

# **Policing in 21st Century - Case Study of Islamabad Safe City Authority**

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## **Abstract**

The rise of urban population warrants a paradigm shift in security assurance strategies. Safe city projects have been a novel approach comprising of state-of-the-art technologies aimed at aiding government and law enforcement authorities to come up with rapid response to threats. The solutions primarily consist of sensor technologies acquiring constant data followed by the analysis of the data through rigorous and robust mechanisms enabling the deterrence of crime leading to overall prosperity for the population. Albeit the technical research on safe city projects and its components has been commonplace there is still a dearth of viable research for assessing the performance of the projects in its intended purposes. Moreover, little research is conducted on the secondary benefits of such projects. This research endeavors to analyze the case study of Islamabad Safe City Project through primary and secondary data to answer two basic question: Has Islamabad Safe City Project resulted in crime reduction? And has the Islamabad Safe City Project resulted in improvement in the quality of life of the residents of Islamabad? On the first question the project has been found lacking as per the analysis of the crime data of the past four years. Crime analysis depicts an immediate drop in crime rates followed by a rise beyond the initial levels. This pattern of crime is seen for all types of crime, thus validating the theory that crime control goes beyond the deterrence strategies and is affected by other socio-economic factors as well. In second part of the research, primary data collected through surveys was utilized to assess the perception of the residents regarding the safe city project. Barring the reduced sense of privacy of the residents, the project seems to have improved all other facets of the lives of the residents pertaining to security.

## **Introduction:**

### **Background**

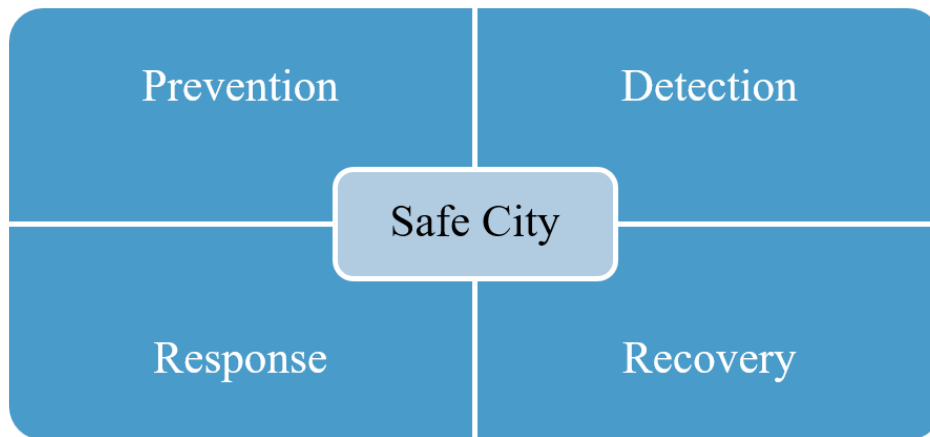
The contemporary world of the unhindered economic growth has invariably resulted in movement of human population towards big cities. The uptick in metropolitan populations will result in 70 percent of the global population residing in urban centers by 2050 according to a UNICEF report (UNICEF, 2012). With all its charms the burgeoning urban population also leads to a rise in crime statistics in most of the instances. The dream of achieving proportionate growth in the economy and social prosperity would remain unrealized until the safety of people's property and life are not ascertained. This objective can only be achieved by evolving and implementing new strategy for law and order maintenance and re-aligning the

policing processes with the latest trends.

In this modern age of information and communication marked by incessant innovation, the law enforcement regimes have also adopted new mechanisms around the world to ensure public safety. The incorporation of innovative solutions such as data banks, video surveillance, and modern artificial intelligence-based analytics prove ever more efficient in making the jobs of humans easier than before. Evidently the advent of these modern technologies in the law enforcement arena has seen an increase in the effectiveness and efficiency of the law enforcement agencies. All over the world the law enforcement authorities have employed the use of technology to aid in the sound execution of the task at hand. It is humanly impossible to deploy personnel across the length and breadth of any city at all times to monitor the activities and subsequently prevent crime. Police departments around the world have, therefore, been increasingly moving towards safe city projects which entail the deployment of modern visual and data tools to act as identifiers of unlawful activities and act as deterrent to crime.

### **Safe Cities**

The concept of “Safe City” is rooted in a concerted ICT framework combining information of various kinds from disparate resources such as sensor technologies and collaboration among agencies to ensure public safety. The purposes of the safe city projects are multifold as shown in the figure 1. The four phases of undesirable activities where the safe city projects are deemed a necessary tool in the modern urban societies are as follows:



**Figure 1: Different stages of undesirable activities where safe city projects prove useful**

## **Four Phases of Benefit**

### **Prevention**

The safe city projects act as deterrent to security threats and harmful activities endangering the safety of citizens. This scenario is obviously the most desirable. The forecasting technologies employing big data analytics and artificial intelligence can come up with early warning of threats to societal peace and the law enforcement agencies can act accordingly to tackle the situation.

### **Detection**

It helps law enforcement authorities in collecting data more effectively to raise situational awareness through simulations leading to overall safety insurance.

### **Response**

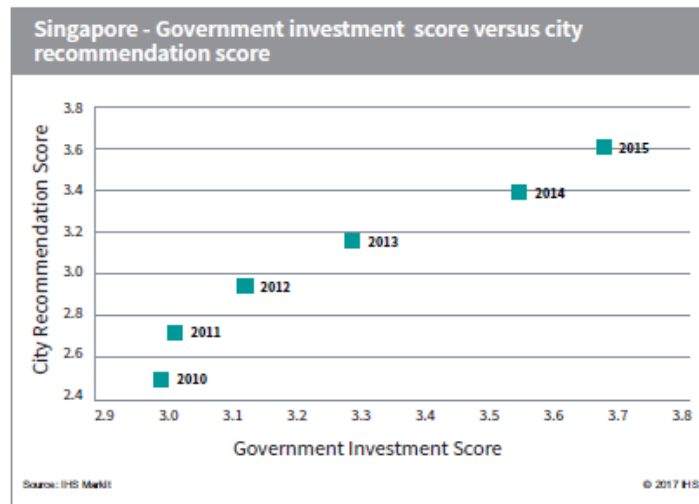
It arms the concerned organizations in urban centers to react in a more systematic and streamlined mechanism based on real-time data and analysis.

### **Recovery**

It can develop abilities pertaining to the post event analysis and examination to identify the victims and provide assistance in addition to the help in prosecution.

## **Success Stories around the World**

Around the world there have been many success stories of implementation of safe city projects. For instance, in Singapore city, the safe city project implemented in 2013, has resulted in significant decline in the crime rates in addition to earning precious capital for the city authorities in form of traffic fines. There have also been social positive impacts largely associated with the ease of mind of the residents and the reduced attacks against the women resulting in significantly elevated women empowerment. The safe city project in London city also presents a success case which other metropolitans can emulate and reap the concomitant rewards. Supplementary to the immediate gains in the public safety domain the hike in tourism, as evidenced by improved recommendation score in figure 2, is also seen as an outcome of safe city projects.



**Figure 2: Improvement in recommendation score as function of government investment in public safety measures Singapore**

### **Policing in Pakistan and the Use of Modern Technology**

Policing in Pakistan has historically been governed by the decrepit colonial-era Police Act of 1861 till the enactment of Police Order 2002. The act primarily undertook the setting up of police force which could aid the colonial masters in taming the spirited public. The rules and procedures to this day are in large part based on Police Rules 1934 also detailing the organizational structure of the Police as a department of the Government of Pakistan. The procedures, initially devised in the backdrop of the requirements of the era, soon seemed unviable to keep up with the changing dynamics of the increasing urban population and demographics. Law enforcement in the developed world has been able to keep up with this change. Interestingly London city authorities had installed CCTV cameras in Trafalgar Square in 1962 when Pakistan even did not have television. In addition, other modern surveillance and analytical tools have also been considered part and parcel of the process of law enforcement in the developed world. While the policing in developing world was venturing into the domain of Artificial intelligence tools for crime data analytics, Pakistan was still engulfed in the age-old system designed with entirely different priorities in mind.

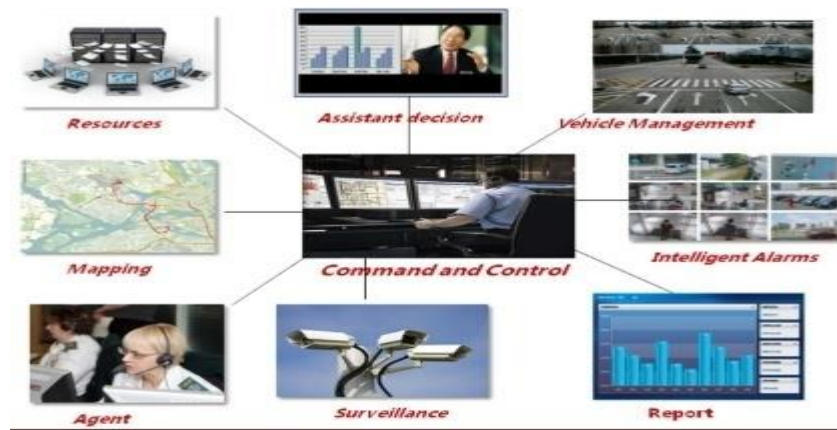
Post 9/11, the specter of terrorism challenged the entire world and Pakistan given its geographical location became a target of the menace. Whole new spectrum of challenges emerged to be faced by the Police department in Pakistan requiring a complete redefinition of its role and responsibilities. Looking down the barrel of multifaceted threats of terrorism and risks to the safety of police force itself meant newer means of law enforcement were the need of the hour. In this context there was a consensus among all the law enforcement agencies to acquire state-of-the-art

technologies to make their job easier. Among other initiatives pertaining to the training of personnel and acquisition of better weapons to deal with the scourge of terrorism, decision was made to launch safe city projects in Lahore and Islamabad.

### The Experiment of Safe City Projects in Pakistan

Pakistan has also started tiptoeing around the idea of safe city projects. The first such project was initiated in Islamabad as Islamabad Safe City Project in 2011 with an investment of PKR 11 billion eventually completed in 2013. The project made up of various components as shown in the figure 3, consists of 1900 CCTV cameras. It was deemed as the first step towards automation of law enforcement in Pakistan.

With the vision of “Safe, Peaceful, and Prosperous Cities” in Punjab, the Lahore Safe City project was launched with objective of modernizing the policing in the province. The project, consisting of 8000 CCTV cameras and data analytics tools, is governed by an autonomous body by the name of Punjab Safe Cities Authority (PSCA) which owes its existence to the Punjab Safe Cities Ordinance passed in 2015.



**Figure 3: Islamabad safe city project: basic layout of the features**

The main objective of implementation of the safe city projects was the assurance of public safety through crime deterrence and detection. In addition, there are also other envisaged benefits from the safe city projects. Firstly, significant funds are generated all over the world from traffic fines. The government investment expresses the adherence of the authorities to continual improvement in public safety. Secondly the security enhancement accruing from the investment leads invariably to a greater sense of appreciation from the public. The public feels secure and in better state of mind to carry out their day to day activities. Thirdly the economic benefits of the safe city projects cannot be overemphasized. The benefits are usually seen in the form of increased investment from outside organizations,

increased tourism, and improved entrepreneurial spirit among the local populace.

## **SCOPE**

Although these safe city projects provide a solution to the security challenges, however, the metropolitan cities face a variety of implementation challenges, such as poor funding, infrastructure difficulties, and public resistance, a lack of technical expertise, and privacy and security concerns. Implementation of public safety solutions represents a major challenge in many different places, and it is crucial for leaders to overcome these barriers in order to achieve the benefits of public safety innovation.

In Pakistan, Safe City Projects are being implemented in Punjab under Punjab Safe City Authority in district cities. One in Lahore has already been successfully implemented. Safe City Project has also been implemented in Islamabad. The present study will be focused on the project in Islamabad and will take it as a case study to analyze its impact on crime and society as whole.

In context of the Islamabad city project, ever since its inception, no comprehensive study has been carried out to gauge the overall impact of the project on human welfare and security. This study undertakes this effort to compare the pre-and post-project crime rates, and human wellbeing especially for the women to paint a picture of the overarching benefits of the projects. The study aims to answer the following questions for the Islamabad safe city project:

1. Has there been a measurable drop in the various crimes ever since the implementation of the project?
2. Has there been any positive impact in the quality of life of the people covered by the project?

In short this paper will strive to assess the performance of the Islamabad Safe City project in light of the above mentioned factors.

## **Literature Review**

### **History of Sensor Based Tools in Policing**

The first experiment in CCTV surveillance in cities can be ascribed to its implementation in Trafalgar Square mainly focused at ensuring the visit of Royal Family of Thailand in 1960, albeit some other instances can be found before that in USA and Nazi Germany but those were in individual buildings. For the first time permanent surveillance cameras deployment was observed in London's railway stations in 1961, leading to its extension to metropolitans in UK such as London and Liverpool. The studies on their effectiveness regard them as a mere PR exercise rather than achieving long lasting security, nonetheless they paved the way for large

scale camera-based surveillance and arguably the start of use of visual technology in security arena. CCTV camera use in security rose steadily through the decade so that by the end of the decade 67 of them were installed in different police station's domains (Piza, 2019).

In the following decades, the use of the CCTV cameras, the main component of safe city projects, saw a rapid rise to the extent that the current estimates of their deployment quote 365 million of them being installed all over the world. The mainstreaming of the aided visual surveillance also saw a number of researches conducted to enhance their effectiveness by assessing how the existing systems were performing in their purposes i.e. crime mitigation and quality of life improvement for the citizens (Piza E. , 2018a).

The large number of CCTV surveillance as a crime deterrence measure could be traced back to the Great Britain where in the period 1996-1998 three fourth of the Home Office budget was spent on CCTV related projects (Armitage, 2002 ). This reorientation of the policy towards technology use in law enforcement resulted in tremendous increase in the deployment of CCTV in Britain from a mere 100 cameras in 1990 to four million of them in 2007 (Farrington, 2007).

The humongous prevalence of CCTV in cities has led to them being regarded as a common part of city life, considered least worthy of enquiry by media and academia (Goold, 2013). In the early part of their history they were ascribed more to the political stimulus rather than their main purpose of security (Tilley, 2009). It was largely ascribed to the politicians meaning to be doing something easily visible to the public eye as the policy measures were not considered as easy to advertise (Tilley, 2009). Resultantly there was little concern about the performance of these tools of crime prevention (Pease, 1999).

### **Impact Assessment Studies**

Once nonexistent, the research on CCTV evaluations saw a noticeable increase over time. And with the rise of the once considered scientifically weak research in this domain, (55% research publications regarded as using less than optimum methods according to (Welsh, 2011) the research designs and implementation has successively improved now using statistically viable methods. Literature abound with the examples of optimal assessment case studies of the CCTV and safe city projects as a mean of crime prevention, some treating it as the sole crime deterrent as in (Hayes, 2011)while some researchers emphasize its role as part of forecasting system aimed at undesirable activities such as in (Piza E. L., 2015.).

Similarly some research endeavors have focused more on complex algorithms rooted in random treatment of the concerned data to limit the equivalence error between the treated and control parameters (Farrington, 2007) (Piza E. , 2018a).

Whatever the modus operandi of the research, it can be unequivocally stated that the research has gotten more and more robust in coming up with effective methods of effectiveness assessment of CCTV.

Similarly there has also been increased research interest in uncovering ways where the crime deterrent is gauged by the rudimentary pre-and-post implementation of the safe city projects, for instance some have argued that the enhancement in law enforcement agencies' capability in apprehension of the offenders, and publicity of the projects leading to increasing citizen satisfaction and awareness are other important benefits of the projects (Gill, 2005). Besides there is also the case of increased offender apprehension either through rapid response time of police or through obtaining evidence later which leads to suspects (Ratcliffe, 2009). Furthermore, there is also an increase in successful prosecutions aided by video evidence from the system in some instance (Ashby, 2017). In execution of these studies it is pertinent to include the factor of the increased reporting of crime which in absence of cameras and other technology would never have been reported (Winge Stig, 2003). Also skewing the results of the studies could be the fact that in the presence of the cameras public feels an added sense of security causing them to let their guard down and go place which would have been avoided in absence of the cameras (Armitage R. G., 1999).

In addition to the above literature instances providing various means of safe city impact assessment there are also some meta-analysis of the literature published. These analyses provide empirical data on the effectiveness of various means of research used for assessing the effectiveness of the visual surveillance and other technology. One such review consisting of 22 publications on vehicle crimes came to the conclusion that there is little significance of the CCTV cameras in deterring the said crimes (Welsh B. C., 2002). An update on the review published in 2008 after reviewing 44 publications in four different areas of the cities: city centers, public residential areas, public transportation areas, and car parking lots. Additionally, it is also postulated that CCTV cameras on average resulted in up to 16 percent reduction in crime statistics. The breakdown of this figure suggests that 51% decrease in car parking lots while other areas and settings explored in the review exhibited little to no crime reduction post CCTV installation.

In 2017 a review of 7 random and natural experiment based studies gauging the effectiveness of crime deterrence of CCTV suggested a decrease in crime: 24% for public residential areas, and 28% for subway stations (Welsh, 2011). This significant disparity among the results of various studies can be attributed to a number of factors concerning integration model of the system in to the existing policing structure, difference in socioeconomic conditions of the locations where the systems are placed, size of the experiment sample, and others. This assertion is

cemented by recent studies suggesting a range of effectiveness levels based on the above factors, more pronounced for the integration mechanism and extent with existing policing structure (Tilley, 2009).

All these factors point to the inadequateness of the research carried out over the years to come up with an all-encompassing, all-inclusive measure of the effectiveness of the CCTV, IT and subsequently the safe city projects. The last few years have unearthed a few indicators which if applied in such researches would prove a uniform effectiveness level of the projects in question.

### **Research Gap**

In short it can be stated from the literature review that there is not a consensus model for gauging the effectiveness of safe city projects. Furthermore, it is also established that the installation of CCTV systems does not necessarily leads to a reduction in crime statistics and the effect is varied in varied settings of cities. Besides the lack of decrease in the crime statistics should not directly be linked to the failure of the system and other reasons of this disparity should be researched.

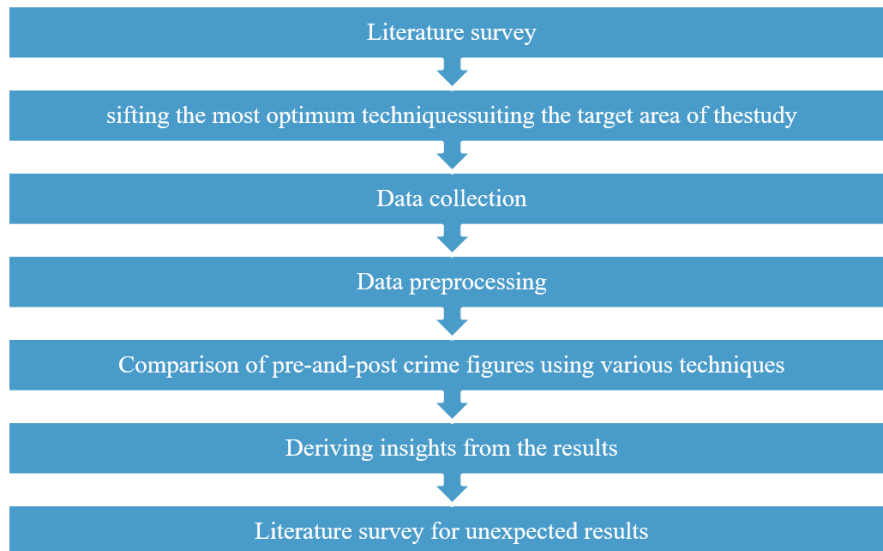
The current paper attempts to gauge the effectiveness of the Islamabad Safe City project through comparison of pre-and –post installation crime statistics. Also the focus of this paper is the secondary benefits of the installation of the system overall termed as the impact on quality of life in Islamabad.

### **Research Methodology**

#### **Research Methods**

This research has two major objectives warranting differing methods.

The first part of the research is rooted in the assessment of the effectiveness of the Islamabad Safe City project through comparison of the pre-and-post installation data of crime in various settings and precincts of the city. For this purpose, secondary data from the concerned department was utilized. The raw data consists of the statistics of different types of crimes against each year. For this study only four years of data was available. Hence, the comparison will be based on four years crime statistics i.e. of 2015,2016,2017,2018. This data is pre-processed, and outliers are eliminated. There onwards, the comparison in the absolute figures was made. Following this, statistical tools were employed for coming up with a more representative comparison. The steps taken in this part of the research are outlined in the figure 4.



**Figure 4 Methodology for determining effectiveness of safe city project as crime deterrent**

For the second part of the research i.e. the determination of the impact of the safe city project on the quality of life of the citizens, primary data through questionnaire was collected from the residents of Islamabad. Over all 100 interviews were conducted for 6 precincts of Islamabad area. The questionnaire was designed using standard methods keeping security at the backdrop. Respondents' opinion was taken on a vast array of issues such as women harassment incidents, business activities, general sense of security, satisfaction with the police response, satisfaction with the privacy after the installation of cameras and other related topics. During the survey special care was given to the demographics such as gender, education, and time spent in Islamabad. The respondents were guided throughout the survey filling and given options related to each question.

The questions asked during the survey from the respondents in Islamabad city are as follows:

1. Gender based harassment incidents in wake of the safe city project?
2. General sense of security in public areas in wake of safe city project?
3. Your recreational activities in the public areas?
4. Feeling of safety in parking your vehicle in public areas?
5. Your satisfaction with the police performance after the safe city project?
6. Your satisfaction with the privacy in public areas after safe city project?

7. Your satisfaction with the oversight on the data collected through the safe city project?
8. Safety while keeping business opens till late?

Against each question the respondents were given the three options: increased, decreased, remains the same.

After the collection of the survey responses from 100 respondents the data was analyzed to come up with a percentage for each response.

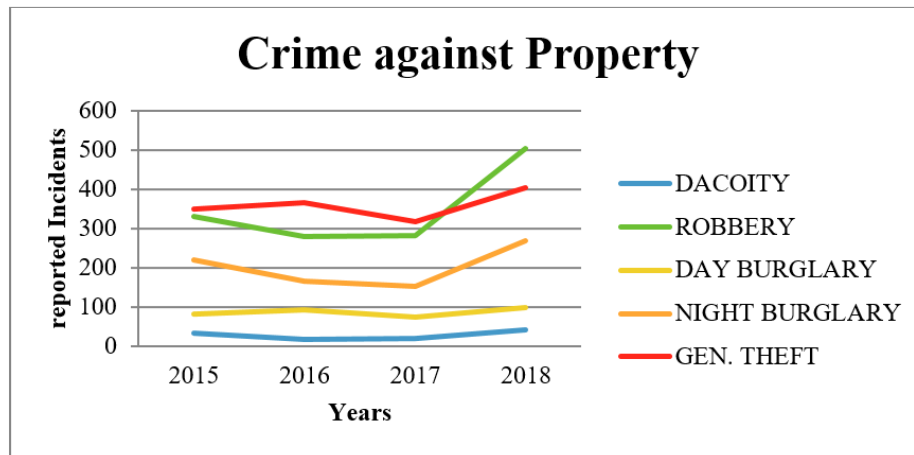
### **Data Sources**

The research utilized the secondary crime data of last four years of Islamabad Capital Territory Police and the data captured and analyzed at the Islamabad Safe City Authority. The trends in crime data were analyzed and a comparative study was done on the over-all crime pattern. Structured interviews were conducted of the public to study the impact of safe city projects on daily lives of the citizens of the capital. Survey was conducted from 100 respondents in the capital city from 6 precincts such that accurate representation of gender, education level, and income are maintained.

### **Findings & Discussion**

#### **Impact Assessment of Safe City Project as Crime Deterrent**

Under this research for the assessing how much has the safe city project contributed to crime deterrence the data for four years was organized under various crime heads. The pattern of crimes under each head was separately plotted against the years. The year comes on the x-axis and the number of recorded incidents against each crime type is on vertical axis. The plots for each group i.e. crime against person, accidents, property, vehicle, recovery u/s 411PPC, and crimes recorded under local & special law are given in the following and then analysis and discussion pertaining to each graph is given as well.



**Figure 5 Pattern of crime against property pre and post installation of the safe city project**

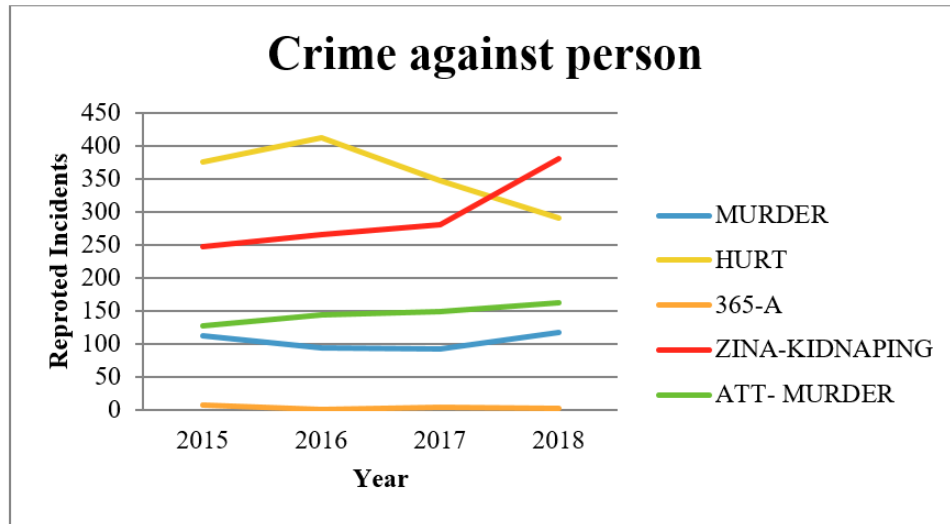
Figure 5 shows the graphical representation of the crimes against property in Islamabad committed since the implementation of safe city project. The graph gives an overview of the various crimes falling under the section such as Dacoity, Robbery, Day Burglary, Night Burglary, and General Theft. It can be seen that almost all the crime types follow the same pattern in the years 2016-2018. There is a fall in the crime against property following the installation of the system in 2015 to 2016, keeping in the same range and then a small increase in all heads in the year 2017 to 2018. The graph shows that there is a definite positive impact of the safe city project on the crime statistics in the initial years but does not hold for the coming years. Furthermore, the drop in crime statistics are not as per the literature reported average of 25% in all the instances. The literature suggests that the fall in crime is not a definite outcome of the system placement and can vary based on the society, integration levels, the monitoring level and the viewed area (Welsh B. C., 2002).

Similarly, in the other heads such as in recovery u/s 411PPC, as shown in the figure 6, there is an increase in recovery of tampered cars which can be attributed to a small extent to the placement of Safe City cameras and a better detection. However, relying this result solely as a consequence of Safe City Project would be misplaced as there are various other factors of policing efficiency and effectiveness that have direct bearing on the overall recovery

**Figure 6: Crime prevention pattern (or lack thereof) of Recovery u/s 411PPC following Safe City Project**

Since the pattern of initial fall in the crime and the subsequent rise was visible in the first two analyzed crime types, the pattern was investigated for the other crime

types for which the data was available. In this context the plot for the crime against person yields a different pattern as shown in the figure 7 below. The crime statistics for most of the fields under ‘person’ category shows a continuous rise even in the initial years. This further grant credibility to the claim that the crime statistics for the whole country or at least the adjoining localities should be analyzed before passing a definitive judgment for the performance of the safe city project in crime deterrence.



**Figure 7: Evolution of crime against person statistics in wake of the safe city project**

On the other hand, a constant decline can be noticed in the vehicle theft incidents for the initial three years i.e. 2015-17 post installation of the system. Here the installation of the safe city project can be attributed as a crime deterrent insofar as vehicular theft is concerned owing to definitive reasons. The vehicle snatched are usually taken out of the city and the placement of the cameras at city exits makes it difficult, resulting in inhibition of the vehicle theft crimes. The motorcycle theft does not necessarily follow the same pattern owing to their ease of transport on small routes where the detection through cameras is avoidable

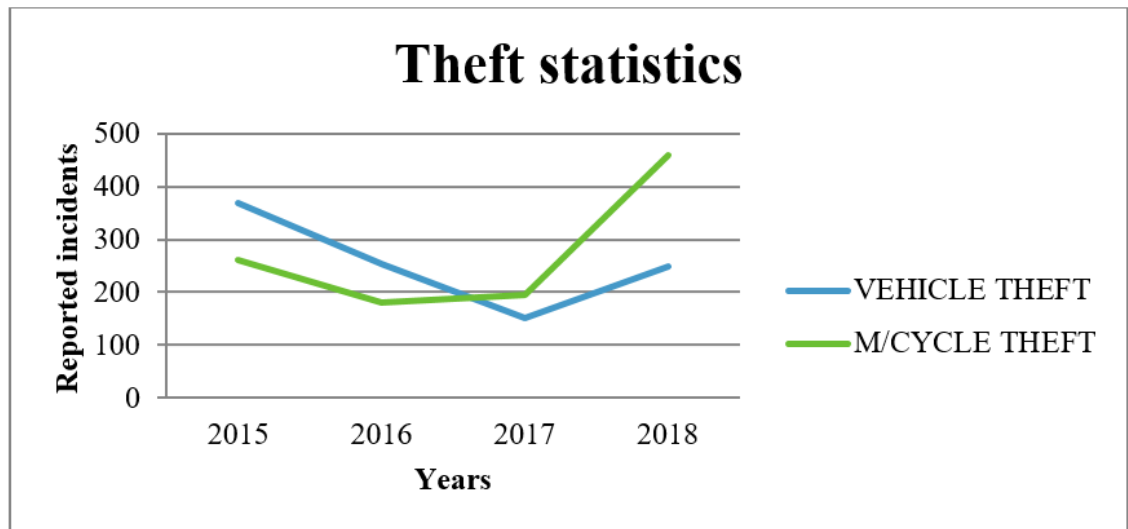


Figure 8: Vehicular theft crime patterns in the wake of safe city project

Similarly, for other crime categories as well there is a lack of definitive continuous fall in the crime following the implementation of safe city project. In most instances there is an initial fall in crime followed by an even more pronounced rise in the crime incidents against the years analyzed as shown in the figures 5, 7, 8 and 9. All these analyses point to the presence of certain other factors which could be affecting crime in the area.

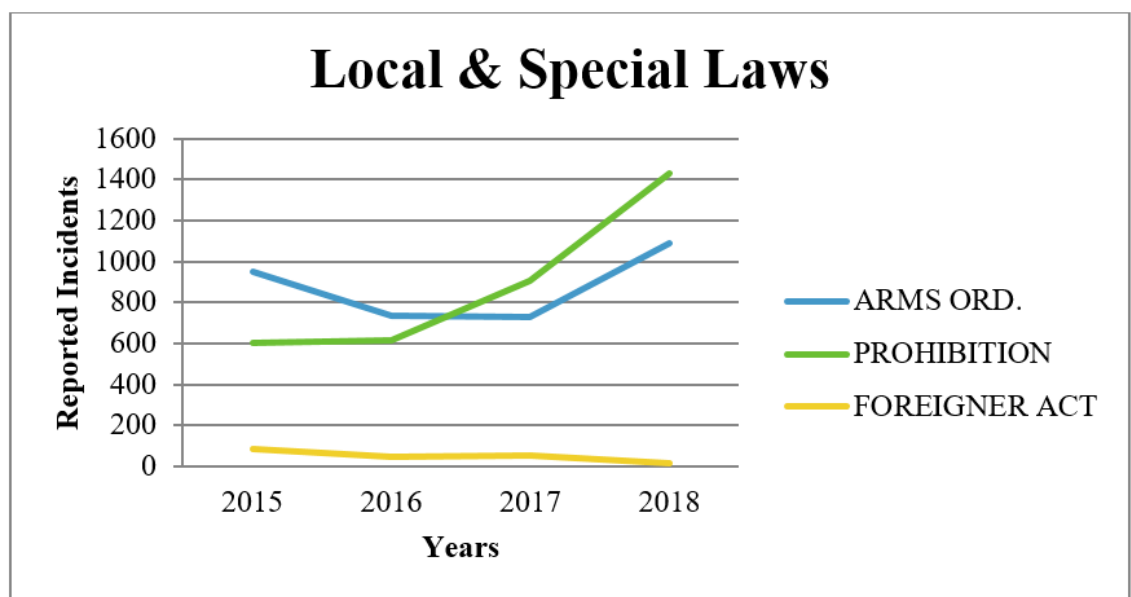


Figure 9: Performance under Local & Special Laws

The most important factor that could potentially contribute to complete the analysis

is the reports of non-functioning CCTV cameras. In the year 2018 and then in the current year there have been increasing newspaper reports pointing to a substantial proportion of the cameras facing break down. According to some newspaper articles the number of cameras not working could be as large as 1500 out of the 1900 installed. Even if the most conservative estimates of 600 cameras not functioning are taken in to the analysis most of the rise in crime statistic in the year 2017 and more pronounced in 2018 could be accounted for (AHMADANI, 2019).

Another factor from literature that could be attributed to the rise in the crime statistics is the increasing sense of security (Armitage R. G., 1999). It has been reported that following the installation of CCTV cameras on such a large scale the public's sense of security is enhanced. Consequently, they let their guards down. The places once deemed no go areas during specific times of the night are visited more and more. People do not give much consideration to their vehicle's safety while parking. In such situation further impetus to the crime is provided by the cameras not working making the perfect recipe for crime.

Safe city projects in isolation are tantamount to wasting money and absent proper integration in to the existing policing system or the improvement of the existing system to enable it to mesh with the safe city project is a key factor in the success of such projects. Barring the training of the personnel directly working on the system and the capacity enhancement of the police force the safe city projects are bound to perform as abysmally as the Islamabad safe city project has performed in the current analysis.

A consequence of such isolated implementation of the project could be that it is impossible to monitor such a large number of camera feeds. And even to link the events from various feeds to gain insights and then to convert those insights into actionable forecast is also the need of the hour. Currently in the advanced economies as well the use of machine learning and artificial intelligence algorithms for crime prevention are becoming more and more common place (Adrian, 2018).

One should also acknowledge the presence of increased reporting of the crimes as a result of continuous monitoring every nook and corner of a city. The crimes once seldom reported are reported more and more because of the improved perception of the police performance in public's eyes. This inserts a bias into the analysis and is practically impossible to work around.

#### 4.2 Impact of Safe City Project on Quality of Life

The ultimate aim of any government funded project is invariably the welfare of the citizens. Any project which fails to deliver on part of improving the overall quality of life of the citizens fails the whole purpose behind implementation of the project. Keeping this factor in mind, this section of the research is focused on the assessment

of the positive impact of the safe city project (or lack thereof) on the lives of people residing in Islamabad. For this purpose, the study undertook a survey, the respondents being the citizens of Islamabad city. The questionnaire consists of questions rooted in gauging the general perception prevalent among the people regarding safe city project. Subsequently it gives an idea of the impact of the safe city project on the quality of life of the residents. The quality of life is made up of a variety of factors but the most pertinent among them is a sense of security. The 8 questions in the survey as given in the methodology section are primarily targeted on the sense of security of the populace. A total of 100 respondents were interviewed considering the brevity of time and resources in this research endeavor. Special care was given to give equal representation to women, and to all the income levels. Against each question the respondents were given three options and the results of the survey are as given in the table 1.

**Table 1: Results of the survey assessing the impact of Safe City project on Citizens**

Questions	Responses		
	Increased	Decreased	Remains the same
Gender based harassment incidents in wake of the safe city project?	21%	69%	10%
General sense of security in public areas in wake of safe city project?	52%	41%	7%
Your recreational activities in the public areas?	68%	4%	28%
Feeling of safety in parking your vehicle in public areas?	81%	3%	16%
Your satisfaction with the police performance after the safe city project?	63%	12%	25%

Safety while keeping business opens till late?	83%	4%	13%
Your satisfaction with the privacy in public areas after safe city project?	30%	57% %	13%

Additionally, to the question “Your satisfaction with the oversight on the data collected through the safe city project?” 59% of the respondents expressed satisfaction 30 percent expressed dissatisfaction, while the remaining did not form any opinion on the subject.

In forming a definitive judgment over the impact of the safe city project the impact on quality of life of the respondents should also be taken in consideration. To this end the Islamabad safe city project could be regarded as having a net positive impact on the lives of the residents.

One factor that needs attention is the decrease in the sense of privacy among the people. This follows from the various scandals prevalent in the newspapers regarding leaking of compromising data online obtained through the safe city project tools (Azeem, 2019).

### **Conclusion**

The research endeavor was intended to assess the performance of the Islamabad safe city project on two fronts: the impact on crime deterrence, and the impact on quality of life of the populace. Literature suggests that the impact assessment of safe city projects or more specifically the CCTV systems implementation yields disparate results depending on factors such as the socioeconomic conditions of the location where the system is implemented, the preexisting structure of policing in the area, the data available for the analysis, and the method of assessment utilized in the assessment. Keeping all these factors at the back of the mind, the study found that the safe city project in Islamabad did not result in continuous decrease in the crime statistics of various kinds. Although a discernable fall in the crime was detected in the initial years, the improvement was not found to be sustainable. Upon further survey of literature, it was unearthed that the lack of sustained improvement could be the function of one or more of the factors listed below:

- Lack of integration of the system with the existing structure or improvement of

the existing structure to meet the requirements

- A false sense of security developed among the population because of the system resulting in relaxation
- Lack of adequate maintenance of the cameras
- Shortage of monitoring personnel to monitor all the data coming in through the system.
- Increase in the reporting of crimes because of improved perception of the police force.

In the second phase of research a survey conducted to gauge the social impact of the safe city project yielded the opposite results i.e. it was a complete success. Majority of the respondents reported improvement in various facets of their life in context of security.

In short, the Islamabad Safe City Project has been found lacking on the primary objective of the crime deterrence, however, it has achieved success when assessed in the context of the quality of life improvement. In other words, the public perception of the project has been much better compare to what the crime statistics suggest, to say the least.

### **Policy Recommendations**

The research paper after assessing the efficacy of Islamabad safe city project comes up with the following recommendations.

1. The project did achieve a drop in crime following its implementation but the effect seems to phase out in the following years. Although various factors can be held contributing to such statistics as detailed in the paper, but the main problem seemed to be the breakdown of a considerable number of cameras. Consequently, it is recommended that regular maintenance and inspection of the cameras be carried out to keep the CCTV cameras in functioning condition.
2. The monitoring of the video feed coming out of the system is as important as installing the system itself. There is a need of workforce trained in the art of deriving insights from various activities.
3. The dark areas which are outside the coverage of any CCTV camera are a major spot for crime. There should be a technical analysis of these discrepancies which would lead to improved performance of the system itself.
4. Special consideration should be given to strike the perfect balance between ensuring the public security and privacy. A significant percentage of the

respondents felt a deterioration of the public privacy following the system installation. An oversight committee should be in place to pay heed to the concern of the people with grievances in this regard.

5. Public awareness campaigns guiding the citizens on the shift in security dynamics and getting them accustomed with the changing dynamics post safe city project implementation is required which must be taken up the ICT Police and District Administration and specific campaigns be launched at school, college and university level.
6. In context of the scandals of leaked footage of the safe city projects, the monitoring policy and chain of handling the feed should be revisited. The personnel tasked with the monitoring of the video footage should be properly vetted. The number of people capable of transferring the data should be kept at a minimum necessary level to avoid further scandals from taking place.

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