Reducing vehicle theft in Morelia, Michoacan, MEXICO

Herman Goldstein Award Submission
June 2022
Reducing vehicle theft in Morelia, Michoacan, MEXICO: Project Summary................................................................. 2
Reducing vehicle theft in Morelia, Michoacan, MEXICO: Project Description................................................................. 3

1. INTRODUCTION ............................................................................................................................................................... 3
   1.1. The municipality of Morelia, Michoacán.................................................................................................................. 3
   1.2. The Morelia Police Department ............................................................................................................................... 3

2. SCANNING ........................................................................................................................................................................... 6

3. ANALYSIS ............................................................................................................................................................................ 6
   3.1. Desk Review ................................................................................................................................................................. 6
   3.2. Field Research and Intelligence.................................................................................................................................. 9

4. RESPONSE ........................................................................................................................................................................... 11
   4.1. Focused patrolling in hot spots ............................................................................................................................... 11
   4.2. Neighborhood WhatsApp groups ........................................................................................................................... 11
   4.3. Systematic registration of potential offenders ....................................................................................................... 13
   4.4. Focused surveillance and criminal investigation .................................................................................................... 14

5. ASSESSMENT ....................................................................................................................................................................... 15
   5.1. Response at hot spots .................................................................................................................................................. 15
   5.2. Crime reduction .......................................................................................................................................................... 15

Agency and Officer Information ............................................................................................................................................. 17
   1. Key Project Team Members ........................................................................................................................................... 17
   2. Project Contact Person ...................................................................................................................................................... 17
Reducing vehicle theft in Morelia, Michoacan, MEXICO: Project Summary

SCANNING

2021 crime incidence data analysis revealed a strong upward trend in non-violent vehicle theft. This upward trend led it to be the second-highest incidence crime in the municipality of Morelia. Preliminary analysis also revealed that this type of crime was impacting mostly low and middle-income households with older models and no safe parking place.

ANALYSIS

The Morelia Police mapped one year of crime incidence and identified 13 areas with a high concentration of non-violent vehicle thefts. Within each of these hot spots, the police performed a time and day analysis, as well as a characterization of stolen vehicles. The police carried out field investigation, in particular on-site observations, interviews with victims and neighbors, and community meetings. This led to the characterization of situational risk factors, as well the identification of potential offenders.

RESPONSE

Through analysis, intelligence, and working sessions, a list of possible responses was generated. Four types responses were implemented: (1) Focused patrolling in hot spots; (2) Neighborhood WhatsApp groups, leveraging accessible and low-cost technology to disseminate prevention strategies and obtain information on potential offenders; (3) Systematic registration of potential offenders and effective communication of their records across police departments and sectors through the use of internal WhatsApp groups; and (4) focused surveillance and criminal investigation of identified potential offenders.

ASSESSMENT

The following activities were carried out at the 13 hot spots:

- 184 neighborhood meetings
- 209 WhatsApp groups
- 34 recovered videos
- 30 criminals linked to auto theft identified, registered, and put under surveillance
- 4 arrests

From December 2021 to May 2022 non-violent vehicle theft dropped by 48.5% in the Municipality of Morelia. In 2 sectors (out of 7), it dropped by over 70%.
Reducing vehicle theft in Morelia, Michoacan, MEXICO: Project Description

1. INTRODUCTION

1.1. The municipality of Morelia, Michoacán

The Municipality of Morelia is the capital of the state Michoacán de Ocampo, located in the West of Mexico. It has a total area of 1,199 square kilometers, equivalent to 2% of the total area of Michoacán. Morelia is also the largest and most populated of the 113 municipalities of the Michoacán state, with 849,053 inhabitants, representing 18% of the state's total population.

In the past 15 years, Michoacán has been one of the most violent states in Mexico. Its geographic conditions have made it an ideal location for the importation, production, and trafficking of illegal drugs. As a result, Michoacán has been home to several criminal organizations that have led to high levels of violence. In addition, the national policies confronting drug cartels since 2006 have caused the splintering of the main criminal organizations, which ultimately led to the diversification of their activities and increased levels of violence.

This wave of violence has also impacted the municipality of Morelia. Morelia has 67 neighborhoods, many of which face severe issues of alcoholism, drug addiction and unemployment. By 2021, Michoacán ranked third among the states with the highest homicide rate in the country, with Morelia being one of the municipalities with the highest incidence. In 2018, Morelia reached its peak of incidence of common crimes, a 43% increase in homicides and an increase in the proportion of firearms use. In 2021, Morelia had a homicide rate of 57.5 per 100,000 inhabitants and the most frequent types of crimes were domestic violence and car theft.

1.2. The Morelia Police Department

In Mexico, the civilian police is responsible for the protection of citizens and is divided into three different police forces: municipal police, the state police, and the federal police. The Morelia Police is a relatively new corporation; it was created in 2015, as a decentralized body of the Municipal Public Administration. Previously, the territories of the municipality were guarded by the state Michoacán Police, which was supported by other federal public security institutions, such as the Federal Police, the Gendarmerie, and the Military Police.

The Morelia Police is part of the Municipal Commission of Citizen Security (CMSC), which is ascribed to the Municipal Presidency. The Commission oversees police operation and integrates other administrative units that work in coordination with the corporation to guarantee citizen security in the municipality. The
The following figure presents the structure of the CMSC. The police corporation is headed by a Chief of Police who oversees the different areas of the police. The structure of the corporation integrates operational units, as well as units that provide inputs for the development of policy strategies. The majority of field operations are carried out by the Proximity Unit, in which a Proximity Director supervises the 7 Heads of Sector.

**Figure 1. Structure of the Morelia Municipal Police Department**
The Morelia Police has approximately 900 police officers, most of them working 12-hour shifts with 24-hour rest periods. The following figure shows the 7 geographical sectors in which the staff is distributed, each of them supervised by a Head of Sector.

Figure 2. Geographical Sectors

Since its formation in 2015, the Morelia Police has integrated Community Policing and the use of information analysis as key pillars of its operation. In October 2020, the corporation started to gradually implement Problem-Oriented Policing, with the support of the Mexican nonprofit LAB-CO and the United States Agency for International Development (USAID). Among other elements, a “POP Coordination” Unit was created, responsible for implementing POP principles and strategies across departments and units.
Early 2022, the Morelia Department analyzed one year of crime incidence data, using their “multi-source” system, which encompasses criminal complaints, calls to 911 and crime reporting by citizens directly to police officers. Data analysis revealed an upward trend in vehicle theft, particularly thefts which did not involve violence. It was the second-highest incidence of crime after domestic violence in Morelia. Through preliminary research and applying CHEERS criteria, the Police found that this type of crime was mostly impacting the low- and middle-income part of the population because they tended to have older models of cars which were easier to steal.

Following the findings of the preliminary analysis, 5 of the 7 Head of the Sectors decided to apply Problem-Oriented Policing to non-violent car theft.

3. ANALYSIS

3.1. Desk Review

The POP Coordination and the Head of each Sector performed an initial analysis of the Police’s “multi-source” internal database, at three levels: (1) geographic mapping of non-violent car theft hot spots, (2) time analysis, and (3) and the characterization of stolen vehicle models.

3.1.1. Mapping hot spots

Due to the size of the municipality of Morelia and to have a more detailed and specific analysis, the first thing that was done was the spatial analysis of hot spots. Using the database and a free Geographic Information System (GIS), in this case, Google Earth, the Police mapped the reports of vehicle theft without violence for

Figure 3. Evolution of vehicle theft in Morelia
The year 2021. Each sector is divided into quadrants and with the use of the maps, spatial patterns were identified in quadrants or neighborhoods with the highest crime rates.

With the help of the POP Coordination and the maps, each Head of Sector chose the quadrants they would focus on to reduce crime. These quadrants had the highest concentration of crime.

**Figure 4. Identification of hot spots in the Revolución Sector**

3.1.2. Time Analysis

After identifying the quadrants with the highest concentration of non-violent vehicle thefts, a time analysis was conducted in each Sector. In all the sectors the daytime analysis was not useful because the crime seemed to occur on any given day; no clear pattern was suggested. However, time of day analysis suggested that most cars were stolen at night and reported to the police in the morning. Further analysis suggested that in some of the sectors specific hot times of the week were associated with weekly markets, where people had to park their cars on the street due to lack of parking facilities.
3.1.3. Characterization of stolen vehicle models

The last data analysis that was done was to identify the main targets stolen in the hot spots. Through this analysis, older and cheaper models that were easier to open were found to be the main targets. This also helped to confirm the preliminary analysis that revealed that the crime was impacting the low- and middle-income households.

The next part that needed to be done was to confirm the hypotheses that had been arrived at through field research and intelligence.
3.2. Field Research and Intelligence

For the second part of the ANALYSIS phase, three activities were carried out in the hot spots by the Heads of each Sector, with the support of the POP Coordination. These were: (1) on-site observation to detect vulnerability factors, (2) interviews with victims or neighbors, and (3) neighborhood meetings.

3.2.1. On-site observation

Exploratory marches and site observations were conducted at the quadrants or areas identified as hot spots. Vulnerability factors that facilitated car theft were identified and documented. These areas often lack parking space inside houses, leading people to park outside. Most of the households had no surveillance systems in place. Other vulnerability factors identified were poor street lighting and proximity to main avenues that served as escape routes for criminals. During the exploratory marches, houses that had security and surveillance systems installed were also identified. This was to detect which cameras might have recorded videos of reported car thefts.

3.2.2. Interviews

Systematic and in-depth interviews were conducted with victims and surrounding neighbors to obtain intelligence and to recover videos of thefts. The interviews helped to understand the dynamics associated with the events and to identify potential offenders. In some cases, and through the interviews, car repair shops were identified where neighbors suspected that vehicles were being taken away after they had been stolen. Video footage pertaining to victims and neighbors was also recovered. Some videos show how the thieves select, approach, and eventually steal the vehicles.
3.2.3. Neighborhood meetings

Following the Community Policing approach and under the direction of the Head of each Sector, neighborhood meetings were organized in the hot spots. In these meetings, the problematic wave of non-violent vehicle thefts was explained, important information on prevention was shared, and neighbors were asked to help prevent further incidents. Gradually, and after gaining their trust, some neighbors and victims began to provide information about the criminals, their *modus operandi*, and the vehicles they use.
4. **RESPONSE**

Based on the analysis, intelligence gathered and working sessions between Heads of Sectors and the POP Coordination, evidence was analyzed, and a list of possible responses was generated. Four main responses were implemented to reduce and prevent non-violent vehicle theft. The responses were: (1) focused patrolling in hot spots, (2) neighborhood WhatsApp groups, (3) systematic registration of potential offenders, and (4) focused surveillance and criminal investigation.

4.1. **Focused patrolling in hot spots**

After demonstrating a clear pattern of robberies at certain locations and times through analysis of crime data, some police patrols were mobilized for deterrence and visibility purposes. The Heads of each Sector instructed specific patrol officers to mobilize a unit to the hot spots at specific times, in this case early in the morning, primarily to reduce the immediate incidence, and to track and identify suspects.

Police officers were also instructed to provide maximum visibility on certain streets or street segments at high risk of crime occurrence. This police visibility not only acted as a deterrent but also helped to further gain the trust of neighbors and make them feel safer and more prone to collaborate with the police.

4.2. **Neighborhood WhatsApp groups**

After each of the neighborhood meetings, the Head of Sector proposed to create a WhatsApp group with participating neighbors. The idea for the WhatsApp group was born out of necessity. Most of these
neighborhoods are made up of low to middle-income households. In Mexico, everyone uses WhatsApp because it is free and easy to use. Using other types of apps or messaging systems is not an option because some people do not have mobile data or the capacity to effectively use these solutions, while WhatsApp is used massively.

During the neighborhood meetings, the rules for the use of the group were explained so that it would not be used for anything other than reporting crimes or suspicious activities. Each group was composed of shift supervisor, the Head of the Sector, and the neighbors who wished to be included. After the groups were created the neighbors were able to report any crime, problem or suspicious activity, and the police made the compromise to follow up and act. The WhatsApp groups not only help to respond faster to complaints from neighbors, but they are also a way to obtain new information, videos, and photos of potential offenders.

WhatsApp groups were also used to share crime prevention information with neighbors so they could ensure their vehicles were safe and less targeted. Police told people to leave vehicle doors locked, windows closed, and to be careful to leave their vehicles parked in well-lit areas.

Figure 10. Screenshots of the neighborhood WhatsApp group chats
4.3. Systematic registration of potential offenders

Due to limited resources, the Morelia Police does not count with a comprehensive IT system to register and monitor suspects. Following the same logic as the neighborhood WhatsApp groups, WhatsApp groups were created to systematically identify, characterize, and register potential offenders. These groups were integrated by the Head of each Sector and the shift supervisor and helped them to share suspects’ records in an agile and cost-effective way.

The record contains a picture of the suspect and his or her personal data, as well as all information related to previous or current arrests. The records also help to link offenders to other criminal acts and other suspects. They are regularly updated by each Head of Sector, and immediately shared in the Police WhatsApp group.

Figure 11. Screenshot of a suspect’s record sent in a WhatsApp group
4.4. Focused surveillance and criminal investigation

Working sessions were held between the Investigation Unit, the POP Coordination, and the Heads of each Sector. During these sessions, relevant information and details about the potential offenders and their *modus operandi* were shared.

The Investigation Unit mobilized patrols and personnel in the detected hot spots and time patterns, to thoroughly investigate the networks of offenders who were stealing the vehicles. Once more detailed information was obtained, a dual strategy was implemented:

- When information was sufficient, the Investigation Unit collaborated with the Prosecutor's Office to have pursue criminal investigation and prosecution. This led to the arrest of several offenders.
- When the conditions were not met for a successful prosecution, Heads of Sectors implemented focused surveillance schemes to identified suspects, assigning patrols and officers to the monitoring of identified potential offenders, in order to reduce opportunities for crime.
ASSESSMENT

The assessment was carried out by the POP Coordination with information from the Investigation Unit, the Heads of each Sector, and the Intelligence Unit. This assessment was divided into two main measurement components. The first consists of an evaluation of the different responses in hot spots. The second consists of the monitoring of crime incidence from the beginning of the implementation of the strategy.

5.1. Response at hot spots

The strategy was carried out in 5 of the 7 sectors and in each of them, hot spots were identified through analysis. In total, the project was implemented in 13 areas with a high concentration of non-violent vehicle thefts. After five months of implementation, the following activities were completed:

- 184 neighborhood meetings were held.
- WhatsApp groups were proposed at the end of each meeting. In total there are now 209 WhatsApp groups.
- Through the neighborhood meetings, WhatsApp groups, and interviews a total of 34 videos were retrieved.
- 30 criminals linked to auto theft were identified, registered, and put under surveillance. In collaboration with the Prosecutor’s Office, 4 of them were arrested.

5.2. Crime reduction

Following a 5-month implementation period, **non-violent vehicle theft dropped by 48.5% in Morelia**. In four of the five sectors where the strategy was implemented, significant reductions have been observed. For example, In the República Sector, it decreased by 70.6% and in Independencia, by 77.8%.

**Figure 9. Non-violent vehicle theft in Morelia**
Since the implementation of the project, the two remaining sectors have decided to participate in the strategy to reduce crime through this approach. The strategy is being extended and adapted to the prevention and reduction of 5 priority crimes for the municipality. And collaboration between police and the community is being strengthened.
Agency and Officer Information

1. Key Project Team Members

Alejandro Gonzalez Cussi, Chief of Police
Pablo Alarcón Olmedo, Police Commissary
Salvador Cárdenas Sánchez, Technical Secretariat
Javier Juárez Escobedo, Director of the Intelligence Unit
Grisel Mejía Calderón, Director of the Proximity Unit
Alejandro Josue Lorenzo Magaña, Director of the Investigation Unit
Commander Ana Laura Naranjo Sandoval, POP Operational Coordinator
Officer Lizbeth Avalos Avalos, POP Operational Coordinator Assistant
Officer Omar Gabriel Hernández Reyna, POP Operational Coordinator Assistant
Head of Revolución Sector Anabel Rubira Vidrio
Head of Nueva España Sector Alejandra Marín
Head of Independencia Sector Gabriela Venegas
Head of República Sector Eder Rueda
Head of Centro Sector Jesús Manríquez
Head of Independencia Sur Alejandro Bedoya
Head of República Poniente Ana Beatriz Medina

2. Project Contact Person

Salvador Cárdenas Sánchez
Technical Secretariat
Morelia Police
Lauro del Villar No. 170
Morelia, Michoacán 58337
+52 1 314 120 3903
sectec@policiamorelia.gob.mx
salvadorc76@hotmail.com