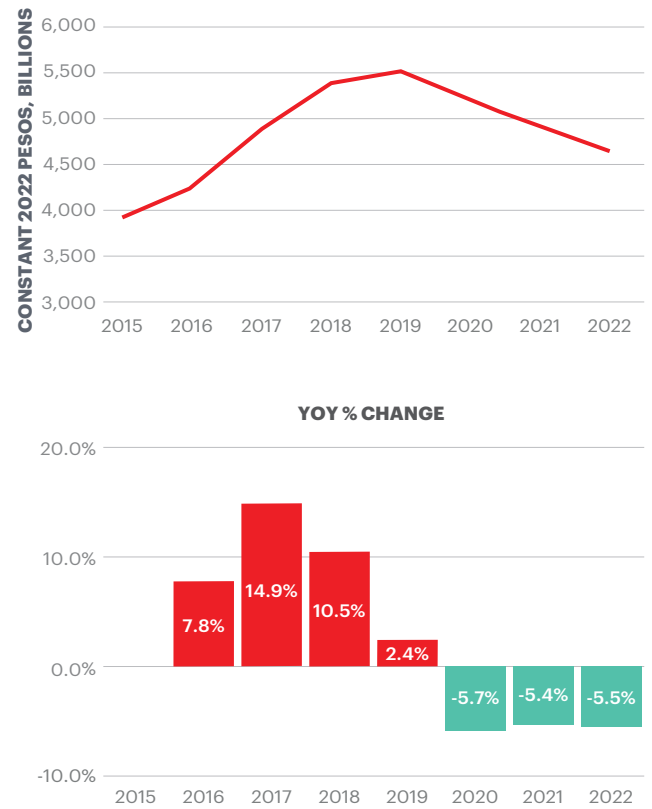
The largest improvement came in 2022, with the economic impact falling by 270 billion pesos from the previous year. Declines in violence drove the improvements over the last two years. For the third consecutive year since the inception of the index, the homicide rate in Mexico fell, decreasing from 28.2 homicides per 100,000 people in 2019 to 24.5 homicides per 100,000 people in 2022. This improvement is positively reflected in the economic impact of homicide, which fell by 505 billion pesos, or 20 percent from 2019. The impact of violent crime also fell by 11 percent from 2019. Figure 3.3 displays the trend in Mexico's economic impact of violence.

The economic impact of organized crime increased in 2022. The other indicators all recorded declines in impact from 2021, as shown in Table 3.3. Between 2015 and 2019, the economic impact of violence rose each year, in total by 40 percent. These four years of continuous increases coincided with Mexico's rising homicide rate and the overall deterioration in peacefulness.

FIGURE 3.3

### Trend in the economic impact of violence and year-on-year percentage change, 2015–2022

The largest annual increase occurred in 2017, a 487.4 billion peso or 14.9 percent increase.



Source: IEP

TABLE 3.3

### Trends in the economic impact of violence, constant 2022 pesos, billions, 2015–2022

In 2022, homicide recorded the largest percentage decrease among all categories of economic impact.

Indicator	2015	2016	2017	2018	2019	2020	2021	2022	Change (Billions) 2021–2022	Percentage Change 2021–2022
Homicide	1,351.35	1,685.62	2,232.74	2,575.73	2,582.89	2,457.78	2,323.00	2,077.57	-245.43	-10.6%
Violent Crime	1,496.57	1,440.21	1,580.01	1,734.35	1,704.15	1,540.68	1,517.81	1,521.21	3.40	0.2%
Organized Crime	19.31	17.25	18.37	17.91	20.88	17.69	18.75	20.50	1.75	9.3%
Fear	49.80	48.89	46.04	48.34	48.87	47.15	44.46	44.02	-0.43	-1.0%
Protection Costs	364.42	391.72	379.72	375.03	531.73	497.37	343.02	348.94	5.92	1.7%
Military Spending	268.18	255.36	249.81	252.74	285.19	306.93	352.03	321.83	-30.20	-8.6%
Domestic Security Spending	134.47	122.76	112.16	112.28	96.59	92.28	84.48	78.94	-5.54	-6.6%
Justice System Spending and Incarceration	250.18	279.65	255.19	269.20	246.62	239.93	232.97	232.87	-0.10	0.0%
<b>Total</b>	<b>3,934.30</b>	<b>4,241.45</b>	<b>4,874.05</b>	<b>5,385.59</b>	<b>5,516.93</b>	<b>5,199.82</b>	<b>4,916.53</b>	<b>4,645.89</b>	<b>-270.6</b>	<b>-5.5%</b>

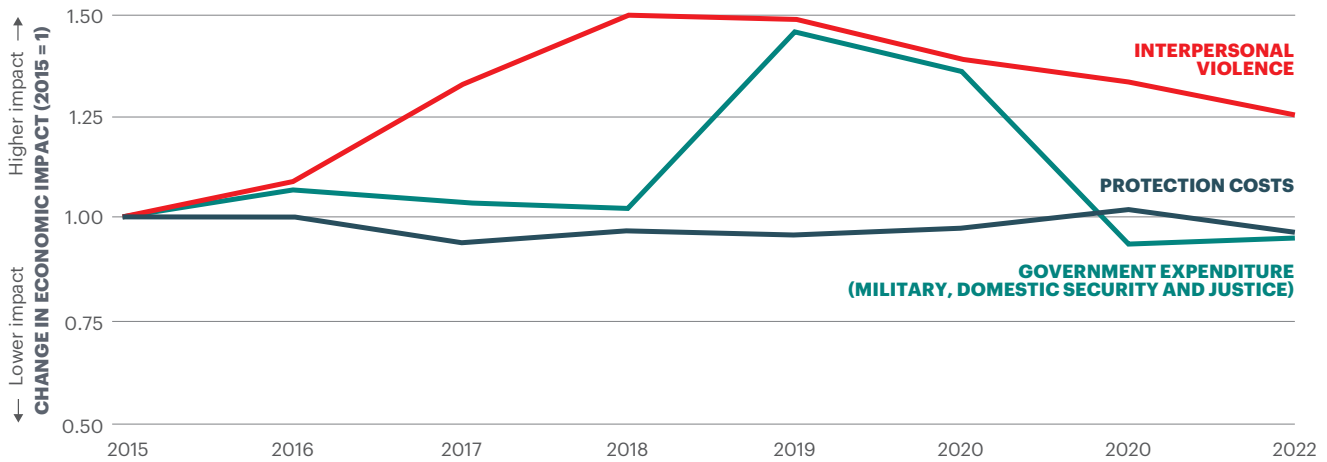
Source: IEP

Note: Totals may not be exact due to rounding.

FIGURE 3.4

### Indexed trend in the economic impact of violence, 2015–2022

Personal and business expenses on protection have recorded the largest percentage decrease since the onset of the COVID-19 pandemic.



Source: IEP

Figure 3.4 shows the trend in the economic impact of violence in Mexico across three categories: Personal and business protection costs, interpersonal violence, and government expenditure. Government spending on violence containment decreased in 2022, compared to 2015.

The near five percent decline in government spending from 2021 appears to be driven by the decline in military spending. The large decline in homicide also explains the eight percent decline in the economic impact of interpersonal violence.

The economic impact of interpersonal violence has increased 26 percent from 2015, while there has been a four percent decrease in business and personal protection costs. The year-on-year change, however, shows that in 2019 business and personal protection costs increased by 156 billion pesos or 42 percent from 2018. Protection costs have since dropped by 182 billion pesos in 2022. Protection costs are an aggregate of surveyed responses on expenditures made by businesses and citizens to protect themselves from the National Survey of Business Victimization (ENVE) and the National Survey of Victimization and Perception of Public Security (ENVIPE). Business expenditures include higher insurance premiums and installing additional locks, alarms, video surveillance cameras, and tracking devices.

In 2019, protection costs peaked at 532 billion pesos. In 2022, these dropped to 348 billion pesos. This sharp change in protection costs reflects both the recent improvements in peacefulness in much of the country as well as the impact of the COVID-19 pandemic on Mexico’s business environment. At the beginning of the pandemic in 2020, crimes typically associated with people’s everyday movements — such as robberies, assaults, kidnappings and extortion — all recorded notable improvements. However, the rates of some of these crimes have rebounded in the years since.

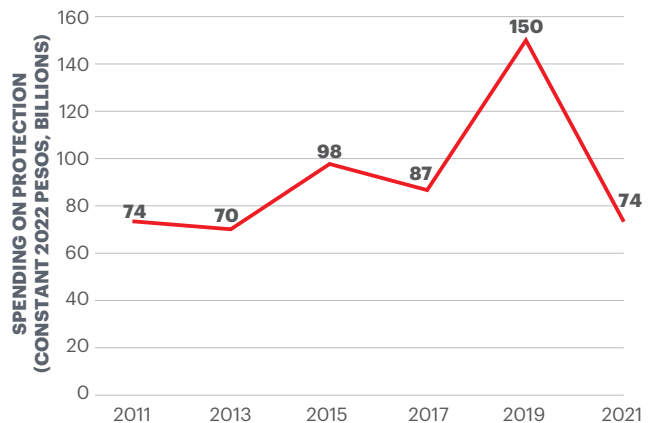
From 2011 to 2019, the number of businesses in operation in Mexico grew from about 3.7 million to over five million. However, following the onset of the COVID-19 pandemic and the economic downturns that accompanied it, the number of businesses dropped, and by 2021 the figure stood at 4.75 million.

As Figure 3.5 shows, spending on protection measures increased an average of 9.6 billion pesos per year from 2011 to 2019. During

FIGURE 3.5

### Business spending on protection against crime, constant 2022 pesos, billions

By 2021, spending by businesses on protection measures had dropped sharply, after peaking in 2019.



Source: IEP

those years, about 43 percent of all businesses in Mexico invested in measures to protect against crime, and in 2019 – the least peaceful year on record – this percentage reached an all-time high of 46 percent. That year, businesses spent a total of 150 billion pesos on such measures. Following the onset of the pandemic, spending on protection measures dropped. By 2021, they had fallen to 74 billion pesos, on par with their 2011 levels. Moreover, in 2021, only about 37 percent of all active businesses invested in protection measures, nearly ten percent less than in 2019.

Table 3.4 shows the change in the economic impact of violence by indicator from 2015 to 2022. Homicide recorded the largest rise, having increased by 726 billion pesos. Government spending on domestic security recorded the largest decline, having decreased by 55.5 billion pesos.

TABLE 3.4

### Change in the economic impact of violence by indicator, constant 2022 pesos, billions, 2015–2022

The economic impact of homicide was 726 billion pesos more in 2022 than in 2015.

Indicator	2015	2022	Change (Billions) 2015-2022	Percentage Change (2015-2022)
Homicide	1,351.4	2,077.6	726.2	53.7%
Violent Crime	1,496.6	1,521.2	24.6	1.6%
Organized Crime	19.3	20.5	1.2	6.2%
Fear	49.8	44.0	-5.8	-11.6%
Protection Costs	364.4	348.9	-15.5	-4.2%
Military Spending	268.2	321.8	53.6	20.0%
Domestic Security Spending	134.5	78.9	-55.5	-41.3%
Justice System Spending and Incarceration	250.2	232.9	-17.3	-6.9%
<b>Total</b>	<b>3,934.3</b>	<b>4,645.9</b>	<b>711.6</b>	<b>18.1%</b>

Source: IEP

Note: Totals may not be exact due to rounding.

#### EFFECT OF HOMICIDE ON FOREIGN DIRECT INVESTMENT

In 2022, net foreign direct investment (FDI) inflows to Mexico totaled 710 billion pesos (US\$35.3 billion), which is approximately 2.8 percent of Mexico's GDP and 13 percent of its total investment spending. In the 2022 World Investment Report, Mexico ranked as the tenth largest recipient of FDI and the second largest recipient of FDI in Latin America.

Mexico remains an important recipient of FDI due in part to new equity investments in mining and other extractive industries as well as in the automotive and telecommunications industries. The United States, Canada, Argentina, Japan and the United Kingdom are the major sources of FDI flows into Mexico. In 2022, the United States invested US\$15 billion, Canada invested US\$3.8 billion, Argentina invested US\$2.3 billion, and Japan and the United Kingdom each invested US\$1.8 billion.

Naturally, levels of business risk within a country affect foreign investment. While it is difficult to isolate the impact of safety concerns on levels of FDI directly, they can be estimated through econometric modelling.<sup>9</sup> As shown in Figure 3.6, estimating this impact since 2016 shows a negative relationship between the homicide rate and FDI flows, that is, a high homicide rate acts as a deterrent to inflows of investment into the country and vice versa. Figure 3.6 shows that the estimated loss in FDI peaked in 2019, at US\$2.6 billion (50 billion pesos). These losses fell to US\$2 billion (41 billion pesos) in 2022, coinciding with the drop in the national homicide rate.

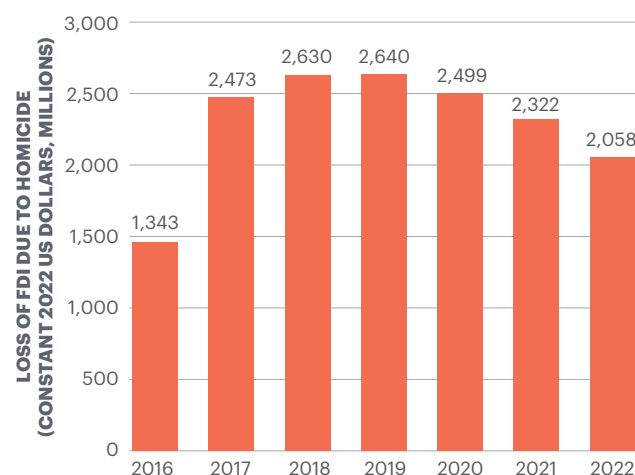
The estimated costs are based on the partial effects of the homicide rate on the changes in FDI flows. They represent the additional investment the country would have received if the homicide rate had not risen from its 2015 levels. In 2022, the lost investment represents 5.8 percent of the total FDI inflows. For the entire 2015 to 2022 period, it is estimated to total 324 billion pesos (US\$16 billion). An explanation of the calculation of the impact of homicide on FDI inflows over the 2015 baseline is provided in Box 3.3 in the 'Methodology at a Glance' sub-section below.

This FDI cost estimate produced here is based on direct impacts. Because of this, it can be considered conservative. In reality, economic losses resulting from decreases in FDI are likely much larger, as FDI into a country improves the employment prospects of the labor force and raises workers' incomes. Moreover, inflows of FDI injects new capital assets. Such capital assets also transfer skills and knowledge to the recipient country as labor force is upskilled and trained. This increases the national stock of human capital that can then build on these new skills elsewhere in the economy. Conversely, any loss of FDI due to safety concerns negatively impacts a nation's ability to innovate in the future.

FIGURE 3.6

#### Loss of investment due to homicide

The total cost of homicide on FDI inflows from 2015–2022 was US\$16 billion or approximately 324 billion pesos.



Source: IEP



## THE ECONOMIC IMPACT OF VIOLENCE BY STATE

In 2022, the economic impact of violence in nine Mexican states increased compared to the previous year, with 23 states recording a decrease. Colima experienced the largest percentage increase, with a rise of 36.2 percent, followed by Campeche at 26.7 percent. The higher economic impact in these two states was primarily due to the costs incurred from increased interpersonal violence in 2022.

Figure 3.7 displays the five states with the largest improvements and the five states with the largest deteriorations in their economic impact from 2021 to 2022. Michoacán had the largest decrease, recording a 19 percent decline, which was driven by a significant fall in homicide and violent crime.

The economic impact of violence differs significantly between states. Of the 32 Mexican states, Colima recorded the highest economic impact, equivalent to 45 percent of its GDP. Table 3.5 lists the five most and least impacted states as a percentage of their GDP. Except for Michoacán and Guerrero, the states with the higher costs as a percentage of GDP all have higher homicide rates, compared to the five states with the lowest economic cost from violence.

The main drivers of the higher economic impact of violence are organized crime, homicide, and violent crime, whose rates are highest in the most economically impacted states. The nationwide economic impact amounted to 35,705 pesos per person in 2022. This is equivalent to approximately 2.2 months of income for an average Mexican worker.<sup>11</sup> Table 3.6 presents the per capita and total economic impact of violence by state.

TABLE 3.5

### The five most and least affected states, 2022, percentage of state's GDP

The five states with the highest economic cost of violence are all less peaceful than the states with the lowest impact.

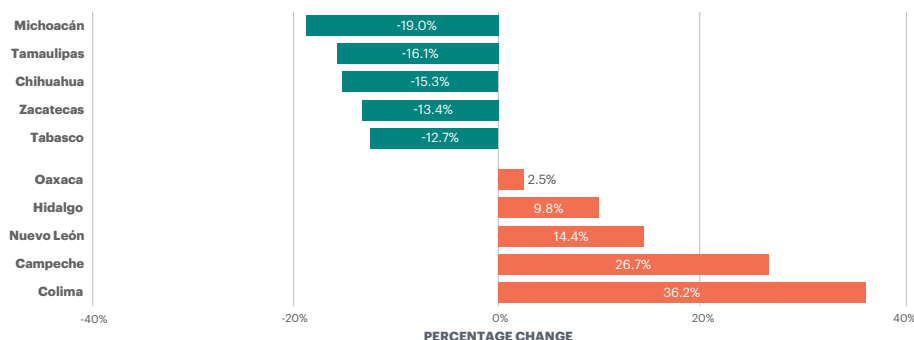
Highest Cost		Lowest Cost	
State	Economic Cost of Violence (% of state GDP)	State	Economic Cost of Violence (% of state GDP)
Colima	44.6%	Yucatán	3.8%
Zacatecas	44.4%	Campeche	3.9%
Morelos	43.9%	Mexico City	5.0%
Michoacán	34.6%	Coahuila	5.2%
Guerrero	32.5%	Tabasco	7.3%

Source: IEP

FIGURE 3.7

### Changes in the economic impact of violence by state, 2021-2022

Colima recorded the largest increase of any state in its economic impact, increasing 36.2 percent from the previous year.



Source: IEP

### KEY FINDINGS

#### ECONOMIC IMPACT OF VIOLENCE

# 18.3%

The economic impact of violence in Mexico was 4.6 trillion pesos (US\$230 billion) in 2022, equivalent to 18.3 percent of the country's GDP.

# 6x

The impact was six times higher than public investments made in health care and more than five times higher than those made in education in 2022.

TABLE 3.6

### The per capita economic impact of violence, 2022

The per capita economic impact of violence varies significantly from state to state, from Yucatán at 11,366 pesos per person to Colima at 102,426 pesos per person.

MPI Rank	State	Per Capita Economic Impact of Violence (constant 2022 pesos)	Economic Impact of Violence (constant 2022 pesos, billions)
1	Yucatán	11,366	26.2
2	Tlaxcala	20,069	28.3
3	Chiapas	16,559	97.6
4	Tamaulipas	23,130	85.8
5	Nayarit	28,180	37.3
6	Hidalgo	28,731	90.7
7	Coahuila	17,891	59.1
8	Tabasco	27,374	71.9
9	Campeche	32,762	33.9
10	Durango	25,455	48.4
11	Aguascalientes	28,061	41.3
12	Veracruz	21,013	181.4
13	Puebla	27,093	182.2
14	Sinaloa	27,625	88.6
15	Oaxaca	32,486	136.0
16	Querétaro	32,002	75.5
17	Mexico City	31,913	286.8
18	Jalisco	35,150	301.2
19	Baja California Sur	38,258	32.0
20	San Luis Potosí	33,018	95.9
21	Guerrero	37,736	138.9
22	Michoacán	51,364	251.1
23	State of México	35,748	635.3
24	Quintana Roo	53,410	96.1
25	Chihuahua	51,977	201.2
26	Nuevo León	37,541	216.3
27	Sonora	55,491	174.6
28	Morelos	66,785	139.3
29	Guanajuato	51,396	325.4
30	Baja California	70,234	263.0
31	Zacatecas	72,198	121.9
32	Colima	102,426	82.9
<b>National</b>		<b>35,705</b>	<b>4,645.90</b>

Source: IEP

The three least peaceful states in Mexico – Colima, Zacatecas, and Baja California – recorded the highest per capita impact of violence in 2022, with these states exceeding 70,000 pesos per person. On a per capita basis, the highest economic effect occurred in Colima, with an impact of 102,426 pesos per person. Colima had the highest per capita spending on justice, public order and domestic security, while Baja California had the highest per capita expenditure on protection costs.

TABLE 3.7

### Percentage change in the per capita economic impact of violence, 2015–2022 and 2021–2022, constant 2022 pesos

The per capita economic impact in Colima was 199 percent higher in 2022 than in 2015. This was the largest percentage increase of any state.

State	2015–2022	2021–2022
Aguascalientes	23.0%	-1.6%
Baja California	57.4%	-8.3%
Baja California Sur	-11.0%	1.3%
Campeche	59.2%	26.6%
Chiapas	-17.6%	-10.3%
Chihuahua	38.0%	-15.3%
Coahuila	-28.6%	-6.1%
Colima	198.9%	36.2%
Durango	-10.9%	-10.1%
Guanajuato	-15.3%	-8.0%
Guerrero	84.5%	-8.2%
Hidalgo	-34.8%	-4.1%
Jalisco	51.4%	9.7%
State of México	24.7%	-5.7%
Mexico City	-6.3%	1.7%
Michoacán	54.2%	-19.0%
Morelos	37.9%	0.1%
Nayarit	44.0%	2.0%
Nuevo León	50.4%	14.5%
Oaxaca	117.3%	2.6%
Puebla	17.3%	-0.1%
Querétaro	27.7%	-8.5%
Quintana Roo	69.5%	-4.7%
San Luis Potosí	56.4%	-10.4%
Sinaloa	-33.2%	-6.4%
Sonora	63.9%	-11.1%
Tabasco	-4.4%	-12.7%
Tamaulipas	-39.8%	-16.0%
Tlaxcala	9.8%	-3.3%
Veracruz	20.2%	-12.5%
Yucatán	-34.5%	-2.3%
Zacatecas	136.6%	-13.5%
<b>National</b>	<b>18.6%</b>	<b>-4.5%</b>

Source: IEP

In contrast, Yucatán, the most peaceful state in Mexico, recorded the lowest economic impact per person, at 11,366 pesos. The extreme disparity of homicides between the states is highlighted by the 91,060 pesos per person difference. Table 3.7 displays the percentage change in the per capita economic impact of violence.



## IMPROVEMENTS AND DETERIORATIONS IN THE ECONOMIC IMPACT OF VIOLENCE

Over the past eight years, the economic impact of violence has improved in 11 Mexican states but deteriorated in 21 others. As a result, the national economic impact of violence in Mexico was 31.4 percent higher in 2022 than it was in 2015.

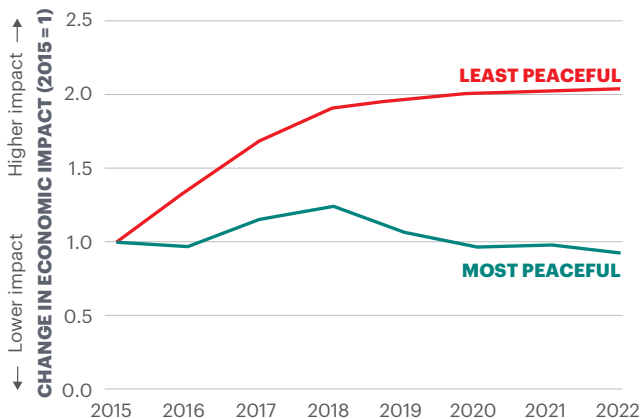
The deterioration in economic impact has been more significant in states that were already less peaceful. This has led to a widening of the “economic impact gap” between the most peaceful and least peaceful states, as illustrated in Figure 3.8.

There was an average yearly improvement of 2.41 percent for the 11 states that have improved since 2015 and an average yearly deterioration of 6.51 percent in the 21 states that have deteriorated since 2015. The “economic impact gap” in 2022 was at its highest level on record. The economic impact of violence in Mexico's five least peaceful states has doubled on average since 2015. In contrast, the five most peaceful states have experienced an average decrease of eight percent.

Since 2015, 11 states have recorded improvements in the economic impact of violence, with an average improvement of 21.5 percent. The five states that improved the most in peacefulness in the past eight years – Tamaulipas, Sinaloa, Durango, Guerrero and Coahuila – saw the economic impact of violence fall by an average of 30.3 percent. Table 3.8 displays the economic impact in 2015 and 2022 for these five states.

FIGURE 3.8  
**Trend in economic impact, five most and five least peaceful states, 2015–2022**

Since 2015, the average economic impact of violence in the five least peaceful states has more than doubled, while the impact in the five most peaceful states has declined by eight percent.



Source: IEP

The state with the largest improvement in peacefulness since 2015, Tamaulipas, experienced the most dramatic improvement since 2015, with a near 40 percent reduction in the economic impact of violence. Tamaulipas ranked as the fourth least peaceful state in 2015 and as the fourth most peaceful state in 2022. Its decline in levels of organized crime drove its improvement in overall peacefulness.

Since 2015, 21 states have recorded deteriorations in the economic cost of violence, with an average deterioration of 59.2 percent. The deteriorations were primarily driven by increases in homicide and organized crime.

TABLE 3.8

### The economic impact in the five states with the largest improvements, 2015–2022

The impact of violence fell by 27.8 percent across the five states with the largest improvement.

State	Economic Impact of Violence (constant 2022 pesos, billions)			Percentage Change (2015–2022)
	2015	2022	Change 2015–2022	
Tamaulipas	142.6	85.8	-56.8	-39.8%
Sinaloa	132.5	88.6	-43.9	-33.2%
Durango	57.1	48.4	-43.9	-15.3%
Guerrero	213.0	138.9	-74.1	-34.8%
Coahuila	82.7	59.1	-23.6	-28.6%
<b>Total</b>	<b>627.9</b>	<b>398.5</b>	<b>-212.4</b>	<b>-30.3%</b>

Source: IEP

The five states that recorded the largest deteriorations in peacefulness in the past eight years were Colima, Zacatecas, Guanajuato, Baja California and Nuevo León. Table 3.9 displays the economic impact in 2015 and 2022 for these states. On average, the economic impact in these states increased by 106 percent. Colima recorded the largest deterioration and ranked as the least peaceful state in Mexico in 2022. The economic impact of violence in Colima has tripled since 2015.

TABLE 3.9

### The economic impact in the five states with the largest deteriorations, 2015–2022

The impact of violence increased by 120.5 percent across the five states with the largest deteriorations.

State	Economic Impact of Violence (constant 2021 pesos, billions)			Percentage Change (2015–2022)
	2015	2022	Change 2015–2022	
Colima	27.7	82.9	55.1	198.9%
Zacatecas	51.5	121.9	70.4	136.6%
Guanajuato	176.4	325.4	149.0	84.5%
Baja California	167.1	263.0	95.9	57.4%
Nuevo León	143.8	216.3	72.5	50.4%
<b>Total</b>	<b>566.5</b>	<b>1009.5</b>	<b>442.9</b>	<b>105.5%</b>

Source: IEP

Note: Total refers to the sum of the five states, the total change across the five states and the total percentage change.



## 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 average of the members of the Organization for Economic Cooperation and Development (OECD). Considering Mexico's high levels of violence, considerable gains could be made by increasing funding to match the OECD average.

Government expenditure on containing and dealing with violence accounted for 14 percent of Mexico's economic impact in 2022, or 633.6 billion pesos. Violence containment spending comprises government expenditures on three indicators: domestic security, the military and the justice system. In 2022, expenditures across these three indicators decreased by an average of 5.1 percent from the previous year.

Since 2007, federal violence containment expenditures have increased by 69 percent.<sup>12</sup> While the government's expenditure on the military, judicial system, and public order and safety have increased, the funding increases have differed. Of the three, military expenditure has had the largest increase, increasing by 108 percent since 2007. This was followed by the expenditure on the judicial system, which increased by 55.5 percent, then the expenditure on public order and safety, which increased 10.6 percent.

In 2020, reductions in movement and other disruptions associated with the COVID-19 pandemic led to the economy contracting by 18.7 percent in the second half of 2020.

In the past five years, the government has cut funding for the justice system, public order and domestic safety, while increasing expenditure on the military – though military expenditure did

notably decline in 2022.<sup>13</sup> This five-year trend reflects the increasing reliance of the on the military for violence containment. Since 2018, the government's expenditure on public order and domestic safety has fallen by 29.7 percent, and spending on the judicial system has fallen by 14.6 percent. During the same period, military expenditures have increased by 27.3 percent.

Spending on domestic security – through police, protection services, custody and incarceration costs, surveillance and security of persons, and associated administration costs – peaked in 2012 and has since declined by 41.8 percent. In 2022, spending on domestic security was lower than it was in 2008.<sup>14</sup> Spending on the justice system in 2022 was 113.7 billion pesos, 0.5 percent lower than the previous year.

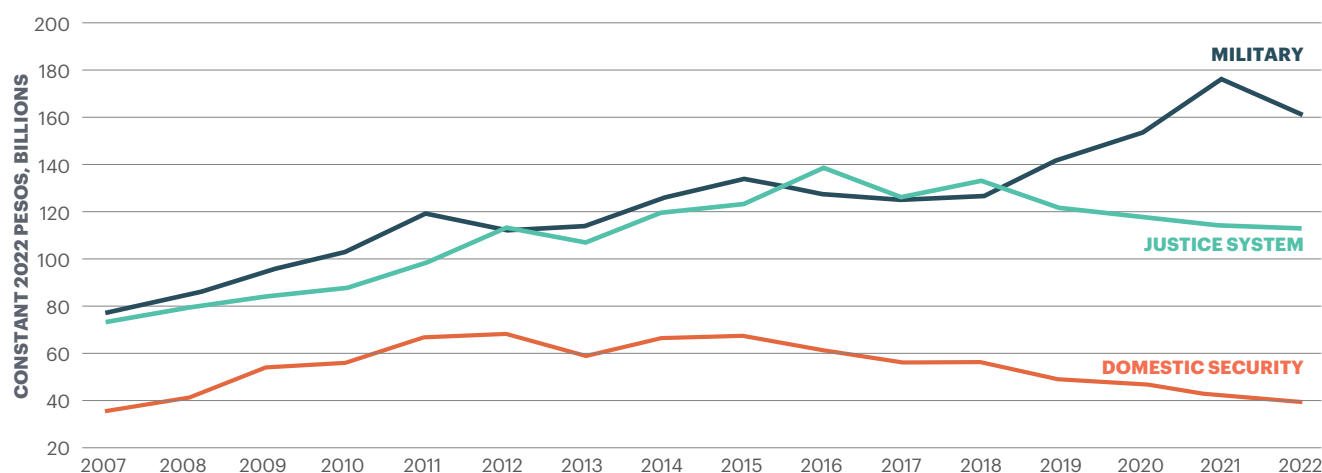
While spending on public order and safety has decreased over the last few years, spending on the military has outpaced other forms of government expenditure, peaking in 2021. From 2017 to 2021, military expenditure grew from 125 billion pesos to 176 billion pesos, or by 40.9 percent, the largest increase of the three categories. However, in 2022, military expenditure fell by 8.6 percent or 15 billion pesos.

Since 2015, defense spending has increased by an average of six billion pesos annually. On average, however, government spending

FIGURE 3.9

### Trend in government spending on violence containment, 2007–2022

Mexico's military expenditure was at its highest level in 2021, while domestic security expenditure is only 10 percent above its 2007 level.



Sources: Mexican Secretariat of Finance and Public Credit (SHCP); IEP

on justice and domestic safety has decreased by one and three billion pesos, respectively, each year over the same period.

The higher levels of expenditure coincide with the increased use of the military to fight organized crime. Despite this, Mexico's expenditure on the military is equivalent to 0.64 percent of its GDP, well under the global average. Figure 3.10 shows the government's expenditure on violence containment from 2007 to 2022.

Similarly, Mexican public spending on justice and domestic security are well below regional and international levels. Mexico spent 0.6 percent of its GDP on the justice system and domestic security in 2022, about a third of the OECD average, as shown in Figure 3.10. A similar trend emerges when Mexican spending on justice and domestic security is compared with other Latin American and Caribbean countries.<sup>15</sup> The Latin American average

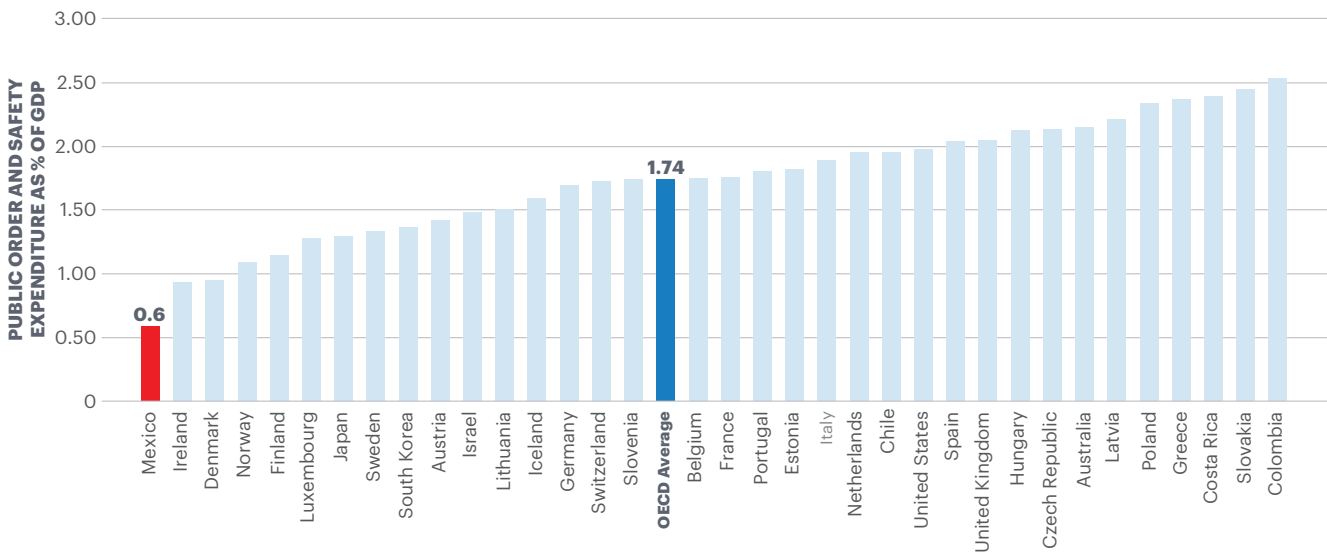
on public order and safety spending is 1.51 percent of GDP, more than twice that of Mexico.

While violence containment may be underfunded across spending categories, investment is particularly needed to build Mexico's judicial system. Even following a judicial reform that took effect in 2019, there is still limited judicial independence at local and state levels. Mexico has an average of 4.4 judges and magistrates per 100,000 people, one-fourth the global average. This deficit limits the judicial system's capacity to process cases and creates backlogs of unsolved cases and persons incarcerated without a sentence. By increasing the number of judges, the capacity of Mexico's legal system would improve, leading to reductions in overcrowding in prisons and those incarcerated without sentences.<sup>16</sup>

FIGURE 3.10

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

Mexico spends 0.6 percent of its GDP on public order and safety, a third of the OECD average.



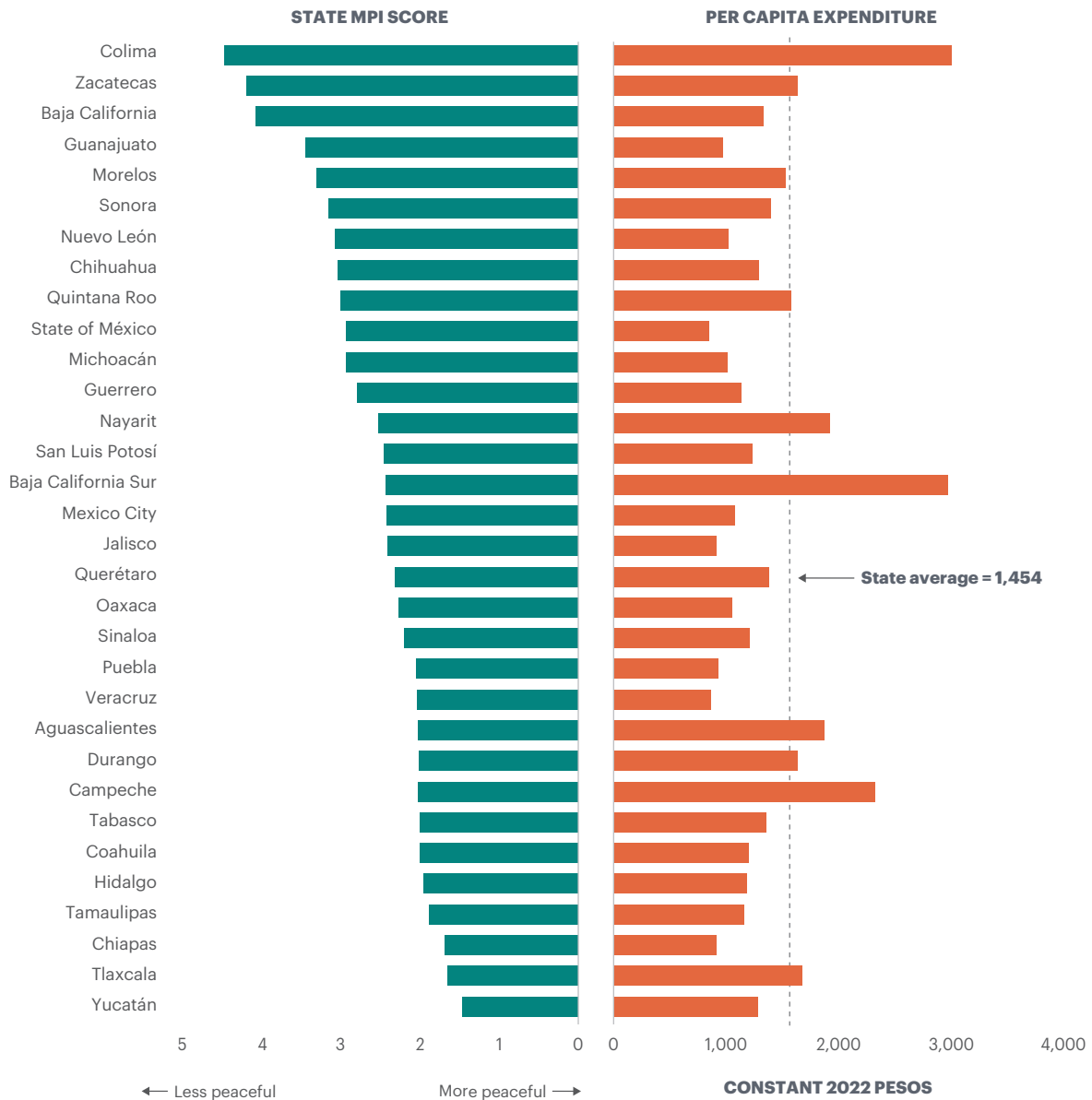
Sources: OECD; Mexican Secretariat of Finance and Public Credit (SHCP); IEP calculations  
 Note: Where data isn't available for the latest year, the latest available data is used.



FIGURE 3.11

### State MPI scores and per capita expenditure on domestic security and justice, 2022

States that experience the lowest levels of peace do not necessarily receive higher per capita funds for domestic security and justice.



Sources: INEGI; IEP

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 Baja California, Michoacán, Chihuahua and Guanajuato experience high levels of violence yet have a below-average per capita spending on domestic security and justice. In contrast, Campeche is relatively peaceful yet dedicates an above-average level of per capita spending on domestic security and justice. Figure 3.11 shows the level of peacefulness and per capita domestic security and justice expenditure by state.

In evaluating the efficiency and effectiveness of government spending on the justice and domestic security sectors, spending beyond an optimal level of effectiveness has the potential to constrain a nation's economic development. This is because excessive spending can divert vital funds away from important sectors such as education and health care. However, underinvestment in justice and domestic security can create

conditions for higher levels of impunity, which in turn reduces the effectiveness of deterrents to crime and violence. According to government data, there is approximately a 43 percent deficit of state police.<sup>17</sup> The real operational force totals 123,070 or 0.96 police officers per 1,000 inhabitants. By comparison, the international standard is 1.8 police officers per 1,000 inhabitants. Therefore, more than 100,000 additional police officers would be required to bring Mexico in line with the international standard.<sup>18</sup>

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. These trade-offs are not easy to navigate and present an important policy challenge. In Mexico, the lack of capacity in the judicial and security sectors leads to a security gap in which the consequent costs of violence far exceed the containment costs. Therefore, achieving optimal spending on domestic security is important for making the most productive use of capital overall.

## METHODOLOGY

The economic impact of violence is defined as the expenditure and economic activity related to "containing, preventing and dealing with the consequences of violence." The **economic impact of violence** refers to the total cost (direct and indirect) of violence plus an economic peace multiplier. The **economic cost of violence** refers to the direct and indirect costs of violence.

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.

Mexico's economic impact of violence consists of three categories:

1. **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.
2. **Protection Costs** refers to the personal and business expenses from the National Survey of Business Victimization (ENVE) and the National Survey of Victimization and Perception of Public Security (ENVPIE) surveys.
3. **Interpersonal Violence** refers to the direct and indirect costs associated with homicide, violent crimes, organized crimes and the fear of victimization.

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 2022 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 and kidnapping
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.

Although data are 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 that 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 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.

“

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

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.<sup>19</sup>

BOX 3.3

### Effect of homicide on Foreign Direct Investment (FDI)

The cost of homicide on FDI was estimated using a first difference panel regression model. The data collected was from quarterly FDI flows and the quarterly homicide rate from 2015 to 2022.<sup>20</sup> Quarterly wage data was used as an additional control. This estimate is based on a previous study,<sup>21</sup> which looked at the effects of various crime indicators on FDI flows quarter to quarter. The panel regression used here varies from the study in a few crucial ways. The model used in this report captures changes in the growth rate of FDI as opposed to the change in the level of FDI quarter to quarter. The following equations describe the estimation technique:

- (1)  $FDI_{it} = HomicideRate_{it}\beta_1 + Wages_{it}\beta_2 + a_i + error_{it}$
- (2)  $FDI_{i2} = HomicideRate_{i2}\beta_1 + Wages_{i2}\beta_2 + a_i + error_{i2}$
- (3)  $\Delta FDI_i = FDI_{i2} - FDI_{i1}$
- (4)  $FDI_{i2} - FDI_{i1} = (HomicideRate_{i2} - HomicideRate_{i1})\beta_1 + (Wages_{i2} - Wages_{i1})\beta_2 + (a_i - a_i) + (error_{i2} - error_{i1})$
- (5)  $FDI_i = \Delta HomicideRate_i\beta + \Delta Wages_i\beta + \Delta error_i$

In equation (5), the estimate assesses the impact of changes in the rate of growth of FDI with a corresponding change in the homicide rate. The above equations also explain why a first difference model was used. The first difference model mitigates factors that may change based on the unique social and economic circumstances of individual states in Mexico, such as differences in income, population size or levels of human capital. The results from this estimation approach are extrapolated to produce an annual estimate from a quarterly one.

# 4

## POSITIVE PEACE

### KEY FINDINGS

- Mexico's Positive Peace Index (PPI) score has deteriorated by 3.1 percent since 2009. In contrast, the average score of the countries in the wider Central America and the Caribbean region improved by 1.2 percent during the same period.
- Positive Peace in Mexico broadly improved in the first half of the 2010s, but then recorded substantial deteriorations between 2016 and 2022, undoing the gains made in the previous years. This coincided with the substantial increases in violence across the country.
- Since 2009, the Pillar of Positive Peace to record the largest improvement was *Free Flow of Information*, on the back of national policies to improve internet access and the use of information technologies.
- Despite this overall improvement, this Pillar faces serious challenges in Mexico, particularly in relation to violence against journalists.
- The *Acceptance of the Rights of Others* Pillar also improved, mainly driven by Mexico's achievement of near gender parity in the federal legislature.
- The net deterioration since 2009 was driven by four Pillars of Positive Peace: *Well-Functioning Government*, *Low Levels of Corruption*, *Sound Business Environment* and *High Levels of Human Capital*.
- The deterioration in the *High Levels of Human Capital* Pillar comes in the context of the impact of the COVID-19 pandemic in Mexico, which significantly affected the country's healthy life expectancy scores.
- In addition, Mexico has witnessed a steep decline in the *Attitudes* and *Institutions* domains that began in 2017, against the backdrop of rising political polarization. This was mainly driven by deterioration in *law to support equal treatment of population segments* and *government openness and transparency*.
- At the sub-national level, the Mexico Positive Peace Index (MPPI) shows that Querétaro, Baja California Sur, Aguascalientes, Sonora and Tlaxcala recorded the best levels of Positive Peace.
- In contrast, Guerrero, Oaxaca, Morelos, Veracruz and Michoacán recorded the worst levels of Positive Peace in the MPPI.
- The MPPI Pillars with the strongest associations with actual peace, as measured by the MPI, are *Low Levels of Corruption* and *Well-Functioning Government*. This suggests that corruption and administrative ineffectiveness are key drivers of violence in Mexico.



## WHAT IS POSITIVE PEACE?

Positive Peace is defined as the *attitudes, institutions and structures* that create and sustain peaceful societies (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 well-being, better developmental results and stronger resilience.

FIGURE 4.1

### What is Positive Peace?

Positive Peace is a complementary concept to negative peace.



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 4.2

### The Pillars of Positive Peace

All eight factors are highly interconnected and interact in complex ways.



## 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 economic opportunity.

**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.

The Pillars of Positive Peace interact systemically to support the *attitudes, institutions* and *structures* that underpin development and peacebuilding (Figure 4.2). 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 application of the global Positive Peace framework to the Mexican context is described in Box 4.1.

#### BOX 4.1

### Measuring Positive Peace in Mexico

This section assesses the state of Positive Peace in Mexico in two different, but complementary ways. The first – presented in the sub-section 'Positive Peace in Mexico' – 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 Positive Peace Index<sup>1</sup> and investigates Positive Peace in Mexico against a global context, allowing for comparisons with neighbors or other comparable countries. 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 presented in

the section 'Positive Peace by State' on page 65. The sub-national 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.

It is currently not possible to replicate the 24 indicators of the global Positive Peace Index at the sub-national level in Mexico (see Section 5: Methodology). For the sub-national analysis section, data have therefore been obtained from various statistical sources and selected based on their statistical relationships with the MPI and their ability to, as closely as possible, capture elements of the eight Pillars of Peace.

In addition to the framework of the eight Pillars, Positive Peace can also be studied through the lenses of its three domains:

- **Attitudes** describes how members of a society view and relate to one another.
- **Institutions** measures the effectiveness, transparency and inclusiveness of administrative organizations.
- **Structures** gauges the technological, scientific and economic foundations that support social development.

The Positive Peace Index uses 24 indicators of socio-economic development produced by reputable sources of publicly

available data. The data for the indicators covers 163 nations worldwide, corresponding to 99.7 percent of the global population. These statistical indicators are selected for having high correlations with actual peace as measured by the GPI internal peace score.

Each indicator is allocated to a Pillar and a domain according to the nature of the information it conveys. The indicators are harmonized in their directionality, meaning scores close to 5 indicate less socioeconomic resilience and scores close to 1 indicate more socioeconomic resilience. A more detailed discussion of the indicators, concepts, methodology and results of the PPI can be found in the 2022 Positive Peace Report.



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

Positive Peace has deteriorated by 3.1 percent in Mexico since 2009, contrasting with a 1.2 percent improvement in the average score for the wider Central America and the Caribbean region.<sup>2</sup> This means that the nation has become less socio-economically developed and less resilient than in the early 2010s, both in absolute terms and relative to neighboring countries.

According to (Table 4.1), in 2022, Mexico ranked 85<sup>th</sup> out of the 163 countries assessed in the PPI. This is 18 places lower than its position in 2009. As a result, it has dropped from the 'High Positive Peace' category to the 'Medium Positive Peace' category. Among its regional neighbors, Mexico now ranks as the sixth highest Positive Peace nation out of 12 countries.

### TRENDS IN POSITIVE PEACE

Mexico's deterioration in Positive Peace took place from 2016 onwards, during which time the nation's PPI score began to undo the gains of the early 2010s (Figure 4.3). This deterioration was driven by worsening scores for the *Institutions* domain, which measures the effectiveness of administrative organizations, and the *Attitudes* domain, which captures how citizens and social groups interrelate (Figure 4.4).

Mexico's deterioration in Positive Peace was driven by sharp movements in three indicators in the *Attitudes* domain: a 33 percent deterioration in *law to support the rights of population segments*, an eight percent deterioration in *factionalized elites* and a four percent deterioration in the *quality of information* disseminated by the government domestically.

TABLE 4.1

### Positive Peace Index – Central America and the Caribbean rankings, 2022

Mexico displayed a medium level of Positive Peace in 2022, ranking sixth in the Central America and the Caribbean region.

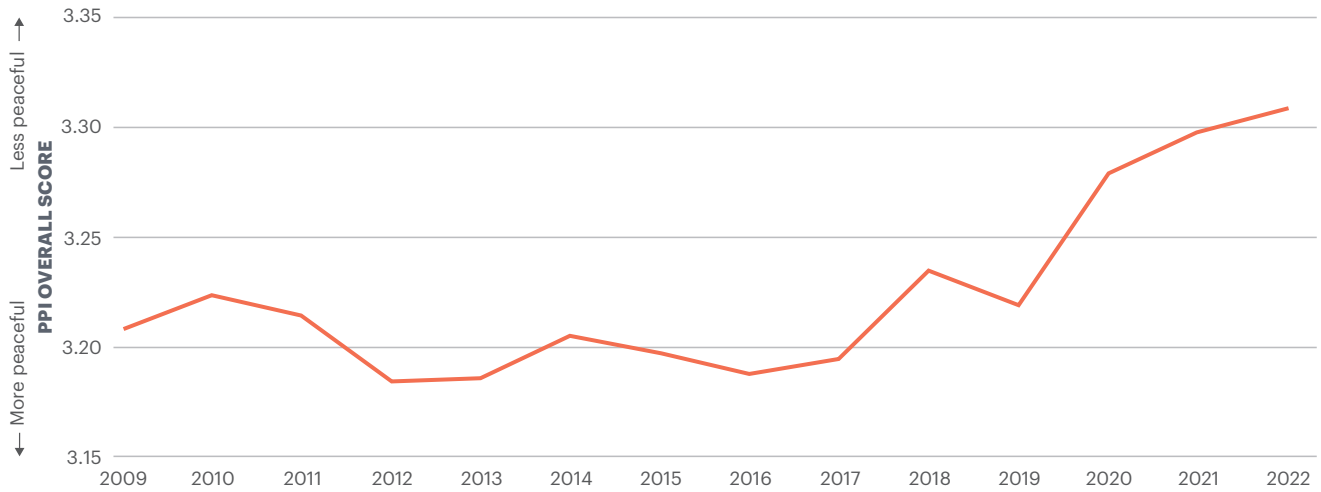
Country	Regional rank	Global rank	Score	Positive Peace category	Change in score from 2009 to 2022 (%)
Costa Rica	1	36	2.419	Very High	-3.1
Trinidad and Tobago	2	44	2.712	High	-5.2
Jamaica	3	51	2.836	High	-6.2
Panama	4	53	2.861	High	-1.6
Dominican Republic	5	76	3.228	High	-7.1
<b>Mexico</b>	<b>6</b>	<b>85</b>	<b>3.308</b>	<b>Medium</b>	<b>3.1</b>
Cuba	7	89	3.344	Medium	-5.3
El Salvador	8	95	3.392	Medium	2.0
Honduras	9	110	3.601	Medium	2.1
Nicaragua	10	118	3.707	Medium	5.4
Guatemala	11	12	3.726	Low	1.6
Haiti	12	153	4.107	Low	0.4
<b>Regional Average</b>	-	-	<b>3.270</b>	-	<b>-1.2</b>

Source: IEP

FIGURE 4.3

### Overall Positive Peace Score in Mexico, 2009–2022

Over the past decade, Mexico’s national Positive Peace score deteriorated by 3.1 percent, primarily driven by developments since 2016.



Source: IEP

The five percent deterioration over the 2009-2022 period in Mexico’s *Institutions* domain was heavily influenced by worsening scores in the *government openness and transparency*, *regulatory quality*, and *control of corruption* indicators, particularly in the second half of the 2010s. To some extent, this reflected the authorities’ inability to effectively manage the precarious internal security situation in the country.

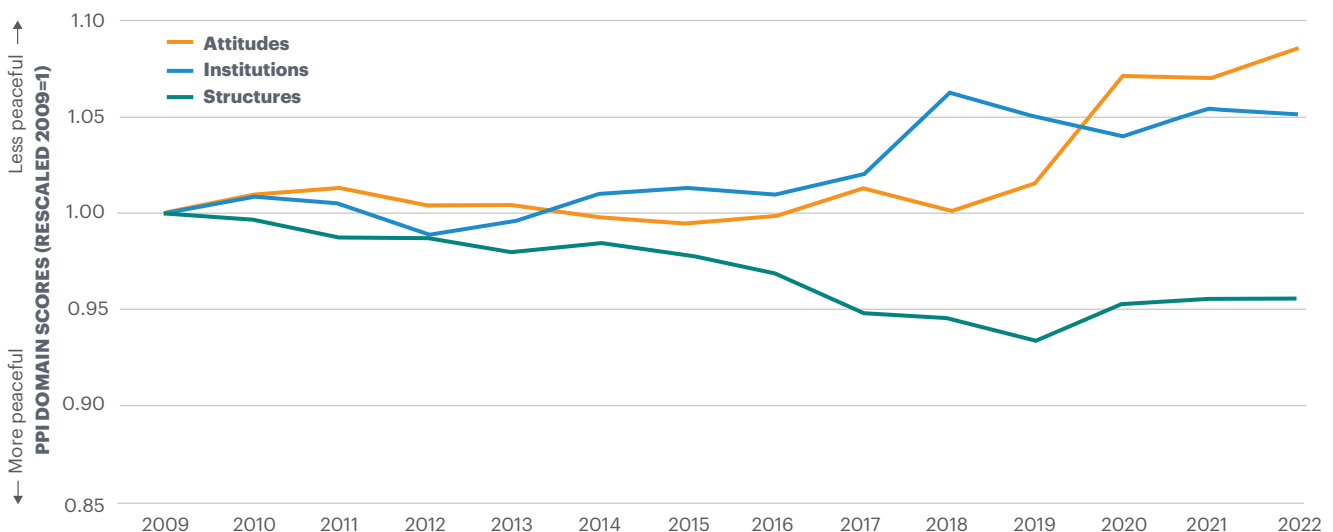
Finally, the *Structures* domain continued to improve, almost uninterrupted, until 2019. This domain improved by more than

five percent in the 2010s and was the primary factor driving Mexico’s improvement in the overall PPI score. The *Structures* domain, though, lost some of its gains between 2019 and 2022, mostly as a result of a steep COVID-19-related decline in the *healthy life expectancy* indicator. Between 2019 and 2022, the average life expectancy in Mexico dropped by more than four years (from 74.2 to 70.1 years), disproportionately higher than a global average drop of 0.8 years.

FIGURE 4.4

### Positive Peace Domain Scores in Mexico, 2009–2022

In the second half of the 2010s, further progress in the *Structures* domain was offset by steep deteriorations in the *Institutions* and *Attitudes* domains.



Source: IEP



## BOX 4.2

### Sharp deteriorations in the *Attitudes* and *Institutions* domains amid rising polarization in Mexico, 2017–2022

From 2017 to 2022, Mexico recorded deteriorations in the *Attitudes* and *Institutions* domains, which were the main drivers of Mexico's overall decline in Positive Peace.

In the *Institutions* domain, the deterioration was mostly a result of a 50 percent decline in *government openness and transparency*, a 16.4 percent decline in *regulatory quality*, and a 12 percent decline in *government effectiveness*. The deterioration is reflected in the country being downgraded in several international measures of institutional quality rankings – including measures related to the rule of law, corruption, and government effectiveness and quality.

The decline in the *Attitudes* domain was driven by a 33 percent deterioration in *law to support equal treatment of population segments* indicator, a 21.7 percent deterioration in the *quality of information* indicator and a 12.7 percent decline in the *factionalized elites* indicator.

The deteriorations in these two domains come in the context of rising levels of polarization in Mexico in recent years, which is part of a global trend. According to a study by the Carnegie Endowment for International Peace, the

level of polarization in Mexico increased by almost 66 percent between 2017 and 2022, reaching its highest levels in nearly a century.<sup>3</sup> In addition, a global survey conducted in 2022 found that 52 percent of Mexicans believed their country was very or extremely divided and that 65 percent believed it was unlikely that the divisions could be overcome.<sup>4</sup>

Polarization can undermine a government's ability to operate effectively and in unity while also lowering citizens' confidence and willingness to engage in civic processes.<sup>5</sup> The heightened polarization in Mexico has been reflected in the media, with different outlets increasingly siding with rival political blocs.<sup>6</sup> Social media has also played a role in exacerbating the polarization, with online debates often becoming heated and acrimonious.<sup>7</sup> Polarization has also manifested in protests and demonstrations, with supporters of various political parties taking to the streets. In some cases, these protests have turned violent, with clashes between police and demonstrators.<sup>8</sup>

## POSITIVE PEACE PILLARS

Since 2009, Mexico's Pillar with the largest improvement was in *Free Flow of Information* (Figure 4.5), despite a 2.3 percent decline between 2019 and 2022. This was due to a more than 45 percent improvement in the indicator *individuals using the internet* (Figure 4.6). This trend was observed globally and was greatly influenced by the development and proliferation of new technologies, along with the reduction in the costs of telecommunications equipment.

In 2009 around 26 percent of Mexicans had access to the internet, by 2022 this proportion had risen to 72 percent.<sup>9</sup> Instrumental to this rise was an initiative called *México Conectado* (Connected Mexico), which began in 2013. This initiative saw the nation invest US\$1 billion in bringing broadband connections to libraries, schools, hospitals and other public facilities in urban and rural areas.<sup>10</sup>

Partially offsetting the positive influence of *individuals using the internet*, Mexico recorded a steep deterioration in the *quality of information* disseminated by the authorities domestically. The rise in disinformation has been a global phenomenon, with an average of 56 percent of people around the world reporting concern about the legitimacy of the news they encounter on the internet. However, in Mexico, levels of concern about fake news are slightly higher than the global average, with 60 percent of people reporting concern.<sup>11</sup> The *quality of information* indicator, which is one of the indicators in the *Free Flow of Information* Pillar, deteriorated by 28 percent in the 2009-2022 period (Figure 4.6).

The *Acceptance of the Rights of Others* Pillar recorded relative gains in the 2009-2022 period. The Pillar improved by 2.1 percent since 2009 on the back of efforts to reduce gender disparities and

economic inequality. This reflects an improvement in the *gender inequality* indicator. Mexico made continuous progress in supporting women's rights, especially in political representation at the federal level. Several initiatives have been successful in reducing the gender gap in the country. In 2008, there were more men enrolled in tertiary education than women; ten years later the situation had reversed, with 42.3 percent of women accessing universities, compared to 40.7 percent of men.<sup>12</sup> Gender quota laws have helped create near gender parity in Mexico's legislature. In 2021, women were elected to 50 percent of the seats in the country's Senate and more than 48 percent of the seats in its Chamber of Deputies.<sup>13</sup>

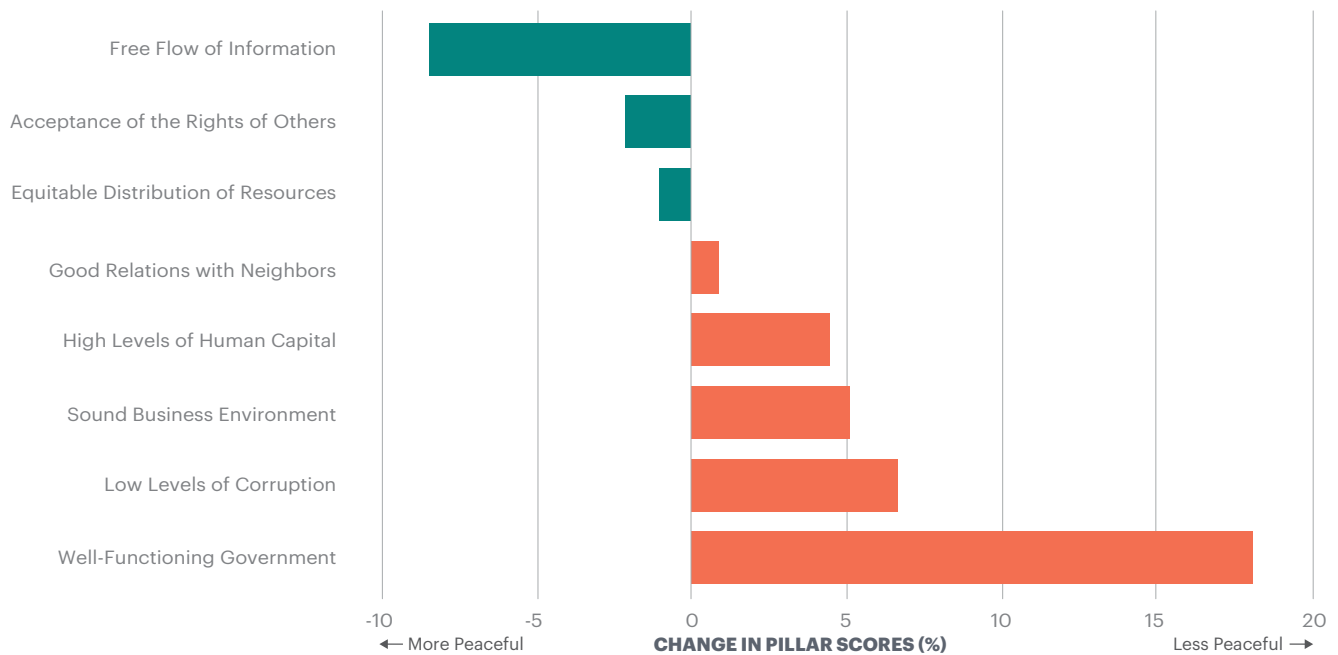
Further contributing to progress in this Pillar, the *exclusion by socio-economic group* indicator also improved, as social spending reduced the level of poverty and inequality in the country. Government programs such as *Prospera*, *Programa Pensión para Adultos Mayores* and *Proagro* have contributed to a reduction in poverty in urban and rural areas. The World Bank estimates that Mexico's poverty rate – the number of persons living on US\$3.65 per day or less – fell from 16 percent of the population in 2005 to 10 percent in 2020.<sup>14</sup> Consistent with this, the Pillar *Equitable Distribution of Resources* also slightly improved by 1.1 percent over the 2009-2022 period.

The *High Levels of Human Capital* Pillar declined by more than four percent between 2009-2022, although one of its indicators, *youth not in employment, education or training*, has improved substantially over the past 13 years. The percentage of young people not engaged in work, education or training fell from 22.1 percent in 2009 to 18.4 percent in 2021. This is noteworthy progress, given that the global average rate jumped from 21.3 percent to 22.3 percent in the same period. This improvement,

FIGURE 4.5

### Positive Peace changes by Pillar, Mexico, 2009–2022

There was substantial improvement in *Free Flow of Information*, while *Well-Functioning Government* had the largest deterioration.

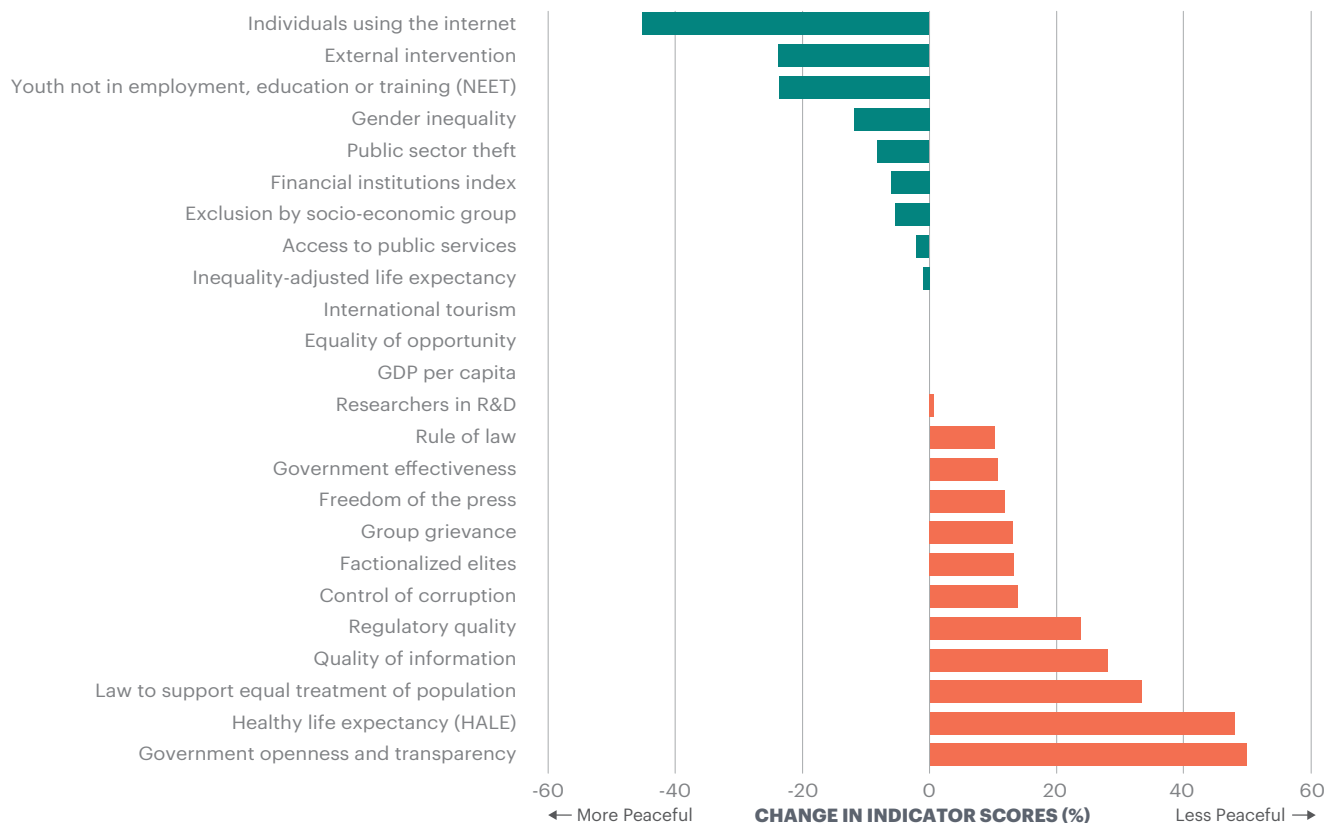


Source: IEP

FIGURE 4.6

### Positive Peace changes by indicators, Mexico, 2009–2022

Positive Peace in Mexico has benefitted from improvement in *individuals using the internet*. However, it was more than offset by deteriorations in *government openness*, *healthy life expectancy* and others indicators.



Source: IEP

however, was more than offset by a substantial decline in *healthy life expectancy*, one of the other indicators of the Pillar *High Levels of Human Capital*.

The decline in life expectancy in Mexico experienced after the onset of the COVID-19 pandemic led to a 23 percent deterioration in the *healthy life expectancy* indicator between 2019 and 2022. This decline was notably higher than the global average of a four percent decline in the indicator during the same period, underscoring the severity of the situation in Mexico. Mexico's COVID-19 death rate has been higher than the global average since the start of the pandemic. According to the World Health Organization data, the global death rate by the end of 2022 was 85 deaths per 100,000 people, while Mexico's death rate was 262 deaths per 100,000 people. Mexico has been one of the countries hardest hit by the COVID-19 pandemic. As of March 2023, Mexico has reported almost 7.5 million confirmed COVID-19 cases and over 333,000 deaths.<sup>15</sup>

The *Sound Business Environment* Pillar also deteriorated in the 2009-2022 period. Although the *financial institution index* indicator improved, it was outweighed by losses in the indicator *regulatory quality*.

The *Low Levels of Corruption* Pillar had the second largest deterioration, falling by almost 6.6 percent since 2009, with two of the three indicators in this Pillar, *control of corruption* and *factionalized elites* deteriorating. In Mexico, corruption is strongly linked with organized crime and drug trafficking, as the cartels often use the official economy to launder money and bribe authorities to facilitate that process. Since 2015, the national organized crime rate has increased by 64.2 percent and, accordingly, corruption has also become more prevalent. Contributing to high levels of crime and corruption, impunity is common across the country, reducing the probability of criminals getting caught and increasing their incentives to commit offenses. According to Impunidad Cero, since 2016, about 93 percent of homicides in Mexico have gone unsolved.<sup>16</sup>

Corruption also affects individuals in Mexico. Acts of petty corruption experienced by ordinary citizens has increased in recent years, with the proportion of people reporting such acts in their contact with public servants rising from 12.1 percent in 2013 to a high of 15.7 percent in 2019, before falling slightly to 14.7 percent in 2021.<sup>17</sup> Moreover, there have been a number of high-profile corruption cases, in which public funds were diverted or embezzled by politicians or public servants. Combating corruption has become a central issue of the current government, which was elected in 2018 on an anti-corruption platform.<sup>18</sup>

*Good Relations with Neighbors* also deteriorated, driven by the poor result of the indicator *law to support equal treatment of population segments*. This also reflects the heightened tensions between some Mexican residents and the refugees and international migrants passing through the country on their way to the United States.<sup>19</sup>

*Well-Functioning Government* recorded the steepest deterioration of all Pillars, registering an 18 percent change since 2009. All three indicators of this Pillar deteriorated in the period, with *government openness and transparency* deteriorating by 50 percent. There was also more than ten percent decline in *rule of law*. Since 2006, Mexico has employed its military to combat drug trafficking and organized crime. While this added resources and personnel to the effort, it also meant the military took on responsibilities that were previously managed by civilian agencies. In this shift, there have been many reports of infringements of human rights.<sup>20</sup> Between 2014 to 2019, Mexico's National Human Rights Commission / *Comisión Nacional de Derechos Humanos* (CNDH) received nearly 3,000 complaints regarding alleged abuses by the military.<sup>21</sup>



## **POSITIVE PEACE BY STATE: THE MEXICO POSITIVE PEACE INDEX**

The Mexico Positive Peace Index (MPPI) is calculated using an adapted version of the global Positive Peace Index (PPI) methodology. It uses state-level economic, governance, social and attitudinal data sourced primarily from Mexico's National Institute of Statistics and Geography, including the National Survey of Victimization and Public Security Perceptions and other surveys. It also uses data from the World Bank, Article 19 and IDD-Mex to build a picture of the state of societal resilience within Mexico.



This section outlines the sub-national Mexico Positive Peace Index (MPPI) using state-based statistical indicators of socio-economic development. The MPPI uses 24 indicators grouped along the eight Pillars of Positive Peace (Table 4.2). These sub-national indicators align with the global Positive Peace Index as closely as possible and were selected based on their correlations to the MPI crime indicators. However, due to specific issues in the Mexican

sub-national context as well as some data limitations, some indicators have had to be slightly adapted.

Like the methodology of the global Positive Peace Index, MPPI indicator scores are harmonized, meaning scores close to 5 indicate less socio-economic resilience and scores close to 1 indicate more socio-economic resilience.

TABLE 4.2

### Indicators in the sub-national Mexico Positive Peace Index, 2020

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

Pillar	Indicator Name	Source*
Acceptance of the Rights of Others	Civil Liberties	IDD-Mex
	Gender Inequality	UNDP HDI-S
	Political Rights	IDD-Mex
Equitable Distribution of Resources	Access to Nutritious and Quality Food	CONEVAL
	Extreme Poverty	CONEVAL
	Inequality	IDD-Mex
Free Flow of Information	Attacks on Journalists	Article 19
	Internet Access	INEGI ENDUTIH
	Proportion of Public Institutions That Have a Website	INEGI CNGSPSPE
Good Relations with Neighbors	Confidence In Neighbors	ENVIPE
	Organized Neighbors to Address Issue of Theft	ENVIPE
	State-Society Competitiveness	World Bank
High Levels of Human Capital	Access To Health Services	CONEVAL
	Illiteracy Rate	IDD-Mex
	Public Expenditure on Education	IDD-Mex
Low Levels of Corruption	Judicial Corruption	ENVIPE
	Perception of Corruption	ENVIPE
	State Government Corruption	ENVIPE
Sound Business Environment	GDP per Capita (log)	IDD-Mex
	Unemployment Rate	INEGI
	Investment	IDD-Mex
Well-Functioning Government	Citizen Democracy Index	IDD-Mex
	Political Commitment	IDD-Mex
	Homicide Sentencing Rate	INEGI CNG, SESNSP

Sources: Índice de Desarrollo Democrático de México (IDD-Mex), Human Development Index sub-national (HDI-S), Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL), Instituto Nacional de Estadística, Geografía e Informática (INEGI), Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH), Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales (CNGSPSPE), Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE), Censo Nacional de Gobierno (CNG), Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP).

The states of Querétaro, Baja California Sur, Aguascalientes, Sonora and Tlaxcala recorded the strongest performance in the MPPI in 2020 (Figure 4.7). The states of Guerrero, Oaxaca, Morelos, Veracruz and Michoacán had the lowest levels of Positive Peace in the country.

Most of Mexico's 32 states recorded MPPI scores around the national average of 3.123.<sup>22</sup> This is a relatively high degree of homogeneity and is to be expected in a sub-national analysis since many of the indicators of Positive Peace are influenced by laws and administrative programs implemented nationally. This means developmental successes and failures are more likely connected to state performance.

In addition, within domestic borders, individuals and groups may migrate from one state to another largely unimpeded. If, for instance, unemployment is particularly high in one state, individuals may move to other parts of the country where it may be less difficult to secure jobs. The relative freedom of movement of people, resources and capital across state borders also contributes to sub-national Positive Peace indices such as the MPPI being more homogeneous than the global PPI.

This relative uniformity of state-by-state Positive Peace outcomes is one of the reasons the relationship between Positive Peace and negative peace<sup>23</sup> is not as strong at the sub-national level as it is globally. In the case of Mexico, certain characteristics of violence and conflict further distort the relationship between peace and societal resilience.

### SUB-NATIONAL POSITIVE PEACE AND THE MPI

Organized crime and drug trafficking in Mexico distort the relationship between levels of violence and Positive Peace. States with higher levels of socio-economic resilience also have greater markets for drugs and more suitable infrastructure of roads and ports through which criminal organizations may transport illegal substances. In addition, some of the states with the highest levels of Positive Peace, as measured by the MPPI, are located close to the border with the United States, which means they have high strategic value for the illegal drug trade.

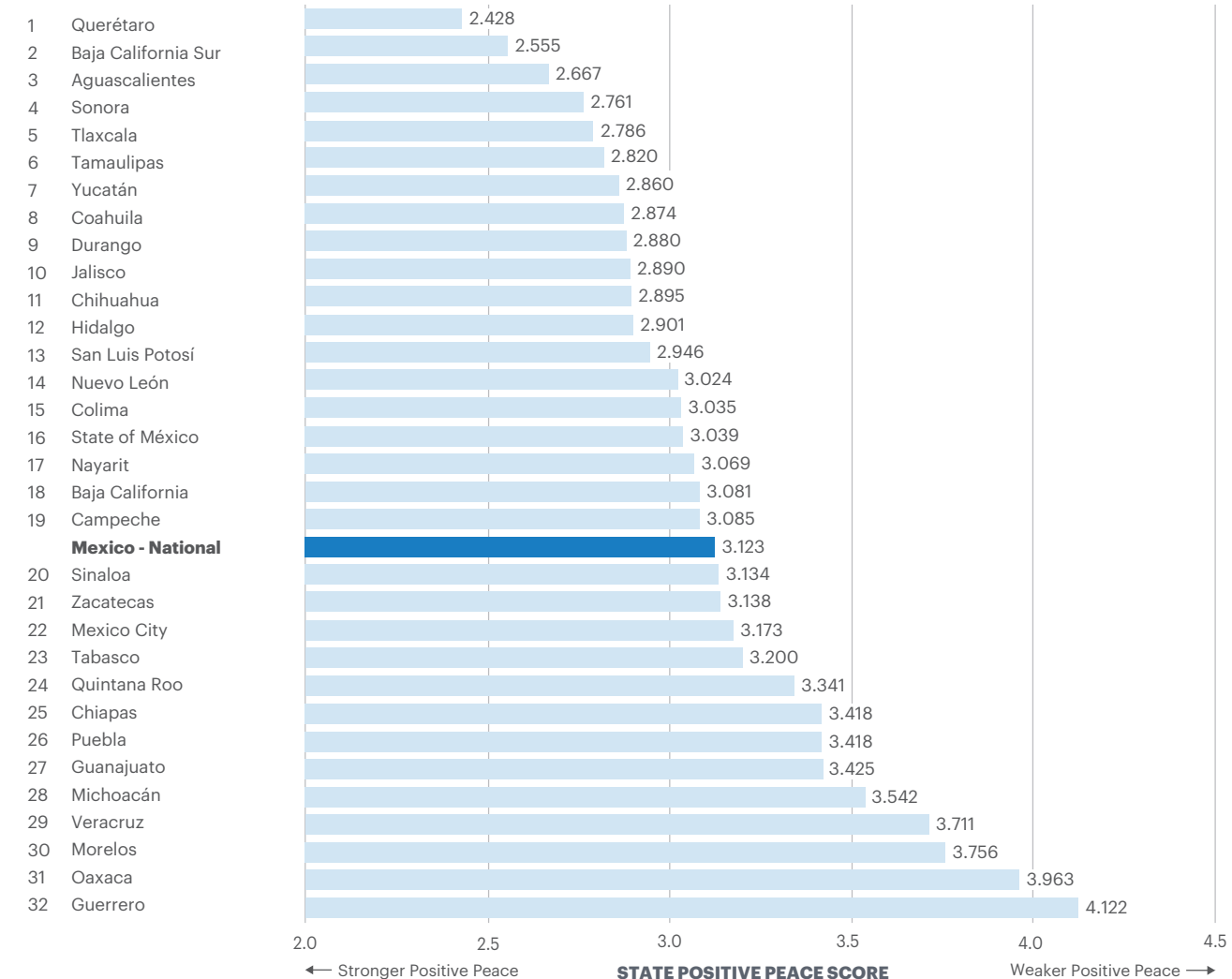
In some circumstances, the presence of organized crime may also facilitate other types of crime. For instance, regions where drug cartels operate more intensely will also support *narcomenudeo* (retail drug sales), which can be associated with firearms crime.

FIGURE 4.7

## Mexico Positive Peace by state, 2020

Querétaro, Baja California Sur and Aguascalientes posted the highest state levels of Positive Peace.

### RANK STATE



Source: IEP

FIGURE 4.8

### Correlations between Positive Peace and the MPI, 2020

The relationships between Positive Peace and the MPI show that violence tends to increase as indicators of *Low Levels of Corruption* and *Well-Functioning Government* deteriorate. The economic nature of violence in Mexico also shows an inverse relationship with traditional human development indicators.

0.47	-0.04	0.35	0.38	GRN organized neighbors to address issue of theft
0.46	-0.24	0.21	0.26	LLC judicial corruption
0.37	0.45	0.15	0.20	HLHC public expenditure in education
0.37	0.25	0.30	0.34	WFG political commitment
0.01	0.55	0.32	0.21	LLC perception of corruption
-0.06	0.36	0.41	0.38	LLC state government corruption
0.20	0.27	0.53	0.47	WFG citizen democracy index
0.05	0.27	0.54	0.52	WFG homicide sentencing rate
0.08	0.21	0.26	0.20	ARO civil liberties
0.18	0.16	0.21	0.33	SBE investment
0.19	0.08	0.29	0.24	EDR inequality
0.09	0.03	0.24	0.27	SBE unemployment rate
0.16	0.13	-0.17	-0.21	EDR inequality
0.15	0.36	-0.21	-0.23	SBE unemployment rate
-0.36	-0.14	-0.40	-0.50	ARO gender inequality
-0.44	-0.18	-0.20	-0.24	EDR access to nutritious and quality food
-0.62	-0.26	-0.22	-0.30	EDR extreme poverty
-0.38	-0.41	0.05	-0.05	FFI Internet access
-0.51	-0.41	-0.08	-0.16	HLHC illiteracy rate
-0.41	0.08	-0.23	-0.28	GRN confidence in neighbors
-0.21	0.15	-0.04	-0.07	FFI attacks on journalists
-0.43	-0.01	0.02	-0.06	HLHC access to health services
-0.03	-0.06	-0.03	-0.14	FFI proportion of public institutions that have a website
-0.28	-0.23	0.05	0.04	SBE GDP per capita
<b>MPI organized crime</b>	<b>MPI violent crime</b>	<b>MPI firearms crime</b>	<b>MPI homicide</b>	

Source: IEP

Note: Correlation coefficients higher than 0.3 are highlighted in darker red; those lower than -0.3 are highlighted in darker blue.

Violent individuals involved with the cartels or in *narcomenudeo* may also be more likely than others to engage in extortion, kidnapping, family violence and other crimes. These factors contribute to a lack of correlation between internal security and Positive Peace in Mexico.

The indicators in red at the top of Figure 4.8 represent factors that trend with violence. That is, in states where these factors are weaker, violence tends to be higher. *Low Levels of Corruption* and *Well-Functioning Government* feature solely in this category and show direct correlation across all types of crime in the MPI. This shows that corruption and administrative ineffectiveness enable crime and violence through misallocating funds that could otherwise have been dedicated to public security. The lack of political rights and civil liberties also show an association with higher levels of violence and crime.

Conversely, the Positive Peace indicators in the bottom half of Figure 4.8, largely colored in blue, show an inverse relationship with crime and violence in Mexico. That is, states that perform well in these indicators also tend to have higher levels of violence. GDP per capita indicates that wealthier states have higher levels of organized crime and violent crime, reflecting the economic nature of these illicit activities. Simultaneously, wealthier states tend to

perform more strongly in gender equality indicators, literacy rates, internet access and access to food and health services. This results in states that perform better in traditional human development measures, such as health, wealth, and education, also having higher rates of organized and violent crime.

The link between wealth and organized crime has important implications for corruption. In recent years, there have been suggestions that low police wages could push officers into corrupt practices to supplement their income.<sup>24</sup> The Positive Peace analysis presented here suggests that corruption at an institutional level, especially in the judiciary and political systems, shows a stronger relationship to violence in the country.

Such analysis shows the value of using the Pillars of Positive Peace to provide a holistic and systemic lens through which to view the issues facing a country. However, how these interact at a local level will be context specific. In recognition of this, in 2022, IEP developed HALO – an open source and standardized toolbox for describing problems systemically to inform effective responses (Box 4.3).

BOX 4.3

### **HALO - a new framework and methodology for analyzing societies from a systems perspective**

The Halo approach has been designed as a set of 24 building blocks for the analysis of societal systems and the design of resilience building programs. This allows for an adaptive approach that can be uniquely tailored based on many dependencies, including the size of the societal system and the level of sophistication required in the analysis. Halo workshops and programs can be as short as two days or as long as one year using this building block approach. Different building blocks can be utilized depending on the strengths of the design team, desired outcomes and the length of time allocated for the analysis.

Analyzing systems can be time consuming, resource intensive and expensive. One of the most critical difficulties in the process is the lack of comprehensive information on the state and dynamics of a system. Therefore, it is important to understand the scope of the work the research team can undertake and the limitations

they face from the very beginning. Arguably the best approach is to start with the simplest depiction of a system and progressively build its complexity.

Once the analysis is complete there should be enough information to be able to look at what interventions are needed to rectify the imbalances within the system and to set it on a new course. In defining interventions, it is generally better to consistently nudge the system towards improvement, rather than radically change it, as that will only destroy the system, leaving an uncertain replacement or increase the possibility for mistakes. One big mistake is difficult to recover from, whereas small changes can be undone more easily, even if they are numerous.

In addition, drastic changes – even those in the right direction – can be disruptive and, in extreme cases, destabilizing for the system. Abrupt changes create a great deal of uncertainty and individuals, groups or organizations may be unsure about how they fit in the new systemic structure. For this reason, it is possible that large or radical changes may cause resistance and antagonism. More details on the Halo approach can be found in the Positive Peace Report 2022.





## MEXICO PEACE INDEX: A DECADE OF MEASURING AND PROMOTING POSITIVE PEACE

Positive Peace and negative peace are complementary concepts. Understanding this systemic relationship is vital in designing peacebuilding strategies that simultaneously contain violence, enhance societal resilience and build socio-economic development. Over the past decade, IEP has worked to foster greater levels of Positive Peace in Mexico through the MPI and the capacity-building endeavors that build on its findings.

The first MPI was developed at a time when Mexico was entering the seventh year of its war on drugs. It arose out of the support from a group of Mexican citizens, led by a Mexican businessman, interested in better understanding the unique dynamics of peace and violence in the country at a critical juncture.

The 2023 edition of the MPI marks ten years of effort by IEP to track and explain these dynamics using quantitative data. Over the past decade, the report has contributed to the national conversation on peace and security in Mexico, and in that time the MPI has become the only national-level report that IEP produces on an annual basis.

Since the war on drugs began, the vast majority of institutional responses to criminal violence have focused on the use of public force, particularly the use of the armed forces as the main resource in the fight against organized crime groups. In part as a result of this approach, one of the main objectives of the MPI has been to apply a systemic approach to understanding peace in Mexico, which takes into account factors beyond those directly related to violence containment.

In doing so, the MPI has not only sought to explain changing patterns of violence, but just as importantly, to analyze the *attitudes, institutions* and *structures* that create and sustain peaceful societies. It has done this by applying IEP's Positive Peace framework to Mexico.

While the MPI is a research report, its purpose is to inform actions that address the burden of violence in Mexico through building and strengthening peace. Over the past decade, IEP has worked with many partners committed to this idea. This has allowed the concept of Positive Peace to be integrated into peacebuilding processes in Sinaloa, Jalisco, Hidalgo, Nuevo León, Michoacán, Morelos, Querétaro and Guerrero. In these processes, training has been provided to:

- More than 4,400 public servants.
- Approximately 3,600 members of the armed forces, including the first generation of the Public Security degree program at the Heroic Military College.
- More than 2,100 police officers.
- More than 5,000 young people in schools and universities.

It is difficult to determine the MPI's precise impact on the country's levels of peace. However, it can be affirmed that the conversation around peace has advanced significantly. Today, in most forums and decision-making spaces, the need for more comprehensive and complex approaches to peace is recognized, calling for multisectoral collaboration initiatives.



# 5

## 2023 MEXICO PEACE INDEX METHODOLOGY

The Mexico Peace Index (MPI) is based on the concepts and framework of the Global Peace Index (GPI), the leading global measure of peacefulness, produced annually by IEP since 2007. As an internal analysis of a single country, the MPI adapts the GPI methodology for a sub-national application. Both indices measure negative peace - that is, the "absence of violence or fear of violence".

The 2023 edition is the tenth iteration of the MPI and uses data published by the Executive Secretary of the National System for Public Security / *Secretariado Ejecutivo de Sistema Nacional de Seguridad Pública* (SESNSP).

The MPI measures peacefulness at the state level in Mexico. A key reason for choosing this unit of analysis is that, Mexico's state governments have wide-ranging autonomous powers, allowing them to have a significant impact on the levels of violence within their states. 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 IEP's United Kingdom Peace Index (UKPI) and United States Peace Index (USPI), 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. 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.

## 2023 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 2022.

#### 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 / Los Delitos contra La Salud Pública*
- 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.

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: Secretariat of Security and Civilian Protection / *Secretaría de Seguridad y Protección Ciudadana* (SSPC)

#### 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.<sup>1</sup>

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 sourced this data from each victimization survey for the years 2018 to 2022 and took 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: ENVIPE

## 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 2022. First, the average value for each state over the six 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 6.2. 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 6.1.

TABLE 6.1  
**Indicator weights in the MPI**

INDICATOR	WEIGHT	% OF INDEX
Homicide	4	30%
Violent crime	3	21%
Firearms crime	3	20%
Detention without a sentence	1	8%
Organized crime	3	21%

TABLE 6.2  
**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	1	
			Retail drug crimes		Possession, commerce and supply in small amounts
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



## METHODOLOGY FOR CALCULATING THE ECONOMIC IMPACT OF VIOLENCE

The economic impact of violence is defined as the expenditure and economic activity related to "containing, preventing and dealing with the consequences of violence." The **economic impact of violence** refers to the total cost (direct and indirect) of violence plus an economic peace multiplier. The **economic cost of violence** refers to the direct and indirect costs of violence.

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.

Refer to Box 6.1 for more detail on the multiplier.

### CATEGORIES AND INDICATORS INCLUDED IN THE ECONOMIC IMPACT OF VIOLENCE

1. **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.
2. **Protection Costs** refers to the personal and business expenses from the National Survey of Business Victimization (ENVE) and the National Survey of Victimization and Perception of Public Security (ENVIPE) surveys.
3. **Interpersonal Violence** refers to the direct and indirect costs associated with homicide, violent crimes, organized crimes and the fear of victimization.

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 2022 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

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 6.1

### 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 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.<sup>2</sup>

## 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 are 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 are sourced from the Ministry of Finance and Public Credit / *Secretaría de Hacienda y Crédito Público* (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 and 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 United States before being

converted to 2022 Mexican pesos. This was based on the aforementioned US study suggesting that the indirect cost of a homicide approximates US\$8.4 million. The equivalent cost in Mexico was then calculated based on purchasing power adjusted GDP per capita of US\$20,277 for Mexico as compared to \$69,288 for the United States in 2020. This is called the adjusted unit cost.

All the costs are adjusted to constant 2022 pesos using GDP deflator data from the World Bank. The base year of 2022 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 pages 79-80. 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 costs 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 are 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 2022. 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 are sourced from the Department of Labor and Social Welfare (Secretaría del Trabajo y Previsión Social, STPS). For 2022, the minimum wage of 172.87 pesos is used. This is calculated for a yearly wage of 45,638 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. Based on this, 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 subnational Mexico Positive Peace Index (MPPI) is based on the methodology for the global PPI, described in full in the 2022 Positive Peace Report, available at [www.visionofhumanity.org](http://www.visionofhumanity.org).

## MEXICO POSITIVE 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 sub-national MPPI differ slightly for two reasons:

- Sub-national data on Positive Peace is limited
- Considerations specific to the Mexican context require some changes in indicators.

The sub-national MPPI was derived from a different set of indicators using information sourced from reputable Mexican and international sources (Table 6.3). Due to the frequency of data releases for some sources, the sub-national index is updated every two years.

Correlations between sub-national MPPI indicators and negative peace are relatively low (Table 6.3). 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 addition, Mexican states with higher levels of socio-economic resilience are typically those where criminal organizations are more active since they have more suitable infrastructure of roads and ports through which criminal organizations may transport illegal substances.

## 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.

TABLE 6.3

### Indicators in the sub-national Mexico Positive Peace Index, 2020

Pillar	Indicator name	Source*	Correlation coefficient (to the MPI)
Acceptance of the Rights of Others	Civil Liberties	IDD-Mex	0.27
	Gender Inequality	UNDP HDI-S	-0.5
	Political Rights	IDD-Mex	0.24
Equitable Distribution of Resources	Access to Nutritious and Quality Food	CONEVAL	-0.33
	Extreme Poverty	CONEVAL	-0.44
	Inequality	IDD-Mex	-0.07
Free Flow of Information	Attacks on Journalists	Article 19	-0.07
	Internet Access	INEGI ENDUTIH	-0.21
	Proportion of Public Institutions that have a Website	INEGI CNGSPSPE	-0.1

Good Relations with Neighbors	Confidence in Neighbors	ENVIPE	-0.31
	Organized Neighbors to Address Issue of Theft	ENVIPE	0.4
	State-Society Competitiveness	World Bank	0.31
High Levels of Human Capital	Access to Health Services	CONEVAL	-0.15
	Illiteracy Rate	IDD-Mex	-0.34
	Public Expenditure in Education	IDD-Mex	0.33
Low Levels of Corruption	Judicial Corruption	ENVIPE	0.25
	Perception of Corruption	ENVIPE	0.31
	State Government Corruption	ENVIPE	0.37
Sound Business Environment	GDP per Capita (log)	IDD-Mex	-0.05
	Unemployment Rate	INEGI	-0.05
	Investment	IDD-Mex	0.23
Well-Functioning Government	Citizen Democracy Index	IDD-Mex	0.49
	Political Commitment	IDD-Mex	0.4
	Homicide Sentencing Rate	INEGI CNG, SESNSP	0.47

Sources: \*Índice de Desarrollo Democrático de México (IDD-Mex), Human Development Index sub-national (HDI-S), Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL), Instituto Nacional de Estadística, Geografía e Informática (INEGI), Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH), Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales (CNGSPSE), Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE), Censo Nacional de Gobierno (CNG), Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP).

**APPENDICES**

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RESULTS  
TABLES

## APPENDIX A

# MPI RESULTS

Table A.1

### Indicator scores, 2022

A lower score indicates a higher level of peacefulness.

STATE	HOMICIDE	VIOLENT CRIME	FIREARMS CRIME	ORGANIZED CRIME	DETENTION WITHOUT A SENTENCE
AGUASCALIENTES	1.290	3.087	1.427	2.516	2.152
BAJA CALIFORNIA	4.523	3.743	4.336	3.879	3.471
BAJA CALIFORNIA SUR	1.361	3.474	1.167	4.292	2.188
CAMPECHE	1.487	3.039	1.834	2.035	1.609
CHIAPAS	1.385	1.512	1.349	1.350	5
CHIHUAHUA	3.493	2.791	3.599	2.106	3.212
COAHUILA	1.229	2.849	1.141	2.724	2.877
COLIMA	5	3.866	5	5	1.710
DURANGO	1.464	4.613	1.812	1.860	1.984
GUANAJUATO	1.373	3.014	1.451	2.123	2.879
GUERRERO	3.484	2.905	4.609	3.504	1.986
HIDALGO	2.788	2.339	3.036	3.265	2.403
JALISCO	1.529	2.969	1.585	1.826	2.186
STATE OF MÉXICO	2.178	2.882	2.303	2.151	3.171
MEXICO CITY	1.740	5	2.291	3.717	1.708
MICHOACÁN	3.419	2.257	4.215	1.704	2.954
MORELOS	3.783	4.193	3.531	2.172	1.939
NAYARIT	1.605	1.979	1.515	1.626	4.932
NUEVO LEÓN	2.190	3.255	2.850	4.704	2.314
OAXACA	2.160	2.702	2.581	1.697	2.415
PUEBLA	1.744	2.905	1.879	1.508	2.777
QUERÉTARO	1.376	3.504	1.682	3.285	1.747
QUINTANA ROO	2.716	4.384	2.577	2.501	2.753
SAN LUIS POTOSÍ	2.092	3.490	2.334	2.253	2.011
SINALOA	1.745	3.132	1.820	2.420	1.831
SONORA	3.702	2.585	3.305	2.545	4.083
TABASCO	1.628	2.932	1.694	1.705	2.537
TAMAULIPAS	1.636	2.740	1.413	1.940	1.855
TLAXCALA	1.496	1.352	1.318	1.261	5
VERACRUZ	1.585	2.475	1.832	2.177	2.670
YUCATÁN	1.091	1.068	1.038	1.378	5
ZACATECAS	4.837	2.715	5	5	1.939
<b>NATIONAL</b>	<b>2.176</b>	<b>3.236</b>	<b>2.435</b>	<b>2.621</b>	<b>2.328</b>

Source: IEP

Table A.2

**Overall scores, 2015–2022**

A lower score indicates a higher level of peacefulness.

STATE	2015	2016	2017	2018	2019	2020	2021	2022
AGUASCALIENTES	1.841	1.736	2.061	2.218	2.325	2.249	2.150	2.021
BAJA CALIFORNIA	3.073	3.056	3.932	4.310	4.459	4.401	4.307	4.102
BAJA CALIFORNIA SUR	2.639	3.222	4.331	2.923	2.601	2.520	2.478	2.448
CAMPECHE	1.670	1.644	1.626	1.555	1.944	1.689	1.622	2.007
CHIAPAS	1.816	1.729	1.739	1.810	1.734	1.610	1.613	1.686
CHIHUAHUA	2.525	2.795	3.274	3.372	3.695	3.756	3.517	3.053
COAHUILA	2.378	1.794	1.806	1.949	2.033	1.991	1.967	1.998
COLIMA	2.451	3.836	3.884	4.050	4.311	4.328	3.989	4.499
DURANGO	2.171	2.105	2.193	2.128	2.156	2.071	2.051	2.319
GUANAJUATO	2.019	2.072	2.352	3.169	3.332	3.617	3.567	2.011
GUERRERO	3.303	3.626	3.666	3.691	3.405	2.954	2.862	3.472
HIDALGO	1.454	1.524	1.721	1.837	1.998	1.874	1.817	2.813
JALISCO	2.266	2.239	2.425	2.729	2.692	2.567	2.496	1.958
STATE OF MÉXICO	2.621	2.377	2.563	2.658	2.830	2.867	2.904	2.424
MEXICO CITY	2.306	2.300	2.484	2.888	2.965	2.462	2.426	2.948
MICHOACÁN	2.183	2.369	2.507	2.640	2.922	3.004	3.190	2.937
MORELOS	2.693	2.768	2.630	2.760	3.274	3.058	3.299	3.333
NAYARIT	1.794	1.552	2.204	2.394	1.903	1.825	1.869	1.936
NUEVO LEÓN	2.299	2.519	2.606	2.549	2.599	2.508	2.802	3.083
OAXACA	1.652	2.149	2.267	2.630	2.526	2.349	2.290	2.281
PUEBLA	1.911	1.745	1.932	2.141	2.286	2.051	2.042	2.048
QUERÉTARO	1.620	1.664	1.836	2.047	2.379	2.416	2.348	2.315
QUINTANA ROO	2.276	1.963	2.473	3.313	3.774	3.118	3.052	2.996
SAN LUIS POTOSÍ	1.852	2.056	2.300	2.365	2.544	2.882	2.730	2.461
SINALOA	3.010	2.800	3.156	2.756	2.543	2.403	2.294	2.200
SONORA	2.708	2.865	2.831	2.336	2.913	3.178	3.524	3.176
TABASCO	2.151	2.197	2.441	2.906	2.795	2.338	2.113	2.004
TAMAULIPAS	2.746	2.757	2.921	2.738	2.309	2.122	2.064	1.905
TLAXCALA	1.385	1.392	1.437	1.457	1.510	1.564	1.517	1.661
VERACRUZ	1.476	1.733	2.140	2.057	2.257	2.082	2.028	2.032
YUCATÁN	1.488	1.457	1.366	1.242	1.237	1.245	1.254	1.449
ZACATECAS	2.145	2.491	3.095	3.237	3.261	3.933	4.227	4.226
<b>NATIONAL</b>	<b>2.225</b>	<b>2.244</b>	<b>2.473</b>	<b>2.623</b>	<b>2.702</b>	<b>2.610</b>	<b>2.605</b>	<b>2.556</b>

Source: IEP

## APPENDIX B

# ECONOMIC IMPACT OF VIOLENCE

Table B.1

### The economic impact of violence, 2022, constant 2022 pesos

STATE	ECONOMIC IMPACT OF VIOLENCE (BILLIONS)	PER CAPITA ECONOMIC IMPACT OF VIOLENCE	ECONOMIC COST OF VIOLENCE % GDP
AGUASCALIENTES	41.4	28,130	9.1%
BAJA CALIFORNIA	263.3	70,315	24.8%
BAJA CALIFORNIA SUR	32.2	38,474	12.3%
CAMPECHE	34.0	32,873	3.9%
CHIAPAS	97.7	16,577	18.2%
CHIHUAHUA	201.4	52,037	19.9%
COAHUILA	59.3	17,947	5.2%
COLIMA	83.1	102,659	44.6%
DURANGO	287.4	25,540	12.5%
GUANAJUATO	48.5	51,533	26.3%
GUERRERO	326.3	38,010	32.5%
HIDALGO	139.9	28,813	18.5%
JALISCO	90.9	35,257	13.2%
STATE OF MÉXICO	302.1	36,114	22.3%
MEXICO CITY	641.8	31,986	4.9%
MICHOACÁN	251.4	51,415	34.6%
MORELOS	139.6	66,931	44.0%
NAYARIT	37.4	28,273	15.0%
NUEVO LEÓN	218.9	37,997	8.8%
OAXACA	136.4	32,570	30.4%
PUEBLA	182.5	27,141	17.8%
QUERÉTARO	75.8	32,139	9.6%
QUINTANA ROO	96.2	53,502	21.6%
SAN LUIS POTOSÍ	96.2	33,113	14.4%
SINALOA	88.8	27,713	12.6%
SONORA	174.8	55,535	16.9%
TABASCO	72.2	27,476	7.2%
TAMAULIPAS	86.2	23,243	9.3%
TLAXCALA	28.3	20,083	13.4%
VERACRUZ	182.8	21,171	12.9%
YUCATÁN	26.3	11,377	3.8%
ZACATECAS	123.4	73,060	44.4%
<b>NATIONAL</b>	<b>4645.9</b>	<b>35,705</b>	<b>18.3%</b>

Source: IEP

Table B.2

**The economic impact of violence, 2015–2022, constant 2022 pesos, billions**

STATE	2015	2016	2017	2018	2019	2020	2021	2022
AGUASCALIENTES	33.6	32.8	36.3	41.5	45.9	49.5	42.0	41.3
BAJA CALIFORNIA	167.1	177.2	265.3	320.5	295.9	284.2	287.1	263.0
BAJA CALIFORNIA SUR	36.0	44.2	84.6	37.9	35.7	30.0	31.6	32.0
CAMPECHE	21.3	23.9	22.0	23.6	25.2	24.4	26.8	33.9
CHIAPAS	118.5	113.9	118.3	128.2	118.3	101.6	108.8	97.6
CHIHUAHUA	145.8	171.2	219.1	243.3	255.3	252.1	237.7	201.2
COAHUILA	82.7	77.1	82.9	84.7	73.9	66.5	63.0	59.1
COLIMA	27.7	61.3	82.3	75.0	79.2	69.3	60.9	82.9
DURANGO	321.9	308.7	349.5	418.6	514.3	446.6	319.1	286.8
GUANAJUATO	57.1	57.7	58.9	52.8	49.7	48.2	52.7	48.4
GUERRERO	176.4	185.9	214.0	359.3	388.0	445.3	354.3	325.4
HIDALGO	213.0	228.7	252.6	245.2	199.7	146.9	144.8	138.9
JALISCO	59.9	65.4	79.7	85.1	93.5	84.5	82.7	90.7
STATE OF MÉXICO	241.5	265.1	291.2	351.5	367.0	354.7	319.4	301.2
MEXICO CITY	678.2	622.3	666.8	715.8	697.4	652.5	624.5	635.3
MICHOACÁN	162.8	188.1	204.7	221.6	254.2	267.0	310.2	251.1
MORELOS	101.0	112.6	110.0	127.8	137.0	123.9	139.2	139.3
NAYARIT	25.9	19.7	43.1	47.8	36.2	35.4	36.6	37.3
NUEVO LEÓN	143.8	162.2	162.8	196.1	186.5	176.6	189.0	216.3
OAXACA	62.6	144.8	147.9	174.0	169.3	142.1	132.6	136.0
PUEBLA	155.3	169.3	196.4	224.8	266.1	227.3	182.4	182.2
QUERÉTARO	59.1	59.8	66.4	76.0	109.7	112.7	82.6	75.5
QUINTANA ROO	56.7	45.3	63.2	99.7	103.9	89.0	100.8	96.1
SAN LUIS POTOSÍ	61.3	72.2	92.2	106.0	91.6	103.2	107.2	95.9
SINALOA	132.5	139.1	172.2	134.9	120.3	106.9	94.7	88.6
SONORA	106.6	118.7	121.0	124.6	159.8	169.9	196.6	174.6
TABASCO	75.2	79.6	93.2	108.1	111.7	93.7	82.4	71.9
TAMAULIPAS	142.6	142.8	151.9	149.9	125.8	107.0	102.2	85.8
TLAXCALA	25.8	26.3	29.8	31.2	34.3	30.3	29.3	28.3
VERACRUZ	150.9	213.4	279.7	258.3	259.5	226.0	207.4	181.4
YUCATÁN	40.1	42.9	35.2	40.2	28.7	26.8	26.9	26.2
ZACATECAS	51.5	69.3	80.8	81.9	83.2	105.6	141.0	121.9
<b>NATIONAL</b>	<b>3,934.3</b>	<b>4,241.5</b>	<b>4,874.0</b>	<b>5,385.6</b>	<b>5,516.9</b>	<b>5,199.8</b>	<b>4,916.5</b>	<b>4,645.9</b>

Source: IEP

# ENDNOTES

## EXECUTIVE SUMMARY

- 1 2021 is the latest year with available data.
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### SECTION 3: THE ECONOMIC VALUE OF PEACE IN MEXICO

- 1 The average conversion rate used is 20.12 Mexican pesos for one US dollar.
- 2 Sourced from the Unidad de Planeación Económica de la Hacienda Pública (UPEHP) and includes general economic, commercial and labor affairs, agriculture, forestry, fishing and hunting, fuel and energy, mining, manufacturing and construction, transport, communications, tourism, science, technology and innovation and other industries and economic affairs.
- 3 Calculated using the Global Peace Index (GPI) economic impact of violence and includes the indicators military expenditure, internal security expenditure and private security expenditure.
- 4 Calculated using the 2022 GPI economic impact of violence homicide indicator.
- 5 Twenty billion pesos were spent on housing and community services in 2022.
- 6 Protection costs are the latest costs reported by the national business victimization survey (ENVE) survey, which are carried out every two years. The 2022 value comes from the 2022 ENVE survey, which is based on data collected in 2021.
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- 13 This calculation accounts for inflation.
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## SECTION 4: POSITIVE PEACE

- 1 This data is based on 2023 Positive Peace Index, which has been calculated but not yet released. The 2023 Positive Peace Report will be published later this year.
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## SECTION 5: METHODOLOGY

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