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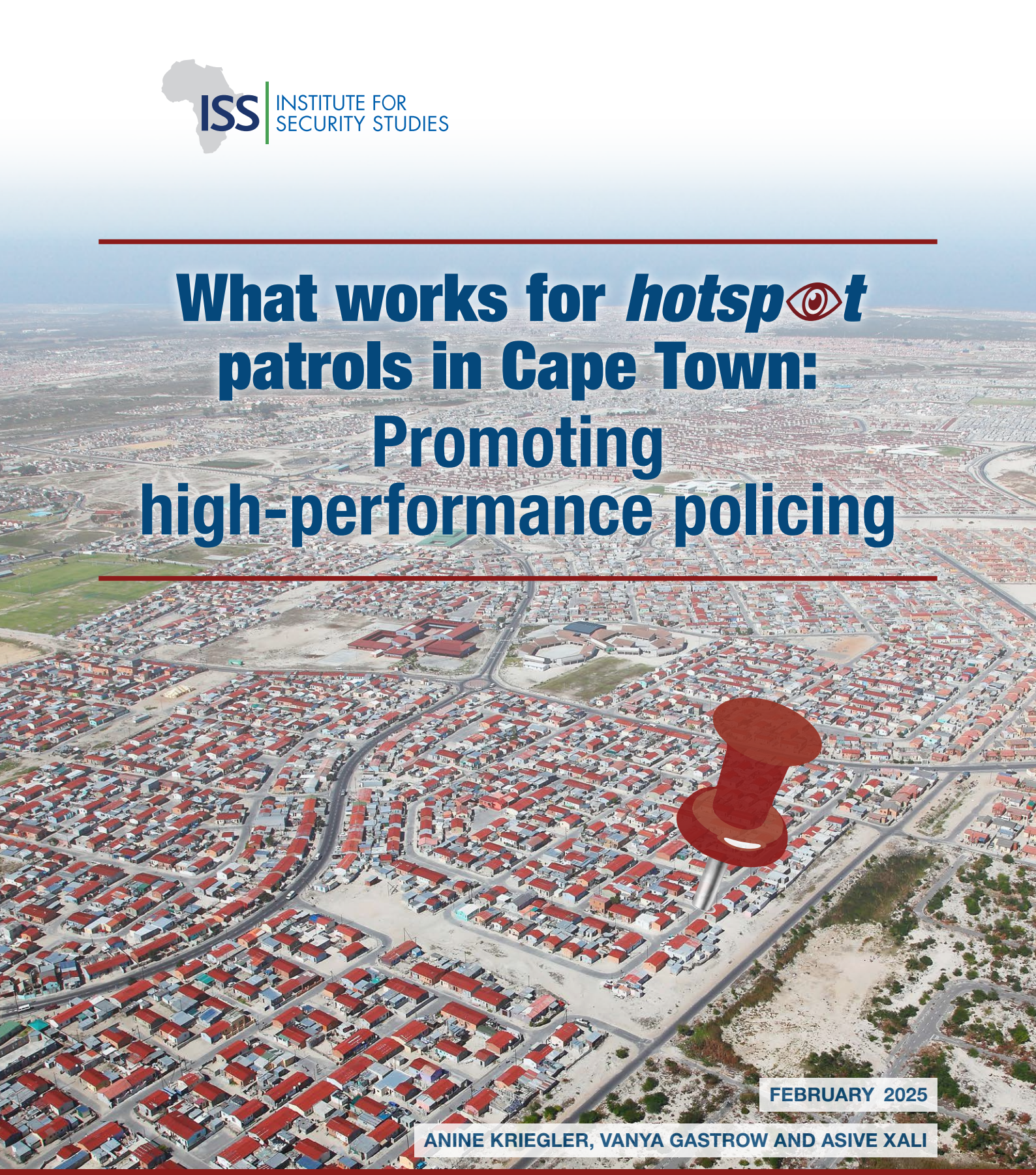
What works for *hotspot* patrols in Cape Town: Promoting high-performance policing



FEBRUARY 2025

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Africa's first hotspot policing experiment in Cape Town confirms that evidence-based, data-driven deployments can significantly reduce violent crime without extra resources.

Western Cape Government
CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD
ISS INSTITUTE FOR SECURITY STUDIES
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Key findings

- **Violent-crime reduction:** Implementing an evidence-based patrol strategy in eight hotspots prevented 100 contact crimes in four months.
- **Resource efficiency:** This achieved significant reductions across various crime categories without additional resources, highlighting the efficiency of data-driven, targeted patrols.
- **Strategic-management enhancement:** Integrating vehicle tracking technologies allowed for assessment and improvement of implementation. It strengthened command and control and station-level management.
- **Scalability and practicality:** The strategy is scalable and replicable across multiple sites and can be implemented and evaluated without complex statistical methods, making it a practical option for widespread adoption.
- **Organisational improvements:** Implementing a new EBP strategy (involving targeting, tracking, and testing) establishes new organisational structures that can lead to broader operational enhancements.
- **Community relations:** Increased police presence and the introduction of innovative approaches can benefit police–community relations.
- **Towards a sustainable policing vision:** While evidence-based policing is not a cure-all, it contributes to more efficient law enforcement, reduces the burden on the justice system by preventing crimes that lead to arrests and court cases, and helps foster safer communities.

Overview of recommendations

- **Establish clear structures for command and control:** Implement a well-defined command hierarchy to ensure consistent strategy application and timely responses to challenges.
- **Strengthen data analysis capacity:** Develop analysis teams, processes, and tools to improve the accuracy and utility of crime data, enabling more effective deployment strategies.
- **Implement Crime Harm Index:** Integrate a crime harm index into decision-making processes to focus on the most impactful crimes and optimise resource allocation.
- **Target patrol deployment:** Utilise crime statistics to design short, frequent, and unpredictable patrols across multiple hotspots, maximising impact through highly focused, strategic police presence in time and place.
- **Use tracking technology:** Adopt tracking systems to enhance the accuracy of patrol implementation and facilitate real-time adjustments.
- **Make hotspot presence a priority:** Treat visible officer presence in hotspots as a key performance metric, distinct from traditional measures such as arrests.
- **Engage frontline officers:** Enhance officer engagement through regular briefings and incorporate their insights into the planning process to improve strategy implementation.
- **Partner with communities:** Foster stronger partnerships with local communities to ensure policing strategies are responsive to their needs and to enhance public trust.
- **Optimise inter-agency coordination:** Improve collaboration between law enforcement and government agencies to streamline operations and enhance safety outcomes.
- **Embrace evidence-based innovation:** Encourage a culture of continuous learning and adaptation by integrating evidence-based practices into everyday policing operations.

Acknowledgements

The project owes its greatest gratitude to the patrollers who carried out thousands of patrols in some of Cape Town's highest-crime areas, risking their safety for the public good.

This work was made possible by the dedication and tireless efforts of individuals across various sectors, organisations, and levels.

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While we have done our best to recognise everyone involved, we may have unintentionally omitted some names. Nevertheless, we are deeply grateful for all contributions to the success of this project.

The dedication of all contributors was essential, but the courage and commitment of the patrollers remain at the heart of this effort, and we thank them most especially.

List of abbreviations and acronyms

AVL:	Automatic Vehicle Location
CAS:	Crime Administration System
CCEBP:	Cambridge Centre for Evidence-Based Policing
CCT:	City of Cape Town
CHI:	Crime Harm Index
CIMAC:	Crime Information Management and Analysis Centre
CPF:	Community Policing Forum
DKNG:	Delft, Khayelitsha, Nyanga, and Gugulethu
DoH&W:	Department of Health and Wellness
EBP:	Evidence-Based Policing
EMS:	Emergency Medical Services
EPIC:	Emergency Police Incident Control
FPS:	Forensic Pathology Services
HSF:	Hanns Seidel Foundation
ISS:	Institute for Security Studies
LEAP:	Law Enforcement Advancement Plan
PI:	Principal Inspector
POCS:	Department of Police Oversight and Community Safety
RI:	Regional Inspector
SAPS:	South African Police Service
SSIMS:	Safety and Security Information Management Services
Vispol:	Visible Policing
WCG:	Western Cape Government

Introduction

This report documents South Africa's first multi-site, evidence-based policing experiment. The DKNG Hotspots Policing Project was a collaboration between the South African Police Service (SAPS), the Western Cape Government (WCG), and the City of Cape Town (CCT). Implementation was supported by the Institute for Security Studies (ISS) and the Hanns Seidel Foundation (HSF). The project aimed to reduce violent crime by implementing tested evidence-based policing (EBP) strategies. Using data, research, and analysis, EBP ensures that policing strategies are informed by the best available evidence of *what works*.

Using data, research, and analysis, EBP ensures that policing strategies are informed by the best available evidence of *what works*

The strategy tested was a specific approach to hotspot patrols. The first test was in 2023 as part of South Africa's first EBP experiment in Mitchells Plain, which used data-driven methods to identify and direct patrols to a violent-crime hotspot in Tafelsig. The Mitchells Plain pilot experiment demonstrated that the strategy had the potential to contribute to a reduction in violent crime.

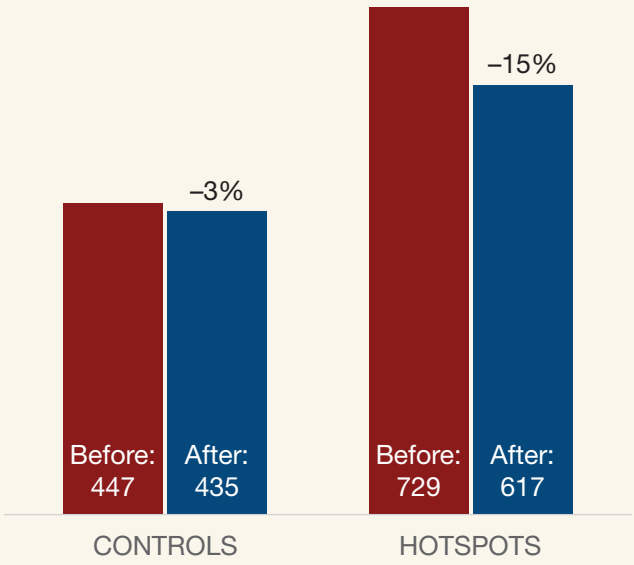
The DKNG hotspots policing project builds on the success of the initial intervention in Mitchells Plain by incorporating lessons learned and expanding the strategy to four new areas: Delft, Khayelitsha, Nyanga, and Gugulethu (DKNG). It comprises the first multi-site, hotspots policing experiment on the continent and is a significant step in bringing EBP to South African policing.

In just four months, the DKNG intervention demonstrated significant impacts across various areas of public safety. These impacts include:

- **Preventing 100 violent crimes in eight hotspots:** During the four-month monitored deployment period, there was a notable reduction in contact crimes compared with the same four months of the previous year. Specifically, there were 100 fewer contact crimes recorded in the hotspots than expected if these areas had followed the same trend as the control areas. This indicates that the intervention effectively prevented these crimes in the targeted hotspots.
- **Substantial year-on-year reductions in multiple crime categories:** The intervention contributed to significant decreases across various crime categories. This achievement highlights the effectiveness of the targeted strategies employed.
- **Efficient use of resources:** The strategy demonstrated that it is possible to achieve marked improvements in safety without additional resources. By optimising existing capabilities and focusing efforts where they are most needed, the project managed to enhance overall effectiveness.
- **Management improvements:** The intervention also led to management and leadership enhancements at the station level. Commanders adopted new tracking and monitoring tools, which improved the oversight and execution of policing strategies.

These achievements underline the potential of EBP strategies to significantly enhance public safety outcomes, even within a limited timeframe and without increasing resources.

Strategy reduced contact crime 5 times more than business-as-usual policing



Impact comparisons

Unless otherwise indicated, the impact comparisons in this report, including those in the text and charts, refer to the following timeframes:

- **After**: This represents the strategy's monitored implementation period, which ran from 15 April 2024 to 1 September 2024.
- **Before**: This refers to the same 20-week period in the previous year, from 15 April 2023 to 1 September 2023.

These timeframes allow for a direct year-on-year comparison to evaluate the impact of the DKNG hotspots policing strategy.

Targeted hotspot patrols are not the singular solution to South Africa's challenge of violent crime, a highly complex phenomenon requiring a multifaceted approach. However, the strategy's effectiveness indicates that it could be a valuable component of a broader violent-crime reduction

strategy. It also demonstrates the value of testing strategies to ensure their efficacy in terms of crime reduction and preserving limited state resources.

This report describes the project's careful planning and rigorous implementation and assesses the strategy's impact on crime

This report describes the project's careful planning and rigorous implementation and assesses the strategy's impact on crime. It highlights the strategy's contributions, challenges, and lessons learned, offering practical, scalable recommendations for future public safety and policing strategies. By promoting awareness of EBP principles in South Africa, the report seeks to encourage the broader uptake and scaling of EBP for greater impact. While addressing crime requires broader efforts beyond policing, this approach can play a key role in fostering safer communities by providing tested strategies and services, helping communities move closer to living in peace and safety.

The science of safety

Evidence-based policing (EBP) is about improving decision-making by using the scientific method to test and strengthen the link between police activities and their intended outcomes. It shifts policing from tradition and opinion to strategies informed by evidence of what works. This approach is critical for maximising impact in South Africa's high-violence context, where resources are limited.

Historically, policing has relied on the 'three Rs': random patrols, rapid response, and reactive investigations. EBP introduces the 'three Ts': targeting crime patterns, tracking implementation, and testing what works. This shift enables law enforcement to focus resources on interventions proven to reduce crime and improve safety.

EBP introduces the 'three Ts': targeting crime patterns, tracking implementation, and testing what works

EBP doesn't require randomised controlled trials to have value. In this project, we distilled EBP to its core elements: determining what research suggests might work, applying it in a targeted manner, monitoring implementation, and comparing the outcomes with 'business as usual'. Our goal was practicality over academic perfection, creating solutions that law enforcement could sustainably adopt with their existing skills and resources.

We sought to demonstrate that EBP is feasible and valuable in South Africa's challenging context. It wasn't a 'researcher hit-and-run'

exercise. We planned, implemented, and evaluated collaboratively, ensuring the project was practical, relevant, and sustainable. This partnership empowered police to continue using evidence-based practices independently. It complements the EBP efforts already being pursued by our partner organisations, particularly the SAPS Research Component, which is conducting its own case studies to support national roll-out.

Fewer crimes lead to fewer victims, lighter caseloads, fewer arrests, and reduced court time

The success of this project underscores the effectiveness of the EBP framework. By subjecting policing strategies to the EBP microscope, we can ensure that our resources are used as efficiently as possible. Fewer crimes lead to fewer victims, lighter caseloads, fewer arrests, and reduced court time – enabling the police and justice system to focus their resources where they are most needed.

Targeted hotspot patrol strategy

This project aimed to test whether modifying existing hotspot patrol strategies in Cape Town could significantly reduce crime. 'Hotspot policing', as a term, encompasses a variety of strategies aimed at enhancing public safety in geographically concentrated crime areas. These strategies range from directed patrols to problem-oriented policing initiatives designed to address specific local crime problems more effectively than broader, area-wide policing. The strategy is not a standalone solution to South Africa's complex violent-crime problem but is a component of a wider, comprehensive crime prevention approach.

The project homed in on a targeted, streamlined approach. It tested whether introducing small yet strategic adjustments to patrol tactics could yield significant reductions in violent crime. Similar strategies have shown effectiveness in reducing crime internationally,[1] but comprehensive evidence of their efficacy in the unique context of South Africa – characterised by high violent crime rates and resource-constrained public safety agencies – was lacking. To bridge this evidence gap, the strategy was initially piloted in Mitchells Plain in 2023 and subsequently expanded to other areas.

The DKNG strategy focused on short, frequent patrols lasting 15 to 25 minutes, based on research showing that longer patrols have less impact. Patrols were timed to match high-crime periods identified through crime analysis, ensuring they were targeted in both time and place. Unlike traditional hotspot policing, which often covers larger areas with less precision, this strategy was tightly focused, data-driven, and closely tracked. Tools like patrol maps and charts ensured patrols were carried out as planned and their impact could be measured.

Image from project flyer explaining intended effect of strategy on potential criminal

1 Weisburd, D. and Telep, C.W. (2014). 'Hot Spots Policing: What We Know and What We Need to Know'. *Journal of Contemporary Criminal Justice*, Vol. 20:2, 202.

How this strategy was different

The DKNG strategy introduced key changes to improve hotspot policing:

- **Short patrols:** Patrols lasted 15 to 25 minutes, based on research showing that staying longer becomes less effective at preventing crime. This shorter, targeted approach allowed officers to cover more hotspots with the same resources.
- **Highly targeted:** Patrols focused on specific hotspots at times identified as high-risk through crime analysis, ensuring maximum impact.
- **Tracked implementation:** Patrols were carefully monitored using tools like maps and charts to ensure they were done as planned and their impact could be measured.
- **Focused evaluation:** Instead of rolling this out everywhere, the strategy was implemented in selected hotspots, allowing for a proper evaluation of its impact by comparing results with control areas with business-as-usual policing.

This approach was more precise, measurable, and resource-efficient than traditional hotspot policing, ensuring better implementation and clearer insights into its effectiveness.

This targeted patrol strategy tested how this evidence-based performance improvement could be adapted to South Africa's unique challenges, including informal settlements and poor infrastructure.

By focusing on high-risk times and places, monitoring patrols, and rigorously evaluating impact, the project aimed to show that strategic adjustments can reduce crime, offering a model for wider use across the country.

Example of infrastructural challenges in Nyanga station area and foot patrols in Khayelitsha (2024)

Mitchells Plain pilot project

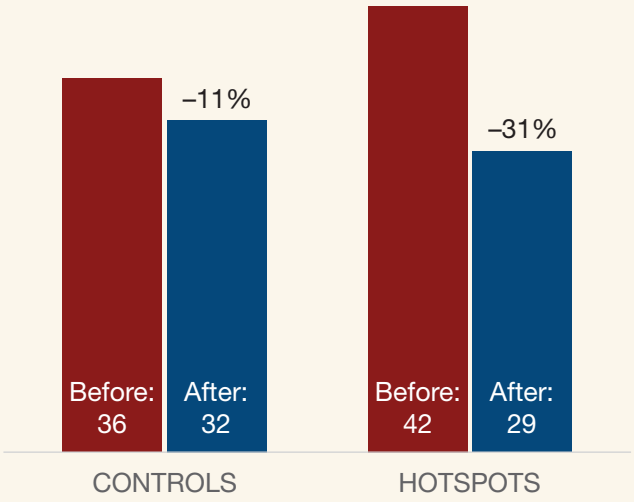
In 2023, the first robust hotspot policing experiment in Africa was launched in Mitchells Plain, a high-crime area of Cape Town. This collaborative effort involved the SAPS, WCG, CCT, ISS, HSF, and the Cambridge Centre for Evidence-Based Policing (CCEBP). To strengthen the participants' understanding of EBP principles and ensure practical application, the CCEBP delivered a tailored, intensive course completed by 24 representatives from SAPS, CCT, and POCS, supported by weekly mentoring from ISS and international experts.

From 8 September to 13 November 2023, the team implemented the patrol strategy within one designated hotspot in Tafelsig East, logging 1,130 patrols over 66 days. This involved using multiple entry points to the hotspot, randomised to enhance unpredictability, and scheduling patrols based on a detailed crime pattern analysis – ensuring hourly patrols during peak crime periods and less frequent patrols off-peak. The team met regularly to review deployment and crime data. Plan adherence (number of patrols conducted, on- and off-peak, time spent in the hotspot, etc.) was tracked using SAPS' Automatic Vehicle Location (AVL) system, CCT's Emergency Police Incident Control (EPIC) data, WhatsApp, and manual logs.

The team met regularly to review deployment and crime data

The result was a 31% reduction in contact crimes in the hotspot. Similar to the hotspot area, the control area also experienced a decrease in contact crimes during the deployment period, showing an 11% reduction. Comparison suggests an additional 20% reduction in the hotspot relative to the control area, indicating a substantial potential impact of the intervention.

Mitchell's Plain pilot: hotspot reduction in contact crimes almost 3 times bigger than business-as-usual policing



This pilot marked a significant step in demonstrating the feasibility and challenges of implementing EBP strategies within South Africa. It underscored the critical role of meticulous planning, tracking, and feedback mechanisms and highlighted the importance of inter-agency collaboration. The lessons learned were pivotal for scaling the approach in the subsequent project.

Building on this success, the project partners agreed to expand this strategy to more stations. This expansion aimed to replicate the methodology, verify its effectiveness in different settings, and integrate it into broader policing practices.

The DKNG hotspot patrol intervention

To test the replicability and validity of the initial findings in Mitchells Plain, the strategy was expanded to four new stations in 2024, namely Delft, Khayelitsha, Nyanga, and Gugulethu (DKNG). By increasing the number of station areas from one to four, hotspots from one to eight, and deployment duration from two to four months, the project aimed to build a stronger basis for determining the strategy's potential impact on crime. Furthermore, expanding the strategy to several stations made it possible to better assess its feasibility on operational levels.

As described in this section, the DKNG project involved careful planning and the rigorous execution of the strategy by the SAPS, WCG and CCT. The project's organisational structure was made up of four levels, from senior leadership to station deployment levels, and incorporated relevant leaders and officials from the SAPS, WCG, CCT, and members of partner organisations (the ISS and HSF). The structure was designed to ensure that all participants had clear, defined and necessary roles.

Expanding the strategy to several stations made it possible to better assess its feasibility on operational levels

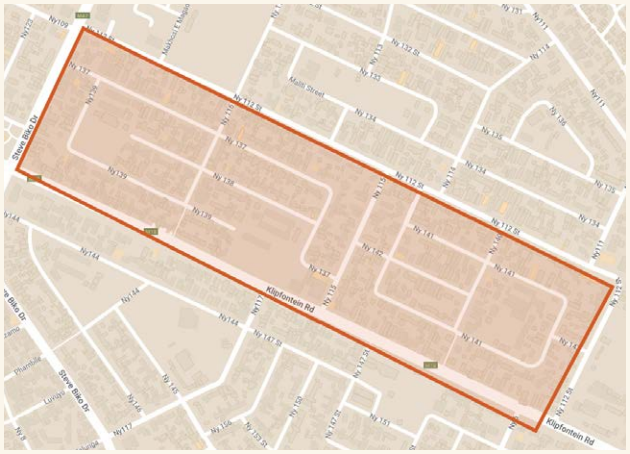
Operational planning took place over February and March 2024. The first planning task was to select four participating police station areas that met two criteria, namely (1) were areas where LEAP patrollers operated (as the CCT and WCG were both partners to the project) and (2) were located in high violent crime areas. The SAPS District Commissioner for Cape Town suggested that the project expand to Delft, Khayelitsha, Nyanga, and Gugulethu. The suggestion was taken to the remaining project partners – the WCG and CCT – who agreed.

Targeting

The next planning task was identifying hotspot areas where the strategy would be deployed at each station. The SAPS Crime Information Management and Analysis Centres (CIMACs) from each station used data from 1 February 2023 to 31 January 2024 to identify areas in their stations that experienced high concentrations of reported murder and attempted murder. Since these are among the most reliably reported violent crimes, they are considered accurate indicators of violent activity in an area. The team also consulted with the SAPS Visible Policing (Vispol) Commanders, LEAP Principal Inspectors, and CCT crime analysts. Together, they chose which of the high-crime areas identified would be hotspots and control areas.

Consideration was not only given to high violent crime rates, but also to how easily patrolable and identifiable the spaces were. This was because, in view of safety concerns, areas that could be vehicle-patrolled were preferred over areas that could only be foot-patrolled. The project also wished to ensure that patrollers could easily locate the hotspot areas and understand their boundaries.

Gugulethu Hotspot 2 – 3383 (Mzoli's)

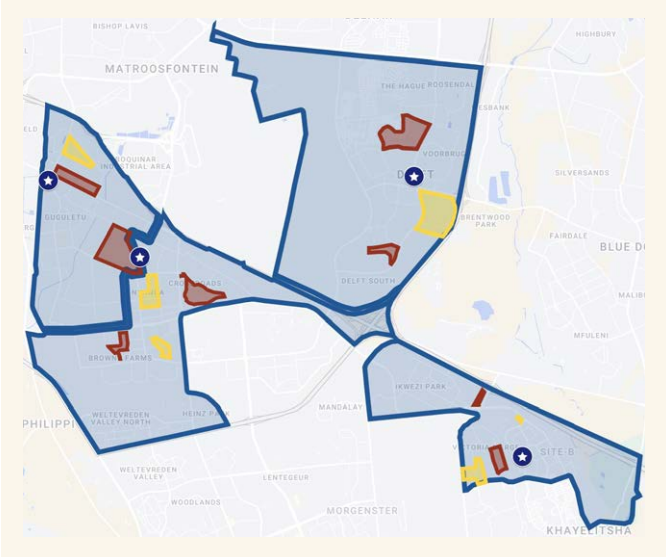


Gugulethu's 'Mzoli's Block' hotspot that was easily patrolable by vehicle and clearly identifiable based on its rectangular shape and well-known Mzoli's restaurant

There was one exception to the above. In Khayelitsha, one of the hotspots selected was an informal settlement that could not be patrolled by vehicles. This meant that SAPS and LEAP patrollers would need to assemble in large teams to patrol the hotspot on foot. Team members believed that an informal settlement hotspot could provide useful insights and lessons into whether the strategy could be effectively deployed in high violent crime areas lacking vehicle access.

The intervention would be deployed in the hotspot areas, while control areas would undergo 'business-as-usual' policing. Each station selected two hotspot areas and one or two similar control areas. In total, there were eight hotspots and six control areas. Although full equivalence was not rigorously tested, the control areas were intended to be as similar as possible to the hotspot areas. For example, the informal settlement hotspot in Khayelitsha was matched with a similar high-violence crime informal settlement as its control. At the end of the deployment, crime rates in the hotspots would be compared with those in the control areas to assess the strategy's impact.

There were two significant oversights in the hotspot selection process. First, in Nyanga, the selected hotspots did not align with SAPS Crime Administration System (CAS) block boundaries, the standard geographic units for reporting crime data. This misalignment posed significant challenges in extracting and analysing crime data for the intervention areas. Consequently, the evaluation had to include all CAS blocks overlapping with the identified hotspots. While this approach provided a workable solution,



The locations of the DKNG hotspots (red) and control areas (yellow)

it introduced a degree of imprecision, as the included CAS blocks extended beyond the exact intervention boundaries.

A second oversight in the hotspot targeting process was the proximity of the hotspots to their controls. In several instances, control areas were located almost directly adjacent to hotspot areas. As a result, some patrols inadvertently spilled over into control areas, complicating the impact evaluation.

The next step in targeting was to determine the optimal times of day for patrols, based on crime pattern analyses of murder and attempted murder incidents from 1 February 2023 to 31 January 2024. The patrol schedules were organised by days of the week, further divided into three-hour intervals. Intervals with higher numbers of murders and attempted murders were designated as 'hot times', requiring three patrols every three hours. Conversely, intervals with fewer such incidents were labelled 'cold times' and required only one patrol every three hours. The Vispol commanders reviewed and adjusted the schedules to ensure they were practical and aligned with operational priorities.

However, a limitation of using only murder and attempted murder to set patrol schedules was their relative rarity compared with other violent crimes, which made it challenging to identify reliable patterns for effective scheduling.

Leiden hotspot: CPA and attempted murder

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
00:00–02:59	2	0	0	1	0	0	3
03:00–05:59	0	0	0	0	0	0	1
06:00–08:59	0	0	2	0	0	1	1
09:00–11:59	0	1	0	0	1	3	2
12:00–14:59	2	0	0	0	1	0	1
15:00–17:59	0	0	0	0	0	1	1
18:00–20:59	2	0	2	3	0	1	3
21:00–23:59	3	2	3	1	12	3	0
Grand total	**9**	**3**	**7**	**5**	**14**	**9**	**12**

Leiden hotspot: Patrol schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
00:00–02:59	3 patrols	1 patrol	1 patrol	1 patrol	1 patrol	3 patrols	3 patrols
03:00–05:59	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol
06:00–08:59	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol
09:00–11:59	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	3 patrols	3 patrols
12:00–14:59	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol
15:00–17:59	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol	1 patrol
18:00–20:59	3 patrols	1 patrol	1 patrol	3 patrols	1 patrol	1 patrol	3 patrols
21:00–23:59	3 patrols	3 patrols	3 patrols	1 patrol	3 patrols	3 patrols	1 patrol
Total daily patrol	**14**	**10**	**10**	**10**	**10**	**14**	**14**

Crime pattern analysis and patrol schedule for Leiden hotspot in Delft

In July, the project team revised the initial patrol schedules to include a broader range of contact crimes, applying harm weightings to each type. This approach provided a more nuanced and effective allocation of patrol resources, ensuring they aligned better with the actual crime landscape [see box below].

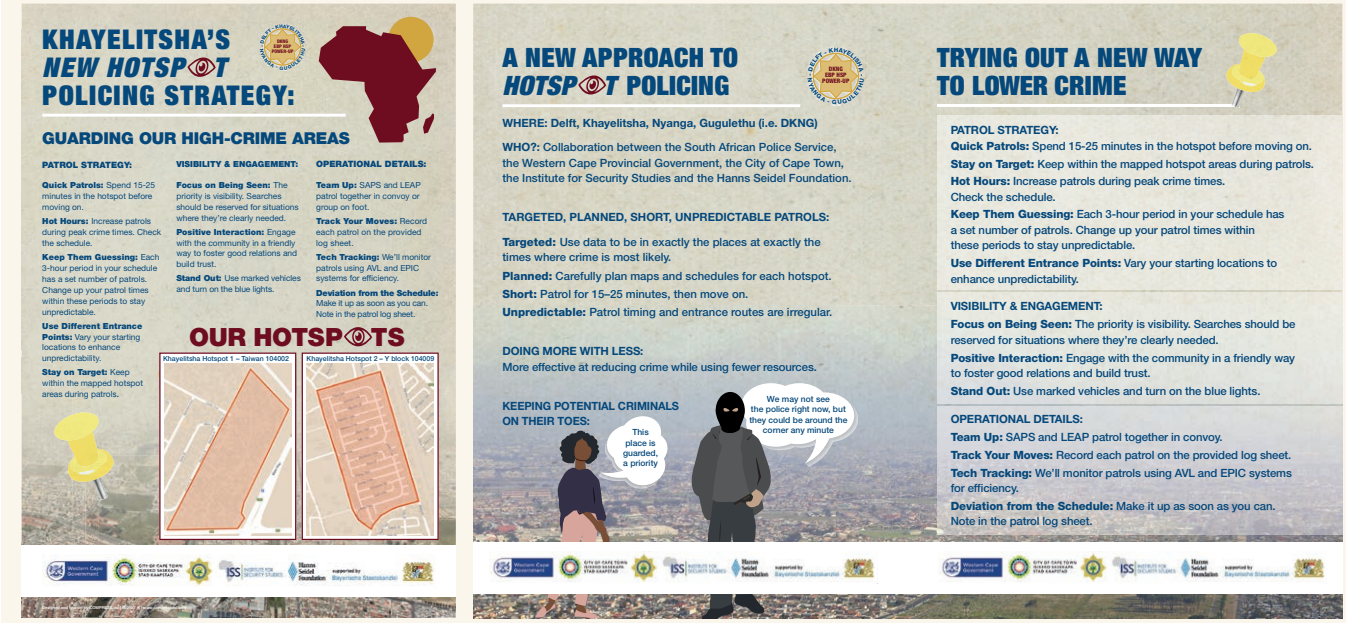
Crime Harm Index

A Crime Harm Index (CHI) was introduced to account for the fact that not all crimes have the same impact. By layering harm weightings onto crime statistics, the CHI provides a clearer understanding of community harm, ensuring that resources are directed where they will make the most difference. The harm weightings, developed by POCS, reflect both the frequency and severity of crimes and are based on South African minimum sentencing guidelines. More severe crimes, such as murder and attempted murder, are assigned higher weightings, while less severe offences, like common assault, receive lower weightings. This method enhances the precision of patrol planning and ensures that interventions focus on the most impactful crimes.

Offence	Minimum Sentencing Guideline	Impact Assessment	Weight
Murder	15 Years	Catastrophic: Loss of life	12
Compelled Rape	25 Years	Major: Physical and deep psychological trauma	10
Rape	10 Years	Major: Physical and deep psychological trauma	9
Robbery with Aggravating Circumstances	15 Years	Serious: Physical and psychological trauma	8
Attempted Murder	5 Years	Serious: Life-threatening physical harm	7
Kidnapping	5 Years	Serious: Physical and psychological trauma	6
Assault GBH	5 Years	Serious: Serious physical injury	5
Sexual Assault, Attempt/Conspire/Entice to Commit Sexual Offence	Up to 3 Years + Fine	Serious: Physical and deep psychological trauma	4
Robbery with a Weapon or Instrument Other Than a Firearm, Common Robbery, Attempted Common Robbery	Up to 3 Years + Fine	Serious: Physical harm	3
Common Assault	Up to 2 Years + Fine	Moderate: Physical/emotional harm	2

Crime Harm Index used for revised patrol schedule design and impact evaluation

On 26 and 27 March, ISS researchers visited the stations to brief deployment teams about the project and the strategy, and how these would be operationalised at the station level. These briefings were attended by Vispol commanders, CIMACs, station commanders, LEAP Principal Inspectors (PIs), and representatives of the Community Policing Forums (CPFs). Vispol commanders would then brief patrollers with the aid of project materials such as flyers, printed schedules, maps sheets, and posters.

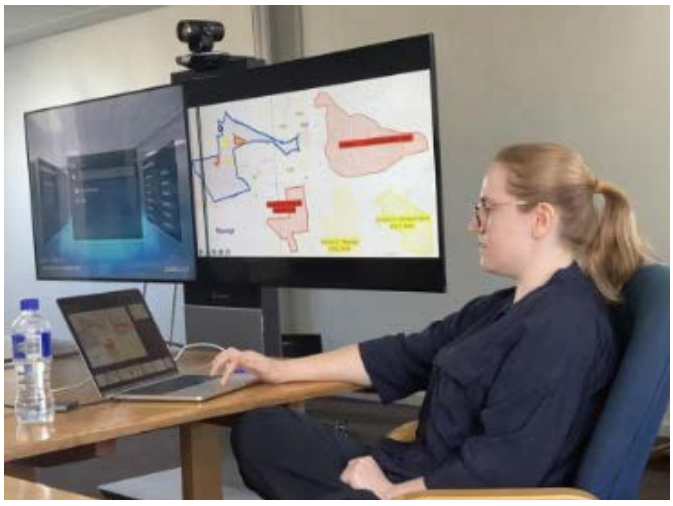


Project materials: Poster for Khayelitsha police station (left) and flyer (right)

Before the official deployment, the project conducted a pilot week in the four station areas to test the approach and make any necessary adjustments. The pilot week identified various operational challenges, including poor shift alignment between SAPS and LEAP, patrollers being redirected to other duties, and issues with log sheet management. While the misalignment of shifts remained an unresolved issue throughout the deployment, other problems were effectively addressed, for example by agreeing that patrollers should document diversions in their log sheets and by adjusting how log sheets were sent to the ISS team for data capture every week.

Tracking

The strategy's monitored deployment began on 15 April and lasted until 1 September. During deployment, area leaders met weekly to receive



Weekly deployment feedback meetings at SAPS District Office in Bellville

feedback on the strategy's implementation. Participants reviewed SAPS, WCG, and CCT weekly hotspot crime data at these meetings and discussed trends in logged patrols and hotspot targeting. The meetings also assessed LEAP and SAPS coordination and monitored patrols using specialised tracking tools.

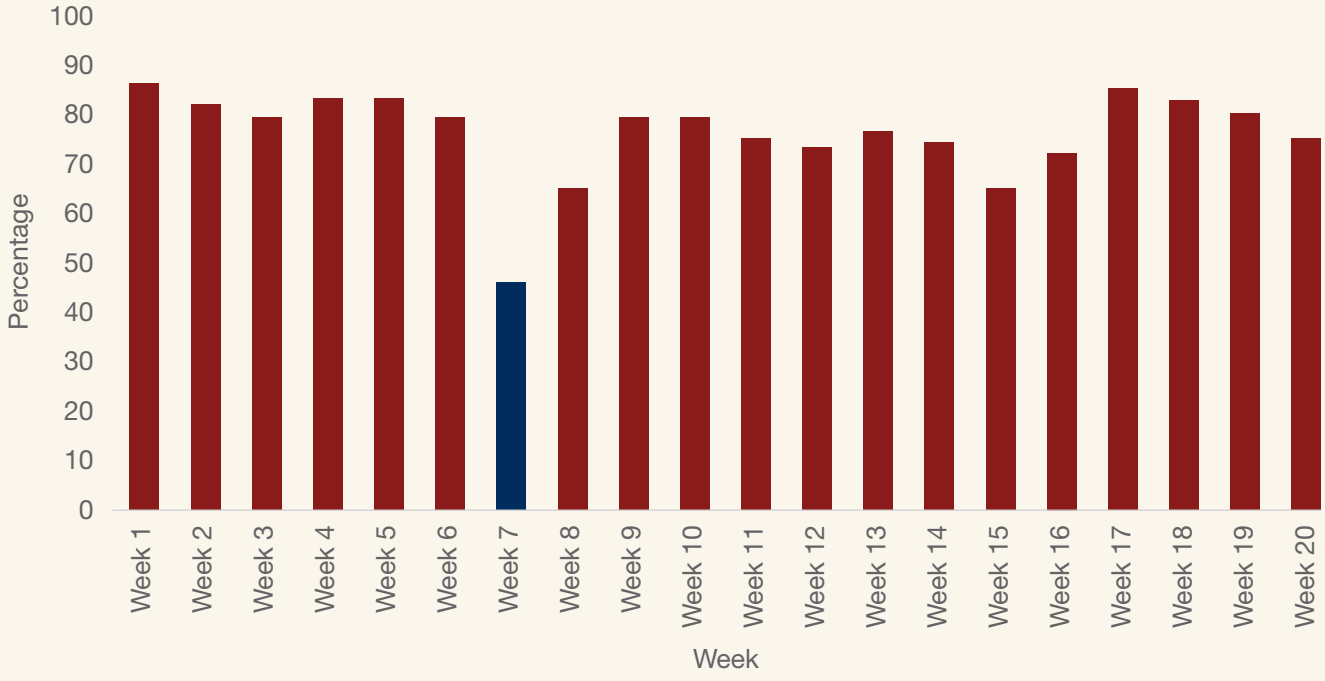
Throughout the 20 weeks of monitored deployment, SAPS and LEAP patrollers logged 14,793 patrols across the eight hotspots, representing an average of 78% of the weekly patrol targets. The achievement for patrols during designated hot times averaged 62%, as these periods required more frequent patrolling, making the targets more challenging to meet.

South Africa's election on 29 May prompted a project pause from 27 May to 2 June, during which SAPS and LEAP patrols continued voluntarily but were not monitored. The pause led to a significant loss of momentum at several stations, with some failing to return to previous patrol levels, highlighting the need for careful planning around operational breaks to maintain patrol consistency.

A key component of the weekly feedback meetings was determining the accuracy of logged patrols. To do this, the project developed tracking and mapping tools. These tools not only gauged the extent to which logged patrols had taken place, but also helped identify and correct weaknesses such as a lack of understanding of hotspot boundaries and insufficient patrol coverage of hotspot areas.

To track and map SAPS patrols, the SAPS District Office provided the ISS researchers with AVL movement reports for vehicles logged as carrying out DKNG hotspot patrols. These movement reports were uploaded to Google Maps to assess their locations. SAPS AVL technical support also gave the researchers AVL movement reports of all detected movements or 'pings' in the hotspots.

Logged achievements of weekly total patrol number targets

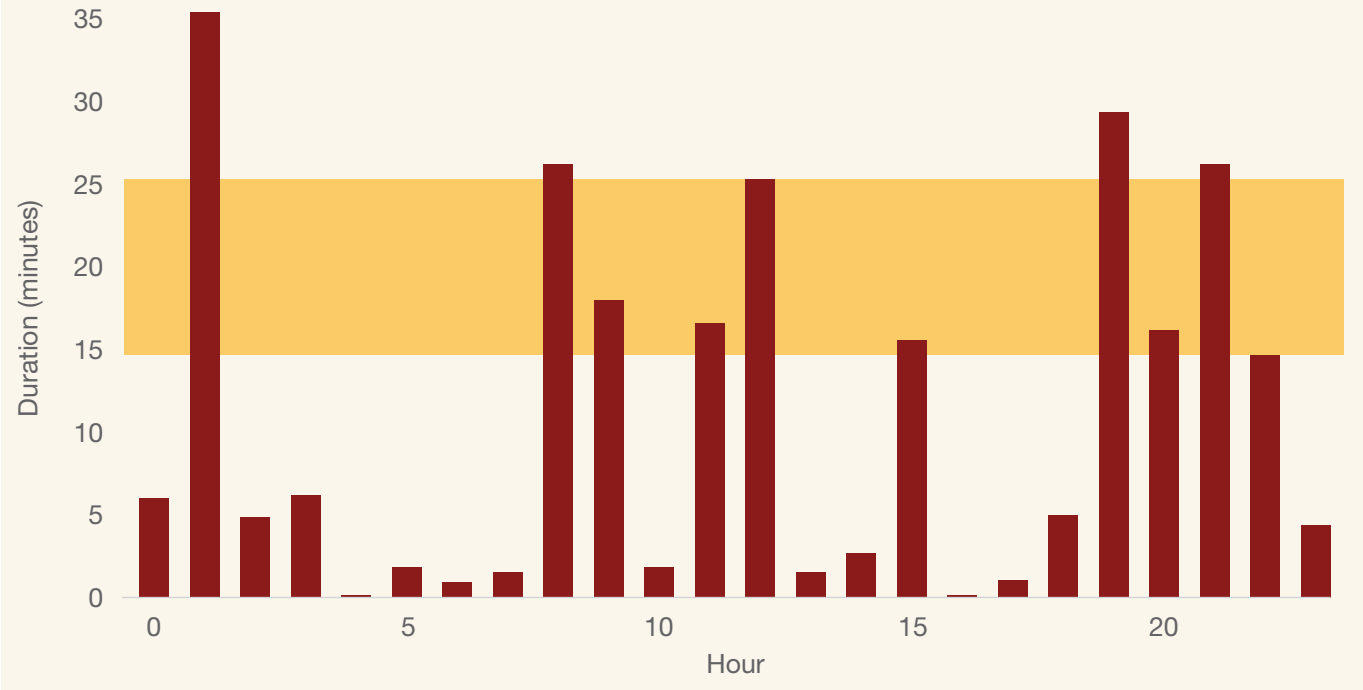


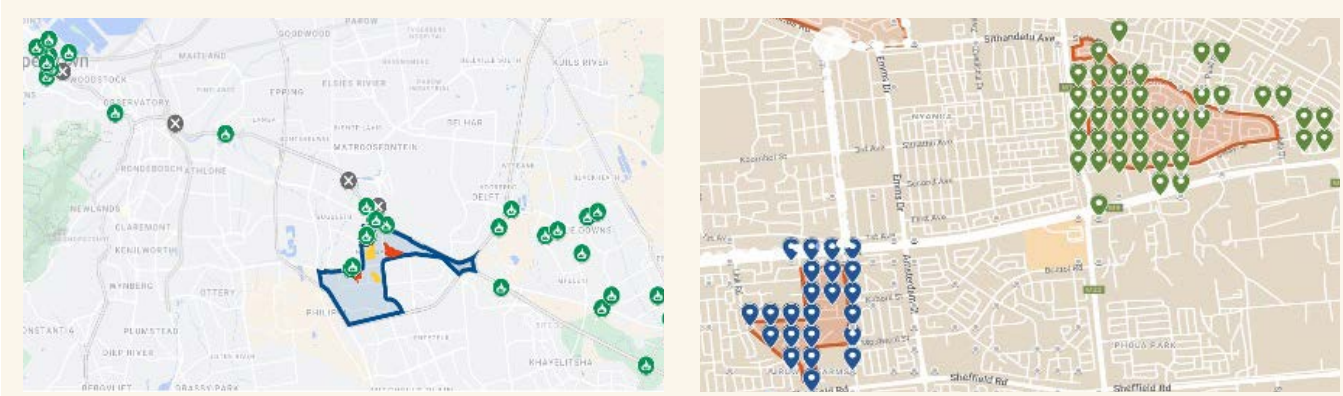
The CCT's EPIC team developed heat maps that drew on EPIC device signals indicating patrol presence in the hotspots. They also developed patrol length charts for LEAP commanders to assess patrollers' time in hotspot.

Example of SAPS AVL map (left) and CCT EPIC heat map (right)

Tracking and mapping were crucial to assessing implementation, as the team often found that many patrollers lacked a proper understanding of hotspot boundaries or did not properly cover areas in their patrols. Sometimes, logged patrols did not align with tracking data. Maps and charts enabled commanders to communicate errors and shortcomings to their patrollers, promoting accountability and enhanced patrols.

Example of CCT EPIC patrol length map





Example of early (left) and later (right) hotspot patrol shift indicating improved ability to target hotspots

Example of early (left) and later (right) hotspot patrol shift indicating improved ability to target hotspots

In the Taiwan hotspot of Khayelitsha, only foot patrols were feasible due to the area's lack of tarred roads and its narrow alleyways. SAPS and LEAP planned integrated foot patrols for safety, but coordination proved difficult due to mismatched shift times and communication barriers between different units. As a result, effective implementation of these patrols was limited. Tracking these foot patrols also posed challenges. The AVL system used for vehicles couldn't monitor foot patrols, and, while LEAP patrollers carried portable EPIC devices, the logistical issues with SAPS led mostly to perimeter vehicle patrols being logged instead of the intended foot patrols.

The tracking and monitoring of patrols helped correct numerous issues, though they also revealed some inaccuracies in the patrol logs. A portion of patrols recorded by members were not detected in the tracking data, suggesting that some patrols may have been logged at incorrect times or locations. Technological and resource limitations prevented the project from verifying every patrol log for accuracy. However, regular tracking and mapping allowed the team to identify

trends and assess the overall reliability of patrol logging across different stations. Commanders received this feedback in weekly meetings and shared it with patrollers during briefings, highlighting the importance of continuous monitoring to ensure protocols were followed and improve the effectiveness of hotspot policing.

Conclusion

The DKNG planning and deployment process exemplifies effective coordination among various levels of government to enhance public safety. The SAPS, WCG, and CCT engaged in extensive planning, which included selecting stations, sharing crime data, and identifying hotspots. The deployment phase required coordinated patrols between LEAP and SAPS, with weekly meetings to review and discuss feedback. Despite challenges, such as difficulties in carrying out integrated patrols and achieving targets, our meticulous tracking and monitoring surpassed previous efforts and significantly improved implementation.

Despite challenges, our meticulous tracking and monitoring surpassed previous efforts and significantly improved implementation

While the deployment was not flawless, valuable lessons were learned about refining this strategy for broader roll-out. In the next section, we will evaluate the effectiveness of the interventions to determine their overall impact.

Impact on crime

Evidence-based policing (EBP) focuses on assessing and enhancing the link between specific policing activities and their impact. Rigorous impact evaluation is crucial to this process. For the DKNG project, the team chose several ways to measure impact. We agreed that the main measure would be the category of all contact crimes, but we would also track changes in the offences of murder, attempted murder, and robberies, as well as the contact crime harm index. This was supplemented by data from forensic pathology and emergency medical services (EMS) trauma incidents.

A decrease in crime in the hotspots is meaningful only if it is larger than any decrease in the control areas

To evaluate effectiveness, six control areas were selected to compare with the hotspots. These control areas represented 'business-as-usual' policing, providing a baseline – a reference point to measure crime trends without the new intervention. This approach allowed the team to compare the new hotspot policing strategy against regular policing. A decrease in crime in the hotspots is meaningful only if it is larger than any decrease in the control areas, ensuring that the results are not influenced by broader factors like seasonal trends or unrelated changes in crime patterns.

Our evaluation encountered several challenges, including geographic misalignment and the proximity of control areas to hotspots [see box]. These factors point to areas for improvement in future evaluations.

Evaluation challenges

Inaccurate crime location data: Crime addresses are often imprecise, with text descriptions that don't match coordinates and multiple spellings of the same street name. In informal settlements, unclear or changing street names and house numbers worsen the issue, making it harder to map and analyse crime data.

Control areas too close to hotspots: Some control areas were located near hotspots, leading to possible spillover effects where patrols extended beyond hotspots into controls. This makes it harder to clearly separate the intervention's impact from routine policing.

Underreporting of crime: Many crimes are not reported due to mistrust of police, fear of retaliation, or other reasons. Alternative data sources like forensic pathology and EMS trauma records help fill this gap and provide a fuller picture.

Boundary misalignment in Nyanga: Hotspots in Nyanga did not align with SAPS CAS block boundaries, complicating data collection. As a result, broader CAS block data, including non-hotspot areas, had to be used.

Differences between hotspots and controls: Although controls were selected to match hotspots as closely as possible, differences in crime patterns and other factors remained, which could influence results and make direct comparisons more difficult.

Other influences on crime: Unrelated events, such as the arrest of prominent gang leaders in Delft, likely impacted crime trends independently of the intervention, complicating interpretation of the results.

Displacement: The study did not measure whether crime shifted from targeted areas to nearby ones. While research suggests displacement is often minimal and benefits may spread to surrounding areas, this remains an unmeasured aspect of the intervention.

Despite these complexities, the evaluation exceeded typical standards and aimed to develop a practical, scalable approach.

The evaluation wasn't perfect, but having eight hotspots instead of just one allowed for clearer pattern recognition and stronger conclusions. While the decreases in crime weren't entirely consistent across the stations, the overall trends across multiple hotspots point to a meaningful impact in the intervention compared to the same period in the previous year, as shown on page 28.

All contact crimes

	Before	After	Case difference	% Change
Controls	447	435	–12	–3%
Hotspots	*729*	*617*	*–112*	*–15%*

The contact crime reduction in the hotspots was 100 cases greater than in the controls, a difference of 13 percentage points, showing a decrease more than five times larger in the hotspots. The significant difference suggests the intervention had a strong impact. This is supported by the fact that overall station areas saw a slight increase of 25 cases (1%), ruling out the possibility that the decrease in hotspots was due to broader trends. However, results varied by station, with three of the four stations showing decreases in hotspot crimes, while the station with the poorest implementation saw no reduction, highlighting the importance of consistent execution.

Murder and attempted murder

	Before	After	Case difference	% Change
Controls	60	54	–6	–10%
Hotspots	*101*	*71*	*–30*	*–30%*

The reduction in murder and attempted murder in the hotspots was 24 cases greater than in the controls, a difference of 20 percentage points. The significant decrease indicates a strong impact of the intervention. This reduction occurred in three of the four stations, while the fourth station experienced a slight increase of one incident. Importantly, there was no significant change in the combined station areas overall, further emphasising that the decreases in hotspots were not part of a broader trend but likely a result of the targeted strategy.

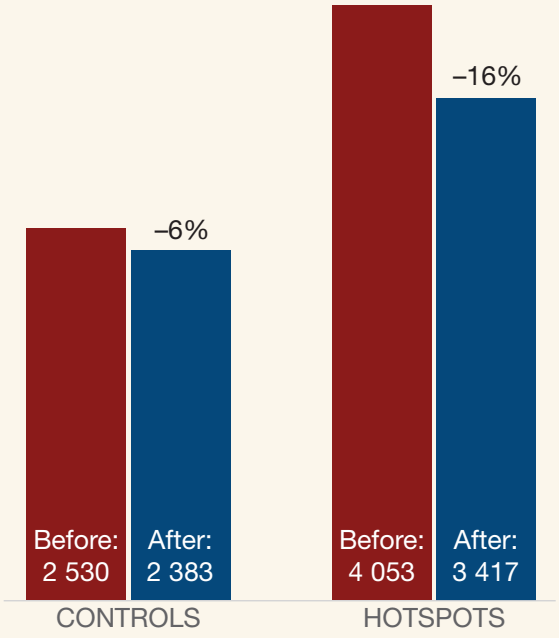
Robberies

	Before	After	Case difference	% Change
Controls	229	191	–38	–17%
Hotspots	*295*	*259*	*–36*	*–12%*

The reduction in robberies (including attempted robberies) in the controls was 2 incidents greater than in the hotspots. The lack of a significant difference between controls and hotspots needs further investigation. The more opportunistic robbery types – including common robbery and robbery with a weapon or instrument other than a firearm – saw larger decreases in hotspots compared with controls. In contrast, more organised robbery types – including carjacking, house robbery, and robbery with a firearm – didn't show similar impacts. This suggests that opportunistic robberies may be more subject to prevention by visibility patrols. However, the small numbers make it hard to draw firm conclusions.

Crime Harm Index

Strategy reduced crime harm almost 3 times more than business-as-usual policing



The 10 percentage point larger reduction in the Crime Harm Index (CHI) in hotspots compared to controls shows the intervention's potential to reduce both crime frequency and severity, improving community safety.

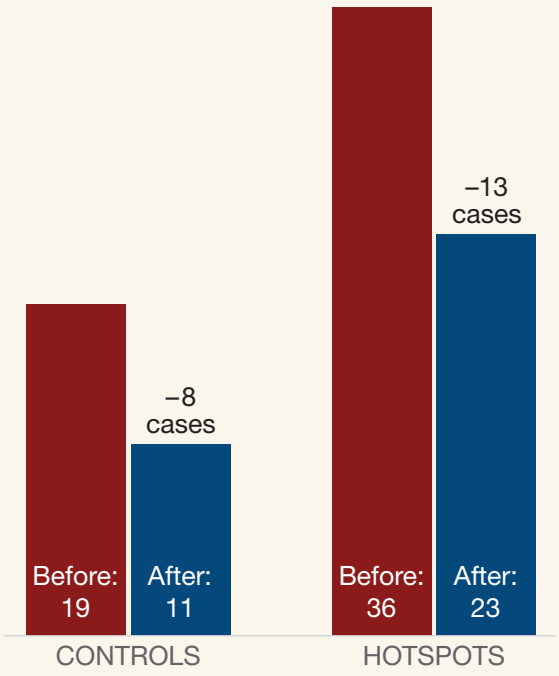
The difference between the unweighted contact crime decrease and the CHI decrease reflects the varying severity of crimes. In hotspots, reductions were concentrated in less severe crimes, such as:

- Common assault: Decreased by 43 cases (CHI weight: 2).
- Common robbery: Decreased by 13 cases (CHI weight: 3).
- Robbery without a firearm: Decreased by 12 cases (CHI weight: 3).

However, a 10-case increase in firearm robberies (CHI weight: 8) offset some gains. This highlights that while overall contact crimes decreased, the CHI was more affected by changes in higher-harm offences, demonstrating the importance of targeting severe crimes for greater impact.

Homicides (Forensic Pathology Service)

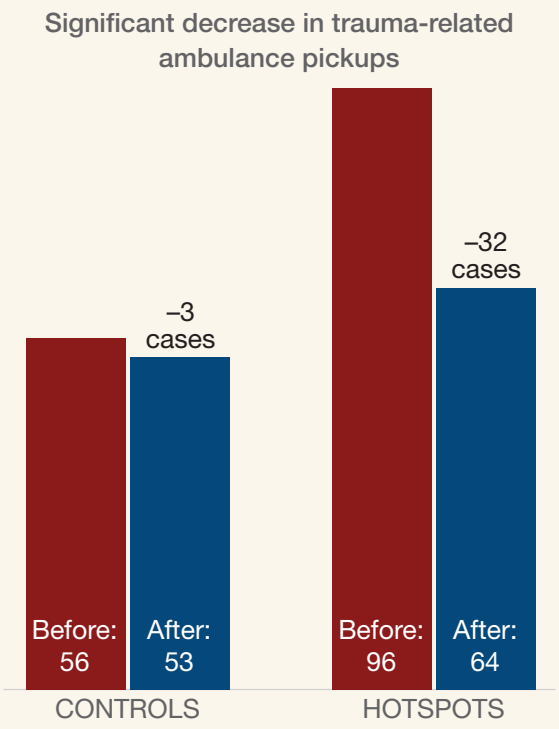
Small but significant decrease in homicides



Verifying police figures with other data sources is essential. Using Department of Health & Welfare (DoH&W) forensic pathology data, we mapped homicide incidents in the hotspots and control areas for the reference period. Major discrepancies were observed between SAPS murder data and FPS homicide data. For example, in Khayelitsha, SAPS recorded 13 murders in control areas during implementation, while FPS recorded only 4, even after accounting for 10% of FPS incidents lacking GIS information. This highlights the need for better data comparability.

The numbers are small because the hotspots were very small areas, but despite these limitations, FPS data confirms a significant decrease in homicide incidents in hotspots compared with the same period in the previous year. This supports the conclusion that the intervention effectively reduced homicide incidents.

Ambulance calls (Emergency Medical Services)



Unlike the other impact measures, this data compares a different time scale: September 2023 to February 2024 (before implementation) versus March 2024 to August 2024 (during implementation). While this differs from the reference periods used elsewhere in the report, it is useful to assess the immediate changes following the intervention.

The reduction in hotspots was 29 incidents greater than in controls. The significant reduction in trauma incidents in the hotspots aligns with other measures, further supporting the conclusion that the intervention had a meaningful impact.

Implementation and impact

To assess the relationship between patrol implementation and its impact on crime, we examined the percentage of patrol targets logged against the percentage change in contact crime across different station hotspots. It is important to note that patrol log accuracy is crucial in this analysis. Inaccuracies in patrol logging can skew the results, leading to potential misinterpretation of the effectiveness of interventions.

	Percent of total patrol targets logged	Percent change in contact crime in hotspots
Station 1	86%	–7%
Station 2	79%	–28%
Station 3	74%	–20%
Station 4	68%	+12%
DKNG average	*77%*	*–15%*

The stations with lower percentages of logged patrols generally showed less contact crime reduction. However, these findings are not definitive. Effective policing can sometimes yield unexpected results due to many other factors influencing crime, such as socio-economic conditions, community engagement, and external policing activities. For example, it is important to note that the station with the highest percentage of logged patrols had only one control area, which was located directly next to one of the hotspots. This control area experienced a larger reduction in crime than the hotspot itself, likely due to spillover patrols influencing the control area's crime trends. Despite these complexities, there is a pattern suggesting that more consistent and accurately logged patrols correlate with better outcomes in crime reduction. This underscores the importance of robust implementation and accurate data collection for effective policing strategies.

Conclusion

The DKNG project's impact evaluation demonstrates significant reductions in contact crimes within the targeted hotspots compared with control areas, confirming the effectiveness of our intervention. While the data showed a substantial decrease in murder and attempted murder, the results for robberies was inconclusive. The forensic pathology (FPS) and emergency medical service data confirm the positive impact on public safety.

> Despite some inconsistencies, a general trend showed that better-implemented patrols correlated with more substantial crime reductions

The variation in crime reduction across different stations was significant. Despite some inconsistencies, a general trend showed that better-implemented patrols correlated with more substantial crime reductions.

While implementation wasn't perfect, the evidence shows that with proper planning, focused patrols, and strong supervision, hotspot policing can effectively reduce crime, highlighting the importance of refining evidence-based strategies to improve community safety.

Organisational impact

Evidence-based policing (EBP) interventions not only have potential impacts on crime, but can also promote institutional capacity building. This was especially the case with the DKNG hotspots policing project, which illustrated how a narrowly designed strategy can have broad and significant organisational impacts. These beneficial impacts are set out below:

EBP interventions not only have potential impacts on crime, but can also promote institutional capacity building

1. Improved targeting

The project introduced new data-driven methods of identifying patrols and directing them to crime hotspots during hot times. Moreover, the project used a harm index for the revised patrol schedule introduced in July. The harm index provides weightings for different contact crimes based on the harm they inflict on victims. It thus considers both the number of counts (i.e. frequency) and the seriousness of offences. Its use in the project raised awareness amongst station-level and senior leaders of new techniques that could be utilised to improve crime targeting and evaluations.

2. Collaboration

The project represented a collaboration between SAPS, WCG, and CCT, involving all three government levels in designing, implementing, and monitoring the strategy. This effort fostered stronger partnerships among various safety agencies in the Western Cape. Weekly joint feedback meetings greatly improved communication and information sharing, addressing one of the most common grievances among agencies. It allowed both agencies to deploy based on the same information. These meetings facilitated joint monitoring and the sharing of LEAP and SAPS patrol data as well as crime data.

SAPS and LEAP collaboration at workshop on 22 May 2024 to improve SAPS and LEAP patrol integration

The plan required SAPS and LEAP to carry out hotspot patrols, necessitating enhanced coordination throughout the deployment. This led to significant improvements in the execution of integrated patrols, allowing public safety organisations to pool resources and boost operational efficiency. While SAPS and LEAP initially conducted patrols independently, their capability for integrated operations improved over time. By the end of the deployment, half of the stations had effectively integrated their patrols, although two stations continued to face challenges. The benefits of integrated patrols were numerous: they reduced duplication of efforts, enhanced patroller safety, improved response capabilities with backup vehicles ready to continue patrols, and increased patrol visibility and accountability, particularly when vehicles operated in convoy.

3. Measured visibility

As part of the project, the SAPS, WCG, and CCT developed tools to measure visibility in hotspots and ensure effective strategy implementation. This included requiring patrollers to complete log sheets and using tracking data to develop patrol heat maps, AVL maps, and patrol length charts. In this way, the project demonstrated how public safety institutions could systematically measure hotspot presence to promote effective implementation of hotspot policing strategies.

4. Promoting leadership and accountability

The design and implementation of tracking and monitoring tools were crucial for commanders to continuously assess patrol implementation, especially when patrollers did not follow through on commands or logged patrols incorrectly. Using tracking data and tools such as patrol maps and charts, commanders could identify patrol shortcomings and provide targeted briefings to patrollers, enhancing their leadership and command control functions at station levels and promoting accountability. These tools also allowed commanders to give feedback to senior leaders, improving their understanding of station-level issues and oversight. Additionally, the leadership of individual commanders at station

Award for best achieving SAPS team went to Gugulethu SAPS (left) and award for best-achieving LEAP team went to Delft LEAP (right)

levels significantly influenced patrollers' ability to meet targets, with leadership changes often leading to marked shifts in patroller morale and performance. This underscores the importance of nurturing and supporting mid-level leaders within safety agencies to ensure effective policing.

5. Enhanced patrols

Tracking and mapping tools enabled patrollers to visually identify patrol errors, correct mistakes, and learn. Through continuous briefings throughout deployment, patrollers' understanding of hotspot boundaries improved significantly, and their coverage of hotspot areas increased. This ensured better strategy implementation and contributed to more efficient use of resources, as patrollers targeted the correct areas and were more productive there.

6. Organisational scaffolds

EBP often involves establishing new, temporary, informal, organisational 'scaffolds' to sustain new policing approaches.[2] Examples of organisational scaffolds developed during the DKNG project include mechanisms and processes such as:

- Joint project monitoring and sharing of crime and patrol data;
- The design of patrol schedules using a crime harm index;
- Integrated hotspot patrolling; and
- The use of tracking and monitoring tools such as AVL maps and EPIC patrol length charts, and heat maps.

2 Canales, R., Bitran, A. and Crandall, V. (2024). Nurturing Community Vitality through Violence Reduction: An Organizational Change Approach. 'Justice Collaboratory: Community Vitality Notebook', Yale.

Although scaffolds are designed to be temporary, they have the potential to be leveraged and transformed into formal mechanisms.

7. Replicable model

The DKNG hotspots policing strategy was first implemented in South Africa in Mitchells Plain in 2023. The successful expansion of the strategy to four new station areas in 2024 showed that the intervention can be replicated in other hotspot areas. This has shown that, with adequate planning, support and guidance, the strategy offers a scalable and practical model for more targeted, effective hotspot policing in the province and country.

Conclusion

The project contributed to positive changes, innovations, and improvements at station and agency levels. It enhanced agencies' ability to implement data-driven methods to target and direct resources to high-crime areas. It also demonstrated the ability and readiness of different levels of government to collaborate and the benefits of such collaboration.

Some of the organisational impacts of the project include the development of tools to track and measure visibility to ensure better implementation of visible policing strategies. Tracking and mapping tools also strengthened leadership and accountability at station levels and enhanced the quality of hotspot patrols. The project established several temporary mechanisms and processes or 'scaffolds' that could be formalised and incorporated into future policing strategies. The successful implementation in four station areas also shows that the model can be replicated and applied more widely with adequate planning and guidance. These organisational impacts demonstrate how new, focused policing strategies could contribute to broader institutional changes and shifts in thinking in public safety agencies.

Tracking and mapping tools strengthened leadership and accountability at station levels and enhanced the quality of hotspot patrols

Challenges and lessons learned

Although significant planning and preparation went into the project, several challenges emerged. These provide valuable insights that could inform similar initiatives in the future. We therefore set out and highlight some challenges below:

Focusing on small hotspot areas rather than patrolling whole neighbourhoods can improve the utilisation of limited resources

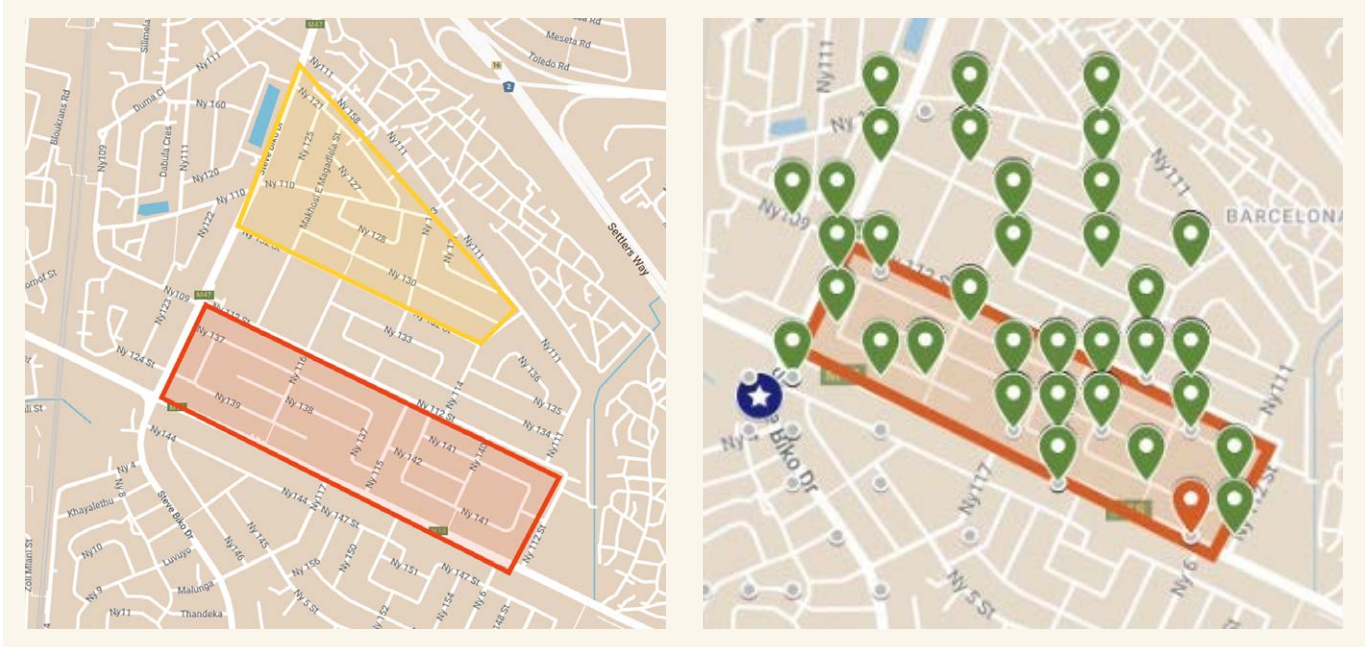
1. Resource constraints

Both SAPS and LEAP encountered challenges relating to resource constraints. LEAP often needed to divert patrols away from hotspots to engage in tracing operations, drop-offs, or to carry out arrests. SAPS patrols were also diverted by factors such as conducting arrests or escorting health care workers. However, these limitations were manageable, as all stations achieved most of their logged patrol targets. Furthermore, one of the least-resourced stations was the best-achieving team on the project, indicating that implementation can be successful in a resource-constrained environment.

Lesson learned: The strategy draws on law enforcement resources but in a manageable way. Furthermore, close coordination between SAPS and LEAP could help, and continuous tracking and real-time feedback could promote resource efficiencies. Also, focusing on small hotspot areas rather than patrolling whole neighbourhoods can improve the utilisation of limited resources.

2. Control areas located too close to hotspots

The project identified six control areas that would experience 'business-as-usual polling' throughout deployment. Crime in these areas would then be compared with crime in the eight hotspots to



Map (left) showing control area (yellow) above hotspot (red). Patrol map (right) showing spillover of patrols into control area

evaluate the impact of the strategy. One criterion for choosing control areas was being as similar as possible to the hotspot areas, and nearby areas were often the most alike. Thus, several control areas were located in proximity to hotspots. This later became a significant challenge, as hotspot patrols frequently spilled over into control areas close to hotspots. As a result, some control areas did not experience 'business-as-usual' policing, undermining the evaluative reliability.

Lesson learned: Future projects should establish control areas that are located far from hotspots. This will allow for more reliable evaluations of the project's impact, thus enhancing the accuracy of the findings.

3. Data quality problems

Good-quality data is essential for the success of data-driven strategies like hotspot policing. However, the project revealed significant challenges with the accuracy and consistency of all datasets used. Errors such as incorrect addresses, spelling inconsistencies, and mismatches with station boundaries were common. For example, the same street was often recorded under multiple variations, such as 'Nteleni', 'Ntileni', 'Ntileni Road', and 'Ntoleni', reflecting a lack of standardisation in data-recording practices. Many areas in the project's focus sites were also not well-mapped, with street names and numbers unclear or inconsistent. City incident data lacked clear definitions, complicating categorisation and analysis. These widespread issues required extensive data cleaning to ensure the information was usable, adding significant time and effort to the project.

Lesson learned: Efforts should be made to improve data-recording practices, standardise location-naming conventions, and invest in better mapping of under-resourced areas. Without reliable data, the ability to design and implement targeted strategies will remain limited.

4. Limited community outreach

During the project's planning phase, SAPS stations briefed community leaders about the hotspot project but did not directly involve them in the planning process. Consequently, hotspots were designated based solely on crime data without considering community crime priorities.

A community evaluation workshop was conducted following the deployment to gather feedback on the intervention. The feedback was overwhelmingly positive, with community policing structures expressing strong support for the project and a desire for greater involvement in future initiatives. An anonymous survey conducted at the workshop revealed that 97% of community respondents found the information shared important, and 100% stated they would apply the workshop's insights in their work. Additionally, during a WCG Nyanga Area-Based Teams meeting, community groups commended the police for the intervention's achievements.

Lesson learned: Community engagement is crucial and could significantly enhance public safety projects. Incorporating community input from the outset, for example in identifying hotspot areas, not only supplements crime data with valuable qualitative insights, but also bolsters community trust and cooperation with law enforcement. Stations should harness this community interest and goodwill, involving community structures in the planning process to ensure that community safety priorities inform planning and strengthen the relationship between public safety agencies and the communities they serve.

5. Inconsistent implementation

Patrolling inconsistencies were observed during the deployment, with some patrollers struggling to fully understand hotspot boundaries and failing to adequately cover designated areas. However, significant improvements were achieved through enhanced leadership, communication,

Community engagement workshop held on 28 September 2024

and the use of tracking tools. Deploying one dedicated patrol vehicle for all station hotspots and a consistent group of patrollers clarified goals, improved coordination, and fostered accountability. This approach not only enhanced the quality and accuracy of patrols, but also strengthened management and accountability at the station level. Despite these improvements, tracking data suggested that some patrols were not being carried out as planned, indicating a need for more consistent adherence to protocols and follow-through. These issues also highlight command-and-control challenges that could affect future interventions.

Lesson learned: To mitigate these implementation issues, it is crucial that hotspots have identifiable boundaries, and patrollers should be equipped with detailed maps and regularly briefed about these boundaries. Patrols must be monitored to verify coverage and adherence to designated areas, and patrollers must receive regular, constructive feedback on their performance. Tracking and mapping are essential accountability tools but are only part of a broader leadership approach. Combined with effective communication and team development, they support the creation of skilled, informed, and engaged teams which are better equipped to implement hotspot policing strategies.

6. Interagency coordination

Coordination between SAPS and LEAP presented significant challenges. These issues frequently prevented the two agencies from being in the same place at the same time, which hindered their ability to collaborate effectively.

Key factors that inhibited integrated patrols at stations included misaligned shift times between SAPS and LEAP, making it difficult for patrollers to be briefed together and synchronise their patrol schedules. Additionally, using different units for patrols often impeded communication among patrollers, and low morale at the station level further complicated coordination efforts. Conversely, a factor that facilitated the implementation of integrated patrols was using a single unit and dedicated vehicle for all station hotspot patrols, which simplified communication. WhatsApp groups were also set up to maintain ongoing communication between LEAP and SAPS patrollers, and positive station morale helped improve collaboration.

Lesson learned: To enhance coordination, it is crucial to prioritise shift alignment and establish clear communication channels and strategies between agencies during planning. This could include setting up WhatsApp groups and arranging daily joint briefings between agencies to ensure everyone is consistently informed and aligned.

7. Patroller buy-in

A survey conducted among patrollers after the deployment showed mixed feelings about the strategy: 50% were satisfied, 31% were neutral, and 18% were dissatisfied with their involvement. The survey suggested that patroller morale may have declined due to fatigue from patrolling the same areas repeatedly. Additionally, 18% did not believe the project targeted the correct hotspots, indicating that greater involvement in the planning phase, particularly in selecting hotspot areas, could have boosted morale.

The station briefings also highlighted a key shortcoming: patrollers were not directly involved in these sessions. Although most patrollers felt they understood the project's objectives and were adequately briefed, involving them more directly in the briefing process could have improved their buy-in.

Involving patrollers in the hotspot selection process could significantly enhance their buy-in and provide deeper insights into their areas' crime dynamics

Lesson learned: Involving patrollers in the hotspot selection process could significantly enhance their buy-in and provide deeper insights into their areas' crime dynamics. Commanders should also regularly update patrollers on the impact of their work to sustain their engagement and morale. This involvement not only aids in strategy implementation, but also bolsters the overall effectiveness of the intervention.

Conclusion

The DKNG hotspots policing project encountered several challenges in implementing evidence-based policing. Key to addressing many of these challenges was continuous tracking, monitoring, and feedback to patrollers. The lessons learned from these challenges are of great value to future evidence-based hotspot policing interventions in South Africa and should thus inform their design and implementation.

Recommendations

The conclusion of the DKNG project has provided valuable insights into the effectiveness of targeted policing interventions. Based on these findings, a set of detailed recommendations has been developed to refine and enhance policing strategies. These will be outlined in a subsequent report, offering law enforcement agencies actionable steps to implement evidence-based policing practices effectively.

The recommendations aim to build on the successful aspects of the DKNG project while addressing the challenges encountered. They are intended to guide agencies in enhancing public safety effectively, using existing resources. The forthcoming document will provide a comprehensive strategy framework for future interventions that aim to reduce crime and strengthen community trust in law enforcement.

1. Establish clear structures for command and control

Leadership is the cornerstone of operational success. Create an organised, responsive command-and-control structure to ensure strategy adherence, effective oversight, and timely operational adjustments. A clear command structure fosters accountability, maintains discipline, and enables prompt course corrections to achieve goals.

Step 1: Define and communicate the command-and control-structure.
Step 2: Establish roles and responsibilities.
Step 3: Build capacity for leadership at all levels.

2. Strengthen data analysis capacity

High-quality, well-analysed data is essential for strategic deployment and impact evaluation. Build robust, integrated analysis frameworks to make data actionable for strategic deployment of policing resources.

Step 1: Assemble a dedicated analysis team.
Step 2: Standardise data-collection and data-sharing protocols.
Step 3: Standardise analysis processes.
Step 4: Enhance analysis capabilities with skill development and technology.

3. Implement Crime Harm Index

Use a harm index to complement crime statistics by prioritising resource distribution and evaluating strategies based on crime severity, not just frequency. By assigning weights to offences using sentencing guidelines and community priorities, the harm index enables a broader analysis of crimes, ensuring that high-volume but lower-harm offences do not overshadow more serious incidents.

Step 1: Develop harm weighting.
Step 2: Train analysts and officers.
Step 3: Apply to decision-making and evaluation.

4. Target patrol deployment using data

Resources should be concentrated where they are most needed, improving efficiency and impact. Use data to pinpoint where and when crime happens most, ensuring patrols are deployed efficiently. Crime statistics are the foundation but should be supplemented with additional data where possible.

Step 1: Collect and integrate relevant data.
Step 2: Identify high crime hotspots and hot times to target.
Step 3: Plan efficient, unpredictable patrol schedules.
Step 4: Establish impact monitoring and adjustment protocols.

5. Use tracking technology

Tracking transforms directives into verifiable action and allows for the evaluation of strategies. Leverage tracking systems (e.g. AVL or EPIC) proactively and strategically for oversight and continuous operational improvement.

Step 1: Assemble a tracking team.
Step 2: Develop tracking analysis and products.

6. Make hotspot presence a priority

Strategic presence itself (being there and being seen) is a critical crime deterrent and community-building tool. It is the foundation for targeted policing and must be in place for actions to have their intended impact. Treat officer presence in hotspots as a standalone metric for performance evaluation for frontline officers and commanders, distinct from other metrics like arrests.

Step 1: Define and measure visibility.
Step 2: Set clear expectations.
Step 3: Develop into performance metric.

7. Engage frontline officers

Operational success depends on frontline buy-in, understanding, and motivation. Ensure officers understand, contribute to, and support the plan.

Step 1: Create regular communication opportunities.
Step 2: Provide tools and feedback.
Step 3: Establish feedback mechanism.

8. Partner with communities

Trust and transparency enhance cooperation and effectiveness. Actively involve communities in planning and assessing hotspot policing.

Step 1: Design community engagement plan.
Step 2: Conduct engagements.
Step 3: Measure community impact.

9. Optimise inter-agency coordination

Coordinated efforts enhance efficiency, officer safety (particularly in high-risk areas), and overall impact. Crime prevention needs more than policing, and effective collaboration benefits all stakeholders. Improve collaboration across law enforcement agencies and with non-policing stakeholders. Leadership at all levels must actively foster coordination by setting expectations, removing barriers, and driving joint initiatives.

Step 1: Formalise collaboration frameworks.
Step 2: Establish communication platforms.
Step 3: Conduct joint planning and training.

10. Embrace evidence-based innovation

A systematic approach to innovation improves operational effectiveness and ensures strategies are impactful. Build a culture of learning and adaptability through evidence-based methods (Targeting, Tracking, Testing). Embedding evidence-based policing requires senior leadership to champion innovation and provide training for all ranks, laying the foundation for a professional framework that fosters continuous learning and improvement.

Step 1: Identify improvement opportunities.
Step 2: Design and implement interventions.
Step 3: Track and evaluate.
Step 4: Share findings and adapt.

Conclusion

The DKNG hotspots policing project, implemented by SAPS, WCG, and CCT, has demonstrated significant results in reducing violent crime and shows potential for scaling as a key component of national policing strategies.

The strategy prevented approximately 100 violent crimes in targeted hotspots and achieved notable year-on-year reductions across multiple crime categories, making communities safer without requiring additional resources. The project also fostered the development of new monitoring tools that enhanced management and leadership at the station level, enabling more precise tracking of patrols and timely feedback.

Policing alone cannot solve the complex social issues underlying crime

The implementation faced challenges such as resource limitations, data inaccuracies, imperfect implementation, coordination issues, and so on. As outlined in this report, these challenges provided valuable lessons, and we have made recommendations to address them in future operations.

Given the benefits shown, leaders should make efforts to expand this approach. While hotspot policing is not the only tool police should use, and policing alone cannot solve the complex social issues underlying crime, this method can help the police have a greater impact with limited resources. By scaling the data-driven, highly targeted approach to hotspot patrolling and embracing similar evidence-based strategies, South African public safety agencies can improve their effectiveness. This will contribute to building safer communities where people can live with less fear and fewer experiences of violent crime.

Final feedback meeting of DKNG deployment and project management teams

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