

Twenty First Century Policing: An Evaluation of the Winnipeg Police Service
Smart Policing Initiative

By

Ryan Catte

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Department of Sociology
University of Manitoba
Winnipeg

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Abstract

Smart Policing Initiatives (SPI) are becoming increasingly common in the United States and in Canada. Supporters of SPI argue that it is a way for police departments to address decreasing budgets and increasing service demands. However, no evaluations have been conducted on the effectiveness of SPI on crime rates for longer than a year. Additionally, few evaluations have been conducted on the factors that help or hinder the implementation of SPI. Consequently, this project is a process and impact evaluation of SPI implemented by the Winnipeg Police Service East District that began in May 2012 until Dec 2016. The goal of the SPI program in ED is to utilize crime and traffic data and proactive policing tactics to reduce crime rates. The results of this thesis indicate that leadership and technology are two important factors to ensure the effective implementation and uptake of SPI. Additionally, univariate and regression analysis results indicate that since the implementation of SPI in ED property crime rates have had a statistically significant reduction in comparison to other districts in Winnipeg.

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Glossary of Terms

Computer Statistics (Compstat): Within policing, Compstat is a performance and organizational management tool to track trends and locations of criminal activity and crime rates.

Smart Policing Initiative (SPI): The Smart Policing Initiative is an organizational philosophy that encourages the use of evidence, analysis, and evaluation to facilitate and encourage best practices by police officers to reduce crime and improve the quality of life for citizens.

Problem-oriented policing (POP): This is an analytic technique to implement a crime reduction strategy by identifying not only the crime(s) occurring, but the underlying problems causing the crime(s).

Community-oriented policing (COP): This is an organizational strategy that promotes crime reduction by means of establishing/developing partnerships with various community organizations and citizens.

Intelligence-led policing (ILP): This is an operational guide that promotes the use of risk assessment and management of intelligence/data to guide operational activities by a police force.

Hot-spot policing: Focusing police patrols in small geographic areas with higher rates of crime compared to surrounding geographic areas of a municipality.

Focused-deterrent: Specific actions taken against an individual or group of individuals e.g. gang members, to reduce their criminal activities.

Focused-patrol: This refers to police officers patrolling a small geographic area due to high criminal activity within the area.

SPI Activity: These are self-initiated activities (field events) that front-line service members utilize in response to the analysis of crime, traffic or community related information and intelligence disseminated by ED crime analyst, detective unit of interest (divisionally directed) including; public complaints concerning traffic, hangouts, or any area of concern that are identified as an emerging crime, traffic or community problem.

SPI Hotspots: Any proactive initiative relating to a specific place of interest including: public complaints concerning traffic, hangouts, or any area of concern.

SPI Subjects: Any proactive initiative relating to a person of interest (divisionally directed) including; any wanted persons, curfew checks or compliance checks on any court ordered conditions.

SPICOMs: Are used by the Community Support Unit members only when conducting

proactive policing issues and concerns. This includes meetings and contacts with community leaders, schools, and groups.

Compliance Check: A compliance check occurs when an ED service member ensures that an individual is abiding by their court ordered conditions of release. Generally, these take the form of a curfew check to ensure that an individual is residing at a court ordered dwelling during a specific time frame.

Special Attention Checks (SPATs): SPAT's are "self-dispatched" field events in which members employ solutions on their own initiative to problems they identify prior to any analysis. SPATs differ from SPI Hotspots in that SPAT's are not guided by any specific analysis, while SPI Hotspots are directed at specific addresses or locations that have been identified by the ED SPI coordinator based upon crime patterns.

Spot Check: Spot checks occur when a police officer identifies and makes contact with an individual in relation to a specific crime being investigated.

Park and Walks (PAWKs): Park and walks are simply when police officers park their cruiser car in an area and proceed to operate on foot within a specified geographic area or location.

Traffic Stops (T STOPS): Traffic stops occur when a motorist is pulled over by an ED service member for violating the Highway Traffic Act.

Traffic citations (PONs): The number of traffic citations issued by all ED members regardless of SPI activities.

SPI Spot check Arrests: These are proactive arrests made by officers not relating to a traffic stop or call for dispatch. These may include SPI and non-SPI proactive arrests.

SPI T-stop Arrests: These are Proactive arrests that are the result of a T-stop. These may include SPI and Non-SPI proactive arrests.

Chapter 1: Introduction and Project Overview

The history of policing strategies and initiatives demonstrates the tendency of police departments to implement activities or practices without reference to research evidence (National Research Council 2004). However, during the past thirty years police departments have increasingly implemented strategies based upon evidence of best practices (Braga and Weisburd 2010).

The Smart Policing Initiative (SPI) encourages the police to make use of the best policing practices based upon available data and evidence (Smart Policing Initiative 2014). Further, SPI encourages police departments to implement evidence-based policing initiatives based on their community's problems and policy environment. SPI is an inclusive philosophy that amalgamates the best practices of previous policing eras. Best practices in policing from the past 30 years include problem-oriented policing, intelligence-led policing, Compstat, some aspects of community-oriented policing, hot spots policing and focused deterrence. Reducing crime and/or vehicle offense/accident rates and strengthening police-citizen relationships are the goals of SPI. However, SPI does not mandate any specific tactics or activities for police departments to engage in. Instead, SPI has established five principles (Smart Policing Initiative, 2014):

(1) Performance measurement and research partnerships - this principle encourages police departments to monitor the effectiveness of their tactics as well as to form external partnerships to evaluate the effectiveness of their activities.

(2) Outreach and collaboration – police departments should form partnerships with community organizations and individuals that will enhance police legitimacy as well as help reduce crime.

(3) Managing organizational change - resistance to change is common in police departments. Therefore, SPI encourages police departments to anticipate obstacles to implementing change and to proactively develop answers to them.

(4) Strategic targeting - focusing policing efforts entails using data to focus attention upon high interest people/places and considering the type of crime and the specific circumstances of the crime. Once all of these factors are considered, a response can be tailored to address the most serious crime problems.

(5) Making better use of intelligence and other information databases/systems. The use of official and unofficial crime and traffic data is imperative to optimizing police departments' allocation of resources. Official records are those from government organizations (including the police department), while unofficial data are those drawn from insurance companies, businesses, community organizations, and citizens.

Each of the five principles of SPI serves as a conceptual guide to be applied to the policy environment as well as the resources of a police department. SPI is becoming increasingly common in the United States and Canada because it provides a customizable, intelligence-led framework that allows for creative and context-specific solutions to local problems. At a time when police budgets have become a major issue for Canadian municipalities, the implementation of these tactics may enable the police to demonstrate an increased level of efficiency and effectiveness.

Crime and traffic safety are two issues affecting the quality of life for Winnipeg residents. Winnipeg's crime rates are relatively high. In 2015, Winnipeg had the highest crime severity index among Canadian cities. However, the city ranked 9th on the non-violent crime severity index – only about 10% above the national average (Allen, 2016).

The WPS is also heavily involved in traffic enforcement. In addition to photo enforcement, the WPS issued over 40,000 Personal Offense Notices in 2015 (Winnipeg Police Service, 2015).

1.2 Purpose of the Thesis

In 2012 the WPS began implementing their version of the Smart Policing Initiative to address crime and traffic issues. SPI was initiated in East District (ED), which is one of four operational areas of the WPS. These areas are described in Chapter 3. The purpose of this thesis is to conduct an impact evaluation of the WPS SPI program. As part of SPI, ED members have implemented a broad range of tactics. A time series evaluation design will be utilized to draw conclusions about the effectiveness of SPI initiatives in ED. Specifically, we will examine:

- 1) To what extent are ED service members utilizing SPI principles to address the goals of SPI initiatives?
- 2) Has the implementation of SPI been incorporated into the culture of ED service members?
- 3) Whether crime rates have changed since the implementation of SPI¹?

The answers to these questions will have practical benefits for the WPS as well as advancing our knowledge of the efficacy of SPI. The results of this evaluation will

¹ It was planned to assess the impact of SPI on traffic accident rates, but adequate data were not available to measure crashes so this was not completed.

provide the WPS with the data required to assess the desirability of implementing SPI in all four districts, to make positive changes to the program, and to help other police services to consider whether or not to adopt SPI strategies.

1.3 Overview of the Winnipeg Police Services' SPI program in the East District

The East District of the WPS began implementation of their SPI program in the spring of 2012 but the program was not fully-implemented until the end of 2013.

Proactive and directed uniform patrol initiatives target specific areas in the district. These target areas are identified by crime analysis using both crime and traffic event types to produce hotspots and regions. Police patrols employ various SPI techniques to reduce crime, traffic problems, and disorder. To achieve this goal, monthly analysis of crime and traffic data is conducted to identify specific target areas in East District. Once a target area has been identified, weekly SPI bulletins are released during weekly SPI meetings that involve all members of East District's three units as well as their supervisors.

1.4 Organization of the East District

Three units in ED are involved in SPI - General Patrol (GP), the Divisional Crime Unit (DCU), and the Community Support Unit (CSU). A SPI coordinator and a crime analyst are also important parts of the strategy.

General patrol consists of uniformed officers who are responsible for responding to calls for service and for patrolling the district area. Each of the seven cruiser car areas in ED has one patrol car responsible for the area. General patrol activities include, but are not limited to: responding to calls for service; traffic enforcement; proactive policing;

investigations; protection of life and property; preservation of peace and order; prevention of crime; and the detection and apprehension of offenders/enforcement of laws. With respect to SPI, GP are responsible for frontline proactive patrols through initiating SPI Hotspots (places), SPI Subjects (persons), traffic stops, spot checks, special attention events, and other field events. Each of these tactics will be discussed later in this chapter.

Members of the divisional crime unit are responsible for the management and follow-up of general criminal investigation. These are crimes that require in-depth investigation that goes beyond the resources of general patrol unit members. The goal of the divisional crime unit is to identify crime patterns within their district and to employ investigative strategies to identify and arrest the person(s) responsible. The DCU contributes to the SPI initiative by sharing intelligence with GP and CSU as well as by identifying places and offenders of high interest to the WPS and consequently helping to create SPI bulletins and files for service members in ED.

CSU members try to solve community problems by means of partnerships with citizens. Their activities include: establishing additional community partnerships; improving the public's perception of safety; providing education to the public in crime awareness and crime prevention strategies; and developing sustainable solutions to community problems. Cases taken by CSU members are ones which fall outside the resources available to GP members but which do not warrant attention from any of the specialty units within the WPS.

Finally, a crime analyst works in tandem with the district SPI coordinator to update SPI files. Crime analysts compile crime and traffic information to identify

criminal and traffic hot spot areas within a district. Data sources for the crime analyst and the SPI coordinator include: provincial (Manitoba Justice), municipal, and organizational information systems; divisional community intelligence/information; and divisional unit intelligence/information. Additionally, the SPI coordinator will update the places and people that are most important for service members in a district to focus their attention on while on shift. Rather than focus on a strict division of labour, the SPI operational model encourages units to communicate with one another and to provide cross-unit support for a more integrated approach to dealing with a district's crime/traffic issues. Representatives of each unit conduct weekly SPI meetings where intelligence is updated and discussed. These formal meetings are supplemented by ongoing, informal communications.

1.5 The Tactics and Processes of SPI in ED

Place- based and offender-based policing are the two primary tactics used to reduce crime and traffic offenses/accidents in the SPI program. Predetermined criteria have been established to identify places and offenders that are of interest to the WPS. The criteria for identifying persons of interest are:

- 1) Poses a potential threat to the public safety & security
- 2) Is wanted on an existing warrant or for investigative interview
- 3) Is a subject of a specific judicial release condition (e.g. curfew check)
- 4) Information or intelligence identifies subject as being involved in criminal activity

The criteria for identifying a place of interest are:

- 1) The place is frequented by active criminals or gang members

- 2) The place has been identified as having an elevated level of crime and traffic activity
- 3) The frequency and volume of calls/public complaints has produced a pattern
- 4) Cause community concern or disorder
- 5) Poses an elevated risk to the public, that includes traffic issues

The use of predetermined criteria as well as objective data under SPI mitigate concerns of discrimination since the WPS is deploying their resources based upon an area's criminal and traffic offense rates. Short-term SPI bulletins may change week to week based upon input by sergeants in the CSU and the DCU. Long-term bulletins are the result of monthly analyses conducted by the crime analyst that show chronic trends in criminal and traffic activity in each of ED's seven cruiser car areas. The following is a list of the information utilized to determine long-term hotspots in ED:

Crime types: homicide; break and enter; robbery; shooting; stolen vehicle (attempt and actual); arson; theft from motor vehicle; and indecent acts.

Traffic issues: Motor vehicle collisions, Highway Traffic Act offenses, impaired driving, traffic complaint. However, areas such as shopping centres, which have higher than average non-fatal vehicle collisions because of their busy parking lots, are removed from the analysis because shopping centre collisions skew the data and would lead to police focusing on geographic locations that are not high criminal/safety risks.

Location/address of interest: Frequented by active criminals or gang members; identified as having elevated levels of crime and traffic activity per crime analysis; frequency and volume of calls/public complaints have produced a pattern; causes community concern or disorder; poses an elevated risk to the public including traffic concerns.

This information is entered into a Geographic Information System mapping (GIS) software program that allows analysts to integrate crime and traffic data. Essentially, a square grid is imposed on top of a map of Winnipeg. Then a calculation is performed to determine a density estimate beginning with the centre point of each grid cell. The distance between each grid cell centre point and each incident data point is measured to determine what weight the cell gets for the grid. The grid cells are colour-coded based on the concentration of crime/traffic incidents. A region is an area that has a higher than 63% probability that a future crime/traffic incident will occur. Consequently, the overlap between a crime region and a traffic region is made into a hotspot. Regions are the geographic boundaries for police patrol based on the amalgamation of the highest incidents of crime and traffic infractions/accidents within each of the seven cruiser car areas in ED.

Offenders of interest are those who pose a threat to public safety and security; are wanted on an existing warrant or for investigative interview; are subject to judicial release conditions; or are individuals for whom intelligence information substantiates likely involvement in criminal activity. The SPI coordinator acts as a hub for obtaining information about high-risk offenders from CSU, DCU, crime analysts, and parole and

probation officers. Similar to hotspots, once an offender is identified based upon these criteria, they are placed on the ED map. Identifying places and offenders is the first step in the SPI process as SPI files, bulletins, and meetings are utilized to share this information with service members in each of the three units in ED. However, SPI bulletins for offenders are only issued if they pose a high risk to community safety and/or currently wanted by police. In most instances, offenders' conditions of release (e.g. curfew) are logged into cruiser car SPI files for ED service members to check during any discretionary time.

SPI files are the means of information sharing between each unit. These files are updated weekly with persons and places of interest and with corresponding intelligence information. Once the SPI files are compiled, they are entered into the computer system within the corresponding cruiser car area file. For serious and current criminal activity, the SPI coordinator will create a SPI bulletin to communicate the information contained in the SPI file to ED service members. SPI bulletins utilize geospatial and temporal data to track problem areas of crime and traffic to provide weekly hot spot mapping of crime and traffic data as well as analysis of long term and short-term problem areas and crimes. The purpose of SPI bulletins is to assist ED service members with: the identification of criminal targets to focus their patrol time on high value subjects and areas; the provision of consistent and effective policing to known areas of concern; and the provision of an easily accessible database to members for proactive policing. The purpose of a SPI bulletin is to identify problem areas in the district for response by frontline officers. Additionally, SPI bulletins serve as a means of creating collective responsibility for service members based upon their individual cruiser car areas as well as current district

priorities. Four types of SPI bulletins are available in folders on the patrol car computers or on desktops: SPI hotspot, SPI subject, SPI traffic, SPI information.

SPI Hotspot: Geographic locations identified by public complaints, criminal hangouts, or any other concern.

SPI Subject: Includes any wanted persons, curfew checks, or compliance checks on any court ordered conditions that may be placed on a person interest.

SPI Traffic: Geographic locations that are identified from public complaints, traffic data, or service member intelligence of traffic related issues.

SPI Information: These bulletins include information pertaining to issues of concern that do not warrant entry into the other three categories of SPI bulletins. For instance, information about community concern over loud parties in a park that has not been confirmed by ED members.

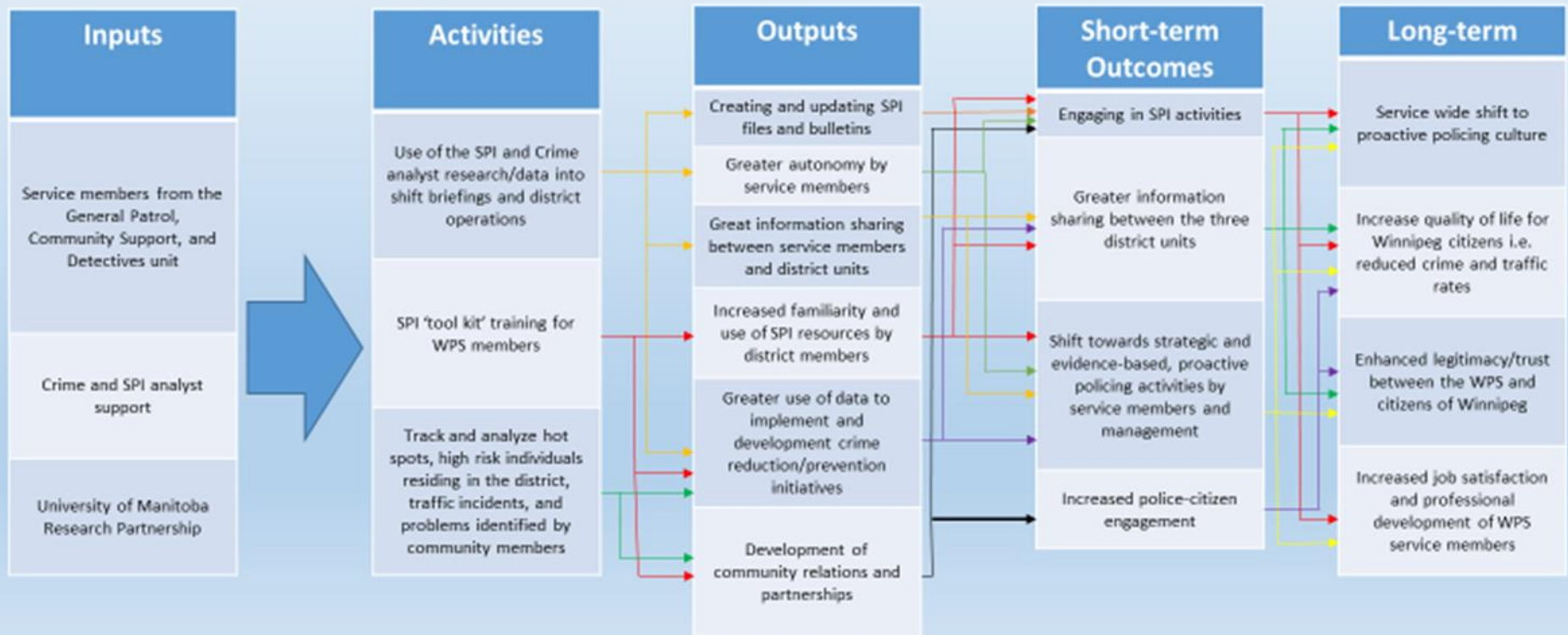
All SPI bulletins are accessible to every service member in ED through laptops in cruiser cars and desktop computers at the ED station through their records management system (Niche). To ensure that each of the three units in ED are working together and sharing information to achieve SPI's goals, weekly meetings have been scheduled. Each presenter is limited to 4 to 5 minutes and is only allowed to present on operational issues pertaining current SPI subject and hotspot information. SPI subject information includes:

number of offenders added or subtracted, the number of completed compliance checks, and any arrests that have been made. SPI hotspot information includes: locations of crime occurrences as well as high interest locations based upon specialty unit intelligence. Each unit is responsible for providing information/intelligence for entry into suppression files that are allocated to the proper SPI files depending on the nature of the information. For instance, the community support unit may have a SPICOM created from their follow up investigation of a general patrol submission.

The logic model for the SPI program (Figure 1) represents the measurable activities as well as outcomes and will guide this program evaluation.

Figure 1: Logic Model

Winnipeg Police Service Smart Policing Initiative Logic Model



Chapter 2: Literature Review

The Smart Policing Initiative (SPI) is the newest policing paradigm in North America. SPI is an initiative that promotes the development of evidence-based policing - utilizing the best practices of policing based upon data analysis and evaluation research (Weisburd & Neyroud 2013). The goal of SPI is to implement policing tactics and strategies that increase the effectiveness and efficiency of the police. However, SPI does not provide a particular tactic or strategy. Instead, SPI is best understood as a policing philosophy that promotes partnerships between police and criminal justice researchers to implement evidence-based policing tactics and strategies. For instance, dozens of SPI projects have been funded by the U.S. Bureau of Justice Assistance (BJA). These projects have elements of problem-oriented policing (POP), community-oriented policing (COP), place-based policing, intelligence-led policing (ILP), and data-driven approaches to crime and traffic safety (DDACTS). Each of these policing tactics is considered a SPI initiative because they promote the use of data collection and analysis to implement proactive, focused, and multifaceted approaches to criminal justice issues. Thus, SPI is an operational model that promotes an organizational shift in police operations from reactive, incident-based policing tactics to proactive, evidence-based policing tactics. The Winnipeg Police Service began implementing a version of SPI in 2012 that utilizes elements of place-based policing, ILP, POP, and DDACTS.

This literature review consists of four sections: (1) situating SPI within policing initiatives developed over the past thirty years; (2) providing examples of the effectiveness of SPI initiatives; (3) the limitations of SPI; (4) a summary of this material.

2.1 Situating SPI within policing initiatives from the past thirty years

William Oliver (2006) separated the history of policing into five eras, beginning in the 19th century and continuing until the early 2000s: (1) traditional, (2) community, (3) problem-oriented, (4) zero-tolerance, and (5) homeland security. The purpose of identifying the five eras of policing is to be able to summarize and situate SPI within the dominant policing paradigms that preceded 21st century policing.

The goal of police departments during the *traditional* policing era was to reduce crime by enforcing the law in a reactive manner. The underlying logic of traditional policing is that the criminal code and the police are effective in reducing crime, so departments simply have to improve their service delivery. This led to an investment in patrol vehicles and efficient dispatch systems. During this era success was measured by reduced response times, crime rates, and clearance rates. However, this model of policing did not prove to be effective in reducing crime,² and the reactive nature of policing with officers isolated in their cars negatively impacted police-citizen relationships.

In the traditional model, the police were not able to build relationships with citizens who knew the most about crimes committed in their neighbourhoods. The perceived need to do this led to the next policing model - community-oriented policing.

Community-oriented policing (COP) sought to reduce crime as well as increase citizen satisfaction by establishing and maintaining relationships with citizens. As a result, building community police stations and increasing foot patrols were two staple

² The dramatic rise in crime rates beginning in the 1970s represented a significant challenge to the traditional model.

aspects of COP. Police departments invested millions of dollars in community police stations, increased foot patrols, and encouraged police-citizen anti-crime programs such as Neighbourhood Watch. Unfortunately, COP had ambiguous principles that made it difficult to evaluate. While some elements of COP remain – particularly the notion of working more closely with communities – its goals were largely unfulfilled (Broden & Nijhar, 2005).

During the 1980s problem-oriented policing (POP) also became a primary model for policing and was part of some versions of community policing (Scheider et al, 2009). Problem-oriented policing is a policing methodology proposed by Herbert Goldstein (1979) that attempts to reduce crime rates by dealing with the underlying problems that cause the crime in the first place. The logic behind POP is that the majority of crimes police departments deal with are recurring issues that are symptoms of larger problems. By understanding crime as a symptom of a complex problem, Goldstein argued that it is possible to sustainably reduce crime rates by dealing with the underlying problem as opposed to merely dealing with each incident in isolation. To accomplish this long-term crime reduction goal, John Eck and William Spelman created the SARA model. SARA is an acronym for: scanning, analysis, response, and assessment (1987). This is an iterative process that can be followed until crime rates have declined. A major benefit of the problem-oriented approach is that it provides police departments a model to follow and to immediately deal with crime as well as to reinforce the long-term benefit of engaging in the evaluation of their activities to optimize their use of resources.

POP does not specify particular tactics to reduce the crimes that been identified in the SARA process. However, one of the tactics that resulted from the process is hotspot

policing. Hotspot policing is based on four assumptions: first, crimes are not equally distributed within a city; second, crime hotspots are stable over long periods of time; third, unlike offenders, places have zero mobility; fourth, crime reductions in hotspots do not lead to crime displacement so these reductions will have an impact on overall crime rates (Braga & Weisburd 2012; Weisburd and Telep 2011; Braga & Bond 2008; Braga 2007).

The fourth era of policing is referred to as the zero-tolerance policing era that began in the 1990s and focused police resources on a specific criminal problem occurring at a specific time and place. Examples of this style of policing include broken-windows policing as well as stop and frisk tactics. The measure of success for this model was a reduction of the specified criminal activity by means of traditional policing tactics such as issuing citations or arresting individuals. The results of zero-tolerance policing are mixed, with some studies finding reduction in crimes, while other studies have found that zero-tolerance policing has been associated with straining relationships between police and minority groups (Greene, 2014).

The terrorist attack in the U.S on 9/11 was a watershed event that marked the beginning of the *homeland security era* of policing. Since 9/11, domestic police departments working with federal agencies have developed new relationships and tactics to help combat international terrorist threats in addition to local criminal activity. While the change has perhaps been greatest in the U.S., police departments in other countries, including Canada, have also focused efforts on anti-terrorism activities³.

³ For example, the RCMP has recently moved officers from areas such as organized crime investigation into anti-terrorism units.

Over the past 30 years there has been an unprecedented level of innovation in policing strategies and tactics. For instance: broken-windows policing, third-party policing, community-oriented policing, problem-oriented policing, Compstat, hotspots policing, evidence-based policing, intelligence-led policing, reassurance policing, and data-driven approaches to crime and traffic safety.⁴ Each of these policing strategies and tactics has typically been implemented in isolation from each other, with varying levels of effectiveness (Telep & Weisburd 2012; Lum, Koper, Telep 2011; Tuffin, Morris & Poole 2006; Weisburd 2004). Consequently, the police community perceives new strategies and tactics as transient because innovations are often short-lived. Therefore, police service members may not believe they should invest themselves in new initiatives because these initiatives may soon be replaced (Darroch & Mazerolle 2012).

Some criminologists have suggested that policing innovations ought to be built into existing practices as opposed to being implemented in place of previous policing innovation (Scheider, Chapman, Schapiro, 2009). SPI allows for researchers and police departments to amalgamate the best practices in policing because it promotes the use of evidence to guide police practice and organization. This differentiates SPI from many other policing initiatives since it allows researchers and police departments to develop systematic, operational guidelines that can be evaluated.

SPI began in 2009 as a response to police departments facing decreasing budgets and increasing service demands in the United States (Smart Policing Initiative, 2014).

An integral part of SPI is promoting the partnership between police and criminal justice

⁴ There is a good deal of overlap between these methods so they should not all be viewed as separate types of initiatives.

scholars for the purpose of implementing and evaluating evidence-based policing practices. This is an ambitious goal, since historically policing initiatives have been implemented without evidence, analysis, or an evaluation plan (Sherman, 2013; National Research Council, 2004). However, since 2009 a growing number of police departments have implemented their own version of the SPI initiative including: offender-based programs, place-based crime prevention, and data driven approaches to crime and traffic safety. According to Coldren et al (2013) five characteristics distinguish SPI from previous policing initiatives:

1. Locally Driven

SPI does not support a particular tactic or strategy but promotes an approach that uses local analysis to inform a proper response by police.

2. Promotes Rigorous Scientific Methodology

SPI promotes partnerships between police departments and researchers to increase the rigor of a police department's research and evaluation capabilities.

3. Multifaceted Approaches

Initiatives should be multifaceted, as research has found multifaceted tactics to be the most effective approaches to reduce crime.

4. Results Oriented

Partnerships are expected to produce results that the police department and/or other police departments can use to increase their effectiveness.

5. Promotes Innovation

SPI promotes the use of novel approaches to the reduction and prevention of criminal activity as well as the implementation of best practices in jurisdictions that have not previously utilized the existing evidence-based tactic

Coldren et al reviewed 39 SPI initiatives and found that impediments to a successful SPI initiative were: issues with the record systems of a police department; poor police partnerships; and a lack of organizational change by the police department trying to adopt SPI activities (2013).

2.2 Examples of the effectiveness of SPI initiatives

SPI in Winnipeg is based on three premises: first, there is a strong relationship between crime and place; second, there is a strong relationship between crime and traffic accidents/offenses; third, there is a strong relationship between focused deterrence and crime/traffic offenses.

The most effective policing strategies are focused, proactive, and multifaceted (Lum, Koper, and Telep, 2011). To sustain and improve police effectiveness and efficiency, a comprehensive philosophy and organizational model has to be implemented and development by a police department. Moreover, police are increasingly utilizing evidence-based policy and practices. SPI provides police departments with the conceptual and practical tools to develop and sustain effective and efficient policing practices. Since the inception of SPI in the United States in 2009, evaluation results from various police departments in the states have demonstrated that SPI is able to: (1) reduce violent crime (2) reduce traffic offenses/accidents (3) sustain crime/traffic reductions long term without displacing criminal activities to other parts of the city.

2.2.1 Relationship between Crime and Place

The traditional model of policing held that the faster police were able to respond to a call the more likely they were to apprehend the criminal responsible. Additionally, the traditional model of policing promoted random preventative patrol that argues that increasing the visibility of police (e.g. more cruiser cars) will decrease crime rates. Therefore, police departments sought to decrease response times and increase visibility. Thus, patrol units should be equally distributed within a city to decrease response times equally. However, the Kansas City patrol experiment found that changing the amount of preventive patrol in an area had no impact on crime rates or fear of crime (Kelling, Dieckman, Brown, 1974; Sherman & Rogan, 1995).

Since 1974, numerous studies have been conducted to establish the most effective patrol strategies for police patrol. Braga and colleagues conducted a meta-analysis of

hotspot policing and concluded that focused, placed-based policing strategies (e.g. hotspots) produced reductions in crime and did not result in displacement (Braga et al 2014).

Hotspot policing is based on findings that confirm what police have known for a long time - that crime is not equally distributed within a city. Sherman and Weisburd (1995) analyzed calls for service in the Minneapolis, St. Paul area over a one-year period in 1987/88. During this period, 50% of calls for service to the Minneapolis police force came from less than 5% of the city's addresses. For a later one-year period in 1988/89 police increased their patrol within 55 randomly-selected hotspots, while another 55 hotspots served as controls. Specifically, during the peak call times of 11 am to 3 am, police increased their patrol of these areas for 'dosage periods' of 3 hours per day. Additionally, 16 observers were placed in 55 hotspots by Sherman and Weisburd to monitor observed disorder for periods of time during the experiment. Citizen calls about criminal activity and observed crime and disorder were the two variables measured by Sherman and Weisburd to assess the effectiveness of the increased hotspots patrol. The results of the data indicated that there were "clear, if modest, general deterrent effects of substantial increases in police presence in crime hot spots" (1995: 645). Also, observed disorder was 25 percent less in experimental hotspots areas when compared to control hotspots areas.

Since 1995, subsequent research indicates that once established, hotspots are stable over long periods of time. Knowing that the majority of crimes occur in a small geographic area is of no practical use to police departments if these small areas are not stable over time. Weisburd et al (2009) conducted a study looking into the stability of

hotspots in Seattle over a 14-year period. They found that crime rates in 84% of the street segments in Seattle remained stable over time i.e. high crime areas remained high, while low crime areas remained low. Consequently, the researchers concluded that crime is the result of stable environmental factors. This is an important finding since it provides support for hotspot policing tactics. However, the authors also note that the stability of crime may also suggest the significance of systemic causes of sustained criminality. As a result, these findings also support problem-oriented policing that seeks to address the causes of crime.

2.2.2 Focused Deterrence and Crime

Focused Deterrence is an integral part of SPI and has been found to have a negative relationship with crime rates (Braga et al, 2008; Weisburd & Braga, 2006; McGarrell et al, 1999; Wilson & Boland, 1978). Generally, focused deterrence strategies i.e. pulling levers policing, are based on the evidence that a small number of individuals commit a disproportionately high number of crimes. Consequently, if police departments are able to stop these chronic offenders from continuing to commit crimes then overall crime rates will be reduced. Pulling levers policing involve police identifying a target population e.g. gang members that are committing a certain type of crime e.g. gun violence. Once police have identified a target population and a type of crime, they will engage with the target population by warning them that the type of crime that they are committing will no longer be tolerated and if they continue to commit these types of crimes then the police will expect particular punishments. One example of the pulling levers policing strategy is the Boston Gun Project that sought to decrease gang violence.

Operation Ceasefire was associated with a 63% decrease in youth homicides, 44% decrease in the number of youth gun assaults, and a 32% decrease in shots-fired calls for service (Kennedy, Braga, Waring, & Piehl, 2001). The effectiveness of strategy was attributed to law enforcement working with social services and community organizations, a multifaceted enforcement strategy, and continually engaging with the target offenders to communicate why they are the target of a focused deterrence strategy.

Data Driven Approach to Crime and Traffic Safety (DDACTS)

In January 2012, the Flint, Michigan police department (FPD) implemented a SPI initiative based upon DDACTS. From 2009 to 2011 the homicide rate in Flint doubled, and the city had high rates of aggravated assault, break and enter, robberies, and other weapon related crimes (Rydberg, McGarrell, Norris, 2014). Exacerbating the increasing violent crime rates were concurrent budget cuts to the Flint, Michigan police force. The number of uniformed officers went from 242 to 122 between 2003 and 2011. Because of its limited police resources and rising violent crimes, the Michigan governor provided the FPD with the technology required to implement a data-driven policing strategy beginning in January 2012. Subsequently, the FPD identified seven hotspot areas within Flint utilizing official crime report data along with traffic enforcement data/accident reports. It is important to note that the FPD began with 5 hotspots, which covered 21% of the city and only allocated a 14-hour window for police officers to patrol the area. Gradually two additional hotspots were identified and the patrol window went from 14 hours to 24 hours. Crime analysts identified each hotspot with GIS, while post-commanders of the FPD used the identified hotspots and subsequently came up with a patrol strategy within

the hot spot. The hotspots were larger than those used in most hotspot policing programs.

The FPD used a general deterrent strategy in which they increased patrol in the seven hotspot areas and utilized high-visibility patrol to reduce violent crime incidents. During the patrol time officers were asked to pull over as many cars as possible for traffic violations and to check the residences of individuals known to police to be involved in criminal activity. As a result, hotspots had an average of 74 traffic stops per square mile in comparison to 5 traffic stops per square mile in non-hotspot areas. Within hotspot areas, for every 100 traffic stops there were 95 verbal warnings, 17 fugitive arrests, and 14 misdemeanor or felony arrests. From January 2012 until March 2014 there was a 19% reduction in violent crime and a 30% reduction in robberies in hotspot areas compared to 7% and 2% respectively in non-hotspot areas (Rydberg et al 2014).

The evaluations suggest that the integrative conceptual aspects and the operational guidelines of SPI provide a promising way of addressing crime and traffic issues in an effective way. Previous policing operational models had various means of identifying/defining criminal problems. For instance, during the professional era the police utilized calls for service to identify problems and typically distributed patrol units equally to different areas within their jurisdiction. Alternatively, during the community era, the police attempted to augment calls for service data with data obtained from community members. A systematic review in 2014 found that the COP led to increased citizen satisfaction and legitimacy of the police although it had a limited in reducing crime (Gill et al, 2014). Many community policing programs are difficult to evaluate because program activities are ill-defined and/or ambiguous. Some police departments found it difficult to implement COP because their officers resisted moving away from the

traditional enforcement role.

SPI is an improvement over many earlier operational models because it promotes the use of data analysis, goal-oriented external partnerships, and operational changes, such as hotspot policing, into a police organization to support the implementation and development of focused, proactive, and multifaceted policing tactics and strategies. The methods of SPI are not novel. However, SPI can help to ensure that optimal policing tactics are utilized to address future crime and traffic issues by allowing the conceptual framework and practical operational guidelines to integrate best practices/strategies and to sustain organizational change.

2.3 Limitations of SPI

Three criticisms have been associated with SPI. First, that targeted policing strategies simply displace criminal activity; second, that police-citizen relationships are negatively impacted by implementing focused policing strategies; and third, that police organizations merely adopt the rhetoric associated with a policing initiative as opposed to implementing the necessary operational change. This section will discuss: (1) the evidence concerning crime displacement; (2) the impact of targeted policing strategies on police-citizen relationships (3) and the importance of leadership for successful police adoption of innovative operation models.

1)Crime displacement has not been found to be a consequence of focused, proactive, and multifaceted police strategies/tactics. Contrary to the belief that targeted policing tactics simply displace criminal activity, research has found that in most cases there is little to no criminal displacement with some studies showing a diffusion of

benefits.

For instance, Braga, et al (2012) evaluated a SPI initiative that took place in Lowell, Massachusetts. The Lowell policing strategy sought to reduce crime by reducing physical and social disorder in identified hot spots. Three disorder-reducing policing strategies were implemented by the Lowell police department: hot spots policing; situational prevention strategies; and social service actions. Increased misdemeanour arrest practices focused on stop and frisk techniques by means of increased foot patrols. Situational prevention strategies included improving lighting within hot spot areas, dispersing loiterers, cleaning up vacant lots, and, performing code inspections that required the police department to form relationships with community and business members. Finally, social service actions included connecting citizens with mental health issues with proper agencies, providing recreational activity for juveniles, and housing for the homeless. The results showed a 19.2% reduction in robberies, 17.3% reduction in violent crimes, and a 15.4% reduction in aggravated assault with no evidence of criminal displacement or diffusion.

A study by Ratcliffe et al (2011) evaluated a program in which hot spots and community-oriented policing frameworks were utilized by the Philadelphia police department to decrease violent crimes occurring in identified hot spot addresses and intersections. This policing strategy was initiated after a period in which the Philadelphia police department had recorded over 100 shootings every month from 2002 – 2008. In response, the Philadelphia police department implemented a proactive, foot patrol strategy that sought to decrease violent crime within identified hot spot areas by means of high-visibility patrol, building community partnerships, and situational crime prevention

measures that sought to change environmental aspects that were leading to violent crime. The officers placed on foot-patrols were told their primary mandate was to increase presence and visibility within hot spots areas. Treatment areas were subjected to a two-officer foot patrol team that was in the area for eight hours either in the morning or evening from Tuesday till Saturday. Officers were put through a one-week training program, which was provided by the PPD intelligence unit to familiarize them with their respective beat areas. The study found that reported violent crime incidents in treatment areas decreased by 23%. Moreover, the greatest decrease in violent crime was found in hot spots that were found to have the highest level of violent crime. Most importantly, diffusion of crime benefits to areas adjacent to treatment hot spot locations was found in all treatment areas.

While the evidence suggests that targeted policing initiatives are effective in reducing crime, the second critique of SPI suggests that such tactics may lead to poor relations between police and residents in high-crime areas. If this is the case, the crime reduction benefits may not justify the cost. Research has shown that focused policing tactics may lead to negative relationships between police and minority populations when they are not implemented with a clear goal that is articulated to community members living within the hot spot areas. In many communities, particularly in the U.S., residents of poor neighbourhoods made up predominantly of racial minorities distrust and fear the police because of negative previous experiences with them. These citizens may not participate in policing initiatives because of this distrust and fear and/or because they fear the crime reduction mandate of a police department (Kitchen, 2007). Unfortunately, some police departments view this as apathy on the part of residents of high crime areas. This

division between police and citizens may be exacerbated if a targeted policing strategy is not designed and managed properly by a police department (Braga & Weisburd 2010) because the increased presence may be viewed by residents as a form of harassment.

Research has found a relationship between the effectiveness of a police department and citizens' perceptions of the legitimacy of that police department. Simply put, if a police department cannot secure legitimacy from the public then the effectiveness of their policing strategy will suffer. Braga and Weisburd (2012) conducted a systematic review of all the available literature available on place-based policing initiatives. The findings conclude that residents of high-crime areas where the police have used a targeted police presence are supportive of increased patrol and police interactions for the purpose of crime reduction and security of their neighbourhood. Unfortunately, it is not known how long residents are willing to cooperate with targeted police patrols to decrease crime rates. One explanation is that a misconception exists that the public's positive perception of police is only contingent upon the ability of the police to reduce crime. Contrary to this belief, research has concluded that fairness and equality during police-citizen interactions has a stronger relationship to citizen's positive perception of police and consequently police effectiveness (Weisburd & Braga 2012; Crank et al, 2011). SPI promotes the use of objective data to justify increasing the presence of police in an area as well as guidelines concerning how to develop meaningful relationships with citizens. Being open with the public about the meaning behind police actions and direction has been found to help increase legitimacy of a police department (Mazerolle et al 2013). However, these operational principles are not always adopted into the daily operation of police departments.

3) A final potential criticism of SPI is a more general problem with attempts to change policing tactics. Changing police culture has been likened to ‘bending granite’ (Guyot 1979). Due to the high frequency and turnover rate of different innovations in policing over the previous 30 years, many police officers have adopted a passive mentality pertaining to novel strategies/tactics (McClure, Levy & La Vigne 2014). Consequently, police critics argue that novel police tactics may only be adopted symbolically by some departments without any change to their daily operations or organizational goals (Manning 2007; Cordner and Biebel, 2005). For instance, Deukmedjian and Lint (2007) found that conceptual confusion was the cause of delaying implementing Community Oriented Policing (COP) in the RCMP for 2 years. Once COP was implemented supervisors were not using logically consistent measures of success for police officers. For instance, arrest rates were still being used as a measure of COP effectiveness without linking this goal to any particular COP activity. Unfortunately, research has found that police departments have utilized the rhetoric of previous policing models e.g. COP and POP without taking meaningful action (Maguire, 2009; Cordner & Biebel, 2005). However, research has found that novel policing strategies/tactics that are most similar to the incident-driven, reactive, models of policing that maintain police sovereignty are most likely to be successfully adopted by police departments (Ratcliffe & Guidetta, 2008; Braga & Wesiburd 2007). In other words, novel policing strategies that require the least change in daily operation by the police are more likely to be adopted. Consequently, police departments will continue with the same policing model they have been using under the rhetoric of the new operational model (Ratcliffe 2002). Therefore, if a police department does not have a clear understanding of the new model or lacks the

resources to implement a new operational model, then it is likely that the model will ultimately fail. Ratcliffe argues that in the long-term a lack of understanding of an operational model may lead to an inability to: identify suitable technological advances; develop uniform training for new and existing officers; and have a uniform system in place so that skills are transferable between districts and units of a police department (2005). Without a clear link between police activities and outcomes it is nearly impossible to identify best practices within an organization that may be replicated in other sites that are experiencing similar crime and public safety issues. Unfortunately, SPI has been found to have been poorly implemented in certain sites across the U.S due to ambiguous implementation of the plan that did not outline the resources, activities, and outcomes of the model prior to the start of the strategy or tactic (McClure, et al, 2014). However, research has found that the most effective means of implementing operational change is strong leadership that provides clear goals, activities, and support/reinforcement through the ranks of the department as well as increasing the research/analysis capacity of police departments (Darroch & Mazerolle 2012; National Research Council 2004). Therefore, SPI relies on strong leadership and research/analysis capacity to enhance its chance for success.

2.4 Summary

The goal of SPI is increase the quality of life for citizens by reducing crime and traffic problems. To accomplish this goal, SPI promotes the implementation and development of focused, proactive, and multifaceted approaches to reducing crime in accordance with evidence-based practice. A unique aspect of the SPI initiative is

promoting police partnerships to conduct cyclical analysis⁵ and to evaluate best practice research. Evaluations have shown SPI initiatives to be effective in reducing crime/traffic problems without displacing crime or negatively impacting police-citizen relations. In spite of these promising results, not all SPI initiatives have been successfully adopted by police organizations. Changing police culture has been likened to bending granite due to resistance from service members and requiring strong leadership. Additionally, police departments have been found by researchers to have insufficient record systems and software packages, as well as a lack of personnel with the skills required to effectively analyze data to implement evidence-based practices. SPI is a promising policing model that requires further research into organizational influences upon successful SPI initiatives as well as the application of this policing strategies in countries, such as Canada.

⁵ Cyclical analysis is one that will utilize the results of an initial analysis to adapt and develop the model and repeat. The purpose of a cyclical analysis is to consistently utilize the results of an initial model until the problem the model sought out to address has been resolved.

3 Methodology

Qualitative and quantitative data will be used in this thesis. The quantitative data will be provided by the Winnipeg Police Service and will include monthly records of service member activity as well as crime rates in ED and the rest of the city from Jan 2008 until May 2016. The qualitative data were collected during 20 face-to-face interviews conducted with WPS service members from ED. This chapter will discuss the process and impact evaluation questions for this thesis, and the data collection and analysis methodology.

3.1 Qualitative Research Design

In-person interviews were conducted with service members from the general patrol unit, community service unit, divisional crime unit, as well as crime analysts, unit supervisors and the ED inspector. The interviews were semi-structured and separate interview guides were created for front-line officers, supervisor/management positions, and crime analysts.

3.1.1 Topics for Qualitative Data Collection

Darroch and Mazerolle identified seven themes that either hindered or facilitated the innovation uptake of an intelligence-led policing initiative implemented by the New Zealand Police department. Due to the limited research available on the topic of variables for innovative uptake, Darroch and Mazerolle's seven themes for successful innovative uptake will be utilized to analyze the qualitative data for this project. The seven themes

are: 1. goals; 2. boundaries; 3. leadership; 4. formalization and management style; 5. innovation; 6. culture/interconnectedness; 7. commitment and will be discussed in detail below

Goals: Valid measurement of the impact of programs may help to legitimize and increase the effectiveness of a program. Additionally, clear goals that are logically consistent with the activities and resources of an organization are important to the success of a program. Therefore, it is important to establish if ED service members understand the goals of the SPI initiative. Goals help to organize and to focus the efforts of service members and to avoid ambiguous and ineffective activities/partnerships. Establishing goals that are logically consistent with a program's activities and resources allow for accurate evaluations.

Boundaries: Boundaries are defined as the extent of organizational barriers to creating partnerships with external organizations, government departments, and/or community groups. For instance, partnerships with academics to aid in the adoption of novel policing strategies. Suspicion, social isolation, and group loyalty are factors that influence a defensive police culture in relation to external organizations (Pearson-Hoff & Herrington 2013 & Paoline 2003). For example, during the professional era of policing, the 1920s through the 1970s (Kelling and Moore, 1988), police departments sought to secure exclusive control of crime related issues. However, recent research has found that multi-sectoral, focused approaches are the most effective means of reducing crime (Weisburd & Eck, 2004). Consequently, policing initiatives during the past thirty years have increasingly involved police departments forming external partnerships and constructing multifaceted crime reduction strategies. However, rigid boundaries have

been found to inhibit innovative uptake of novel policing strategies. Understanding boundaries to forming internal and external relationships is significant due to its influence on the effectiveness of SPI.

Leadership: Leadership influences the daily activities and conduct of officers (Pearson-Hoff & Herrington 2013). However, there is limited research on the relationship between policing leadership and innovation uptake. The research on police leadership has found two forms of leadership qualities - transactional leadership and transformational leadership. Transactional leadership involves a top-down relationship between supervisors and front-line officers that revolves around monitoring the completion of tasks (Bass 1990). Transformational leadership may be characterised by development and growth by means of support and inspiration between a supervisor and front-line staff members (Mastroski 2004). Transformational leaders are more conducive to innovation. This thesis will investigate if ED supervisors tend to be more transactional and/or transformational in their leadership style.

Formalization: Formalization is defined as administrative activities that limit the police officers' use of discretion (Darroch & Mazerolle, 2012). For instance, having rigid procedures to be followed without question or input from officers while conducting their daily activities. Researchers argue that rigid formalities that stunt police discretion are an impediment to innovation (Pearson-Hoff & Herrington 2013; Wood et al, 2008). SPI provides extensive information to individual officers which they can use to guide their proactive work. For example, officers can get information about high risk individuals' release conditions and residence that was not readily available to service members before SPI. Consequently, SPI should increase the ability of service members to use their own

discretion while engaging in proactive policing. The thesis will examine the degree to which members are allowed to use this discretion as well as their willingness to do so.

Innovation: For several decades, some police departments have used data-driven approaches to increase the effectiveness and efficiency of their departments. However, research indicates that when police departments do adopt new technology it is typically integrated into traditional policing models as opposed to creating novel approaches to address crime and traffic issues (Weisburd et al. 2003). This thesis will examine whether SPI influenced the development of innovative strategies and technological innovations.

Technology: Refers to the any system(s) that are utilized to help accomplish an occupational goal. Increasingly, IT is being integrated by various public and private sector organizations and institutions to augment their organizational efficiency and effectiveness. Pertaining to police organizations, technological advancements have been continually adapted by police departments throughout history e.g. problem-oriented and homeland security era to help with officer/citizen safety or to help police organizations to obtain operational goals/priorities efficiently and effectively. However, research has found that the adoption of new technology by police has not always had a direct impact on their organizations efficiency and effectiveness. While studying the uptake of Intelligence-led policing by the New Zealand Police Department, Darroch and Mazerolle found that the two primary reasons technological advancements do not lead to improved effectiveness and efficiency is because of data quality and data flow. Consequently, this thesis will examine if technology influenced the uptake of SPI in ED.

Culture/Interconnectedness: Research into police organizations suggests that police culture may impede the adoption of innovative policing techniques (National

Research Council, 2004; Ratcliffe & Guidetti, 2008). Furthermore, Manning argues that police departments may adopt an innovative policing rhetoric without changing their daily behaviour (2007). One explanation for this is that police culture often favours traditional policing strategies/tactics. In this thesis, I will examine the support for SPI expressed during interviews with ED members and augment these findings with quantitative data pertaining to SPI activities.

Commitment: The commitment to the SPI initiative by managers as well as by front-line service members is crucial in ensuring the successful use of SPI activities. The SPI initiative in ED requires significant organizational changes, such as new positions and technological innovations, and consequently an increase in the possibility of impediments to its successful uptake. Therefore, it is important to gather data regarding the difficulties of implementing SPI as well as to determine whether or not these difficulties have been addressed.

3.1.2 Qualitative Evaluation Questions

While there is limited research on the topic, a previous evaluation of the implementation of intelligence-led policing by the New Zealand police department was used to draft the thesis questions (Darroch & Mazerolle, 2012). The process evaluation questions include questions on the goals, management style, technologies, innovative uptake, commitment, culture, boundaries, and formalities. The table below outlines each concept, question, and data source.

Relevant Concept	Question	Data Source
1. Goals	What are the short and long-term goals of SPI?	Front-line, supervisors, and crime analysts
2.a Boundaries	<p>In your opinion, does SPI facilitate cooperation between all service members in ED?</p> <p>Does it also facilitate cooperation with community members, businesses, and/or government agencies?</p>	Front-line, supervisors, and crime analysts
2.b Boundaries	As a member of ED, do you feel part of a team working towards the same goal? If so, how?	Front-line, supervisors, and crime analysts
2.c Boundaries	Does it also facilitate cooperation with community members, businesses, and/or government agencies? If so, how? Do you have an example?	Front-line, supervisors, and crime analysts
3.a Leadership	<p>1) Does SPI provide guidance for tasks to be completed with your downtime?</p> <p>2) Do your superiors check to see if you are completing SPI tasks during your shifts?</p> <p>3) Are the expectations of your performance made clear to you?</p> <p>4) As a member of ED, do you feel part of a team working towards the same goal?</p> <p>5) Are you supported by</p>	Front-line and crime analysts

	<p>your superiors for achieving activities related to ED goals?</p> <p>6) Do your supervisors provide motivation/inspiration for you to achieve the goals of ED?</p>	
3.b Leadership	Is SPI best suited for guiding police officers to accomplish tasks or does it facilitate the growth of officers professional development?	Supervisors
4.a Formalization	How formally or informally are your daily duties structured? Has SPI influenced your daily activities?	Front-line, supervisors, and crime analyst
4.b Formalization	How are your goals established and accomplished? Does SPI facilitate this?	Supervisors
4.c Management Style	Is management accessible to all members of the service to help solve any problems ED is facing? Does SPI influence this at all?	Front-line and crime analysts
5. Innovation	In your experience, is ED open to innovation or trying new tactics/activities?	Front-line, supervisors, and crime analyst
6. Culture/Interconnectedness	In your opinion, how has SPI influenced formal and informal discussions of ED Service members?	Front-line, supervisors, and crime analysts
7. Commitment	Have you noticed any barriers to the implementation and ongoing SPI initiative? If so, what were they and how have they been addressed?	Front-line, supervisors, and crime analysts

3.1.2 Qualitative Data Sources

Selection of participants: A convenience sample was utilized for this for recruitment in this study. The service members of ED are the population of this study. The inspector of ED selected front-line as well as supervisor/management officers based upon their willingness and availability to participate in an interview. Once a participant agreed, a time was established to conduct the interview in the conference room of the ED station. It should be noted that due to the sampling method of this thesis there are limitations for the generalizability of the results to other members of ED.

Each of the 20 interviews took place at the East District station and was approximately forty-five minutes in length. I interviewed the district inspector, the ED crime analyst, the ED SPI coordinator, and three unit supervisors as well as 14 general patrol members. At the beginning of each interview the respondent was provided with a description of the purpose of the interview. An informed consent sheet was provided to ED service members who also received a verbal description of the informed consent sheet and a statement of the option to withdraw their participation at any point during the interview. The participants were informed that their responses would be kept confidential and that there were no occupational repercussions for withdrawing their participation in this study. A digital recorder was used during each interview, with the consent of the participant. The interviews were subsequently, uploaded and transcribed on the primary researcher's locked computer.

3.1.3 Qualitative Analysis

All interviews were transcribed using the transcription program Express Scribe. Subsequently, the transcribed interviews were separated into three categories; front-line officers, supervisors/Inspector, and the crime/SPI coordinators. Finally, all responses will be categorized based upon the eight main themes outlined by Darroch and Mazerolle.

3.2 Quantitative Research

Randomized controlled trials (RCT) are referred to as the gold standard of program evaluation methodologies. Knutsson and Tilley (2010) argue that RCT are difficult to apply to social scientific experiments, especially criminal justice evaluations, due to ethical and/or political restraints. An RCT was not possible in this case because it was district-wide and it would not have made sense to randomly assign one of the other three districts as two of them are very dissimilar to ED. Therefore, a quasi-experimental design will be utilized to assess SPI. The study will collect several years of data before and after the implementation of SPI and results will be compared with West District (which is similar in many respects to East District) as well as Downtown and the North districts. The Winnipeg Police Service has 1425 sworn members. There are 4 police districts in the city:

District 1 (Downtown)	212 members
District 2 (West)	175 members
District 3 (North)	173 members
District 4 (East)	174 members

According to an environmental scan conducted by the Winnipeg Police Board (2016:6) the districts have the following characteristics:

District 1 (the downtown core)

- Smallest population of any district at 61,423
- Highest percentage of lone-parent families
- Highest percentage of single people at 43%
- 66% of dwellings are apartments

District 2 (West of Red River)

- Population of 245,396
- Largest population aged 65 and over
- Family structure is largely married couples
- 60% of dwellings are single-detached houses

District 3 (North of Downtown, between East and West district)

- Population of 132,796
- Highest average number of persons living in a private household
- 68% of dwellings are single-detached houses
- Highest percentage of people whose mother tongue is a language other than English

District 4 (East of Red River)

- Population of 249,754
- Similar demographic profile as District 2

In addition to their demographic similarity and population size, East and West Districts also have similar crime statistics (Table 2). The district populations are nearly identical so rates are not presented.

Table 2: Number of violent and property crimes in ED and WD in 2013

	Number of Crimes in 2013	
	Violent Crimes	Property Crimes
East District	1437	6685
West District	1488	7332

District 4 (also called East District – or ED) was selected as the first district to adopt the SPI approach. The impact of SPI will be measured by comparing it with District 2 (also called West District – or WD) which is a naturally occurring comparison area. ED and WD cover comparable geographic areas, contain comparable populations, and have comparable police resources. Statistical comparisons will also be made with the rest of the city.

SPI Activities:

In addition to the analysis of crime and traffic accident data, this thesis will also use the monthly records of SPI related activities as an indication of ‘buy-in’ from ED service members. This is important because research into policing has concluded that police may adopt the rhetoric of a new initiative but make no practical change in their daily operations. All SPI activities are conducted voluntarily by officers and have been recorded by the SPI coordinator on a monthly basis since its inception⁶. These data can be

⁶ For instance, officers pulled over a stolen vehicle identified within a hotspot

used to determine the extent to which ED service members have adopted SPI into their daily activities as police officers.

3.2.1 Definitions for Quantitative Data Analysis

SPI Activity Tools in the SPI “toolkit”—including SPI Hotspots, SPI Subjects, and SPICOMs—are proactive because they are strategically guided by available data and are officer-initiated. Further, they allow more productive use of discretionary time, such as conducting compliance checks when officers have time available in an area with several high-risk individuals. Additionally, spot checks, traffic stops not resulting in an arrest, compliance checks, special attentions, and park and walks are quantitative measures of police proactivity as well as indicators of the degree to which ED service members’ “buy-in” to the SPI initiative. All SPI activities are quantitative measures of ED service members’ acceptance of the SPI philosophy because of their voluntary nature. SPI activities are not mandated activities for ED uniform members to perform. On the contrary, SPI activities have been presented and implemented by ED management as a set of tools that ED uniform members are able to utilize by using their own discretion.

1) SPI Activity: These are self-initiated activities (field events) that front-line service members utilize in response to the analysis of crime, traffic or community related

while on patrol. After identifying the driver, the officers found a large amount of drugs in the vehicle for the purpose of sale. This traffic stop and arrest was subsequently recorded as a SPI traffic stop, since it was an activity instigated by the officers while patrolling a hotspot.

information and intelligence disseminated by ED crime analyst, detective unit of interest (divisionally directed) including; public complaints concerning traffic, hangouts, or any area of concern that are identified as an emerging crime, traffic or community problem.

SPI Hotspots: Any proactive initiative relating to a specific place of interest including: public complaints concerning traffic, hangouts, or any area of concern.

SPI Subjects: Any proactive initiative relating to a person of interest (divisionally directed) including; any wanted persons, curfew checks or compliance checks on any court ordered conditions.

SPICOMs: Are used by the Community Support Unit members only when conducting proactive policing issues and concerns. This includes meetings and contacts with community leaders, schools, and groups.

In addition to the three SPI activities, ED has periodically conducted SPI Max Projects (SMP). SMPs are conducted when a systemic problem has been identified by the Inspector, supervisors, and crime/SPI coordinator and there are adequate personnel to carry out the SMPs. Consequently, SMPs are not regularly scheduled and vary from year to year in frequency. ED managers utilize all available resources in the district and conduct each SMP for approximately one month. The primary reason for conducting SMPs is because certain areas with chronically high levels of crime or a sustained and

significant increase in crime require increased police presence to help reduce high levels of crime.

2) Proactive Activities: These measures provide insight into the extent that officers are moving away from a primarily reactive model of policing to a proactive model of policing, which is the primary goal of SPI. Each of these activities is self-initiated by ED service members during their shifts and may or may not be related to a specific SPI activity.

Compliance Check: A compliance check occurs when an ED service member ensures that an individual is abiding by their court ordered conditions of release. Generally, these take the form of a curfew check to ensure that an individual is residing at a court ordered dwelling during a specific time frame. Before SPI, ED supervisors did not have an effective way of organizing and disseminating information pertaining to high-risk offenders' compliance with court ordered release conditions, such as curfews. However, the assignment of a SPI coordinator to East District provided a way of accomplishing this goal. The SPI coordinator identified high-risk offenders with serious criminal activity who resided in East District. SPI bulletins were not issued – rather a link to Niche (the WPS data records management system) was created that allows officers to access these lists in the cruiser car on their laptop or via the station desktop computers. These lists are broken down by cruiser car area. Officers are provided with up to date information on the residence and curfew times of these individuals.

Special Attention Checks (SPATs): During a patrol, an officer may have intelligence or information to investigate a specific place. If an officer notices suspicious activity that justifies further investigation, then they will be conducting a SPAT. SPATs differ from SPI Hotspots in that SPAT's are not guided by any specific analysis, while SPI Hotspots are directed at specific addresses or locations that have been identified by the ED SPI coordinator based upon crime patterns. SPAT's are "self-dispatched" field events in which members employ solutions on their own initiative to problems they identify prior to any analysis. Subsequent intelligence may lead to a Bulletin. Spot Checks are defined by ED as a proactive police activity. However, these are not SPI measures, because they do not require a SPI bulletin to use them.

Spot Check: Spot checks occur when a police officer identifies and makes contact with an individual in relation to a specific crime being investigated.

Park and Walks (PAWKs): Park and walks are simply when police officers park their cruiser car in an area and proceed to operate on foot within a specified geographic area or location. PAWKs are a unique activity which places uniformed members in direct contact with citizens in a non-enforcement context. This is a beneficial activity because these in-person contacts with uniformed members of a police service are rare for citizens. Therefore, this provides officers with an opportunity to establish a positive experience with citizens.

Traffic Stops (T STOPS): Traffic stops occur when a motorist is pulled over by an ED service member for violating the Highway Traffic Act.

3) Measures of enforcement:

Traffic citations (PONs): The number of traffic citations issued by all ED members regardless of SPI activities.

SPI Spot check Arrests: These are proactive arrests made by officers not relating to a traffic stop or call for dispatch. These may include SPI and non-SPI proactive arrests.

SPI T-stop Arrests: These are Proactive arrests that are the result of a T-stop. These may include SPI and Non-SPI proactive arrests.

Each of these three measures is a form of proactive enforcement because they are not related to calls for service and are the result of uniformed officers' self-initiated activities. Although TSTOPS and PONs are not directly related to SPI strategic allocation of police resources, they are a form of proactive policing. Therefore, they are all indications of a shift from reactive policing to proactive policing activities by ED personnel.

3.2.2 Quantitative Data Sources

Monthly crime and traffic rate data was collected in July 2016 and included data from January 2008 until July 2016 for the East and West District. Since the implementation of SPI in May 2012, frequency counts were made for various measures and amalgamated for each of the three units from the district including general patrol, community support, and divisional crime units. Consequently, Excel files have been kept with crime rates as well as SPI activities that represent total crime and SPI activities in the district. Police activities are recorded in cycles. Each cycle consists of four weeks that begin on a Sunday and end on a Saturday.

3.2.3 Quantitative Data Analysis

Both frequency tables showing percentage reductions among the policing districts and linear regression will be utilized in the impact analysis for this project. The types of crime and traffic incidents included are:

Property Crime: Arson, Break & Enter, Possess Stole Property, Motor Vehicle Thefts, Theft – over \$5000 (non-motor vehicle), Theft - \$5000 or under (non-motor vehicle), Fraud, Mischief.

Violent Crime: Homicide, other violations causing death, attempted murder, aggravated sexual assault, sexual assault with a weapon, sexual assault, other sexual offenses, aggravated assault, assault with a weapon/cause bodily harm, common assault, all assault against peace officer, all other assaults, firearms offenses, all robberies,

kidnapping/forcible confinement, all abductions, extortion, criminal harassment, uttering threats, threatening/harassing communications, commodification of sexual activity, other violent crimes.

Although a time series analysis may be conducted utilizing these data points, the results will not provide the optimal information to answer the research questions related to the impact of the SPI program. Alternatively, a linear regression analysis will allow for a comparison of means between the two naturally occurring comparison groups of ED and WD. The impact analysis portion of this thesis is best served by comparing the crime rates between ED and WD since they are comparable on the basis of geographic size, demographics, crime and traffic types/rates, and police resources. Furthermore, ED implemented their version of SPI in 2012 while WD did not begin to implement a limited form of SPI until 2015. Consequently, this has provided a naturally occurring comparison group that a linear regression analysis may utilize to compare the two districts and to assess the effectiveness in the SPI program.

Summary

The purpose of using a mixed methodology is to illuminate information about the process and impact of the SPI initiative in the ED of the WPS. Qualitative data was collected by conducting 20 interviews with front-line and management staff of the WPS. Statistical analysis focused on crime, traffic, and SPI activities in hotspots that were subjected to SPI initiative activities. Chapter four will discuss the results of the qualitative and quantitative data analysis.

Chapter Four

4.1 Qualitative Analysis of the Smart Policing Initiative

The success of the implementation of SPI was measured utilizing the criteria of goals, boundaries, formalization, leadership, management style, innovation, culture/interconnectedness, and commitment. In the interviews, questions were asked measuring each of these dimensions. Through this chapter *few* refers to 0 - 4 respondents; *some* refers to 5-10 respondents; *most* refers to 11 – 21 respondents.

Goals

The interviews indicate that GP members, analysts, and supervisors all agree that crime reduction is the primary long-term goal of SPI. However, the three groups each had unique perspectives on the short-term goals of SPI as well as on the parameters of how SPI may be utilized to fulfill community goals (e.g. crime reduction and increase feelings of safety) as well as organizational goals such as buy-in and effective and efficient use of limited police resources.

General Patrol Members

Most GP members state that there are no differences between the short and long-term goals of SPI. Reducing crime is both the short- and long-term goal:

“I think that the long and short-term goals are pretty much the same. Really what it comes down to is proactive policing. [partner] I would tend to agree” (GP2).

GP members understand that SPI utilizes proactive policing to achieve its goal of

reducing crime. It is important to note that GP members understand that proactive policing entails taking direct action that mitigates against future criminal activity. GP members indicated that they have to conduct proactive work in between responding to calls for service from the queue due to the high volume of calls for service and inadequate staffing. If they have uncommitted time, they will carry out actions such as high visibility patrol within hot spots or curfew checks on high-risk offenders:

“We are front-line officers, so we are obviously tied to the queue...our main priority is to respond to calls for service. While if we have the time, we will patrol these high crime areas or while we have free time while we are still working we will do that type of thing.” (GP2).

“We don’t really have the capability to come in everyday and say hey today this is what we are focusing on since we are attached to the queue, so those calls are always first. If there is any downtime and with short staff it is few and far in between we don’t really have a lot of those opportunities per se” (GP2)

While SPI activities are not novel policing tactics, most GP members believe that SPI provides them with direction in conducting these activities in high-crime areas and on high-risk individuals to reduce criminal activity. However, a few GP members said they do not need SPI to tell them where hot spots are in their district:

“In my previous experience before SPI came out...we were doing something to

this extent already, it was based on your own observations or reading through the arrests and finding areas that are concerning and then you will go and check those areas” (GP3).

Despite this officer’s view, most officers agreed that having the information contained in SPI bulletins and provided to them does save them time in identifying high-risk individuals and high crime areas to focus their attention upon.

SPI and Crime Analysts

The SPI coordinators and the Crime analysts mentioned that the goals of SPI are best understood as mutually reinforcing goals for the WPS as a service and the communities they protect and serve. The analysts state that the short and long-term goals of SPI are to reduce not only crime, but also calls for service and traffic incidents:

“You want to have a reduction in crime, a reduction in traffic incidents, reduction in calls for service, and an increase in the perception of safety in the community and that is the overall goals of SPI, long-term and short-term” (crime analyst).

The primary function of the service understood by most ED members regardless of rank is that they serve the community by reducing crime through enforcement tactics and by keeping citizens safe as well as by informing citizens about their efforts to reduce crime in their area. Some supervisors and the SPI coordinators believe that that another primary goal of SPI for the community is to improve the relationship between the police and

citizens in Winnipeg:

“...we can achieve our long-term goals, which is to reduce crime and to build relationships between the police and the public. That separation, the anxiety of people seeing the police...you kind of want to reduce that anxiety and make us more approachable and doing that allows for more freedom of information and exchange of information. We definitely don’t have enough police to stand on every street corner in the city, we rely on the public a lot and I think our long-term goals are to build those relationships...and by building those relationships I think we are going to reduce crime” (SPI coordinator).

The intent of improving the relationship between police and citizens is to make police officers more approachable and more aware of community safety initiatives that the police could assist with. The divergence between crime-focused community engagement and partnership community engagement will be discussed further in the culture section below.

The internal goals of SPI are to promote the autonomy and development of all WPS members’ skills as well as to increase the ‘buy-in’ of WPS members. Pertaining to autonomy and development, the analysts believe that providing up to date information for GP members in their SPI suppression folders for subjects, places, and traffic promotes autonomy for officers who can choose their preferred activity:

“I think SPI allows you to do that [autonomy] because it gives you some choice and any one of those choices whether it is getting out of your car and going to kick the soccer ball around with some kids or checking someone on a curfew...there are so many different options” (SPI coordinator).

Moreover, GP members are able to develop their skills by engaging with SPI activities/projects and working with other units to acquire further skills for their chosen career paths:

“If you are interested in criminals and crime here are the people that are committing those kinds of things in our area, you have a choice as to which direction you want to take that and you can improve those skills or pick up skills that you may not have and as a recruit” (SPI coordinator)

For instance, GP members who would like to apply to the Major Crimes Unit will be able to focus on SPI subjects and hot spots to learn how to execute search warrants and perform surveillance upon suspected drug houses.

Finally, to achieve buy-in from the service, the analysts believe that it is important to show service members the crime reduction results of SPI, and make it as easy as possible for service members to engage with and to contribute to the SPI projects and activities:

“They [ED members] would like to know, because before when they would address these bulletins, they would respond to it, they never had feedback...so they don't know, did we do anything? This actually tells them hey look at that, you went in there, saw a problem, you addressed it, the problem declined, so very, very simple, but you have confirmation that you are doing your job well and a lot of times in policing you don't get that confirmation...” (crime analyst)

ED Supervisors

Supervisors believe that there are several short-term goals of SPI. Externally, the goals of SPI are to reduce crime as well as to increase community engagement:

“I think for me at least I think it was to reduce crime, displace crime, and have more of an engagement with the community” (Supervisor),

The internal goal of SPI is to become more proactive as a service:

“We are changing the culture of policing and it is back to getting out there and being more proactive than reactive and that's taking a bit of changing of attitudes in order to get there...I know that we are heading in the right direction it is just a matter of how long is it going to take to get there”, “You hear guys going to Jason and saying how I do this or how do I do that or this is in this folder should it be here? Jason's the guy to talk to about that, but they are interacting with him and they are looking for more...they are trying to find more knowledge and that is a

really positive thing” (Supervisor).

All supervisors believe that facilitating the culture shift or ‘buy-in’ of SPI as well as the standardization of SPI across the service is the primary goal for them as leaders within the WPS:

“I think that the short-term goal overall for the development of the program is to be able to get the rest of the divisions on board as to where we’re at right now at the ED. We need to be standardized throughout the service, so the short-term goal now is to make sure that the same reports that we are using here at ED are the same reports that are going to be used in Division 11, District 2, so that any member going to any place within the service they are going to see the same product. It is almost like going to get a coffee from Tim Hortons, it doesn’t matter which one you go to...” (Inspector)-

Further, all supervisors indicated that they wanted to be proactive as a service by focusing on mitigating emerging crime trends that were identified by crime analysis:

“I think the long-term goals with respect to the SPI program is for members to be able to come in and that’s going to be an everyday occurrence with them is ... OK what are we doing with SPI and how are we going to tackle the problems today? Then they are going to go to the computer and they will see the hot zones and the individuals that we are looking for and it will be common practice for them. So,

the long-term goal is to get everyone in the service to use SPI programming to be able to identify those areas of concern and get them pointed in the right direction so it becomes common place in their everyday work” (Inspector)

Therefore, supervisors and analysts understood that proactive crime reduction entails not only increasing specific SPI activities, but also involves taking action based on the available data and preventing further crimes from occurring by responding to emerging crime trends.

Commitment

All members interviewed agreed that the goals of SPI have not changed since its inception in ED which indicates a strong level of commitment to the program. Most GP members stated that they were initially hesitant about SPI when it was introduced in ED because they didn't understand how SPI would change their daily operations and what the rationale was behind the SPI program:

“Yah, I mean when it started out...nobody knew what to do, like the guy in the street didn't (know) how to act, they didn't know what was expected of them, what SPI was about” (Supervisor).

For instance, “we were told in uniform when we were 89 [SPI car] we were put in plain clothes with like raid vests, I don't know if you guys did that or, I mean in District 3 that is how we started in just plain clothes and the different vests on...but a lot of people weren't buying into it, they were like what do you want us

to do here, I don't get it...go pick up people on warrants? What do you want here?" (GP5).

Most GP members initially believed that SPI was simply a means of documenting the activities that they had been doing for their entire careers. However, through the efforts of supervisors and the SPI coordinators, GP members were educated about SPI. This is important because the support and education provided by the supervisors and the SPI coordinator are indicative of the district's commitment to developing the SPI program and ensuring their officers were able to utilize the resources provided by SPI to become a more proactive district:

"I mean before if you ever wanted to know, you had to search out yourself to see if calls for service in certain areas, or crimes in certain areas you would have to do that on your own whereas now it's the numbers are there and...I think a lot of...police officers probably doing a lot of this before, prior to SPI and it just maybe wasn't being documented properly, just because we weren't keeping track when I mean...even though you go call to call or you're between calls it doesn't mean you are not doing anything. You are driving around and we knew where the problem areas were then too...maybe we were not aware of specifically that break-ins are happening in this area. Now we are, but before we are still hitting those problem areas, but that time you were spending wasn't being accounted for in any way. It wasn't being documented that down time whereas now it gets accounted for" (GP5)

Specifically, GP members understood that the resources provided by SPI allowed them to become more focused in their activities and to better share information with their peers and between units in ED:

“I think it is helpful to have the documentation, it’s...to touch on what my partner was talking about earlier there, in your travels you are talking to people and getting to know them and this stuff is happening in that area and it is just really informal in passing and you kind of hear that stuff from people out on the street or from co-workers whereas SPI almost seems to kind of formalize it and kind of make it a permanent document and I think it...becomes more widely known. I would think that it’s that, that information is shared and you know if you want to find the information it is there it is available for you to look up and to find as opposed to...who did I talk to again about whatever and you know it just seems to organize it and kind of make it more of a formal process I guess. (GP4)”.

However, the results of the interviews with the supervisors, GP members, and the SPI/crime analysts indicate that district wide buy-in is a primary goal if SPI is to continue to develop. The implementation of SPI across the WPS has a number of challenges.

Three of these were identified in East District:

(1) All ranks stated that calls for service are an impediment to conducting SPI activities. Improving this situation will require additional personnel resources (unlikely

given city budget concerns) and/or changing how calls for service are prioritized. Ideally, GP members would be able to engage in proactive activities as opposed to responding to calls for service that are not immediate priorities. For instance, GP members should be able to conduct a proactive patrol in a hot spot area as opposed to responding to a noise complaint from the previous evening to clear it from the queue. Unfortunately, during the initial implementation of SPI, dispatchers would send GP members to calls for service when they attempted to sign on to a SPI activity from the suppression files:

“I would have to say if SPI is important to the service then they have to make it important. For example...there was a situation going back a year and a half ago now. I was out working out in WD [West District] and River Heights was getting hit real hard. That was a real big SPI hot spot for break and enters into detached garages and motor vehicles and things of that nature. So, the pressure was being put on us to do that, so I did, I finished my call and I got put onto this SPI once again. I remained on the SPI for I bet you 30 seconds and I was pre-empted to go way across WD, which would have taken me 15 minutes to get there for something that was very similar anyways. There was a fella with no description who was looking into cars and left on foot 5 minutes ago in an unknown direction, so now they are taking me out of this real high crime area to go over there, which you know he has already been gone for 5 minutes and who knows what he looks like and who knows where he went. Meanwhile this River Heights was...it was in the news it was, we were making people aware it was really, really, really important. So, I ended up getting into a little bit of a verbal dispute with dispatch

over it...and so I remember that day, I was really down in the mouth about SPI. The message that was sent to me that you are telling me that it is important, but when I try to do something or try to do some SPI it is really not that important because you just...I thought dispatch really just wanted to get the call out of the queue. I understand if the call is of an urgent nature we must go out there and protect life and property, but this really wasn't really anything. So, the message that I got in my mind that day was that you are telling me that it is important, but you guys aren't overly showing me that it is important so...I would just...what they are saying here to us is that anything of a priority...so if there is a 5, 4, 3, 2, 1 in the queue we have to go. So, I understand on priority 2 and priority 1 and sometimes even priority 3, but to me I thought, well if I can't do this now...when can I ever do it? It is just a battle that I was just tired of losing and so to be honest, I got away from doing SPIs because it just didn't seem like they would ever allow me to do it" (GP6).

Consequently, during the initial implementation of SPI, GP members would conduct proactive policing activities in between calls for service. This was also something that most GP members indicated they did before the implementation of SPI. However, to address the issue, supervisors in ED established a threshold that allowed GP members to engage in SPI activities as long as there were not particular priority level calls waiting in the queue.

(2) GP members did not want to assign themselves or sign onto any SPI activities because they did not want to be perceived by their peers as avoiding calls for service.

Because of the results of the SPI program as well as the consistent push from ED supervisors to conduct SPI activities, there is no longer a stigma associated with SPI activities:

“Like I said specifically with the Inspector he does it in person and it is pretty specific and he has a pretty good memory that way. He has done things as a group and he has talked to people individually during their shifts...and I think he even had a pig roast and it sounds really silly, but it is probably the best thing ever. The morale increased significantly, they felt like what they had done was obviously appreciated by the people above, it’s not a huge cost and it really went a long way” (Supervisor).

However, some officers said that they are ‘queue-driven’ officers and that they do not believe there is a mandate to engage in proactive SPI activities. Consequently, some supervisors, analysts, and GP members said that a few patrol sergeants will encourage the members under their patrol to focus on the queue as opposed to SPI activities. This leaves GP members confused:

“Yah when they do the SPI report because it is comparing all of the shifts...if one shift has a supervisor...that promotes SPI more than others...or who are more concerned with the queue and the calls for service then we’re compared and seen as lower on the SPI...so we may not have as many SPI arrests because we are taking more calls for service or...we just see that the queue as being more

important because that's how our supervisors kind of got us thinking, so that we might get the attaboys more. We get the, hey you guys have to do more SPIs, which is after the fact when we have been told that the queue is more important. It is a little contradictory?" (GP6).

This is an issue that supervisors, analysts, and fellow GP members believe needs to be dealt with through standardization of SPI throughout the service. Additionally, the queue-driven mentality among some of the members is indicative of the need for the increased education of officers about the SPI program and the merits of sharing information, developing skills, and using the resources of SPI to be proactive while also responding to calls for service.

(3) When SPI was first implemented it was difficult for members to navigate the SPI suppression files since they had to sign onto multiple internal computer programs to access the files:

“Accessibility through our computer sometimes is tougher to get...(GP7),

"For me, accessing the files that they put in there...it is a lot of, it would be a lot easier if it was a little more accessible than to go through a whole bunch of hoops to get to it." (GP6).

However, the SPI coordinator along with the WPS's IT department have continually focused on addressing the issues in accessing the SPI suppression files by talking with

members about the challenges they face and addressing them:

“I think what my partner had touched on earlier too is that it seems to be a lot more organized now. Like I know when SPI first came into existence I was already a GP at that point so I didn’t...but again hearing from what guys were saying in GP it’s like yah the files aren’t up to date, then it makes it a little bit difficult to kind of go out there and do your job, but it seems like that is being done a lot better now and that information is current and it is up to date and just makes it easier for us to access that information” (GP4).

Overall, most GP members agree that SPI provides a more efficient and effective way to conduct their daily operations. However, most GP members, analysts, and supervisors believe that the true benefits of SPI have not been reached due to insufficient manpower and the lack of standardized SPI procedures to serve as a guideline as well as an accountability tool for all WPS members. This is an issue that supervisors in ED are currently attempting to address as they believe that SPI is a GP driven program that requires sufficient manpower and accountability measures. Additionally, most members from all ranks interviewed indicate that a lack of standardized SPI procedures led to debates about implementation and development of the SPI program within ED. To deal with this, supervisors and analysts believe that a standardized policy for SPI needs to be developed and mandated by the WPS executives across the service:

“It does, we do need standardization across the board and I think that’s going to have to come from the top down. I think you need the top to buy in completely before you can do that (crime analyst).

“I think the executive have to support it. The executive has to support what we are doing and not all executives support what we are doing. If you don’t have the executive supporting, what we do is hard to sell, so as the Inspector that I am the lead on [this issue]. I have other inspectors in the other divisions and so how do I sell that to them and get them to do their stuff when sometimes we have executive members that don’t support it. And they are supportive, but not in the way in which we are doing it sometimes is not the way they want to see it and again it comes down to people wanting it to be their way. There are certain individuals that don’t...some aren’t as enthusiastic as others. Greg and I are part of the uniform ops and this comes back to...how our police culture works. Uniform members, I have been a uniform guy for 27 years and probably in uniform in some form or fashion in the streets 22 of those 27. Greg was on uniform in some form or fashion and so we...uniform ops is where my passion lies in a sense and making sure that the front lines are important and I think that it is the number one priority for the service. Other people in other places don’t seem to have the same passion for front-line officers. So sometimes their passions lie in investigations or other...so when we talk about SPI being implemented in uniform ops, so their enthusiasm for uniform ops might not be as great. So, what it comes to do is, how do we implement it, the executive needs to buy in 100% and they do, but there are

some that do not buy in as much just from their comments and their actions in regard to cutting certain things. So those guys have to be on board 100% and for them to be on board 100% certain individuals that don't buy in as much have to be accountable and those leaders that don't buy in as much have to be accountable and those divisions. So, if I have a sergeant that is not buying in there has to be accountability to them and if I don't want to do it here I should be accountable. If you don't want to implement the program and encourage members to do it and be passionate about it maybe I shouldn't be in this division because it is uniform ops and that is where SPI is. So, if we have other divisional commanders that aren't as hungry for it and don't want to sell it as much maybe they should be asked to move on, well not asked but told to move on, but that has to be from the support of the executive so that's where we need the change to be made" (Inspector).

This policy should outline the roles and responsibilities of key WPS members pertaining to SPI including inspectors, patrol sergeants, and SPI/crime analysts. One reason for standardization is the WPS transfer policy:

"I think the other thing is that when you have new people that are transferring into the new district that aren't maybe as proactive in using SPI in their old areas they may not understand what SPI is all about. New recruits don't know what it is, so it is a little bit of a time to groom them and teach them how to use it. So those would be some of the draw backs" (GP2).

Due to some inconsistencies pertaining to the SPI program's procedures, each district and unit provides SPI resources differently and also records SPI activities differently:

“How we report certain things some people want to use the program we have NICHE [the WPS records management system]. Some people say no we started and the way it has been working very well in ED is through our suppression files, while division 11 likes to do it through NICHE so we came to a compromise and we said we will let your members do it through NICHE but they need to go out and do it and check on their members and those are the differences. So, some people get their back up against the wall and want to do it their way. Well we have to make concessions along the way so that we make sure the program gets in place and that the members are doing the work so whether you do it through NICHE or the suppression files it doesn't matter” (Inspector).

Consequently, ED supervisors and analysts have reported that they have had to provide continual training and education to their members who are transferred into ED from other districts. Standard procedures, data analysis, and IT files are required for all positions to establish a service wide standard that then allows each district to tailor the SPI program to the particular needs of their district.

Communications

Internal Communication

All members interviewed believe that sharing information between units and peers is integral to performing their daily operations efficiently and effectively. Consequently, all ED members support sharing information and knowledge between all members and units. This sharing does not just entail having information about ED operations or communication with their supervisors or SPI/crime analysts. Most ED members find SPI bulletins to be very useful because they synthesize all the information from all units and supervisors in a concise, current, and easily accessible way:

“I think they [SPI bulletins] are pretty comprehensive. It will have the area in question and will include a map that includes the area and a couple of the occurrences detailed on there and then it will have the general information like you know this area, this time, this is what’s happening, it generally happens between these times. So, you are not looking for night-time garage break-in suspects at noon on Monday morning or whatever, that kind of thing. They are pretty comprehensive and they basically have everything you need in there and everything you need to do in the area” (GP1).

All members interviewed also highlighted the importance of the SPI coordinator in sustaining communication between all three units as well as with the crime analysts and specialty crime units. Specifically, the SPI coordinator verifies all

intelligence/information from ED members and subsequently synthesizes and disseminates that information to ED members through SPI bulletins:

“Yah, it’s...I find it, what I find helpful about the SPI is that the SPI coordinator takes the time to organize all the information. Then there are the folders that are available to us there and the laptops in the car and you can just like, oh this particular area, oh, and click on it and oh, this is what is going on so it is more of less kind of having that information more at your fingertips as opposed to trying to remember something or sift through something. It just kind of makes it a little bit more streamlined and available and like I said you can kind of see what works and what’s been going on type thing...so yah that is what I find helpful” (GP4).

According to the ED inspector, SPI bulletins are created through a process of active communication between unit supervisors, analysts, and himself. SPI bulletins save supervisors and uniformed members time in researching the information that they had to collect on their own before the inception of SPI:

“I like it, I like SPI and I think that it is good. Just that someone is analyzing and disseminating the information it saves us a lot of time. Prior to our shift, you don’t have to review everything as in-depth because someone else is giving you that information and you can go, instead of you doing your own research” (GP1).

All members indicated that the work of the SPI coordinator in updating the material in the bulletins and being available to all ED members was a key factor in the utility of the bulletins.

Different ranks used the bulletins in different ways. Before SPI, supervisors often did not share information between all units unless it was for high priority cases because it was simply too time-consuming and there was no established or trusted means to share information with all members. Supervisors utilize SPI bulletins as an efficient way of disseminating pertinent information that they know will be brought to the attention of all members in ED:

“For me as a sergeant in detectives, everyday it influences me because I am always talking with the SPI coordinator and we are putting out SPI bulletins...it is actually saving money because in the old days I might work a surveillance project and sit on a place in an area. I’ll have my guys out sitting and if it is going to be thefts in a car, now I am able to get the SPI coordinator to send it to the GP members and they are able to flood that area, which is going to probably...they may get an arrest and it has happened in the past or it may just displace it, it will slow it down. that’s how I am seeing it at least” (Supervisor).

GP members reported that the focused information provided by SPI bulletins (such as type of crime, time of occurrence, possible suspects/vehicles, and location) provides them with the direction to help them contribute to district crime reduction goals:

“I think it really depends on what time of the day or what time your shift is at. For example, let’s say that we get a bulletin from Jason about a repeat offender for thefts or robberies. They might be down by curfew, but that won’t start till 10pm so going to do curfew checks before there is no benefit there. Whereas, let’s say one of those bulletins are saying that between 12 and 2 for whatever the reason the 403 area is getting garage break-ins or B and E’s into the houses because people are at work, well having that information at your fingertips is really handy because now you can start focusing on those pockets and having more of a presence in that area during those times either to deter people from trying to commit crime or potentially trying to catch them” (GP2).

Finally, analysts stated that SPI bulletins allow them to present the results of their analysis with all units in the district in an organized and efficient way:

“Absolutely, so for the emerging trend bulletin, something like there is a break and enter that is occurring, we will recognize it and we will put together a bulletin. Jason sends it out to the masses and we also put it into the SPI folders that are in the cruiser cars. Then within a few weeks or months I will go back and I will analyze what happened with that bulletin...was crime reduced, did we arrest anyone and so forth. And then I will put together an evaluation bulletin, a one pager, again it is disseminated to all of the members and it is also used to speak to the executive level as to what we have done and accomplished” (crime analyst).

Before the inception of SPI, the GP, CSU, and detective units had little communication, with most communication being limited to large-scale district projects or infrequent problems/cases. SPI has provided the infrastructure necessary to increase the communication between the three units in ED by means of suppression files and SPI bulletins. However, some GP members did not associate SPI bulletins and suppression files with increased communication with other units even though SPI bulletins are the result of intelligence provide from all three units. For instance, while responding to other questions about how they have incorporated SPI into their daily activities, all GP members mentioned utilizing the SPI bulletins, having other unit members present a new SPI bulletin during their shift briefings, and/or talking to the SPI coordinator or utilizing the SPI suppression files. Therefore, even though GP members may not have explicitly recognized an increase in their internal communication due to SPI, the analysts and supervisors have found that sharing information with GP as well as GP sharing information with them has increased the ability for ED to share resources and work together towards the same goals:

“I think it generates more collaboration between us and the back office or us and CSU because there is a lot more, it makes us feel like we are working towards the same goals. For instance, the back office will have their investigations. It isn't like you have to go to the back office and ask if there is anyone that they are looking for because it is already disseminated to us so we already know what they are looking into and that is general knowledge for everyone so it isn't a specific

person's job to get that information, it is available to everyone" (Inspector).

Also, the quality of information sharing has increased since it is focused on emerging criminal trends that focuses the resources available in ED:

"Our back office puts bulletins out all the time with respect to emerging crime trends and you get those guys that are, that's what they like to do, the autonomy, they are going to go chase those bad guys down. They'll put a bulletin out and they will get a call the next day that we got your guy...so it creates a good team atmosphere "(Inspector).

Therefore, SPI has been able to provide a mechanism that streamlines internal communication and focuses existing resources within the district. As a result, cases have been solved because more members in the district are able to help provide surveillance or locate persons of interest based upon the shared information.

SPI bulletins are a mechanism that allows all ED members to focus and build upon the available intelligence within the district. This helps the police to work more efficiently and effectively. A common example provided by respondents in all positions interviewed is that sharing information allows for suspects to be located in less time, since all eyes in the district are looking for a particular person or vehicle as opposed to a single officer or team within one unit. The work done by the SPI coordinator who facilitates and sustains SPI bulletins, is one of the key factors that has led to the

effectiveness of the communication component of SPI.

External Communication

Effective police-public relations have always been an important aspect of policing and SPI is understood in ED by the inspector, supervisors, analysts, and GP members as a way to develop and sustain these relationships:

“I think that SPI allows us a lot of... different things to get to what we need to do for the goal of community engagement and being part of the community. It is one of those things that we have gotten away from and need to get back to and I think that SPI allows us to get in there and get engaged with the community and get the intelligence that we need to go and fight the bad guys” (Inspector).

GP members provided many examples of how they used their time while patrolling hot spots to engage with community members to help reduce crime and/or listen to citizen concerns. These forms of community engagement are not unique to SPI, but GP members did indicate that having information about crime trends available to them via SPI bulletins allowed for them to feel more informed while interacting with citizens. For instance, one area had an increasing number of garage break-ins that was identified by the crime analysts and the detective unit. A SPI bulletin was created and one GP unit used the information to notify a resident living within the hot spot area of the problem after the resident had left a garage door open while warming up their vehicle in the morning. The resident was appreciative of the information and the GP unit believed that

providing that information to the resident was helpful in showing residents they know what is happening in the area and are spending time there addressing the break-in problem. Furthermore, most GP members felt that the SPI bulletins focused their community engagement and patrol into areas where citizens want to see the police more and consequently make them feel safer:

“I think it has added because I think...years ago it was a lot more community engagement with officers and then it kind of went into kind of the queue-driven, where it is just attending calls. Then the SPIs added a level of proactive policing where you actually have to talk to more people, attend areas, and kind of just show your presence around where an area that might be not so much...criminals hanging out and with criminal activity. The SPI program has kind of added where people really want to see the police in the area, which makes them feel safer which in turn may reduce the crime if the criminals are looping⁷...they see the police there and they won't do anything in that area, so I think that has added and might just change the crime to different areas” (GP5).

Additionally, community engagement is understood by most GP members as a way of listening to community members' concerns:

“Again, the whole point of SPI is being proactive. So, when they are getting contacted by the police as opposed to them having to phone us, we are saying that

⁷ Looping refers to criminals returning to the same location.

we are aware of what is happening in the area and just to let you know there is going to be a higher concentration of police in this area at this time do you have any concerns or any feedback for us. So, I think we really engage ourselves and not only showing them that we are involved the community but also makes them feel involved because we are asking what they think works and what doesn't work and it is kind of a two-way street in that sense" (GP2).

SPI has also helped supervisors respond to specific citizen concerns by having data available to inform the public what actions the police are taking to address their concerns. For instance, one supervisor indicated that the SPI activity data enabled him to tell concerned community members that the ED members are in their area searching for the perpetrators of an emerging crime pattern:

"It's just making it easier for them and for me...and I said earlier the politics of the game. Here is what we have, say it is Sage Creek getting hit with theft and the committee members are all up in arms Well if I am able to go to them and say listen we have focused and put time into your area...their emotion comes down, they are happier with the police and hopefully we get a result. But I think a lot of this is just people want to feel heard and they want to feel the police are actually working with them and I think sometimes they feel that they are just a number and I think when we are able to say that we have put this much time into, it is tracked right, in your area and it has come down, people are appreciative" (Supervisor).

Communications with the community were also enhanced during periodic SPI-Max projects that have been run intermittently in ED communities with serious crime problems. At the time of these interviews, GP members were in the process of conducting a pre-test, post-test survey with residents of a recent SPI-Max project to help determine how the project had influenced the residents. GP members saw this process as novel and specific to SPI and useful in helping to identify what citizens liked and did not like about the increased police presence in their community during the SPI-Max operation.

Finally, GP members were encouraged by their supervisors to engage with the public by conducting park and walks during large community festivals as well as visiting local community centres to play soccer or hockey with youth. Supervisors, analysts, and some GP members understood community engagement to be an important part of their jobs, because it helps to reduce barriers between the police service and citizens. All supervisors stated that encouraging community engagement is important and that reducing crime is not the only purpose of SPI.

Specifically, the purpose of engaging with the community is to make community members feel safe and to build positive rapport with them. For instance, one supervisor mentioned that he was able to encourage his members to play sports such as ball hockey with youth from Elmwood High School, which is in a high crime area. The supervisor believed this had a positive influence on students, the principal, and ED service members.

Supervisors noted that SPI allows these types of community engagement activities to be tracked and understood as equally important as traditional criminal enforcement activities. Furthermore, all ED members understand the value of community engagement activities and enjoy participating in them even though they feel similar levels of apprehension about engaging with community members as community members do with them. SPI facilitates community engagement by means of SPI bulletins that place community engagement on an equal footing with enforcement tactics as well as disseminating positive experiences that ED members have had with community members.

Formalization

All supervisors and analysts stated that supporting front-line officers' autonomy and skill development is a priority of SPI and the WPS, since making individual officers better makes the service better. SPI and crime analysts understand that their role is to facilitate officer-informed discretion by providing support to supervisors and GP members. Specifically, SPI and crime analysts save police officers time by identifying criminal trends and high-risk suspects. By providing up-to-date information about the location, type of offense, time of occurrence, and community needs, supervisors trust their officers to choose their preferred activity and to utilize or to augment their skills to conduct SPI activities effectively. The crime and SPI coordinators, supervisors, and GP members agree that SPI activities must be created and disseminated in a way that augments service members' discretion as opposed to being created in a way that imposes activities upon service members:

“SPI gives the members the autonomy to be able to do what they want to do so we say you know how do we get to where we need to be for the goal. First of all, getting the bad guy - and so that is either going through the warrants and getting them off the street because they are wanted or that is curfew checking all the bad ones that are on their curfews or under certain bail conditions, so we do checks on those. So, we have members out here that love to chase the bad guy and then other people aren't keen on that. OK, so maybe they are traffic oriented, so if you are traffic-oriented then we get them to go and do some traffic work, but do it in the areas that we have identified as hot zones. The other part of it for being engaged in the community...going in the community, even if it is playing soccer with kids in a field, you are going to be seen by the community as approachable, as trust worthy, and they are more apt to try and give us some information about things that are going on or they are more comfortable about calling us with something going on. So, if you do one of those three things you are doing policing but it doesn't mean that we are going to tell you that you have to do one, two, or three...go out and do it. So, I think that we give the members the autonomy...that is where I think our focus has changed a little bit as far as supervising. I think that we have to give them the ability to pick what they like to do, but ask them to do it in certain areas and ask them to do it very well when they do it, not just go and drive and around and have a cup of coffee in a sense” (Inspector).

According to the supervisors, the primary reason for this stance is because not all officers have the same skill sets nor do they have the same interests. Consequently, if supervisors

want to get the most out of their officers then it is important to allow each officer to pursue activities at which they are proficient and that they enjoy doing. Therefore, SPI is understood by supervisors as a means of allowing them to get the most out of their officers by providing them with a choice between patrolling hot spots, checking on high-risk criminal offenders, or working on community engagement:

“SPI is diverse and that is one thing that is good about it...even though it is about information and how do we learn of what crimes are going on and how can we best go at this, there is also... within the SPI there is sort of what I call enough for everybody. Traffic is relevant in SPI because you get a lot of intelligence at different traffic stops and things like that rather than just giving a ticket. There are some people that like to go out and catch [criminals], there is that there too. Then we have people that have an unbelievable personal skill and we are able to send those people with the public” (Supervisor).

Most GP members reported enjoying the discretion their supervisors gave them to choose their preferred activity and to utilize or to augment their skills to conduct SPI activities:

“Yeah, that’s about it...the SPI program, I would think that what it has kind of added to policing as a whole...that it is proactive policing rather than just going to your call. That it is giving officers more of a chance to go to areas and just put their presence in and be able to identify people in the area. It even works towards building community relationships, where you are talking to people, they

see you out of the car” (GP5).

Providing members with current intelligence, autonomy, and support encourages more GP members to participate in the SPI program:

“Last year me and my partner did a lot of that while on my shift. There are 18 people or 20 people on our shift, there were others that liked doing the hot spot areas. So even though I wasn’t doing all the SPI stuff I was doing the warrants, we have other units that preferred the hot spots, we had other units that did traffic, so as a whole shift we’re hitting all areas of the SPI. So it allowed us the freedom of we weren’t getting harassed by our bosses – “hey that’s great you did the warrants, but what about all the other stuff”? We had others...like doing that stuff that is what they did so, we had the freedom which was nice. If you start pressuring people you’re going to start...getting less participation if you start upsetting people” (GP5).

Leadership

All ranks identified leadership as being the key to successfully implementing, developing, and sustaining the SPI program. Specifically, passion and commitment were identified by supervisors and GP members as necessary to the success of SPI:

“they [supervisors] are pretty fired up when they started it [SPI] and I don’t think the enthusiasm from management has gone down at all even with management

changes because sometimes you get switches at the higher ups and then they have their own programs and interests or whatever, but they have been able to keep the ball rolling for this SPI thing” (GP1)

The interviews identified three actions that leadership must take to ensure the successful implementation of SPI:

First, senior leaders must provide the resources necessary to implement SPI. Becoming a proactive police service requires an increase in analytic capacity as well as the necessary allocation of officers. While being interviewed, supervisors believed that,

“I don’t think that the resources are being directed here yet. I am hoping that the police board and the executive is starting to realize that if we get out in front of things then we can bring our numbers down” (supervisor).

One consistent challenge that was mentioned by GP members is insufficient personnel to handle calls for service. One explanation for insufficient personnel is that resources are being allocated to specialty divisions over GP services. Consequently, there are insufficient GP members to adequately address the calls for service that lead to an increasing level of calls for service in the queue. Due to an increasing number of calls for service, dispatchers are not able to provide GP members with sufficient time to engage in proactive, SPI activities:

“I think with people being more aware of knowing how to utilize it, it has the potential of having longer lasting benefits. I guess what it really would come down to is more manpower. You don’t use the SPI opportunities as much because you don’t have enough manpower or the time to do it” (GP2).

All ED supervisors believe that the WPS executives must support the allocation of funds to develop and to sustain the required personnel resources as well as the information infrastructure to support the use of intelligence by ED service members. WPS executives are investing in better technology as well as increasing their analytic capacity by hiring civilian crime analysts and purchasing better computer programs. However, the investment in technology must be matched with an investment in the allocation of officers because that ultimately prevents ED members from being as proactive as they would like,

Second, a consistent and clear message is required from senior executives to ensure that SPI is made a priority within daily operations. Senior managers must provide clear directives and procedures for all members to follow to ensure the successful implementation of SPI:

“Yah, you need that leadership component...it boils down to that. When this comes out I am not certain, there are certain individuals that are out there and they want to do it their way and sometimes it is that...were guys aren’t partaking as much because it is not their program...they want to do things differently, they believe that it should be a different way. Meanwhile, this program has been up

and running ...but if I am running it I will say do it this way, but you may not be happy with that and that is what we are running into sometimes with the divisional commanders that think it can be done differently or their way and they may not encourage members to do it the same..." (Supervisor).

To address this issue, the WPS executives have to establish service wide priorities for all members to facilitate cooperation between various units and positions and encouraging them to work towards the same goal:

"their analyst might talk differently than our analyst so it is trying to get everyone on the same page and have that standardized approach to SPI and that is where we are bringing in a lot of people in and a lot of units into the fold in a sense. We need to make sure that we have our [program] standardized in my view 100% because we are still waiting for the same reporting structure because we are waiting for the geomeia mapping. Once we have that standardized we can expand this and we can really get down in the weeds with those other divisions to get them on board" (Inspector).

Furthermore, most officers agreed that standardization and the inherent accountability of standardized procedures is important to the success of SPI:

"they may not encourage their members to do it as well and if they don't encourage their members there is no accountability in this...and you don't want to

have the big stick to hold them accountable, but at the same time you need to encourage them and as supervisors we need to push them in the right direction. If you don't have those S1's...the sergeants that are on board that is where things fall down a lot in our culture and our police service that is where it falls down quite a bit" (Inspector).

Finally, leadership is necessary to facilitate the development of ED service members' skills to become proactive officers. Consequently, senior managers must provide the necessary resources as well as standard training so that members are able to develop the skills required to effectively participate in SPI activities:

"it is a tool that we want to show them that this is an opportunity for these guys to do what they want to do and that is why you joined the police service. If you became a police officer, there has got to be things that you liked about the police role that you assigned yourself or applied for and if you don't like doing one of those three things then policing might not be a fit for you because that is what policing is and that is how you try to encourage them to use it to their benefit to what they want to do. And personally, from a supervisor's perspective I think that we have to encourage members to develop their skills. So, for some...for example we have a member in uniform that wants to go to traffic division I am going to encourage them to go to traffic, so that gives them the opportunity to become, what we call autonomy mastery so they can master their skill level and what they are doing to develop. If someone is really interested in going to the warrant squad

then they are going to go out to the warrants and do the curfew checks and they are doing to go and do that and they have the autonomy to do it and then we are going to say become masters of what you are doing” (Inspector)

To allow for the development of ED service members, most GP members, analysts, and supervisors expressed the view that positive reinforcement from their supervisors as well as seeing the results from the analysts about the success of SPI augmented their commitment to SPI:

“I think the GP members are buying into it, more than they were in the past. It is spreading out and guys are seeing results from it. And so, as a result they are getting positive feedback from management, but they are also getting...they can see it themselves that they are making a difference so they tend to go with a lot more” (Supervisor).

The interviews highlighted the practical challenges that exist having sufficient GP personnel to engage in proactive policing tactics. Additionally, there is a need for leadership to provide a standardized procedure for SPI as well as accountability mechanisms for those who choose not to engage in or promote SPI activities. Finally, it is important that leadership continues to provide to ED service members the opportunity to develop and master their skill sets by engaging in more proactive policing activities

Innovation

Two factors were instrumental in the implementation of SPI in ED: (1) the increase of the analytic capacity of the district through the hiring of a full-time crime analyst as well as assigning a full-time SPI coordinator; (2) ED's use of existing IT support within the WPS to disseminate up to date information across the district including SPI suppression files and SPI bulletins. These changes allowed ED to construct the required infrastructure to support SPI - to gather, analyze, disseminate, and support proactive policing that helps to reduce crime within the district. By utilizing the existing IT resources, hiring a full-time crime analyst, and providing an experienced, full-time SPI coordinator that was available to GP members, the SPI program was able to directly increase efficiency in ED in three ways:

1. Saving officers time identifying where they should focus their attention while on duty:

“I just think it's not a temporary fix. I think guys are seeing that it's something that is important because it actually it's been shown that it is reducing crime and the guys are...I think guys want to, they come to work wanting to work...sometimes you just don't know where the work is and it's just helped to direct them into the right area so that they're seeing that...they're not having to drive through the whole St. Vital or North Kildonan, they know where to go and they know where the hot spots area is, so I think it has had a positive effect that way” (SPI Analyst).

For instance, one officer indicated that before SPI s/he would make notes of their own observations while on patrol and read through arrest records to identify areas before they went out on their shift. SPI has created the infrastructure required to track, research, and analyze criminals and criminal activities with available data that has led directly to saving officers from having to do this work themselves and which has created a reliable means of sharing pertinent information with all service members. Overall, the innovative delivery of information throughout the service due to SPI has streamlined the daily operations of supervisors and GP members.

2. Supervisors were better able to focus their resources and secure partnerships with the GP, CSU, and detective units, so that each member was working as part of a team as opposed to working independently. For instance, detectives could save time conducting traditional surveillance protocols since all members in the district could help identify suspects and vehicles by reacting to a SPI bulletin. Furthermore, by having SPI data, supervisors were better able to make decisions about emerging crime trends and to allocate their resources accordingly. One supervisor indicated that the data was illuminating for him and changed his course of direction since he previously had to assume which areas would be hot based on prior knowledge as opposed to current analysis. This is not to say that experience and qualitative data are not important, but this suggests that SPI is better able to utilize all available data -qualitative and quantitative - to accurately identify emerging crime areas that require increased police presence. One supervisor commented that SPI allows for all officers to have the same level of information. This means that experience is less significant because SPI places officers on

a more equal footing.

3. The ability to disseminate the results of SPI-Max projects and to provide positive reinforcement to members by documenting activities of officers was found to positively influence 'buy-in' to the SPI program. Supervisors and analysts believe that tracking and disseminating the results is an important part of their monitoring the success of SPI and improving their ability to lead the officers under their command. Additionally, supervisors noted the benefit of having the information from SPI when interacting with community members and businesses to explain to them what they have been doing with regards to their concerns about crime and disorder.

Most of the more experienced members interviewed indicated that SPI isn't unique in its use of crime trend analysis, arrest records, and calls for service since service members utilized this information prior to the inception of SPI:

"I mean before if you ever wanted to know, you had to search out yourself to see calls for service in certain areas, or crimes in certain areas you would have to do that on your own. I think a lot of...police officers were probably doing a lot of this before, prior to SPI and it just maybe wasn't being documented properly. Just because we weren't keeping track when I mean...even though you go call to call or you're between calls it doesn't mean you are not doing anything, you are driving around and we knew where the problem areas were then too. Maybe we were not specifically aware that break-ins are happening in this area...but before we are still hitting those problem areas, but that time you were spending wasn't

being accounted for in anyway, it wasn't being documented" (GP5).

However, most of these experienced members noted that with the addition of the SPI and crime analysts as well as the SPI bulletins and suppression files, the means by which this information is utilized by the service has changed the allocation of resources within the district:

"I remember the first project was in the 401 area and now it has changed because everyone thinks of that as the bad area and they assume that was going to be the bad area again and no it had moved, so then we used our...that is what I am saying about this intelligence-led, it helps a lot because then it puts our resources in the right areas without waiting a month to figure it out. It has been very good" (Supervisor).

Additionally, SPI bulletins were important to GP members because the bulletins saved them time as well as made them aware about where to look and what to look for while they were conducting their daily duties. All GP members interviewed indicated that they found the information contained with the SPI bulletins comprehensive, as the bulletins contained a map, the type of crime, the location and time of the crime, and any suspects or vehicles to look for:

"...I find it, what I find helpful about SPI is that the SPI coordinator takes the time to organize all the information then there is the folders that are available to

us there and the laptops in the car and you can just like, oh this particular area oh and click on it and oh this is what is going on so it is more of less kind of having that information more at your fingertips as opposed to trying to remember something or sift through something. Or it just kind of makes it a little bit more streamlined and available and like I said you can kind of see what works and what's been going on type thing...so yeah that is what I find helpful" (GP4).

Essentially, SPI has provided the model necessary to begin to effectively and efficiently utilize data that have been available for years but which were underutilized due to a lack of technological and analytic capacity within the service.

The SPI coordinator was identified by all members interviewed as being an integral part of the daily operation and sustainability of SPI. Specifically, the physical presence and background in policing with the WPS that the ED SPI coordinator has is consistently mentioned as being instrumental to members utilizing the technological resources of SPI. One of the reasons is that officers know that their SPI coordinator is readily available to them:

"His knowledge base is helpful because he...that way he is telling it to us or bringing it to us and it is coming from a voice of experience and coming from someone who knows and not just someone that is a paper pusher and is just the facts ma'am. He knows what he is talking about and he is always there and always approachable" (GP1).

Most of the GP members mentioned that they appreciated the SPI coordinator, who is a police officer, going through the data and presenting them with the important information they needed to do their job more effectively:

“Yes, because it is nice to have a filter from our crime analysis through to our front-line members so that they can pick what really needs to be targeted. I’m sure he sees a lot more information than what we see. And it is nice to have someone with the background in policing and actually knowing how everything is on the street and say that this is a concerning area or that this is a blip because there was a street festival or something like that...that type of stuff. It is just nice to have someone that can filter” (GP3).

Technology

Most ED members believed that technological aspects of SPI, specifically SPI suppression files and bulletins being available in their cruiser cars, were instrumental in increasing their use of SPI resources and consequently their efficiency and effectiveness for three reasons; (1) having reliable, and up to date information about hot spots and high risk offenders in their areas that they did not have prior to SPI; (2) due to the reliability and up to date information about hot spots and high risk offenders, WPS members transferring into the district were quickly able to identify where to go and what to do in ED regardless of their prior knowledge of the district; (3) All ED members, new or experienced, were able to save time conducting their own research into criminal issues in their district.

1) Most GP members, supervisors, and analysts mentioned the importance of having up to date information,

“Yes, but it needs to be up to date...like curfews and people with warrants...stuff like that it needs to be up to date or else a lot of time we are just in the car spinning our tires on the computer and...it’s not even applicable anymore, this guy doesn’t live here anymore, he is out somewhere (GP4), “I think what my partner had touched on earlier too is that it seems to be a lot more organized now, like I know when SPI first came into existence I was already a GP at that point so I didn’t...but again hearing from what guys were saying in GP it’s like yah the files aren’t up to date then it makes it a little bit difficult to kind of go out there and do your job, but it seems like that is being done a lot better now and that information is current and it is up to date and just makes it easier for us to access that information” (GP4 Partner).

Up to date information provided the SPI program with legitimacy as a resource for officers to better fulfill their occupational goals because it was a reliable source of information that they knew is being maintained by the SPI coordinator for their needs on a regular basis. Having applicable and current information is instrumental in establishing trust and justifying further investment into SPI by ED members.

2) SPI bulletins were important to GP members because the bulletins made them aware about where to look and what to look for while they were conducting their daily duties. All GP members interviewed indicated that they found the information contained with the SPI bulletins comprehensive, as the bulletins contained a map, the type of crime, the location and time of the crime, and any suspects or vehicles to look for:

“Especially if you do not know it. For sure, it paints a quick picture of where you need to be and what times if you aren’t doing something. Especially...I don’t know D2 at all, I know some main roots...for me that would be beneficial, knowing where this problem is” (GP7)

3) Finally, most GP members believe that the SPI bulletins and suppression files allow incoming ED members to understand the areas and people of interest within ED quickly. Prior to the use of SPI bulletins and suppression files, WPS members that were transferred into ED had to rely on other members to share information with them and learn about the district. Two problems with this is: (1) there is so much information to know from so many sources that one ED member cannot be expected to collect all this information in addition to performing their daily duties;(2) Information that is shared between officers may not be current or become obsolete because officers were not able to share information in a timely manner. Consequently, SPI bulletins and SPI suppression files were created to address these issues and allow incoming and current members to share information quickly and understand what the priorities are in the ED regardless of their background in the district.

“...I find it, what I find helpful about SPI is that the SPI coordinator takes the time to organize all the information then there are the folders that are available to us there and the laptops in the car and you can just like, oh this particular area oh and click on it and oh this is what is going on so it is more of less kind of having

that information more at your fingertips as opposed to trying to remember something or sift through something. Or it just kind of makes it a little bit more streamlined and available and like I said you can kind of see what works and what's been going on type thing...so yeah that is what I find helpful" (GP4).

Essentially, SPI has provided the model necessary to begin to effectively and efficiently utilize data that have been available for years but which were underutilized due to a lack of technological and analytic capacity within the service.

Culture

The successful adoption of SPI into the working culture of ED was demonstrated by three findings derived from the interviews:

1. Support for and understanding of the rationale for the SPI program:

Most members reported that they did not understand SPI when it was initially implemented. Some officers believed that SPI was simply an additional GP squad car⁸ that did not have to respond to calls for service:

"I mean when it started out...nobody knew what to do, like the guy in the street didn't how to act, they didn't know what was expected of them, what SPI was about" (Supervisor).

⁸ An extra car - called an '89' car - that was assigned to proactive duties was a tactic that had been used in other WPS districts.

However, after three years all of the members who were interviewed reported that they understood that SPI is a way of utilizing data to allocate the district's resources more efficiently and effectively:

“I think now that members have a better understanding of what it is all about...I think they use it as a tool in their toolbox more than anything else as opposed to only a designated car. You don't necessarily have to have a designated car to be doing SPI tactics, like if you have downtime there is nothing stopping you from going and knocking on that door and making sure he is abiding by their curfew or having your presence in an area where there is garage break-ins or store break-ins, like everybody has access to that information now and should be able to determine that this is our area and we should go and check this out at that time. So, I would say that yes maybe old tactics, but new opportunities on how to take advantage of them” (GP2).

Most GP members understood that SPI was a program that was intended to make the service more proactive by guiding their downtime by utilizing intelligence from all three district units. Moreover, most ED members interviewed indicate that SPI is becoming second nature for most ED service members:

“I think it is almost becoming second nature for most guys in this shift now because they are so involved with it. So, I think you just talk about it with the

guys in the lunch room saying oh yeah we had this traffic stop and pulled this guy and now naturally next time I will say we went and did a SPI arrest at this address here because it is a known drug house or high crime area. I think it just comes more naturally now than it did from before” (GP2).

2. Increasing voluntary participation in SPI activities as well as in SPI-Max projects:

All supervisors, as well as the SPI coordinator, have found that since the inception of SPI, an increasing number of ED service members are engaging in SPI activities, requesting to be members on SPI-Max projects, or going to the SPI coordinator and sharing information to help create or develop SPI bulletins:

“I think that it has a great deal. I think now we have a better buy-in from the GP guys and they are and they coming to Jason and coming to myself and they are coming to the CSU guys and saying that they would like to do something with this and we never got that before, we never got guys saying can we work on this during our overlap or asking if there is something that they can do. They are looking for opportunities to participate and we didn’t have a lot of that in the beginning. I think the idea’s been here for 4 or 5 years now since [Insp.] Burnett came here and it has been here for that long and it is creating that culture and how we are starting to think along those lines and I would absolutely say that in the spirit of cooperation amongst the different units has come a long way”
(Supervisor).

All supervisors and analysts reported that SPI has only recently begun to have large scale buy-in by ED members⁹. They all believed that there is a need for continued efforts to sustain SPI and continue to develop the program so that it will be further integrated into the overall operation of the WPS.

(3) SPI is being utilized as a resource for training officers. Most supervisors, and analysts in ED, as well as some GP members, expressed the view that SPI is a valuable tool for the training and development of new and current officers. Supervisors also reported that by allowing officers the choice of proactive crime reduction activities, the use of suppression files provides the opportunity to better develop the skill sets of the officers under their command:

“It [SPI] teaches...when we show these guys how to patrol, when I show I mean give them the opportunity to patrol and to learn how to spot check people and stop and talk to people I mean you can learn so much doing that. Not everyone has to be a bad guy for us to stop and talk to them. That is what the guys have learned. It seemed for the longest time you get a call with a description so you went and talked to that guy based on a description you didn't go there and talk to a guy just because he happened to be walking down the street and you stopped to talk to

⁹ Though it should be noted that conversations with ED officers during the early part of the implementation process indicated that there was a high level of initial acceptance of the concept of SPI. That acceptance is now being translated in concrete actions on the part of ED members.

him...didn't have to be a criminal spot check, sometimes you can just stop and talk to a guy" (Supervisor).

Essentially, SPI activities create a developmental tool for officers to demonstrate and learn the skills that are required to be a leader within not only ED, but also the WPS. For instance, one supervisor mentioned that the SPI files allow his officers to participate in trackable activities that demonstrate the qualities required to be promoted into various specialty units or management positions. Furthermore, SPI suppression files and bulletins help provide information to experienced WPS members who are new to the district and allow them to start focusing their attention on hot spots and high-risk offenders quickly regardless of their familiarity with ED:

"For me personally, I find it helpful because I am new to the district and so for me...getting to know where these hot spot areas are and what's happening here that's good for me to know I'm still trying to figure out where I am going when I am going to a call, so knowing that this area has all of a sudden really picked up in whatever then that's great, then that's something that I can tuck in the back of my mind and know that...we just finished up a call in this area. I remember getting an email from the SPI coordinator that there is a rash of bike thefts or something going on in here and maybe we will just hangout here for a little bit longer while I type a report. We will just be a presence here and maybe deter some of that stuff or maybe catch somebody doing it...so yeah developmental wise that has been helpful for me" (GP4).

As a result, officers are better able to focus their patrol time and efforts into areas that have been identified as being high in crime and consequently in need of increased police attention.

Challenges Implementing SPI

This final section of this chapter will outline three potential challenges for SPI: (1) a divide between GP members and analysts; (2) the potentially negative impact of unsupportive senior leaders; (3) skepticism about displacing crime.

1. There is a divide between the analysts and front-line officers due to the physical separation of the positions. Specifically, the crime analyst is located at a different location than ED which makes it difficult to collaborate with ED members:

“I think one of the biggest challenges is because I am here, I am stationed at headquarters so it’s difficult to have the communication with the members of GP that I should be having. So, if I was at the district in the district working from the district at least part of the time I would have that constant communication and have more information, more intelligence, probably better bulletins and I could probably help more in their investigations” (crime analyst).

To help alleviate this problem, the SPI coordinator, who was aware of this issue, spent more time sitting in the lunch room as well as talking to officers informally to let them know how he was able to help them and address any issues the ED members were having

utilizing any of the SPI resources. As a result, the SPI coordinator has not experienced the same separation as the crime analyst. Therefore, it is important for analysts to initiate contact and establish a rapport with GP members that will prove to GP members that the analysts are able to save them time and help them fulfill their responsibilities effectively and efficiently. However, a few of the ED members were hesitant to take advice from the crime analyst. One of the reasons for this is because the crime analyst in ED does not have a background in policing, which meant for some officers that the advice provided to them from the crime analyst did not fit the realities of a uniform member's experiences. Additionally, some officers are hesitant about accepting the results of the analysis conducted by crime analysts pertaining to hot spots or crime rates.

While this reluctance to accept advice was not widespread, the primary reason it appears to be the disconnect that exists between the data and the officers' personal experience. For instance, officers will have patrolled an area for several years and believe that particular areas are higher in crime than others. The disconnect was most prominent pertaining to emerging crime trends. Essentially, crime analysts would identify particular patterns or areas that were causing higher crime rates. However, officers were not aware of these emerging patterns, primarily due to the busy pace of their shifts as well as to the urgency of the crime trends. Consequently, the crime analyst would suggest that the officers focus their patrols in a particular area that may or may not have been an area that the officer had noticed any increased criminal activity in when they reflect on their previous shifts. Ultimately, this is an issue that has to be addressed by leadership in order to continue to shift the culture. It should be noted that until recently the WPS was behind many other departments in its employment and use of crime analysts so some reluctance

to accept their advice is understandable and should decline as the value of the analysts becomes more obvious.

2. All members interviewed mentioned the significant role of senior GP members as well as patrol sergeants in the ‘buy-in’ to SPI. Specifically, GP members expressed the view that their patrol sergeants have full control over whether their shift (or platoon) – will be queue-driven or proactive. A patrol sergeant who supported SPI would establish times and ways that even a busy shift would be able to conduct SPI activities. Alternatively, a patrol sergeant who was not a supporter of SPI would not support or construct a plan to allow their officers to participate in SPI activities. This view was articulated by the inspector in charge of ED:

“So if you get...if you get those individuals that want to move this service forward as commanders they are going to try and push and encourage members to do SPI. But when you get those other individuals that are at the grassroots level and are the officers and supervisors of the platoons, that is where sometimes the breakdown can happen. Because those are the ones that sell it to their members and if you can’t get them on board it is hard to get the rest of the team from that platoon on board to do the initiatives because if they don’t really care or they are mad at the culture or mad at the...for whatever they are disgruntled they may not encourage their members to do it as well and if they don’t encourage their members there is no accountability in this. And you don’t want to have the big stick to hold them accountable, but at the same time you need to encourage them

and as supervisors we need to push them in the right direction. If you don't have those S1's...the sergeants that are on board that is where things fall down a lot in our culture and our police service that is where it falls down quite a bit"

(Inspector).

This issue is most salient for GP service members and their patrol sergeants. Patrol sergeants can choose not to engage in SPI activities at all, or utilize SPI information and resources ineffectively e.g. signing off on hot spots without conducting spot checks. This issue is indicative of the power that supervisors have on the daily operations of the police department. Most of the members interviewed indicated that senior members who do not support new policing initiatives may negatively impact the implementation of the strategy by not explaining the program to their officers, by withholding guidance/reinforcement for engaging in activities related to the novel program, or by explicitly denouncing the program in a manner that negatively impacts the motivation of officers to engage in activities related to the new policing strategy. For instance:

"When they do the SPI report because it is comparing all of the shifts. If one shift has a supervisor...that promotes SPI more than others...or who are more concerned with the queue and the calls for service then we're compared and seen as lower on the SPI. So, we may not have as many SPI arrests because we are taking more calls for service or...we just see the queue as being more important because that's how our supervisor's kind of got us thinking, so that we might get the thatta boys more, we get the, hey you guys have to do more SPIs, which is

after the fact when we have been told that the queue is more important. It is a little contradictory?” (GP6).

Consequently, the inspector, analysts, and some GP members indicated that standardized roles, responsibilities, and accountability measures are important to overcome barriers that present themselves in scenarios involving unsupportive senior staff members. However, these standardized roles must still allow for each division to tailor a response to their district’s issues:

“They are going to tailor it to their own needs and it is going to come down to them tailoring it to their needs, but again you want to standardize it so you don’t want to open that door all the way because they want to change things, whereas if you do that it may not work as well. But they do have a different aspect of how they are going to apply it, how they apply SPI for their gang suppression is different than how we apply SPI for divisionally directed stuff within EDS although it can be utilized in the same way in the sense, so it is about showing them how it all works and then them figuring out a way to implement SPI for their program (Inspector)”.

Alternatively, patrol sergeants may promote SPI by allocating downtime for GP members to conduct SPI activities as well as by providing GP members with the training required to conduct proactive policing activities. In the interviews, GP members as well as supervisors indicated that receiving focused reinforcement was the most effective method

of promoting and supporting a novel policing initiative. For instance, providing generic reinforcement to officers that was not based on a specific activity that they carried out was interpreted as just paying lip service to them. Alternatively, when GP members were provided with reinforcement based on the details of a successful SPI activity (e.g. one resulting in an arrest), then GP members felt more supported by their supervisors and were provided with a feeling that they were providing meaningful contributions to their team in ED.

To address this issue, ED has made SPI activities a factor in transfers to specialty units within the Division. Thus, patrol sergeants who are not participating in SPI are negatively impacting the officers under their command as well as themselves. If GP members are not allowed to conduct SPI activities because of their patrol sergeant then they will put pressure on their patrol sergeants to do so because they do not want to be overlooked for a transfer. Additionally, some supervisors in ED have taken it upon themselves to provide focused, positive reinforcement to members for participating in SPI to increase buy-in. Regardless, supervisors who are not enthusiastic about participating in SPI present a difficult challenge to the optimization of the program.

Chapter Five

Quantitative Analysis of the Smart Policing Initiative

5.1 Process evaluation of SPI activities

This chapter addresses the following questions:

- Are the proactive tactics and strategies advocated by proponents of SPI actually utilized in dealing with problem people and areas?
- Has SPI had an impact on criminal activity in East District?

Providing objective measures of “proactivity” can be difficult. In his evaluation of the Edmonton Police Service, Curtis Clarke (2006) has defined proactivity as the “strategic deployment of resources in order to target criminally active individuals and community disorder” (Clarke, 2006:9) In the Edmonton context, “strategic” referred primarily to the analysis of data and use of “Problem Files,” a system that appears similar to the SPI bulletins used in East District.

Proactivity in ED encompasses those initiatives that use crime analysis to target problem people and problem places. The extent to which this has an impact on crime rates, calls for service, and traffic issues will be explored in the following sections.

Increasing Police Proactivity and Visibility in ED

Since the days of Guyot’s (1979) ‘bending granite’ analogy, many policing researchers have found that police officers are reluctant to change the way they do their jobs. For example, the attempt to implement community policing in many departments was unsuccessful because the leadership was unable to get line officers to ‘buy in’ to a new philosophy and practice of policing. Thus, in assessing the success of a strategy like

SPI, it is important to determine the degree to which WPS members carry out the proactive work that is necessary to make the strategy successful.

The interviews reported in Chapter 4 suggest that there has been a high level of ‘buy in’ by East District members. To see if these attitudes have been translated into actions in the community, this chapter will examine the actual use of SPI “toolkits” by officers to determine the degree to which officers are doing the proactive police work that is at the heart of SPI.

Proactive and performance (SPI) numbers

The East District SPI Coordinator collected the data used in this analysis. The data are available from December 1, 2012 until June 11, 2016. Frequency counts were made for various measures and amalgamated for each of the three units from ED - general patrol, community support, and divisional crime units. From December 1, 2012 until Jun 11, 2016 the recorded police activity of ED was separated into four-week cycles that run from Sunday to Saturday. However, traffic citations were recorded every month on a standard 12- month calendar. SPICOMS were not recorded by ED until late 2013, and therefore were only available from Dec 1, 2013 until Jun 11, 2016.

Variables. We begin by observing SPI-specific variables (hotspots, subjects, and coms), followed by other measures of proactive activity associated with the SPI toolkit (traffic stops, compliance checks, special attention events, and park and walks). SPI activities are proactive because they are strategically guided by available data and are officer-initiated i.e. they are not mandated activities for ED members to perform. SPI subjects, SPI hotspots, and SPICOMS are three quantitative measures of police

proactivity. In addition, there are two enforcement measures: SPI T-stop arrests and SPI spot check arrests. Each of these measures is the end result of a SPI activity as opposed to being the result of a more general proactive activity. Furthermore, it is important to separate SPI T-stop arrests, and SPI spot check arrests since including them with the other three SPI activities would count the same SPI activity twice. For instance, if an ED service member is conducting a SPI hotspot and arrests an individual while conducting a traffic stop in the SPI hotspot or SPICOMS then it is counted as a SPI T-stop arrest as opposed to a SPI hotspot or SPICOMS activity. Therefore, including a SPI T-stop as a SPI activity would be inaccurate since it is simply an arrest that is the result of a police officer conducting a SPI hotspot or SPICOM. The first set of variables is most significant because they are direct measures of SPI police proactivity—police activity based on data collected and analyzed by a WPS crime analyst and disseminated by the SPI analyst through the creation of SPI bulletins. Secondly, park and walks, traffic stops (TSTOPS), compliance checks, special attention (SPATs), and spot checks—are alternate measures of proactivity. These activities are self-initiated activities and officers do not need to respond to a SPI bulletin. However, these still provide insight into the degree to which officers in ED are moving away from a primarily reactive model to a proactive and strategic model.

Figures 2-4 show the trends in SPI activities from 2013-2016.

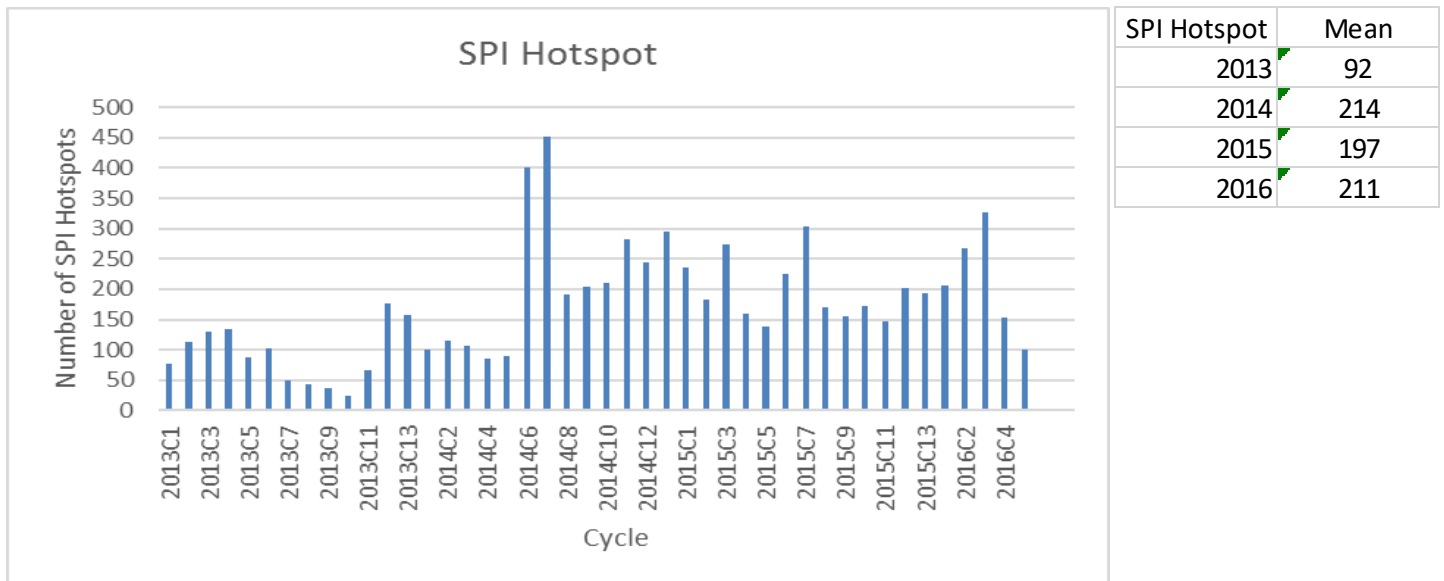


Figure 2: SPI Hotspots initiated in ED from Dec 1st 2012 to the 5th cycle of 2016.

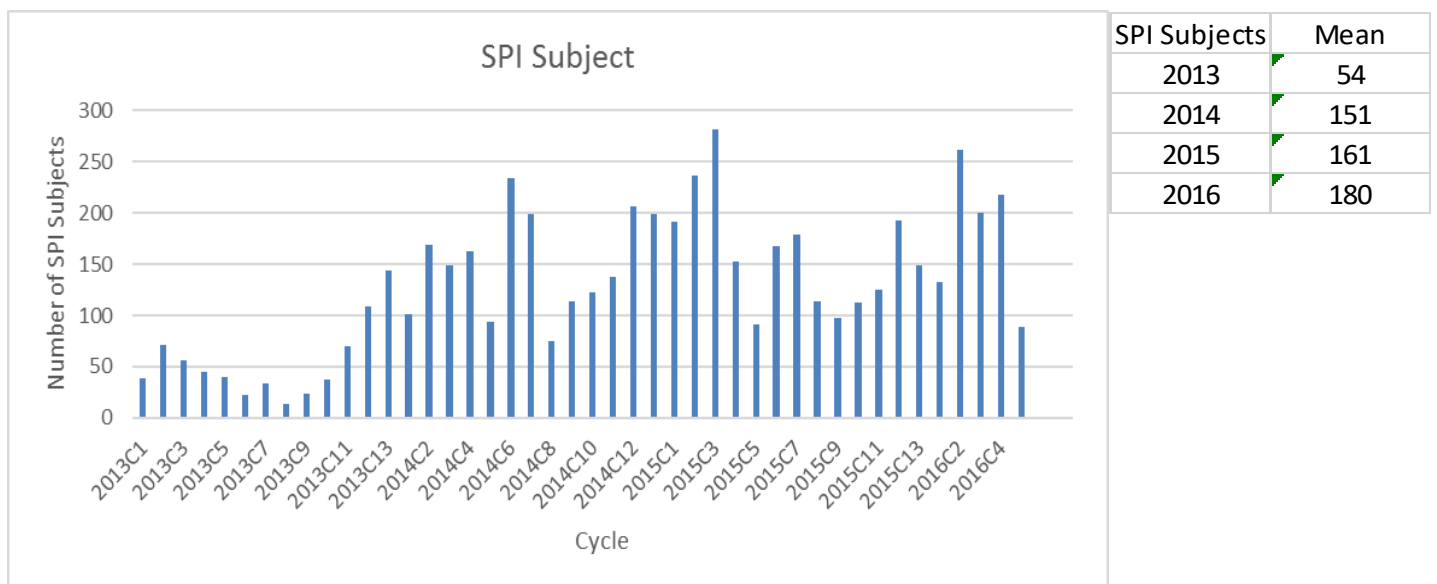


Figure 3: SPI Subjects initiated in ED from Dec 1st 2012 to the 5th cycle of 2016.

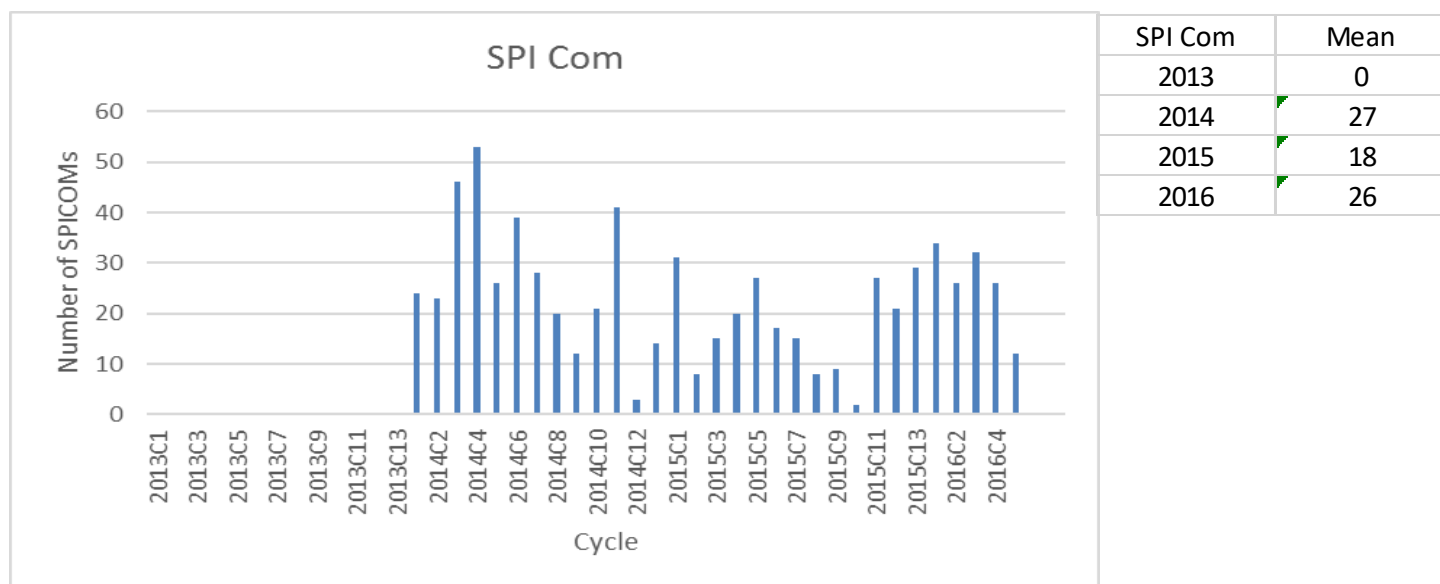


Figure 4: SPICOMS initiated in ED from Dec 1st 2013 to the 5th cycle of 2016.

While the SPI program commenced in late 2012, implementing a new philosophy and changing longstanding practices takes time and it is apparent from Figures 2 and 3 that SPI was phased in gradually and SPI activities did not become part of regular practice until 2014. The numbers of SPI Hotspot checks and SPI Subject checks increased quite dramatically from 2013 to 2014 and have remained high since then. SPI subjects increased by 2.8 times compared to the previous year, while there were 2.3 times more SPI hotspots. Finally, SPICOMS are exclusive measures of the proactive policing activities of the Community Support Unit that only began to be tracked from Dec 2013 until Jun 2016. Over this time frame, SPICOMS have remained relatively stable with a mean of 24 recorded activities per cycle. Unfortunately, there was no data to compare this average to prior to the implementation of SPI.

These results are important for two reasons. In 2013, there was a negative view of SPI activities among some ED service members who felt that by undertaking a SPI

activity they would be perceived by other service members as avoiding responding to calls for service; i.e. avoiding their normal duties. The interviews conducted in 2016 suggested that this negative view has been mitigated among ED uniform members and this perception is supported by the data about SPI activities. Second, this increase in SPI activities indicates that ED uniform members increasingly used their discretionary time to perform various duties based upon intelligence collected and disseminated by the ED SPI analyst and crime analysts, as opposed to simply conducting random patrol and clearing low priority service calls in the queue. After the initial increase in checks of SPI hot spots and SPI subjects, ED members sustained the changes through 2016. In 2013, the mean number of SPI subjects initiated by ED members was 54. From 2014 until 2016 SPI Subjects had a mean of 151 or 2.80 times greater than 2013. SPI Hotspots went from a mean of 92 to 239 or 2.6 times greater in during 2014-2016 compared to 2013. These numbers are significant because they indicate that SPI is a continuing initiative since ED service members are continuing to participate in SPI activities.

Proactive Activities

Traffic stops, park and walks, special attention activities, spot checks, and compliance checks are not directly related to the analysis done for SPI, as ED members may engage in these activities within or outside of SPI hotspots. However, each of these activities is a form of proactive policing since they are the result of self-initiated activities by ED service members rather than activities resulting from calls for service. Consequently, they are all indications of a general shift from reactive to proactive policing by ED personnel.

Traffic (T-stops): Traffic stops are recorded when an ED service member stops a vehicle for either a traffic code violation and/or as a result of suspicious activity that may or may not result in a traffic ticket (PON) being issued. In 2013 the mean number of traffic stops initiated by ED members was 350 per cycle. From 2014 until 2016 traffic stops had a mean of 590 or 1.7 times greater than 2013. These numbers indicate that ED service members continue to increase their proactive activities while conducting their daily duties.

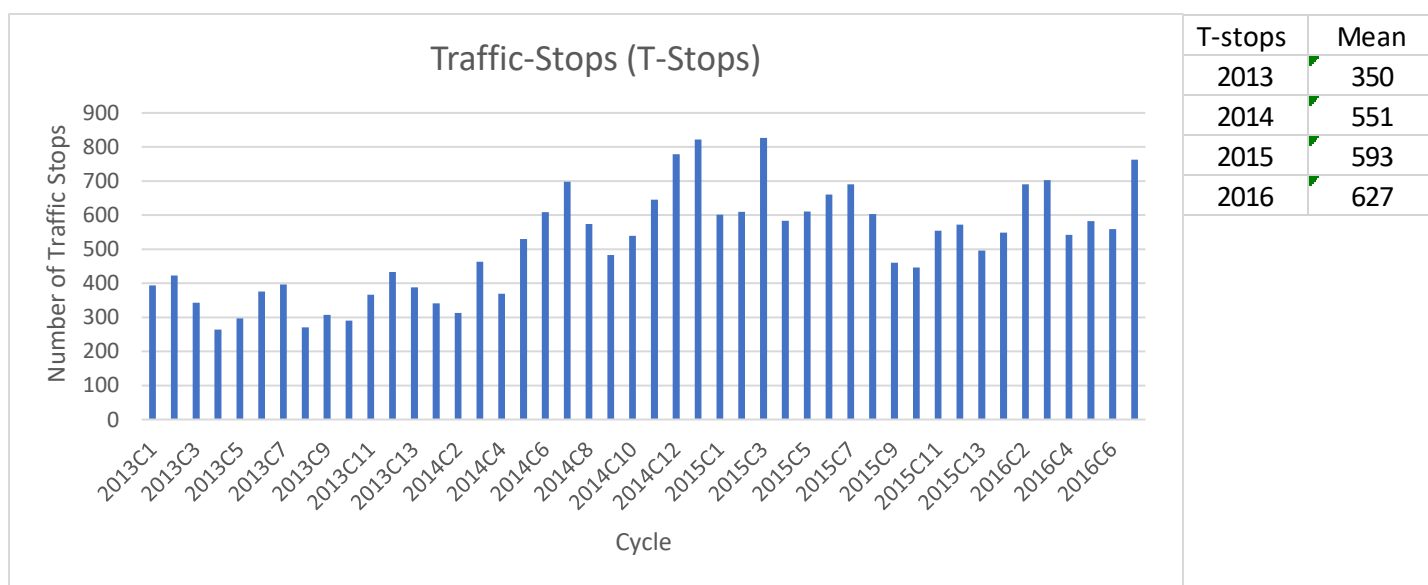


Figure 5: Traffic stops initiated in ED from Dec 1st 2012 to June 11th 2016

SPATs and Spot Checks: Special attentions (SPATs) are when police focus their attention on a particular area, while spot checks are when police focus their attention on particular individuals/vehicles. Although each of these activities is self-initiated, they are not based upon data analysis or formal intelligence and so are not considered to be SPI activities. In 2014, there were slight less than half as many SPATs as there had been in 2013. The mean number of SPATS per cycle remained almost the same in 2015, then in 2016 went back to the 2013 level. Spot checks remained about the same in the years after

2013, increasing slightly in 2016. Overall, SPI did not have a significant impact on these forms of proactive policing in ED.

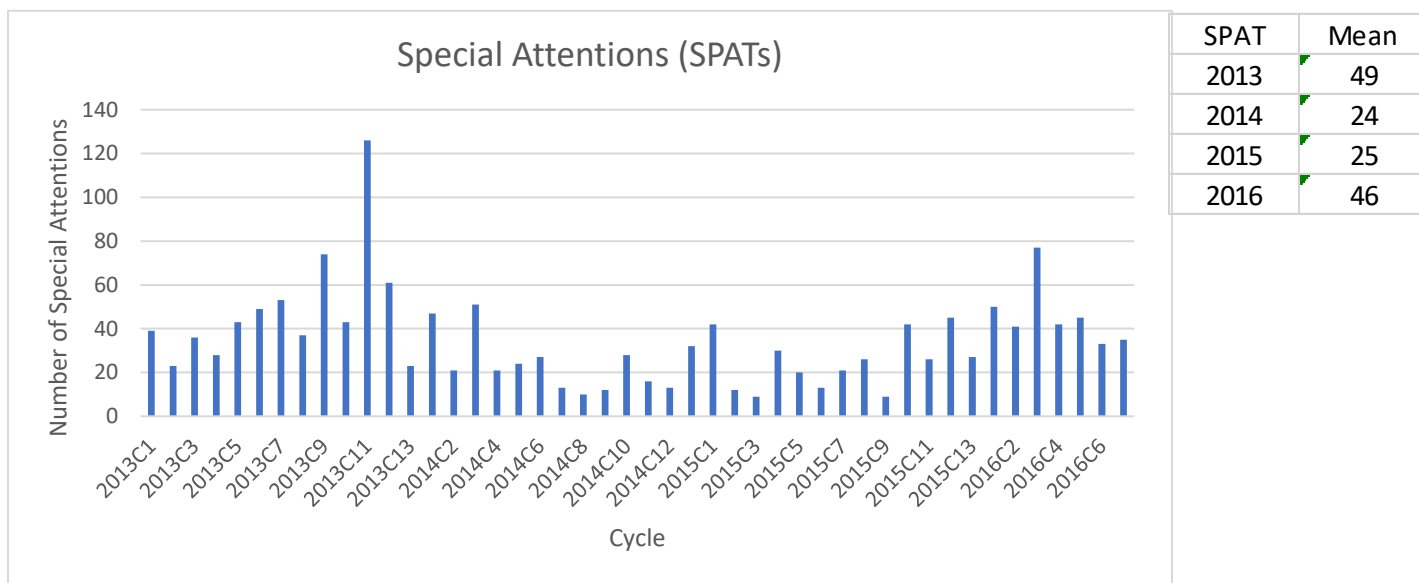


Figure 6: Special Attentions (SPATs) initiated in ED from Dec 1st 2012 to June 11th 2016.

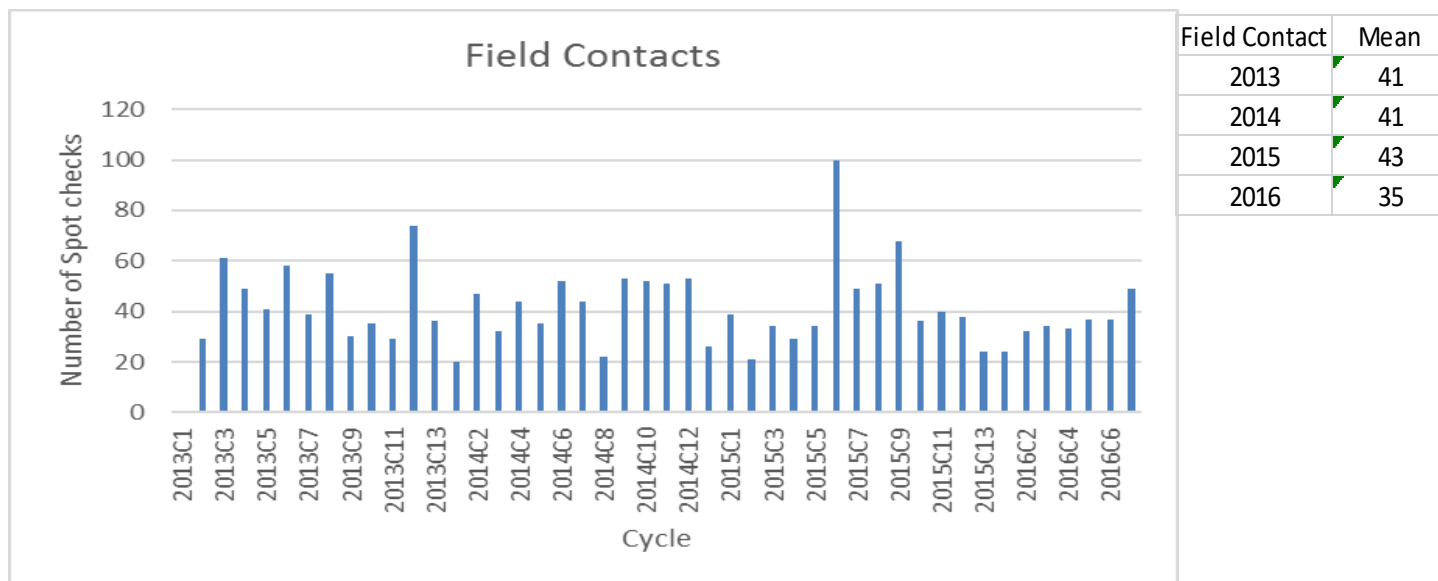


Figure 7: Field Checks initiated in ED from Dec 1st 2012 to June 11th 2016.

PAWKS (Park and Walks): Park and Walks are a useful activity for uniform members of ED because they are not initiated to enforce the law. Instead, these police-

public interactions are initiated to build rapport with citizens. These forms of interactions are relatively rare, but they are an important measure of ED's commitment to community engagement (Lichtenberg, 2007). Research into police-public relations has shown that community engagement activities are important to increase the legitimacy of a police service and the effectiveness of proactive police initiatives (National Research Council, 2007). In 2014 PAWKs increased by 33% from 2013 (Figure 8). They declined in 2015, but increased in 2016 to an average of 18 per cycle. Officers noted in interviews that they felt justified in using PAWKs because they were "following the numbers". In other words, ED uniform members indicated that they are more willing to conduct a PAWK because hotspot data provides a reason for them to be in the area.

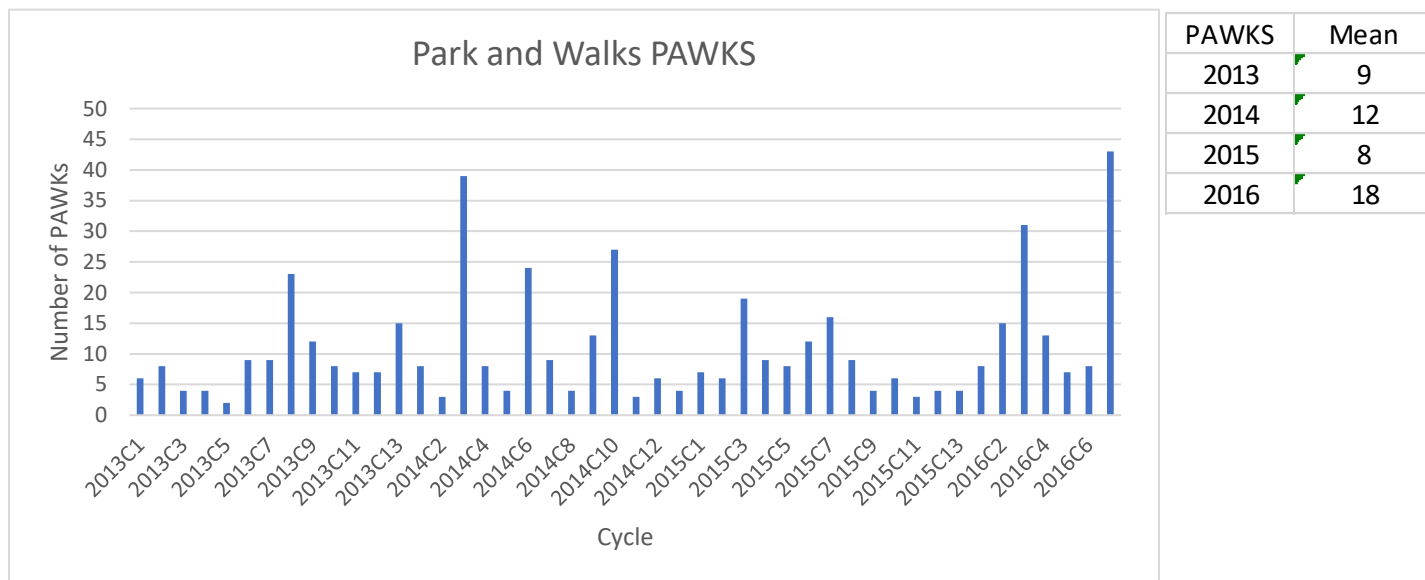


Figure 8: PAWKs initiated in ED from Dec 1st 2012 to June 11th 2016.

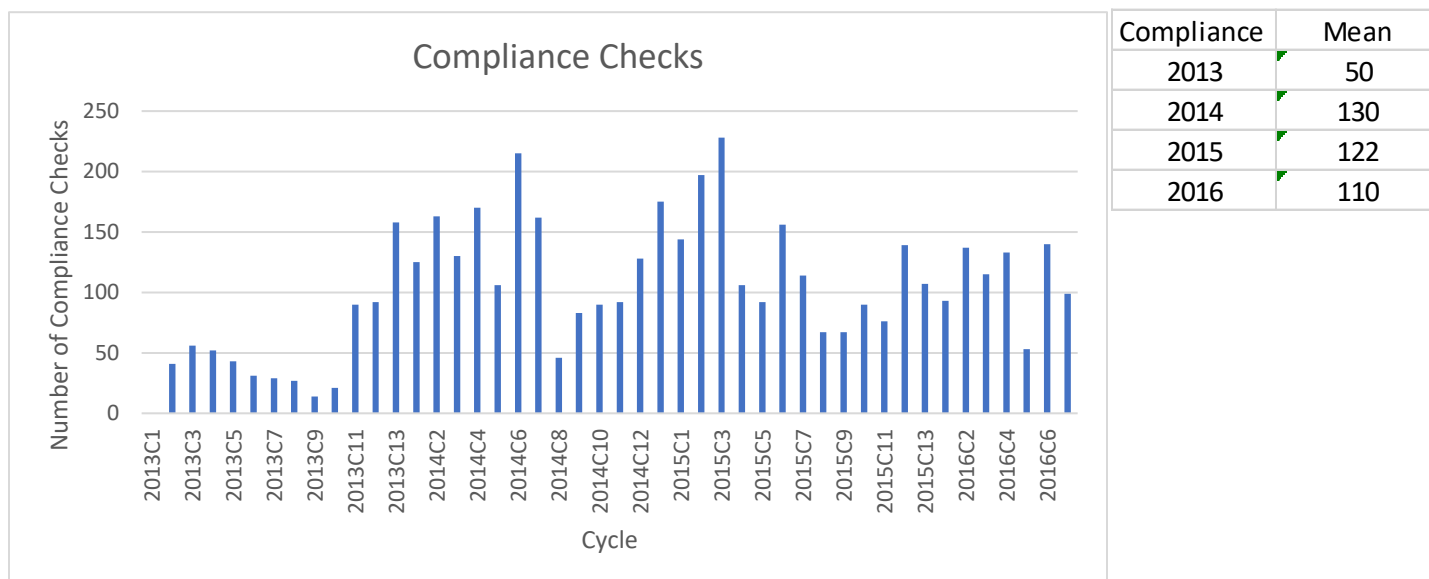


Figure 9: Compliance checks initiated in ED from Dec 1st 2012 to June 11th 2016.

Compliance Checks. A benefit of SPI to ED is that it encourages members to focus on high-risk criminal individuals residing in ED with court conditions. Prior to SPI, ED did not have an effective mechanism to obtain, validate, and disseminate information about court-ordered release conditions, such as curfew checks for high-risk offenders. However, the SPI analyst has worked in partnership with Manitoba Justice to obtain and distribute information about high-risk offenders with serious criminal records who resided in East District. SPI bulletins were not issued – rather a link to Niche (the WPS Records Management System) is created that allows officers to access these lists in on their laptop in their cruiser cars or via the station desktop computers. These lists are broken down by cruiser car area or PUAR. Compliance checks increased by 260 percent from 2013 to 2014 and have remained at a high level since then.

Measures of Enforcement

Proactive traffic-stop arrests and proactive spot check arrests result from both SPI and non-SPI activity initiated by ED service members. From 2013 - 2014, proactive spot checks arrests increased by 1.7 times, and remained at that level until 2016, while proactive T-stops remained constant throughout the whole period. These results are a direct measure of proactive and evidence-based policing tactics that show an operational shift has occurred in ED away from a reactive model towards a proactive one.

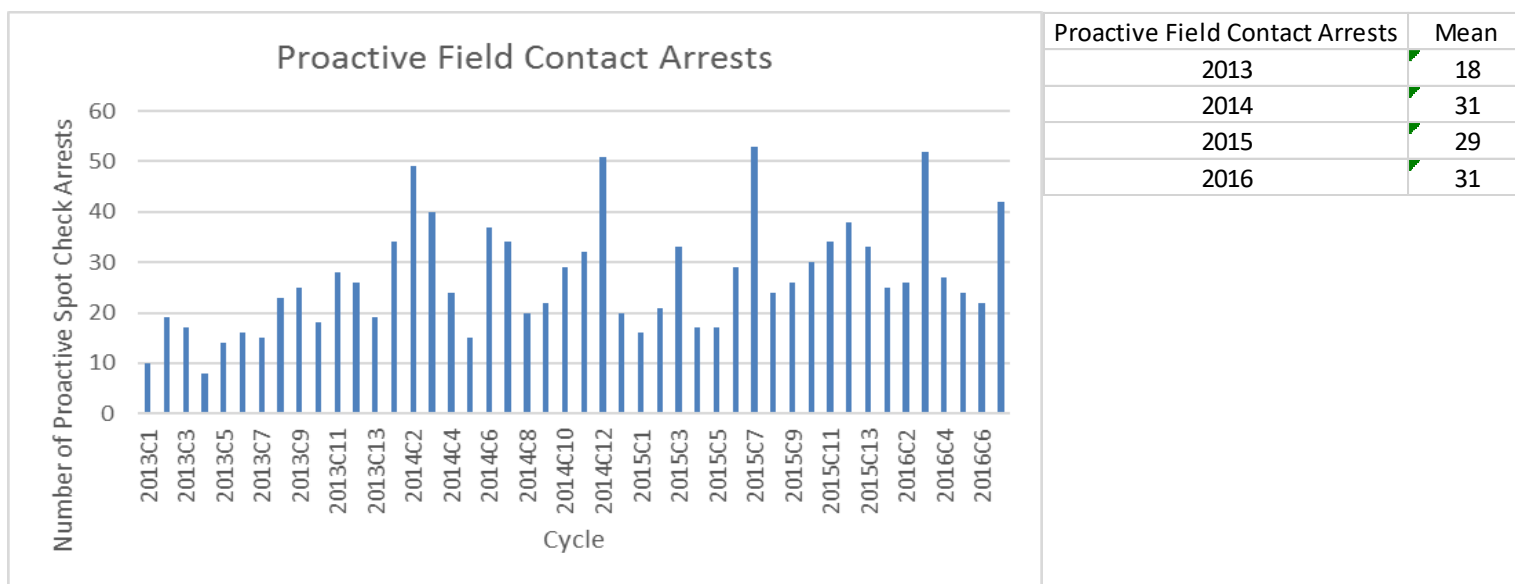


Figure 10: Proactive Field Contacts initiated in ED from Dec 1st 2012 to June 11th 2016.

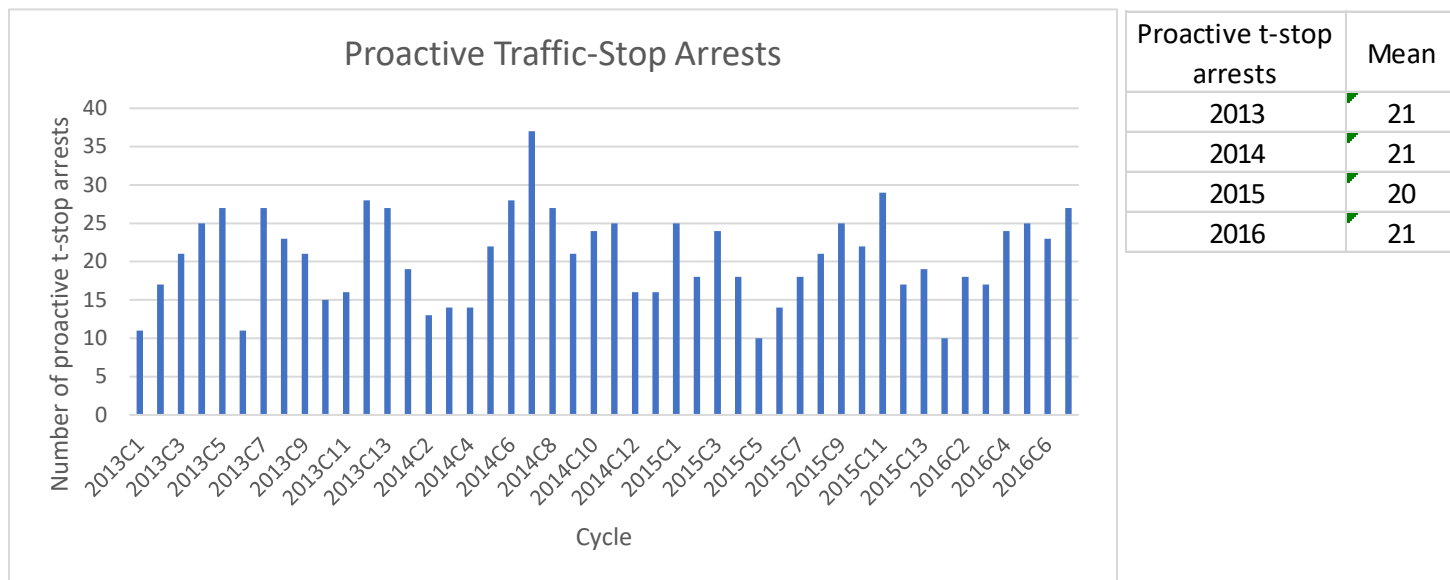


Figure 11: Proactive Traffic Stops Arrests initiated in ED from Dec 1st 2012 to June 11th 2016.

Traffic citations (PONs) are not direct results of SPI activities, but they are results of proactive policing activities. In 2014, PONs were 36 percent greater than 2013. After a small decline in 2015, the mean number of PONs increased substantially in 2016 to a level which is almost double the number in 2013.

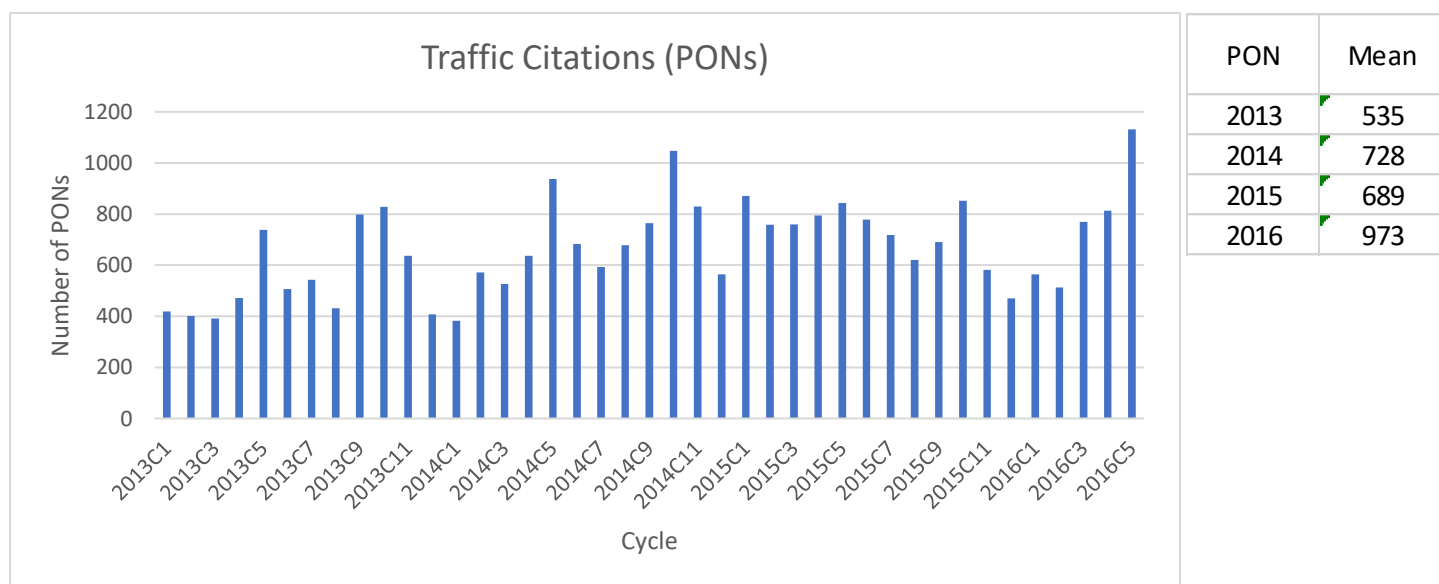


Figure 12: PONs initiated in ED from Jan 1st 2014 – Jun 30th 2016.

5.2 The Impact of SPI on Crime Rates

Univariate Results

Four scatterplots were created to compare property and violent crime between ED and WD as well as ED with the rest of the city i.e. Districts 1 and 3.

Property Crime

This section will begin with the results of property crime since the SPI program should have its greatest impact on this form of crime. Figures 13 and 14 below show that there is a seasonal pattern to property crime and shows similar trends among the districts for the frequency of property crime. Table 4 compares the percentage changes in property crime between ED and WD as well as ED and the rest of the city before and after the inception of SPI. When comparing the percentage changes amongst ED, WD, and the rest of the city from before and after the inception of SPI, it is clear that property crime has dropped in ED, while it has increased in WD and in the rest of the city. Specifically, ED has had a 9.2% reduction in property crime, while WD and the rest of the city have had a 3.5% and 12.1% increase in property crime since the inception of SPI. There is a 21.4% difference in property crimes when ED is compared to the rest of the city and a 12.7% difference in property crimes when ED is compared to WD. In raw numbers, the average number of property crimes has decreased from 567 in 2013 to 515 in 2016 in ED while it has increased from 626 in 2013 to 646 in 2016 in WD and from 1531 in 2013 to 1664 in

2016 in the rest of the city.

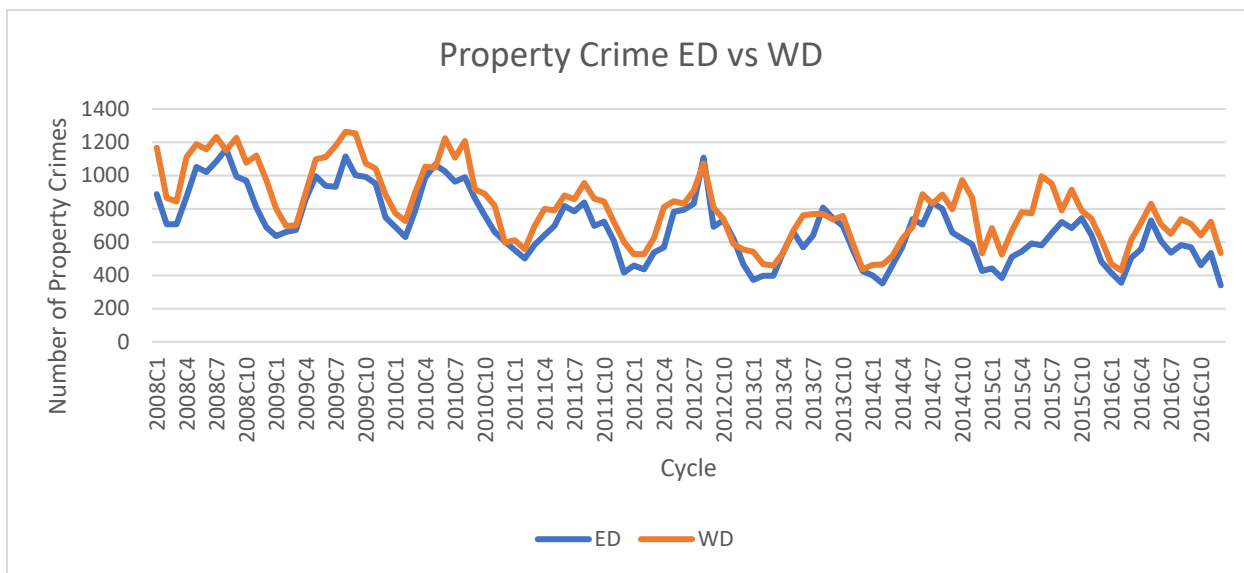


Figure 13: Property crime rates in ED and WD from Jan 2008 until Dec

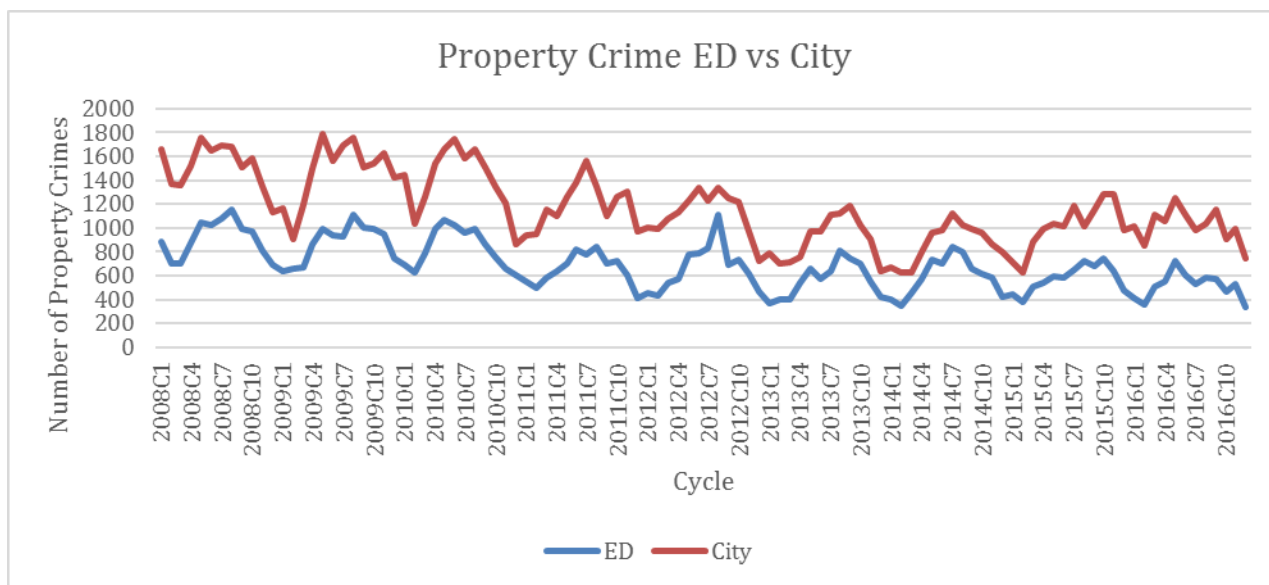


Figure 14: Property crime rates in ED and the rest of the city from Jan 2008 until Dec 2016.

Property Crime Year	Mean			% Change		
	ED	WD	D1D3	ED	WD	D1D3
2008	912	1092	1520			
2009	875	1000	1472	-4.1	-8.5	-3.1
2010	835	938	1404	-4.5	-6.1	-4.6
2011	655	764	1194	-21.6	-18.6	-15
2012	669	736	1126	2.1	-3.7	-5.7
2013	567	624	908	-15.2	-15.3	-19.4
2014	596	710	870	5	13.9	-4.2
2015	581	768	1013	-2.5	8.1	16.5
2016	515	646	1018	-11.3	-15.9	0.5

Table 3: Monthly percent changes in property crime rates in ED, WD, and the city from Jan 2008 until Dec 2016.

Property Crime	ED	WD	Rest of the City
2008 – 2012	-26.6%	-32.6%	-25.9%
2013 - 2016	-9.2%	3.5%	12.1%

Table 4: Percent changes in property crime rates in ED, WD, and the city from Jan 2008 until Dec 2016.

Violent Crime

Figures 15 and 16 show the trends in violent crime from 2008-2016. Table 6 compares the percentage changes in violent crime between ED and WD as well as between ED and the rest of the city before and after the implementation of SPI. The declines in violent crime from 2008-2012 were similar for ED, WD, and the rest of the city. While ED shows a smaller increase in violent crime than the rest of the city from 2013-2016 (1.6% for ED and 11.5% for the rest of the city), WD showed a decline of 6.9%. Thus, the difference between ED and the rest of the city suggests that SPI made a difference, but the difference between ED and WD was not in the expected direction. This ambiguous result suggests that SPI had at best a limited impact on violent crime.

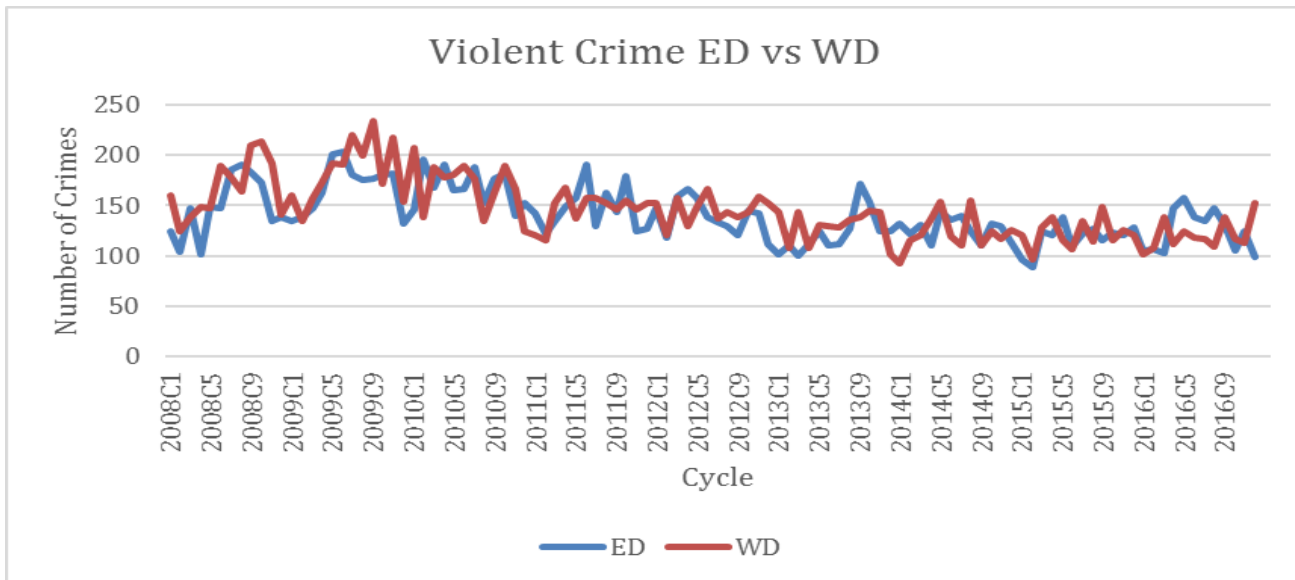


Figure 15: Violent crime rates in ED and WD from Jan 2008 until Dec 2016.

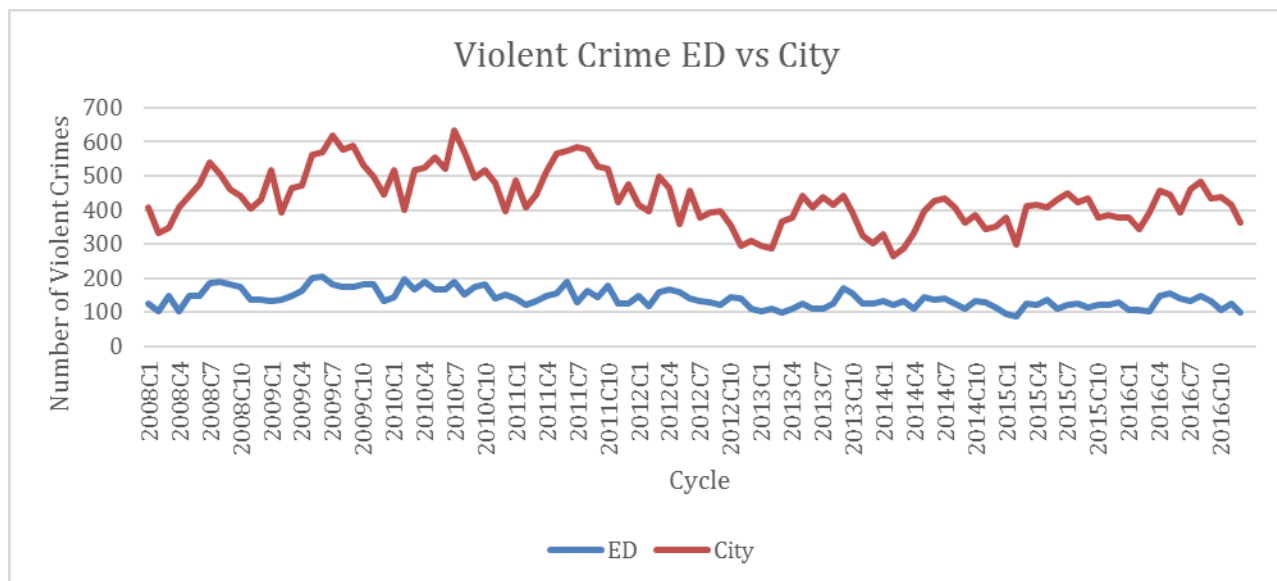


Figure 16: Violent crime rates in ED and WD from Jan 2008 until Dec 2016.

Violent Crime	Mean			% Change		
Year	ED	WD	D1D3	ED	WD	D1D3
2008	148	167	433			
2009	168	184	520	13.1	10.1	20.1
2010	168	170	510	0.4	-7.6	-1.9
2011	147	147	508	-12.9	-13.7	-0.3
2012	139	146	393	-5.3	-0.6	-22.7
2013	123	130	374	-11.8	-11	-4.8
2014	127	124	360	3.6	-4.7	-3.8
2015	118	122	399	-7.3	-1.1	10.8
2016	125	121	417	5.9	-1.1	4.4

Table 5: Monthly percent changes in violent crime rates in ED, WD, and the city from Jan 2008 until

Violent Crime	ED	WD	Rest of City
2008 – 2012	-6.1%	-12.6%	-9.2%
2013 - 2016	1.6%	-6.9%	11.5%

Table 6: Percent changes in violent crime rates in ED, WD, and the city from Jan 2008 until Dec 2016.

Regression Results

A simple linear regression analysis has been utilized to compare property crime and violent crime between ED and WD as well as the rest of the city of Winnipeg i.e. District 1 and 3. The reason that this method was chosen is because it is the most robust methodology available to the researcher of this project based upon the available monthly data collected by the WPS from January 2008 until Jul 2016.

A scatterplot was created for property crime and violent crime that were indicative of a linear relationship over time. Additionally, a preliminary multivariate assumption check was run, utilizing a normal probability plot, and verified that there are no issues of normality, linearity, outliers, or homoscedasticity except for violent crime between ED and the rest of the city (appendix 1). The normality plot results for ED and the rest of the city suggest issues with heteroscedasticity. Finally, there are no issues with missing values in this data set as it is recorded monthly by the WPS.

Property Crime ED: compared to WD

From 2008 until 2016, Table 7 shows the results that there is a statistically significant difference between the average property crimes rates of ED and WD at $P < .01$. Furthermore, the results of the regression analysis found that district i.e. ED and WD has a strong relationship with crime rates with an R square of .69 as well as a strong percentage of explanation for monthly property crime rates with an adjusted R square of .66. The intercept or mean value of property crimes in ED and WD from January 2008 until December 2016 is 731. Since the inception of SPI in 2013 until December 2016, the average number of property crimes in ED is 221 crimes lower when compared to the average during that same time period in WD.

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.830740562							
R Square	0.690129882							
Adjusted R Square	0.668546888							
Standard Error	124.9959846							
Observations	216							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	14	6994220.431	499587.2	31.97563	1.42327E-43			
Residual	201	3140423.231	15624					
Total	215	10134643.66						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	731.3780743	31.67665969	23.08886	1.91E-58	668.9168803	793.839268	668.9168803	793.8392683
D1	31.57533284	41.91471852	0.753323	0.452137	-51.07363931	114.224305	-51.07363931	114.224305
D2	-35.58808126	41.87154243	-0.84993	0.396373	-118.1519172	46.9757547	-118.1519172	46.9757547
D3	48.08183798	41.83243995	1.149391	0.251761	-34.40489429	130.56857	-34.40489429	130.5685702
D4	175.0850905	41.79742252	4.188897	4.19E-05	92.66740694	257.502774	92.66740694	257.5027742
D5	273.2550098	41.7665004	6.542444	4.92E-10	190.8982995	355.61172	190.8982995	355.61172
D6	293.5360401	41.7396827	7.032541	3.11E-11	211.23221	375.83987	211.23221	375.8398703
D7	301.0392927	41.71697733	7.21623	1.07E-11	218.7802338	383.298352	218.7802338	383.2983516
D8	367.9869897	41.69839102	8.824969	5.35E-16	285.76458	450.209399	285.76458	450.2093994
D9	266.7680201	41.68392927	6.399781	1.07E-09	184.5741266	348.961914	184.5741266	348.9619135
D10	230.604606	41.67359637	5.53359	9.71E-08	148.4310873	312.778125	148.4310873	312.7781247
D11	158.3856363	41.66739541	3.801189	0.000191	76.22434491	240.546928	76.22434491	240.5469277
Since SPI	-221.0357717	80.74588692	-2.73742	0.006748	-380.2534593	-61.818084	-380.2534593	-61.81808412
Trend	-0.007318283	0.933858169	-0.00784	0.993755	-1.848733912	1.83409735	-1.848733912	1.834097346
District	-119.3611111	17.00979901	-7.0172	3.39E-11	-152.9016538	-85.820568	-152.9016538	-85.82056844

Table 7: regression analysis of property crime rates in ED compared to WD from Jan 2008 until Dec

Property Crime: ED compared to the rest of the city

When property crime in ED is compared to the rest of the city there is also a statistically significant difference. From 2008 until 2016, table 8 shows the results that there is a statistically significant difference between the average property crimes rates of ED and the rest of the city at $P < .01$. Furthermore, the results of the regression analysis indicate that district i.e. ED and the rest of the city has a strong relationship with crime rates with an R square of .82 as well as a strong percentage of explanation for monthly property crime rates with an adjusted R square of .80. The intercept or mean value of property crimes in ED and the rest of the city from January 2008 until December 2016 is 1088. Since the inception of SPI in 2013 until December 2016, the average amount of property crimes in ED is 440 crimes lower when compared to the average during that same time period in the rest of the city.

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.905619105							
R Square	0.820145964							
Adjusted R Square	0.807618817							
Standard Error	154.1525261							
Observations	216							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	14	21780523.39	1555752	65.46949	7.12846E-67			
Residual	201	4776363.26	23763					
Total	215	26556886.65						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1088.139966	39.06555177	27.85421	6.2E-71	1011.109085	1165.170847	1011.109085	1165.170847
D1	82.49599355	51.6917384	1.595922	0.112077	-19.43166333	184.4236504	-19.43166333	184.4236504
D2	-15.311723	51.63849107	-0.29652	0.767141	-117.1343849	86.51093881	-117.1343849	86.51093881
D3	99.88056038	51.59026755	1.936035	0.054266	-1.847012574	201.6081333	-1.847012574	201.6081333
D4	208.8506216	51.54708195	4.051648	7.26E-05	107.2082036	310.4930396	107.2082036	310.4930396
D5	356.9873494	51.50894695	6.930589	5.57E-11	255.4201274	458.5545714	255.4201274	458.5545714
D6	333.290744	51.47587376	6.474698	7.14E-10	231.7887369	434.792751	231.7887369	434.792751
D7	367.0385829	51.44787214	7.134184	1.73E-11	265.5917904	468.4853754	265.5917904	468.4853754
D8	402.6753108	51.42495039	7.830349	2.74E-13	301.2737163	504.0769053	301.2737163	504.0769053
D9	301.8675942	51.40711529	5.872098	1.76E-08	200.5011676	403.2340208	200.5011676	403.2340208
D10	276.8932109	51.39437215	5.387617	1.99E-07	175.5519117	378.2345102	175.5519117	378.2345102
D11	200.0854944	51.38672474	3.89372	0.000134	98.75927455	301.4117142	98.75927455	301.4117142
Since SPI	-440.127532	99.58065833	-4.41981	1.61E-05	-636.4843099	-243.770755	-636.4843099	-243.770755
Trend	1.567362317	1.151689761	1.360924	0.175062	-0.703581598	3.838306232	-0.703581598	3.838306232
District	-479.888889	20.97750175	-22.8764	7.37E-58	-521.2530927	-438.524685	-521.2530927	-438.5246851

Table 8: regression analysis of property crime rates in ED compared to the rest of the city from Jan 2008 until Dec 2016.

Violent Crime: ED compared to the rest of the city

ED does a statistically significant different violent crime rate in comparison to the rest of the city. From 2008 until 2016, table 9 shows the results that there is a statistically significant difference between the average violent crime rates of ED and the rest of the city at $P < .01$. Furthermore, the results of the regression analysis found that district i.e. ED and rest of the city has a strong relationship with crime rates with an R square of .92 as well as a strong percentage of explanation for violent crime rates with an adjusted R square of .91. The intercept or mean value of violent crimes in ED and the rest of the city from January 2008 until December 2016 is 425. From the inception of SPI in 2013 until December 2016, the average amount of violent crimes in ED is 120 crimes lower when compared to the average violent crimes during that same time-period in the rest of the city.

Violent Crime: ED compared to WD

ED and WD do not have a statistically significant difference when comparing violent crime rates.

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.959747802							
R Square	0.921115844							
Adjusted R Square	0.915621425							
Standard Error	46.28048721							
Observations	216							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	14	5027086.635	359077.6	167.6457	1.5138E-102			
Residual	201	430518.5829	2141.883					
Total	215	5457605.218						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	425.8473775	11.7284667	36.30887	3.13E-90	402.7207587	448.9739963	402.7207587	448.9739963
D1	18.19783759	15.51916728	1.172604	0.242342	-12.403423	48.79909818	-12.403423	48.79909818
D2	-16.0171173	15.50318108	-1.03315	0.302775	-46.58685577	14.55262108	-46.58685577	14.55262108
D3	23.21237217	15.48870316	1.498665	0.13553	-7.328818164	53.75356251	-7.328818164	53.75356251
D4	38.21963946	15.47573775	2.469649	0.014358	7.704014791	68.73526413	7.704014791	68.73526413
D5	57.00468453	15.46428866	3.686214	0.000293	26.5116356	87.49773346	26.5116356	87.49773346
D6	58.23417404	15.45435925	3.768139	0.000216	27.76070428	88.7076438	27.76070428	88.7076438
D7	72.51921911	15.44595246	4.695031	4.93E-06	42.06232617	102.976112	42.06232617	102.976112
D8	62.41537529	15.43907077	4.04269	7.52E-05	31.97205192	92.85869866	31.97205192	92.85869866
D9	50.20042035	15.43371622	3.252646	0.001341	19.76765528	80.63318543	19.76765528	80.63318543
D10	42.2632432	15.42989041	2.73905	0.006716	11.838022	72.6884644	11.838022	72.6884644
D11	11.99273271	15.42759446	0.777356	0.437863	-18.42796126	42.41342668	-18.42796126	42.41342668
Since SPI	-120.13289	29.89663227	-4.01827	8.28E-05	-179.0841608	-61.18161896	-179.0841608	-61.18161896
Trend	0.733648598	0.345766395	2.121804	0.035079	0.051853797	1.415443399	0.051853797	1.415443399
District	-294.601852	6.297976596	-46.7772	5.3E-110	-307.020432	-282.1832717	-307.020432	-282.1832717

Table 9: regression analysis of violent crime rates in ED compared to the rest of the city from Jan 2008 until Dec 2016.

Chapter 6: Discussion

SPI is not novel in its use or application of focused, intelligence-led policing tactics. However, SPI is novel in its philosophy and ability to integrate various tactics e.g. hot spot and focused deterrence policing to reduce crime. Beginning in 2013, SPI has been implemented and developed in ED with the aim of increasing the efficiency and effectiveness of policing efforts in the district. To accomplish this goal, ED has utilized geographic, crime, and traffic data to guide the allocation of police resources. This analysis was done by a crime analyst, and SPI coordinator working closely with ED supervisors. The analyzed information was subsequently provided to all ED members from the general patrol, community support, and detectives units by means of SPI bulletins i.e. electronic files that provided a one page summary of time, locations, and known information about a patterned forms of crime happening within a hotspot. SPI bulletins were updated daily by the SPI coordinator and made available to all members through computers in their cruiser cars. Consequently, when ED members had down-time i.e. time they did not have to respond to high priority calls for service, they were able to utilize the information contained within the SPI bulletins to conduct proactive policing activities in an effort to reduce crime in ED.

The purpose of this evaluation was to answer the following questions: (1) have members in ED become more proactive, instead of reactive since the implementation of SPI? (2) what has helped or hindered the implementation of SPI in ED? (3) has SPI had an impact on crime rates in ED?

Utilizing SPI Principles

Overall, the utilization of SPI in ED has led to: increasing information exchange between units; establishing that crime reduction, traffic safety, and community engagement are equal goals of the WPS; and utilizing data/analysis to more efficiently and effectively allocate limited police resources. These findings may be attributed to the SPI program since all five principles of SPI are present within ED:

(1) Locally driven: leadership in ED has ensured that crime reduction strategies are being tailored to the profile of local criminal problems. For example, informal discussions took place regularly between the inspector, the SPI coordinator, crime analyst, and the three unit supervisors to track local trends, identify problems, and implement solutions. Additionally, information from service members and citizens were used to help identify the most effective tactics to deal with the identified problems.

(2) Promotes innovation: ED staff have implemented innovative tactics including data management through the suppression files and statistical/geographic information system integration. Additionally, the SPI coordinator has established relationships with other WPS units as well as with external organizations including Manitoba Justice to obtain and disseminate current information about high-risk offenders to ED service members.

(3) Result oriented: SPI has been focused on producing measurable results. Since the inception of SPI in ED the district has created systematic tracking methods for SPI activities as well as their impact on crime and traffic incidents within ED.

(4) Promotes scientific methodology: the scientific component of SPI has been embraced as evidenced by the hiring of full-time crime analysts as well as partnering with

the U of M to conduct a program evaluation.

(5) Multifaceted approaches: SPI projects are district wide initiatives to address chronic crime/traffic issues within ED. These projects involve law enforcement tactics, community engagement activities, as well as external partnerships with applicable organizations such as local businesses.

Incorporating SPI into WPS culture

SPI utilizes evidence-based policing as well as data analysis to inform and guide pragmatic strategies that mitigate emerging and chronic criminal trends. Specifically, this shifts officers' attention to areas with emerging crime trends. Consequently, SPI directs officers' patrol time into areas that may differ from the areas that they would have chosen to patrol before the implementation of SPI. The interviews conducted with ED members suggest that while this shift in focus has been accepted by many of the members, some are reluctant and believe in reactive policing.

Proponents of reactive policing believe that responding to calls for service is the true form of policing and consequently, calls for service take precedent over proactive forms of policing. Consequently, proactive and community engagement activities are not priorities for these service members. Furthermore, those who support reactive policing expressed the view that data analysis is not as good a method for selecting geographic hot spots of crime compared to their personal knowledge and service history. Finally, there is a concern that focusing on hot spots means that police are simply chasing crime, displacing crime to other areas, and ignoring alternative geographic locations.

Some supervisors expressed the view that the WPS has a reactive culture. One

explanation of this was provided by senior members of the WPS who indicated that since the early 2000s, many officers have only been taught to respond to the queue and simply do not feel comfortable engaging in proactive policing tactics since it is not in accordance with their training and service history. Unfortunately, this view creates impediments to SPI because it leads to practical challenges, such as ineffective use of proactive time, and the diffusion of responsibility for proactive policing to other service members or units. Two major issues relating to the prevalence of reactive policing have had some impact on the implementation of SPI.

First, some ED members are signing off on SPI bulletins without taking the actions required to optimize their proactive policing time. This finding does not call into question all SPI activities, but it does suggest that these activities are not homogenous and that some officers are unclear on how to access SPI activities and/or on how to conduct proactive activities effectively. Consequently, reactive members may prefer responding to calls in the queue over SPI activities because they feel this is the best way they can help their team. This issue was compounded due to a stigma attached to SPI activities by GP members, as they were perceived as 'queue dodgers'. This is unfortunate because conducting SPI activities will ultimately lead to fewer calls for service as well as lower crime rates. These reductions will in turn allow for more proactive policing and community engagement opportunities for WPS members. The interviews and the statistics on proactive activities suggest that this problem has largely been resolved in ED. However, the sentiment is an indication of the support for reactive policing that exists amongst some WPS service members and has been found in other police departments implementing novel strategies/programs (Darroch and Mazerolle, 2012).

Second, reactive officers indicated that they do not have time during their shifts to engage in proactive policing and/or community engagement activities due to insufficient staff and a high volume of calls for service in the queue. Consequently, proponents of a reactive culture mentioned that it is the responsibility of other parts of the WPS to engage in proactive policing and/or community engagement activities because they have the time to do these activities. For instance, some GP members believe that the Community Support Unit has the responsibility for establishing community relationships as well as for dealing with chronic community issues.

To address these conceptual and practical challenges to SPI, previous research has indicated that strong leadership is required at all levels of the department. Executive and front-line management must provide their subordinates with clear direction and must utilize accountability measures to ensure the effective implementation and sustainability of any major organizational reform. However, research has also found that management must balance strong leadership and accountability with allowing their officers the discretion to develop their professional skill sets by utilizing the tools that they feel are best suited for the task at hand (Pearson-Goff, M. and Herrington, V. 2013; Darroch and Mazerolle, 2012). This evaluation has found that strong leadership leading to successful operational change has two components at the executive level as well as the front-line management level.

First, executive leadership must establish policies that outline the conceptual framework of a strategy as well as the strategy's roles, expectations, and accountability measures. Pertaining to SPI, executives should approve a standardized SPI protocol, which includes accountability frameworks to ensure that immediate supervisors and

front-line members are acting in accordance with the principles of SPI. While local circumstances will always vary, some degree of standardization is necessary to avoid ambiguous operational guidelines that result in ineffective implementation. Therefore, SPI must be implemented with clear objectives and activities to which senior managers, supervisors, and front-line members are accountable. Furthermore, mid-level staff will only be supportive of a novel initiative if it is mandated by the WPS executive team and clearly articulated within standard protocols and procedures that senior level WPS members will be held accountable for. These standardized protocols will have to include the responsibilities of all positions as well as ways for each member to meaningfully contribute to the continued development of the program.

Second, front-line management is significant in the sustainability of organizational reform since they control the perception and implementation for front-line service members enacting novel policing initiatives. Due to the paramilitary structure of police organizations, front-line supervisors play a crucial role in supporting uniform members during their daily operations and ensuring that they are acting in accordance with the goals of the police department. Ideally, front-line management have to provide encouragement as well as education to their subordinates in order to effectively guide operational change. However, if front-line management do not provide encouragement or education to their subordinates then operational change will not occur. Pertaining to SPI, when first introduced some senior staff members simply did not believe in the program and voluntarily withdrew their support. Consequently, services members under their command did not adopt or learn the skills required to implement SPI. To address this problem, standardized procedures and accountability measures have to implemented

contemporaneously with novel programs that require operational change.

Impact: Did SPI Have an Impact on Crime Rates?

The results show that there has been a shift from proactive to reactive policing and that this has had a statistically significant impact on property crime in ED in addition to maintaining the lowest violent crime rates in ED compared to the rest of the city. Pertaining to property crime, ED had a 9.2% reduction in property crime rates in 2016 when compared to 2013; while, WD had a 3.5% increase and the rest of the city had a 12.1% increase. Therefore, property crime from 2013 to 2016 in ED was 12.7% lower compared to WD and 21.3% lower compared to the rest of city. Furthermore, the results of the regression analysis indicated that these differences are statistically significant. The statistically significant decrease in property crime in ED suggests that hot spot policing, focused patrols, intelligence sharing, and compliance checks of high-risk offenders can have an impact on criminal activity. Furthermore, this reduction in property crime and shift in operation from reactive to proactive policing did not lead to an increase in violent crime in that ED continues to have the lowest rates in the city.

Chapter 7: Conclusion

The purpose of this thesis was to establish if the SPI program had led to an increase in proactive policing in the daily operation of ED; and if so, did SPI lead to a decrease in crime rates in ED. Subsequently, the results of this project's data indicate that SPI activities and resources are increasingly being utilized by ED members to facilitate a shift from reactive to proactive policing. Additionally, SPI is being developed and sustained by strong leadership and effective use of technology within ED that has positively influenced the policing culture in ED. Finally, the successful implementation of SPI within ED has led to statistically significant reductions in property crime when ED is compared with WD and with the rest of the city and did not lead to an increase in violent crime in ED.

Why SPI worked

The uptake of innovative policing strategies is dependent on utilizing up to date information as well as strong leadership that supports autonomy. Having up to date information readily available to front-line officers saves time and provides guidance for police officers to effectively and efficiently utilize their downtime. Additionally, up to date information provides leaders with the evidence they need to justify sending their resources into a high crime area and monitoring if their efforts are having an impact on that area.

Pertaining to leadership, this thesis elaborates on previous research in that leadership must be understood as a dichotomy that includes executive leadership and front-line leadership: (1) executive leadership that creates clear goals and measurable activities/outcomes as well as accountability measures for members; (2) front-line level

management sustain a novel program by educating and informing their subordinates. Essentially, executives have to create and provide clear goals as well as policies and the allocation of the resources necessary for a novel program. While, front-line management have to facilitate the 'buy-in' by their officers through training, positive reinforcement, autonomy, and enforcement of accountability measures provided by the executive.

Challenges for SPI:

There are two primary challenges that will prevent SPI from reaching its full potential: (1) not addressing reactive culture; (2) overreliance on technological advancements:

(1) Reactive policing culture supports the idea that exclusively responding to calls for service as well as utilizing personal knowledge are the optimal forms of policing. This understanding of policing is troublesome because it limits the ability for police to adapt to their everchanging environment and emerging criminal trends. With decreasing budgets and increasing demands, police departments have to utilize data analysis techniques to increase the efficient use of their time to areas that are experiencing high rates of crime; instead of simply responding to calls for service and patrolling areas of town that police know have chronic criminal issues that may benefit from social development techniques as opposed to exclusive law enforcement tactics.

(2) Police departments cannot become over reliant on technological advancements as well as scientific methodologies as they have in the past. Science and technology are simply tools that are able to identify patterns for police. Crime is inherently, a social problem that will ultimately require a multifaceted, socially influenced solution that is not

reliant only upon data analysis and law enforcement tactics.

Recommendations

SPI is a promising organizational philosophy for the WPS that will help the department to navigate the demands of 21st century policing. The full potential of SPI has not yet been achieved in Winnipeg since SPI is not being utilized in all districts or units within the WPS nor with external partnerships to help mitigate chronic criminal trends. To achieve the full potential of SPI the WPS must implement procedural standards to ensure that all units and districts are utilizing SPI effectively. Specifically, the crime analyst and SPI coordinator positions must continue to develop their capacity to reduce internal communication barriers, gather salient data, and analyze/evaluate policing tactics and initiatives. Therefore, the WPS has to continue to integrate daily operations and intelligence sharing between various units so that up to date and pertinent information is readily available to all service members that may help to work toward achieving their crime reduction goals as a team. Furthermore, methods for facilitating effective external partnerships must be further investigated by the WPS to make a significant difference in the communities that they serve as well as form the foundation to deal with future budget cuts to the service e.g. Block by Block/Thunderwing project.

Targeted proactive policing has been found to reduce many different types of crime. Unfortunately, the reduction in crime has often not been sustained over longer periods of time or after an initial crackdown. One explanation for this is that police focus on chronic trends that are too complex to eliminate with tactics that rely solely on law enforcement tactics. Unlike some previous policing philosophies, SPI promotes

partnerships between the police and citizens, non-government organizations, businesses, and external government departments to address the underlying problems causing chronic criminality. Specifically, SPI is able to facilitate goal oriented community-based partnerships between police and external organizations.

Crime is a complex social phenomenon that cannot be dealt with by police alone. As police budgets begin to be reduced, police departments across North America are accepting the fact that police are not able to arrest their way out of all forms of crime. For SPI to truly impact Canadian society as well as become a lasting policing philosophy, the paradigm must be utilized to create partnerships with organizations, businesses, and other government departments. The police do not have the training nor the resources to deal with chronic poverty, mental health issues, or addiction problems. Consequently, police departments must optimize their resources to reduce emerging crime, tactically deal with organized crime as well as high-risk individual offenders, and partner with outside organizations to deal with the problems underlying systemic criminal issues. Fortunately, SPI provides the means to record, share, and identify the proper organizations, businesses, and government departments to work with. Multiple supervisors indicated that the data that is being tracked and acted upon by SPI provides them with the intelligence that they need to interact with community members effectively since SPI identifies clear goals, activities, and results to share with external entities from the WPS. Further policy development will be able to continue to move the service to optimize its crime reduction function as well as community support role for the city of Winnipeg. By partnering with other government departments, non-government organizations, and private sector groups and organizations the police department will be able to initiate and

monitor cost-effective, multi-faceted programs. The primary reason for these external partnerships is to ensure that they mitigate the exhaustion of their resources spent addressing chronic social issues that they are the de facto provider for due to their 24/7 availability.

In addition to the crime reduction results of SPI, an important finding was the promotion of community engagement by leadership in ED. Police institutions, and the cultures that sustain them, support policing initiatives and activities that are goal-orientated and utilize law enforcement tactics. Alternatively, research has proven that police organizations have not embraced community partnerships as effectively as hoped by previous initiatives e.g. community-oriented policing. Past initiatives have proven that effective police-public partnerships are difficult to establish primarily due to their lack of clarity. Additionally, police-public partnerships are generally with affluent neighborhood residents as opposed to low-income residents that required the most help by police. Fortunately, SPI provides police organizations with the infrastructure required to establish where chronic problems are in their city, the reasons for the problems, which existing organizations may help reduce the problem, as well as the ability to track the problem for progress. Essentially, community groups that have the capacity to conduct social work and provide mental health or continued case management for troubled individuals already exist within each community. These groups should be utilized by the police to help reduce chronic trends since they simply do not have the resources.

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Appendix 1

