



Submitted to:

The Sudbury Regional Police Service 190 Brady Street Sudbury, Ontario P3E 1C7

Prepared by:

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### **Executive Summary**

The use of closed circuit television ("CCTV") monitoring systems in law enforcement remains a relatively new concept in Ontario, despite its extensive use in the United Kingdom and other countries. When the Sudbury Regional Police Service (the "Service") started the Lion's Eye in the Sky video monitoring project in 1996, it was likely the first Service in Ontario, if not Canada, to use CCTV monitoring as a tool for law enforcement.

In the three years that have followed the installation of the first CCTV camera, the number of cameras located in the downtown area of Sudbury has grown to five. As the number of cameras has increased, criminal activity in the downtown area has decreased.

Overall, crime rates in the downtown area have dropped dramatically since the installation of the first camera. While some of this decrease is due to an overall drop in crime across Canada, a significant portion can be attributed to the presence of CCTV monitoring downtown and its ability to deter crime. Our analysis indicates at least 300, and as many as 500 robberies, assaults, thefts and other criminal offenses have been deterred by the Lion's Eye in the Sky project, saving as much as \$800,000 in direct monetary losses.

While the Lion's Eye in the Sky project has proven to be a deterrent to crime, it has also improved the Service's ability to deal with crime and anti-social behaviours such as prostitution, public intoxication and panhandling. In the three years following the introduction of CCTV monitoring in the downtown area, arrests relating to prostitution and drug offenses have increased by an average of 18% per year, indicating the value of CCTV monitoring to detect criminal activity.

### **Executive Summary**

In addition to reducing crime and anti-social behaviour, CCTV monitoring has provided other benefits to the Service. The ability to monitor officers involved in traffic stops or other incidents has improved officer safety. Public safety has also been enhanced as the Lion's Eye in the Sky project allows the Service to locate missing children, find patients from the hospital and prevent potential suicides.

The decision by the Service to implement CCTV monitoring in the downtown core has also gained the approval of individuals and businesses in the area. Our surveys indicate high levels of approval for the Lion's Eye in the Sky project, with 79% of individuals and 98% of businesses agreeing with the decision to implement CCTV monitoring downtown.

While the use of CCTV monitoring causes concerns over intrusions into the privacy of individuals, our research has indicated that projects such as the Lion's Eye in the Sky are well within the rights of the Service. This appears to be the view of the public as well, with 65% of the individuals surveyed and 98% of the businesses indicating CCTV monitoring is not an invasion of privacy.

While the Lion's Eye in the Sky has been an effective means of both deterring and dealing with crime, there is the potential to both enhance and expand the project. Our research has identified gaps in coverage in the downtown area that the Service may wish to consider addressing. As well, the Service may wish to increase the amount of resources dedicated to staffing and signage to ensure that the Lion's Eye in the Sky project continues to contribute to a safe environment for the residents of Sudbury.

| Terms of reference | In an effort to improve law enforcement, the Service, in conjunction<br>with community partners, has implemented a CCTV monitoring<br>project for the downtown area of the City of Sudbury.  |
|--------------------|--|
|                    | Prior to the possible expansion of the project to other areas of the Region, the Service has requested an independent evaluation of the economy, effectiveness and efficiency of the monitoring system.  |
| Study objectives   | As outlined by the Service, the overall objective of the evaluation is<br>to demonstrate whether the use of CCTV monitoring as an adjunct to<br>law enforcement provides positive benefits to both the provision of<br>police services and the community as a whole.   |
| Evaluation premise | At the core of any program evaluation, such as this one, is the question of incrementality.  |
|                    | The key issue is determining what has been the contribution of video<br>monitoring to decreases in criminal activity in the downtown area,<br>i.e. what has been the incremental impact of the cameras. The<br>incremental impact is the difference between what has actually<br>happened in the downtown area and what would have happened to<br>criminal activity, had all else remained unchanged, except that video<br>monitoring was not in place. Determining this requires the<br>application of informed professional judgment and the development<br>of an evaluation theory. |
|                    | Our evaluation was carried out based on the premise that criminal activity in Sudbury will generally reflect the experience of other communities. For example, if crime in the downtown area decreased by 30% following the installation of cameras and crime in other communities also decreased by 30%, the cameras likely did not have an incremental effect as the Sudbury experience is reflective of a general decreased by 50%, the "extra" drop in crime is due to a factor unique to Sudbury, namely the video monitoring system.   |

| Evaluation quanting                                  | We appreciate that other factors besides the video monitoring system<br>may have had an influence on criminal activity in the downtown<br>area. However, our research has indicated that the most significant<br>initiative instituted in the downtown area during the 1990's was the<br>video monitoring system and we have therefore assumed that this<br>has had the largest potential to influence criminal activity. In<br>addition, the emphasis on community-based policing initiatives does<br>not appear to be unique to Sudbury. As a result, other initiatives<br>designed to reduce crime, such as foot patrols and crime prevention<br>programs, are likely common to all communities, not just Sudbury.<br>Accordingly, the CCTV monitoring program is, in our view, the<br>only significant difference in law enforcement between Sudbury and<br>other communities. |
|--|--|
| Evaluation questions                                 | evaluation procedures to answer the following key questions.   |
| Anticipated benefits of the video monitoring project | What were the perceived benefits of the video monitoring<br>project? Was the focus solely on criminal activity or were other<br>benefits also anticipated, such as a reduction in anti-social<br>behaviour and increased officer safety?   |
|  | How was the video monitoring project intended to affect crime?<br>Was the project intended to act in a proactive fashion (i.e.<br>provide a deterrent to crime) or was the use of video cameras<br>designed to provide better evidence after the fact?   |
|  | What types of criminal activities and other behaviours would<br>been influenced by the video monitoring system?  |
| Impact of video monitoring<br>on the downtown area   | How has criminal activity changed in the downtown area since<br>the inception of the video monitoring project? How do these<br>changes compare to communities that do not have video<br>monitoring systems in place?   |
|  | Is the experience of Sudbury's downtown area comparable to<br>other communities where CCTV systems were introduced?  |
|  | What other factors have been influenced by the presence of<br>cameras in the downtown area? Has the extent of non-criminal<br>behaviour (such as panhandling and intoxicated persons)<br>changed due to the installation of the cameras?   |
|  | How is the Service using the system for non-criminal<br>applications? Has the video monitoring program enhanced the<br>Service's ability to undertaken these functions?  |

| Impact of video monitoring<br>on other areas | How has criminal activity changed in other parts of the Region<br>since the installation of the cameras? Has the level of criminal<br>activity in these areas increased, indicating the possibility that<br>criminal activity has moved from the downtown area to other<br>parts of the Region? |
|--|---|
| Costs and benefits of video<br>monitoring    | What is the cost of operating the video monitoring system?<br>How do these costs compare to the benefits obtained from<br>having the system in place?   |
| Acceptance of video<br>monitoring            | How is the video monitoring perceived by the residents of<br>Sudbury? Are they aware that cameras are present in the<br>downtown core?  |
|  | Do people in the downtown area feel safer? Has this contributed<br>to more people downtown, thereby improving conditions for<br>local businesses?   |
|  | Is video monitoring perceived to be an invasion of privacy? Do residents think the benefits of the program outweigh any of the concerns surrounding it?   |
| The future direction of video monitoring     | Is the video monitoring system operated as efficiently and effectively as possible? Are there shortfalls in the system that should be addressed?  |

| Procedures Performed                                 | This section of our report provides an overview of the methodology<br>employed in our review to address these questions and the<br>information upon which our comments and suggestions are based.   |
|--|---|
| Anticipated benefits of the video monitoring project | Discussions were held with representatives of the Service to<br>gain an understanding of the video monitoring project, its<br>intended objectives and how the Service perceived it would<br>influence criminal and anti-social behaviour.   |
| Impact of video monitoring<br>on the downtown area   | Information concerning criminal offenses committed in the<br>downtown area was accumulated and reviewed. This<br>information was then compared to the installation of the cameras<br>in order to ascertain how criminal activity changed subsequent<br>to the commencement of video monitoring.   |
|  | Similar information for other communities that do not have<br>video monitoring systems in place was gathered and compared<br>to the criminal offenses committed in the downtown area. This<br>allowed us to differentiate between a general decrease in crime<br>and decreases caused by video monitoring systems.  |
|  | The experiences of other communities where CCTV systems are<br>present was analyzed to assess the reasonableness of the<br>evaluation results. This information was obtained through a<br>combination of personal interviews and reviews of evaluation<br>studies commissioned for those communities.   |
|  | Interviews were held with officers and members of the<br>communication and dispatch teams to gain their views as to how<br>video monitoring has affected the downtown area.   |
| Impact of video monitoring<br>on other areas         | The number of criminal offenses committed in the portions of<br>Sudbury surrounding the downtown area was reviewed to<br>determine whether there has been a transfer of crime from the<br>downtown core to the surrounding area. The determination was<br>based on a comparison of the level of crime in the surrounding<br>areas to crime levels in other communities. |

| Costs and benefits of video monitoring      | The cost of operating the video monitoring system was compiled<br>based on financial information provided by the Regional<br>Municipality of Sudbury.  |
|---|--|
|   | Research was performed to determine the estimated financial cost of criminal offenses.   |
|   | Based on the decrease of crime experienced in the downtown<br>area (in excess of that experienced in other communities) and<br>the estimated cost of criminal offenses, an estimate of the<br>financial benefits resulting from the decrease in crime was<br>determined. This benefit was then compared to the cost of<br>operating the video monitoring system in order to determine the<br>net financial benefit of having cameras in the downtown area. |
| Acceptance of video<br>monitoring           | A survey of 50 downtown merchants and 58 residents was<br>conducted in order to assess the knowledge and perception of<br>the video monitoring project.  |
|   | Individual interviews were held with business and community organizations to ascertain their views on video monitoring.  |
| The future direction of<br>video monitoring | Individual interviews were conducted to identify potential<br>shortcomings in the video monitoring system and strategies for<br>overcoming these deficiencies.   |
|   | Suggestions were developed for addressing other findings resulting from our review.  |
|   | An overall conclusion as to the economy, effectiveness and<br>efficiency of the video monitoring program was arrived at based<br>on the results of the procedures performed.   |

| A brief history of video<br>monitoring | Even though CCTV monitoring systems are well-established as a tool for crime prevention and detection in the private sector, their use in Canada for policing purposes is very much in its infancy. Our research indicates that only a handful of police services use CCTV monitoring in a law-enforcement role, with Sudbury likely the first community in Ontario to undertake a community CCTV monitoring program.   |
|--|---|
| The U.K. experience                    | While CCTV monitoring may not be common in Canada, it is<br>widespread in the United Kingdom. Identifying when and where<br>CCTV monitoring first started is difficult, but video monitoring<br>dates back to at least the 1960's, when CCTV systems were installed<br>in the London subway system.   |
|  | Today, more than two-thirds of all police services in the United<br>Kingdom operate CCTV monitoring systems. These systems are<br>often more extensive than the CCTV monitoring project in Sudbury.<br>For example, the Borough of Ipswich, which has a population of<br>approximately 120,000, operates a system of 117 cameras. This<br>results in a ratio of one camera for every 1,025 residents. Sudbury,<br>by comparison, operates one camera for every 32,000 residents.  |
|  | CCTV monitoring in the United Kingdom will be further expanded<br>as a result of new funding for video monitoring programs under the<br>Crime Reduction Programme of the Home Office and Department of<br>Environment, Transport and Regions. A total of £170 million (Cdn<br>\$382 million) has been allocated to expanding CCTV monitoring<br>with the priorities on housing areas and public parking lots. Funds<br>are also available to modernize existing CCTV systems. Almost 750<br>communities submitted applications for funding under this program.<br>In addition to government funding, CCTV monitoring programs are<br>also financed through contributions from private businesses. |

| Video monitoring in<br>Sudbury | CCTV monitoring in Sudbury began during 1994 when Chief<br>McCauley became aware that the Glasgow Police Service used<br>CCTV monitoring systems in its downtown core. During a personal<br>visit to Scotland in 1995, Chief McCauley took the opportunity to<br>attend the Glasgow Police Service and observe the CCTV system in<br>operation.   |
|--------------------------------|---|
|                                | Convinced that CCTV monitoring would be effective in law<br>enforcement, the Service installed its first camera in December<br>1996. This camera was provided to the Service at no cost by<br>Northern Voice and Video, a supplier of closed circuit video<br>equipment.  |
|                                | Since the installation of the first camera, four more cameras have<br>been installed in the downtown area. Municipal tax dollars have not<br>been used to finance either the purchase price of the cameras or their<br>ongoing operations. Rather, a number of community organizations<br>and private companies have come forward to provide funding for<br>CCTV monitoring, including: |
|                                | The Lions Club of Sudbury   |
|                                | The Sudbury Metro Centre  |
|                                | Northern Voice and Video  |
|                                | Sudbury Hydro   |
|                                | <ul> <li>Insurance companies</li> </ul>   |
|                                | > CP Rail   |
|                                | Ontario Works   |
|                                |   |

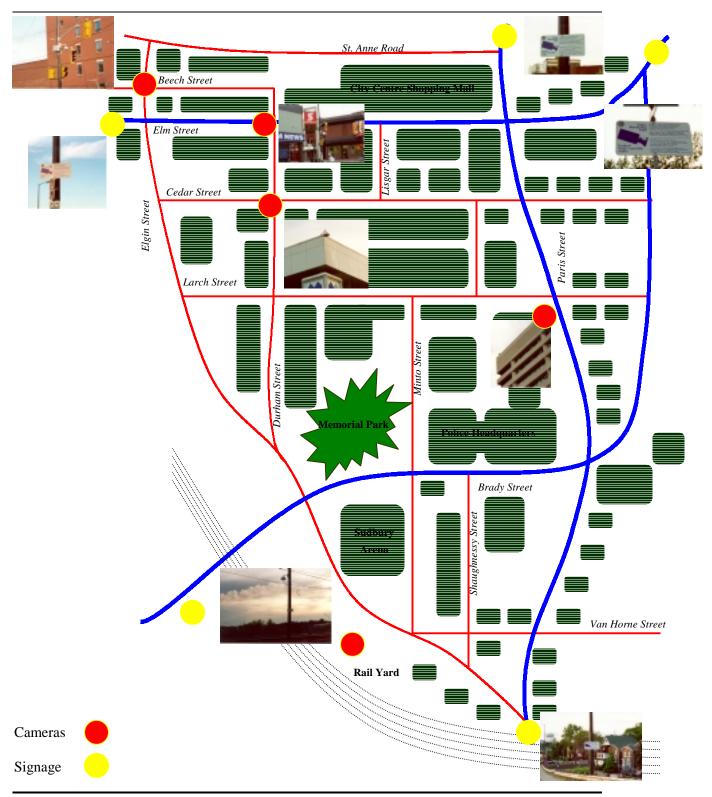
| How video monitoring<br>influences criminal<br>activity | Previously commissioned evaluations indicate that the main benefits<br>of CCTV monitoring systems result from their ability to deter<br>criminal activity within the area under surveillance. This deterrence<br>capability can been explained by two different theories, the routine<br>activity theory and the rational choice theory.  |
|---|---|
|   | The routine activity theory states that criminal offenses occur as a result of three elements being present at the same time and place. These are a motivated offender, a suitable victim and the absence of a capable guardian.  |
|   | Previously commissioned studies have indicated that CCTV monitoring systems have the ability to deter crime by removing any or all of these elements from a situation.  |
|   | The presence of CCTV cameras in a specific area increases the<br>risk of detection, which could remove motivated offenders from<br>the area.  |
|   | The presence of CCTV cameras in a specific area could make<br>potential victims more security conscious, thereby making them<br>less vulnerable to crime.   |
|   | CCTV cameras in areas could also be perceived as<br>compensating for a physical lack of police officers in a certain<br>area at a certain time. In these cases, the cameras would become<br>a capable guardian.   |
|   | The rational choice theory suggests that criminal offenders, like all<br>individuals, are involved in making decisions and choices and that<br>these choices exhibit a degree of rational thinking. This would<br>entail that offenders weigh the benefits of committing an offense<br>against the risk of detection and arrest. Where CCTV systems are in<br>place, the risk of detection and arrest as perceived by the offender<br>would be increased, thereby making the offense less attractive. |

| Video monitoring and<br>privacy | Arguably, the most significant issue surrounding CCTV programs is<br>whether the videotaping of public and private spaces constitutes an<br>invasion of privacy.<br>Apart from cases with exceptional circumstances, videotaping of<br>another person or private property without consent does not<br>constitute a wrong in Canada <sup>1</sup> . Canadian courts have shown that<br>there is nothing to prevent the videotaping of another person, so long   |
|---------------------------------|---|
|                                 | as the pictures are not offensive, libelous or taken for criminal<br>purposes. Where pictures depict a minor, however, the provisions of<br>the Young Offenders Act come into force and the identity of the<br>minor cannot be disclosed publicly.  |
|                                 | While videotaping of public spaces is not prohibited, it is illegal to willfully intercept a private communication. As long as the CCTV monitoring system does not contain voice recordings, the legality and admissibility of the video evidence should not be a concern.  |
|                                 | There are several possible means of designing a CCTV monitoring<br>system so as to alleviate some of the concerns over individual<br>privacy. In the United Kingdom, for example, CCTV programs are<br>managed by crime and disorder reduction partnerships, rather than<br>the police services themselves. As well, CCTV monitoring<br>programs are required to be operated under detailed codes of<br>conduct and adhere to both the Data Protection Act and the Human<br>Rights Act.   |
|                                 | In addition to operating policies, the actual physical design of CCTV monitoring systems can also protect the privacy of individuals. The Ministry of Transportation, which maintains cameras along major freeways in Toronto to monitor traffic flows, has installed barriers to prevent their cameras from viewing into residences. Signage may also help with the perception of CCTV monitoring programs by warning people that they are in an area monitored by cameras. This disclosure also contributes to the deterrence aspect of CCTV systems. |

<sup>&</sup>lt;sup>1</sup> Our comments concerning the legal issues surrounding video monitoring programs are based on a review of certain publications and texts and have been included for information purposes only. As with any legal matter, we strongly recommend that this information be supplemented with additional research (including consultation with legal counsel) as our research does not represent a legal opinion.

| Sudbury's downtown area | The downtown area of Sudbury consists of a mix of commercial office space, government offices, retail and entertainment establishments and residences (primarily apartments and seniors complexes).  |  |  |
|-------------------------|--|--|--|
|                         | Despite the difficulties experienced by the downtown core in recent<br>years, the area continues to draw residents from outlying sections of<br>the Region for a number of reasons, including:   |  |  |
|                         | Employment – The downtown core houses the offices of the<br>Regional Municipality of Sudbury, the City of Sudbury, Bell<br>Canada, several financial institutions, the Province of Ontario<br>(two office complexes) and the Federal Government (Federal<br>government agencies were recently consolidated and are now<br>housed primarily in the downtown core). In addition, the<br>downtown area contains two call centres, each employing a<br>sizeable number of individuals. |  |  |
|                         | Transportation – The downtown core is the home of Sudbury<br>Transit's passenger terminal.   |  |  |
|                         | Entertainment – The Sudbury Arena represents a major draw<br>into the downtown core during the winter months. In addition,<br>several bars and nightclubs are located in the area.   |  |  |
|                         | <ul> <li>Residential – The downtown core contains a number of seniors' complexes.</li> </ul>   |  |  |
|                         | The downtown area of Sudbury is also home to a number of the less<br>fortunate residents of the Region. We would surmise that the<br>congregation of these individuals in the downtown core is due to a<br>number of factors, including the availability of low-cost rental<br>housing, the presence of various social services agencies and the<br>general tendency of homeless persons to remain within downtown<br>centres.   |  |  |

| Description of the project | The Lion's Eye in the Sky CCTV monitoring project consists of five cameras located at strategic points in the downtown area of Sudbury, designated as Zone 20 by the Service, as follows:   |  |  |  |
|----------------------------|---|--|--|--|
|                            | <ul> <li>Corner of Paris and Larch Street</li> </ul>  |  |  |  |
|                            | <ul> <li>Corner of Durham and Cedar Street</li> </ul>   |  |  |  |
|                            | <ul> <li>Corner of Elm and Durham Street</li> </ul>   |  |  |  |
|                            | <ul> <li>Corner of Beech and Elgin Street</li> </ul>  |  |  |  |
|                            | Elgin Street (at the rail yard)   |  |  |  |
|                            | All of the cameras are "pan, tilt and zoom" types that are capable of<br>rotating in two dimensions. This differs from stationary cameras,<br>which are fixed in position and are unable to adjust their view.<br>Three of the cameras are mounted on poles (traffic light or power<br>line poles) while the other two cameras are mounted on office<br>buildings.  |  |  |  |
|                            | The video from the cameras is monitored at a workstation located<br>next to the dispatching centre for the Service. Monitoring of the<br>cameras is done primarily by Ontario Works clients, but we were<br>informed that police officers on light duty and law and security<br>students have also been used to monitor the cameras. While the<br>Service has arranged for personnel to monitor the cameras, we<br>understand that there have been instances recently where the<br>cameras are unmanned, particularly at night and during weekends.<br>During these periods, the cameras follow preprogrammed scanning<br>patterns. At all times, the areas monitored by the cameras are<br>recorded. |  |  |  |
|                            | In addition to the cameras, the Service has also installed signs<br>informing residents of the presence of a CCTV monitoring system.<br>These signs are located on all major streets accessing the downtown<br>area. However, we are not aware of any signs actually located<br>within the downtown area.   |  |  |  |
|                            |   |  |  |  |



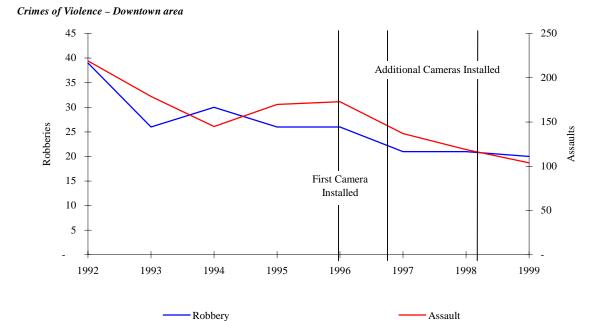
Sudbury Regional Police Service

| Anticipated benefits                            | As a public body, the Service has a duty and responsibility to the residents of the Region to provide and maintain a safe environment. The establishment of the CCTV monitoring project in the downtown area was intended to contribute towards this goal, through both the deterrence of crime and improving the reaction to crime.  |
|---|---|
| Deterring criminal and<br>anti-social behaviour | From our discussions with senior officers and administration of the<br>Service, we understand that the primary purpose of establishing a<br>CCTV monitoring system in the downtown area was to decrease<br>criminal and anti-social behaviour, such as aggressive panhandling<br>and loitering, thereby increasing the sense of security for residents<br>and businesses in the area. The accomplishment of this decrease in<br>crime would be achieved through the deterrent factor provided by<br>the cameras. It was anticipated that criminals, aware of the fact that<br>their actions were being monitored, would choose not to commit a<br>crime in the downtown area. |
| Enhancing the ability to<br>respond to crime    | In addition to deterring crime and anti-social behaviour, the CCTV<br>system was also intended to improve the Service's ability to deal<br>with crimes after they had occurred. Through video monitoring of<br>the downtown area, the Service's ability to detect and monitor<br>certain types of crimes would be enhanced, as the area would be<br>under observation even though officers were elsewhere. The use of<br>video monitoring was also anticipated to improve the Service's<br>ability to identify suspects involved in criminal activities.  |

| Types of activity affected |  | nplementation of a CCTV monitoring<br>pes of criminal activities due to either<br>nethod in which the crime is  |  |  |  |  |  |  |  |
|----------------------------|--|---|--|--|--|--|--|--|--|
| Criminal activity          | Generally speaking, the Lion's to influence two broad categor  | Eye in the Sky project was designed ies of criminal activity:   |  |  |  |  |  |  |  |
|                            | <ul><li>Crimes of violence</li></ul>   |   |  |  |  |  |  |  |  |
|                            | <ul> <li>Crimes against property</li> </ul>  |   |  |  |  |  |  |  |  |
|                            | We have designed our evaluation to address the impact of CCTV monitoring on these activities. Specifically, we have based our analysis on the following types of crime:  |   |  |  |  |  |  |  |  |
|                            | Crimes of violence Crimes against property   |   |  |  |  |  |  |  |  |
|                            | Robbery  | > Theft   |  |  |  |  |  |  |  |
|                            | Assault  | Break and enter   |  |  |  |  |  |  |  |
|                            |  | <ul><li>Motor vehicle theft</li></ul>   |  |  |  |  |  |  |  |
|                            |  | Mischief involving property   |  |  |  |  |  |  |  |
| Anti-social behaviour      | was also anticipated to influence<br>This behaviour represents action  | · ·   |  |  |  |  |  |  |  |
|                            | two criminal offenses – prostitution<br>offenses were not included und<br>they are, for the most part, und<br>assaults, which clearly have an<br>prostitution and drug transaction<br>commitment of a criminal offe-<br>are likely understated as a num-<br>been reported. For these crime | offender and a victim, both parties in<br>ons are willing to participate in the<br>nse. As a result, historical statistics<br>ber of these offenses wouldn't have<br>es, the installation of CCTV cameras<br>her than a decrease, in crime as the |  |  |  |  |  |  |  |

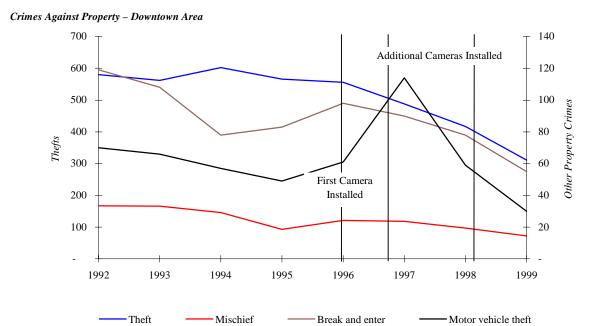
Criminal activity levels

In the period following the installation of the first camera, criminal activity in the downtown area (Zone 20) has decreased dramatically. After two years of increases in the number of violent crimes committed in the downtown core, the number of assaults and robberies decreased by a total of 38% in the three years following the installation of the first camera.



| Total Offenses Committed - Selected Crimes of Violence |      |       |       |      |      |       |       |       |  |
|--|------|-------|-------|------|------|-------|-------|-------|--|
|  | 1992 | 1993  | 1994  | 1995 | 1996 | 1997  | 1998  | 1999  |  |
| Robbery  | 39   | 26    | 30    | 26   | 26   | 21    | 21    | 20    |  |
| Assault  | 219  | 179   | 145   | 170  | 173  | 137   | 119   | 104   |  |
| Total  | 258  | 205   | 175   | 196  | 199  | 158   | 140   | 124   |  |
| Increase (decrease)                                    |      | (20%) | (15%) | 12%  | 2%   | (21%) | (11%) | (11%) |  |

Similar results were also experienced for crimes against property. After five years of minor decreases, the number of crimes against property decreased by 44% in the period following the installation of the cameras. However, this decrease did not occur immediately following the installation of the first camera as the number of car thefts in Zone 20 actually increased by 87% in the first year. However, other crimes against property showed marked decreases in the year immediately following the installation of the cameras.



| Total Offenses Committed - Selected Crimes Against Property |      |      |      |       |      |      |       |       |  |  |
|---|------|------|------|-------|------|------|-------|-------|--|--|
|   | 1992 | 1993 | 1994 | 1995  | 1996 | 1997 | 1998  | 1999  |  |  |
| Theft   | 580  | 562  | 602  | 566   | 556  | 488  | 417   | 311   |  |  |
| Break and enter   | 119  | 108  | 78   | 83    | 98   | 90   | 78    | 55    |  |  |
| Motor vehicle theft   | 70   | 66   | 57   | 49    | 61   | 114  | 59    | 30    |  |  |
| Mischief  | 167  | 166  | 146  | 93    | 121  | 118  | 97    | 72    |  |  |
| Total   | 936  | 902  | 883  | 791   | 836  | 810  | 651   | 468   |  |  |
| Increase (decrease)   |      | (4%) | (2%) | (10%) | 6%   | (3%) | (20%) | (28%) |  |  |

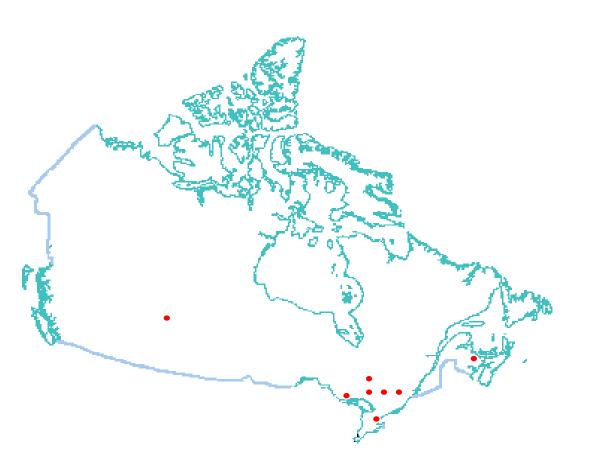
What decreases are attributable to video monitoring While crimes of violence and crimes against property have decreased following the installation of the CCTV system, this in itself does not provide an indication as to the effectiveness of the cameras in deterring crime. In order to differentiate between general decreases in crime and the influence of CCTV monitoring, we have compared the level of criminal activity occurring in Zone 20, both before and after the installation of the CCTV monitoring system, with other communities that do not have similar systems in place. Where decreases in criminal activity in Zone 20 exceed those experienced in other communities, we have attributed this excess to the presence of the CCTV monitoring system.

In selecting the communities for our comparison, we attempted to satisfy a number of different criteria that, if met, would result in the most meaningful comparison. These criteria included:

- The inclusion of Northern Ontario communities Given the somewhat unique aspects of Northern Ontario (in terms of population, economics and distance from major centres), we felt the comparative analysis should include other Northern Ontario communities.
- The inclusion of similar sized communities Communities of different sizes experience different levels of criminal activities due to a number of factors. Accordingly, we have included in our analysis communities that have population levels similar to that of the Region of Sudbury.
- The inclusion of Ontario communities Criminal activity in Sudbury will likely parallel levels in other Ontario communities. As a result, we have included other Ontario communities in our analysis.

In order to make the comparison as meaningful as possible, we initially requested information on criminal offenses committed in downtown areas. However, the communities located in Northern Ontario were unable to provide this information and we have therefore used community-wide crime statistics for Northern Ontario. However, crime statistics for downtown areas was provided by the other communities surveyed.

#### Communities selected



North Bay, Ontario Population – 54,000

Timmins, Ontario Population – 48,000

Sault Ste. Marie, Ontario Population – 80,000

Sudbury, Ontario Population – 160,000

Regina, Saskatchewan Population – 194,000

Saint John, New Brunswick Population – 126,000

Hamilton, Ontario Population – 624,000

Ottawa, Ontario Population – 763,000

### North Bay (community-wide information)

| Total Offenses Committed - Selected Crimes of Violence |  |  |  |      |      |       |      |      |  |
|--|--|--|--|------|------|-------|------|------|--|
|  |  |  |  | 1995 | 1996 | 1997  | 1998 | 1999 |  |
| Robbery  |  |  |  | 21   | 29   | 13    | 11   | 25   |  |
| Assault  |  |  |  | 378  | 422  | 342   | 455  | 496  |  |
| Total  |  |  |  | 399  | 451  | 355   | 466  | 521  |  |
| Increase (decrease)                                    |  |  |  |      | 13%  | (21%) | 31%  | 12%  |  |

| Tota                | l Offenses Co | ommitted - Selected | Crimes Aga | inst Proper | ty    |       |       |
|---------------------|---------------|---------------------|------------|-------------|-------|-------|-------|
|                     |               |                     | 1995       | 1996        | 1997  | 1998  | 1999  |
| Theft               |               |                     | 2,003      | 1,947       | 1,817 | 1,607 | 1,560 |
| Break and enter     |               |                     | 577        | 551         | 689   | 508   | 611   |
| Motor vehicle theft |               |                     | 105        | 150         | 65    | 131   | 173   |
| Mischief            |               |                     | 760        | 689         | 597   | 606   | 694   |
| Total               |               |                     | 3,445      | 3,337       | 3,168 | 2,852 | 3,038 |
| Increase (decrease) |               |                     |            | (3%)        | (5%)  | (10%) | 7%    |

### *Timmins (community-wide information)*

| Total Offenses Committed - Selected Crimes of Violence |  |  |  |      |       |      |      |      |  |
|--|--|--|--|------|-------|------|------|------|--|
|  |  |  |  | 1995 | 1996  | 1997 | 1998 | 1999 |  |
| Robbery  |  |  |  | 22   | 8     | 17   | 18   | 17   |  |
| Assault  |  |  |  | 496  | 433   | 491  | 456  | 467  |  |
| Total  |  |  |  | 518  | 441   | 508  | 474  | 484  |  |
| Increase (decrease)                                    |  |  |  |      | (15%) | 15%  | (7%) | 2%   |  |

| Total               | Offenses Cor | mmitted - Selected C | rimes Aga | inst Proper | ty    |       |                 |
|---------------------|--------------|----------------------|-----------|-------------|-------|-------|-----------------|
|                     |              |                      | 1995      | 1996        | 1997  | 1998  | 1999            |
| Theft               |              |                      | 1,287     | 1,066       | 1,139 | 1,030 | <del>9</del> 97 |
| Break and enter     |              |                      | 626       | 522         | 455   | 342   | 413             |
| Motor vehicle theft |              |                      | 163       | 129         | 97    | 104   | 141             |
| Mischief            |              |                      | 547       | 544         | 498   | 488   | 473             |
| Total               |              |                      | 2,623     | 2,261       | 2,189 | 1,964 | 2,024           |
| Increase (decrease) |              |                      |           | (14%)       | (3%)  | (10%) | 3%              |

### Sault Ste. Marie (community-wide information)

| Total Offenses Committed - Selected Crimes of Violence |  |  |  |       |       |       |       |       |  |
|--|--|--|--|-------|-------|-------|-------|-------|--|
|  |  |  |  | 1995  | 1996  | 1997  | 1998  | 1999  |  |
| Robbery  |  |  |  | 37    | 36    | 47    | 38    | 37    |  |
| Assault  |  |  |  | 1,317 | 1,406 | 1,371 | 1,142 | 977   |  |
| Total  |  |  |  | 1,354 | 1,442 | 1,418 | 1,180 | 1,014 |  |
| Increase (decrease)                                    |  |  |  |       | 6%    | (2%)  | (17%) | (14%) |  |

| Total               | Offenses Co | ommitted - | Selected C | rimes Aga | inst Proper | ty    |       |       |
|---------------------|-------------|------------|------------|-----------|-------------|-------|-------|-------|
|                     |             |            |            | 1995      | 1996        | 1997  | 1998  | 1999  |
| Theft               |             |            |            | 2,757     | 2,960       | 2,617 | 2,360 | 1,878 |
| Break and enter     |             |            |            | 1,008     | 1,127       | 967   | 850   | 717   |
| Motor vehicle theft |             |            |            | 330       | 339         | 355   | 240   | 188   |
| Mischief            |             |            |            | 1,628     | 1,657       | 1,498 | 1,599 | 1,120 |
| Total               |             |            |            | 5,723     | 6,083       | 5,437 | 5,049 | 3,903 |
| Increase (decrease) |             |            |            |           | 6%          | (11%) | (7%)  | (23%) |

### Regina (criminal offenses for downtown core – 1999 not available)

| Total Offenses Committed - Selected Crimes of Violence |  |   |  |      |      |      |           |      |  |
|--|--|---|--|------|------|------|-----------|------|--|
|  |  |   |  | 1995 | 1996 | 1997 | 1998      | 1999 |  |
| Robbery  |  |   |  | 34   | 33   | 36   | 40        | n.a. |  |
| Assault  |  |   |  | 63   | 78   | 105  | 110       | n.a. |  |
| Total  |  | 4 |  | 97   | 111  | 141  | 150       | n.a. |  |
| Increase (decrease)                                    |  |   |  |      | 14%  | 27%  | <u>6%</u> | n.a. |  |

| То                  | tal Offenses Co | ommitted - Selected ( | Crimes Aga | inst Proper | ty    |       |      |
|---------------------|-----------------|-----------------------|------------|-------------|-------|-------|------|
|                     |                 |                       | 1995       | 1996        | 1997  | 1998  | 1999 |
| Theft               |                 |                       | 512        | 921         | 616   | 512   | n.a. |
| Break and enter     |                 |                       | 128        | 146         | 108   | 74    | n.a. |
| Motor vehicle theft |                 |                       | 63         | 81          | 85    | 75    | n.a. |
| Mischief            |                 |                       | 118        | 119         | 130   | 127   | n.a. |
| Total               |                 |                       | 821        | 1,267       | 939   | 788   | n.a. |
| Increase (decrease) |                 |                       |            | 54%         | (26%) | (16%) | n.a. |

### Saint John (criminal offenses for downtown core)

| Total Offenses Committed – Selected Crimes of Violence |  |  |  |     |       |      |     |     |  |
|--|--|--|--|-----|-------|------|-----|-----|--|
| 1995 1996 1997 1998 199                                |  |  |  |     |       |      |     |     |  |
| Robbery  |  |  |  | 23  | 33    | 20   | 30  | 29  |  |
| Robbery<br>Assault                                     |  |  |  | 400 | 343   | 322  | 329 | 332 |  |
| Total 423 376 342 359                                  |  |  |  |     |       |      |     |     |  |
| Increase (decrease)                                    |  |  |  |     | (11%) | (9%) | 5%  | 1%  |  |

| Тс                  | otal Offenses Comm | itted - Selected ( | Crimes Aga | inst Proper | ty   |       |      |
|---------------------|--------------------|--------------------|------------|-------------|------|-------|------|
|                     |                    |                    | 1995       | 1996        | 1997 | 1998  | 1999 |
| Theft               |                    |                    | 394        | 374         | 369  | 227   | 175  |
| Break and enter     |                    |                    | 322        | 190         | 52   | 200   | 223  |
| Motor vehicle theft |                    |                    | 76         | 45          | 51   | 53    | 32   |
| Mischief            |                    |                    | 529        | 385         | 416  | 406   | 374  |
| Total               |                    |                    | 1,321      | 994         | 988  | 886   | 804  |
| Increase (decrease) |                    |                    |            | (25%)       | (1%) | (10%) | (9%) |

### Hamilton (criminal offenses for downtown core)

| Total Offenses Committed - Selected Crimes of Violence |  |  |  |       |       |       |       |       |  |
|--|--|--|--|-------|-------|-------|-------|-------|--|
| 1995 1996 1997 1998 19                                 |  |  |  |       |       |       |       |       |  |
| Robbery  |  |  |  | 110   | 120   | 101   | 83    | 121   |  |
| Assault  |  |  |  | 1,037 | 1,176 | 1,152 | 1,160 | 1,225 |  |
| Total  |  |  |  | 1,147 | 1,296 | 1,253 | 1,243 | 1,346 |  |
| Increase (decrease)                                    |  |  |  |       | 13%   | (3%)  | (1%)  | 8%    |  |

| Total               | Offenses Co | nmitted - Selected C | Crimes Aga | inst Proper | ty    |       |       |
|---------------------|-------------|----------------------|------------|-------------|-------|-------|-------|
|                     |             |                      | 1995       | 1996        | 1997  | 1998  | 1999  |
| Theft               |             |                      | 2,161      | 1,835       | 1,683 | 1,496 | 1,713 |
| Break and enter     |             |                      | 650        | 601         | 513   | 558   | 511   |
| Motor vehicle theft |             |                      | 556        | 480         | 610   | 461   | 499   |
| Mischief            |             |                      | 785        | 639         | 562   | 470   | 542   |
| Total               |             |                      | 4,152      | 3,555       | 3,368 | 2,985 | 3,265 |
| Increase (decrease) |             |                      |            | (14%)       | (5%)  | (11%) | 9%    |

### Ottawa (criminal offenses for selected downtown areas)

| Total Offenses Committed - Selected Crimes of Violence |  |  |  |     |     |     |       |     |  |
|--|--|--|--|-----|-----|-----|-------|-----|--|
| 1995 1996 1997 1998 199                                |  |  |  |     |     |     |       |     |  |
| Robbery  |  |  |  | 54  | 65  | 81  | 67    | 79  |  |
| Assault  |  |  |  | 341 | 370 | 356 | 270   | 314 |  |
| Total  |  |  |  | 395 | 435 | 437 | 337   | 393 |  |
| Increase (decrease)                                    |  |  |  |     | 10% | 1%  | (23%) | 17% |  |

| ,                   | Total Offenses Committed - Selected Crimes Against Property |  |       |       |       |       |       |  |  |  |  |
|---------------------|---|--|-------|-------|-------|-------|-------|--|--|--|--|
|                     |   |  | 1995  | 1996  | 1997  | 1998  | 1999  |  |  |  |  |
| Theft               |   |  | 3,711 | 3,223 | 2,698 | 2,431 | 2,186 |  |  |  |  |
| Break and enter     |   |  | 646   | 484   | 410   | 412   | 350   |  |  |  |  |
| Motor vehicle theft |   |  | 335   | 293   | 279   | 303   | 76    |  |  |  |  |
| Mischief            |   |  | 754   | 678   | 478   | 303   | 420   |  |  |  |  |
| Total               |   |  | 5,446 | 4,678 | 3,865 | 3,600 | 3,032 |  |  |  |  |
| Increase (decrease) |   |  |       | (14%) | (17%) | (7%)  | (16%) |  |  |  |  |

#### Criminal offenses in other Northern Ontario communities

Since the inception of CCTV monitoring, criminal offenses in the downtown core of Sudbury have declined at a greater rate than other communities in Northern Ontario.

As noted below, the downtown area has consistently experienced larger decreases in assaults and thefts compared to other Northern Ontario communities. For the other crimes examined, the overall decrease in offenses during the three years following the installation of the cameras was greater in Sudbury than the other communities.

| Compa               | arison Chai | nge in Crim | inal Offens | es – Sudbu | ry and Nort | thern Ontar | io Commu | nities  |       |
|---------------------|-------------|-------------|-------------|------------|-------------|-------------|----------|---------|-------|
|                     |             | 1997        |             |            | 1998        |             |          | 1999    |       |
|                     | Zone        | N.          | Diff.       | Zone       | N.          | Diff.       | Zone     | N.      | Diff. |
|                     | 20          | Ontario     |             | 20         | Ontario     |             | 20       | Ontario |       |
| Robbery             | (19%)       | 6%          | 25%         | 0%         | (19%)       | (19%)       | (5%)     | 14%     | 19%   |
| Assault             | (21%)       | (3%)        | 18%         | (13%)      | (7%)        | 6%          | (13%)    | (6%)    | 7%    |
| Crimes of violence  | (21%)       | (2%)        | 19%         | (11%)      | (7%)        | 4%          | (11%)    | (5%)    | 6%    |
|                     |             |             |             |            |             |             |          |         |       |
| Theft               | (12%)       | (7%)        | 5%          | (15%)      | (10%)       | 5%          | (25%)    | (11%)   | 14%   |
| Break and enter     | (8%)        | (4%)        | 4%          | (13%)      | (19%)       | (6%)        | (29%)    | 2%      | 31%   |
| Motor vehicle theft | 87%         | (16%)       | (103%)      | (48%)      | (8%)        | 40%         | (49%)    | 6%      | 55%   |
| Mischief            | (2%)        | (10%)       | (8%)        | (18%)      | (4%)        | 14%         | (26%)    | (15%)   | 11%   |
| Crimes against      | (3%)        | (8%)        | (5%)        | (20%)      | (9%)        | 11%         | (28%)    | (9%)    | 19%   |
| property            |             |             |             |            |             |             |          |         |       |

# Criminal offenses in similar sized communities

While the comparison to Northern Ontario communities indicated that CCTV monitoring resulted in lower rates of crimes of violence and crimes, the comparison to similar sized communities provided somewhat different results.

As noted below, crimes of violence in the downtown area decreased by a larger amount than the similar sized communities. However, the benefits of the CCTV monitoring program were not as apparent with respect to certain types of crimes against property. While break and enters and mischief dropped faster in Sudbury than the other communities, this was not the case for thefts and motor vehicle thefts. Unlike the Northern Ontario comparison, the decrease in these types of crimes lagged behind the similar sized communities.

| Com                 | parison Ch | ange in Cri | minal Offe | nses – Sudł | oury and Si | milar Sized | Communi | ties  |       |
|---------------------|------------|-------------|------------|-------------|-------------|-------------|---------|-------|-------|
|                     |            | 1997        |            |             | 1998        |             |         | 1999  |       |
|                     | Zone       | Same        | Diff.      | Zone        | Same        | Diff.       | Zone    | Same  | Diff. |
|                     | 20         | Size        |            | 20          | Size        |             | 20      | Size  |       |
| Robbery             | (19%)      | (15%)       | 4%         | 0%          | (25%)       | (25%)       | (5%)    | (3%)  | 2%    |
| Assault             | (21%)      | 1%          | 22%        | (13%)       | (3%)        | 10%         | (13%)   | 1%    | 14%   |
| Crimes of violence  | (21%)      | (1%)        | 20%        | (11%)       | (6%)        | 5%          | (11%)   | 1%    | 12%   |
|                     |            |             |            |             |             |             |         |       |       |
| Theft               | (12%)      | (24%)       | (12%)      | (15%)       | (25%)       | (10%)       | (25%)   | (23%) | 2%    |
| Break and enter     | (8%)       | (23%)       | (15%)      | (13%)       | 5%          | 18%         | (29%)   | 12%   | 41%   |
| Motor vehicle theft | 87%        | 8%          | (79%)      | (48%)       | (6%)        | 42%         | (49%)   | (40%) | 9%    |
| Mischief            | (2%)       | 8%          | 10%        | (18%)       | (2%)        | 16%         | (26%)   | (8%)  | 18%   |
| Crimes against      | (3%)       | (15%)       | (12%)      | (20%)       | (13%)       | 7%          | (28%)   | (9%)  | 19%   |
| property            |            |             |            |             |             |             |         |       |       |

This deviation, however, may not be representative of the effectiveness of the cameras. During our review, we noted that thefts in the similar sized communities increased dramatically in 1996. By 1999, the number of criminal offenses in the communities surveyed was equal to 1995 levels. In comparison, thefts committed in the downtown area during 1999 were 45% lower than 1995 offenses.

#### Criminal offenses in other Ontario communities

As with the earlier analysis, a comparison of criminal offenses in the downtown core to other communities in Ontario demonstrates the benefits of the CCTV monitoring system.

During the three-year period following the installation of the first camera, crimes of violence in Sudbury decreased at a greater rate than the downtown areas of other Ontario communities.

While crimes against property did not experience a significant decrease in 1997, subsequent years witnessed declines in Sudbury that were significantly higher than those experienced in other Ontario communities.

| Com                 | parison Ch | ange in Cri | minal Offei | 1ses – Sudt | oury and Ot | her Ontario | Communi | ties    |       |  |
|---------------------|------------|-------------|-------------|-------------|-------------|-------------|---------|---------|-------|--|
|                     |            | 1997        |             |             | 1998        |             |         | 1999    |       |  |
|                     | Zone       | Other       | Diff.       | Zone        | Other       | Diff.       | Zone    | Other   | Diff. |  |
|                     | 20         | Ontario     |             | 20          | Ontario     |             | 20      | Ontario |       |  |
| Robbery             | (19%)      | (2%)        | 21%         | 0%          | (18%)       | (18%)       | (5%)    | 33%     | 38%   |  |
| Assault             | (21%)      | (2%)        | 19%         | (13%)       | (5%)        | 8%          | (13%)   | 8%      | 21%   |  |
| Crimes of violence  | (21%)      | (2%)        | 19%         | (11%)       | (7%)        | 4%          | (11%)   | 10%     | 21%   |  |
|                     |            |             |             |             |             |             |         |         |       |  |
| Theft               | (12%)      | (13%)       | (1%)        | (15%)       | (10%)       | 5%          | (25%)   | (1%)    | 24%   |  |
| Break and enter     | (8%)       | (15%)       | (7%)        | (13%)       | 5%          | 18%         | (29%)   | (11%)   | 18%   |  |
| Motor vehicle theft | 87%        | 15%         | (72%)       | (48%)       | (11%)       | 37%         | (49%)   | 4%      | 53%   |  |
| Mischief            | (2%)       | (21)%       | (19%)       | (18%)       | (14%)       | 4%          | (26%)   | (25%)   | 1%    |  |
| Crimes against      | (3%)       | (12%)       | (9%)        | (20%)       | (9%)        | 11%         | (28%)   | (4%)    | 24%   |  |
| property            |            |             |             |             |             |             |         |         |       |  |

Overall conclusion

Regardless of the type of community chosen, criminal offenses in the downtown area have experienced larger overall declines than the other communities surveyed. While other factors may have contributed to this decline, the most significant factor influencing criminal activity in the downtown area has been the Lion's Eye in the Sky project. This demonstrates that CCTV monitoring does act as a deterrent to criminal activity and has resulted in less crime in the downtown area.

Quantifying the number of<br/>offenses deterredBy extrapolation, it is possible to convert the larger decreases in<br/>crime experienced in the downtown area into an amount of criminal<br/>offenses deterred. Given the differences in crime rates in the<br/>communities surveyed, we have expressed the number of offenses<br/>deterred as a range.

During the three year period following the installation of CCTV cameras in the downtown area, between 300 and 500 criminal offenses have been deterred, the majority of which were assaults and thefts. As time passed since the installation of the CCTV cameras, the number of offenses deterred has increased.

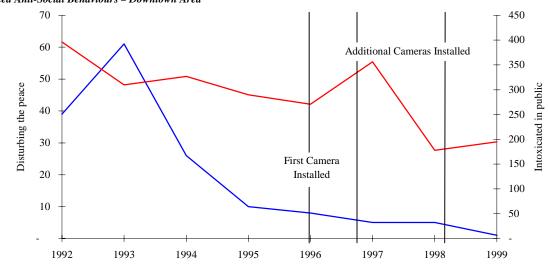
|                     |      | Low Range | of Estimate |       |      | High Range | of Estimate | ate<br>Total<br>15<br>157<br>180<br>34<br>- |  |  |
|---------------------|------|-----------|-------------|-------|------|------------|-------------|---|--|--|
|                     | 1997 | 1998      | 1999        | Total | 1997 | 1998       | 1999        | Total                                       |  |  |
| Robbery             | 4    | —         | 8           | 12    | 7    | 2          | 6           | 15  |  |  |
| Robbery<br>Assault  | 31   | 37        | 43          | 111   | 38   | 51         | 68          | 157   |  |  |
| Theft               | _    | 19        | 121         | 140   | 29   | 48         | 103         | 180   |  |  |
| Break and enter     | 4    | _         | 23          | 27    | _    | 1          | 33          | 34  |  |  |
| Motor vehicle theft | _    | —         | —           | _     | —    | —          | —           | -   |  |  |
| Mischief            | 13   | 26        | 2           | 41    | 13   | 31         | 46          | 90  |  |  |
| Total offenses      | 52   | 82        | 197         | 331   | 87   | 133        | 256         | 476   |  |  |

#### Anti-social behaviour

Unlike criminal offenses, which consistently demonstrated decreases following the installation of CCTV cameras in the downtown area, certain anti-social behaviours decreased while others increased. This discrepancy in trends is likely a result of the dual role of CCTV monitoring as a deterrent to anti-social behaviour and an enhanced method of detection.

Certain behaviours, such as disturbing the peace and intoxicated persons, decreased significantly following the installation of the CCTV system. In 1999, only one disturbing the peace charge was laid in the downtown area, compared to eight in 1996 (the year preceding the installation of the first camera) and 61 in 1993. Public intoxication charges also dropped significantly, after an increase in 1997. One possible explanation for this trend is that the CCTV system allowed the Service to identify and charge more intoxicated persons in 1997. This, in turn, provided a deterrent to offenders, resulting in fewer offenses in following years.

Intoxicated in public



|  | 8   | 1     |      |       |      | I   |       |     |  |  |
|--|-----|-------|------|-------|------|-----|-------|-----|--|--|
| Total Offenses Committed - Selected Anti-Social Behaviours |     |       |      |       |      |     |       |     |  |  |
| 19921993199419951996199719981999                           |     |       |      |       |      |     |       |     |  |  |
| Disturbing the peace                                       | 39  | 61    | 26   | 10    | 8    | 5   | 5     | 1   |  |  |
| Intoxicated in public                                      | 396 | 310   | 327  | 290   | 271  | 356 | 178   | 195 |  |  |
| Total  | 435 | 371   | 353  | 300   | 279  | 361 | 183   | 196 |  |  |
| Increase (decrease)  |     | (15%) | (5%) | (15%) | (7%) | 29% | (49%) | 7%  |  |  |

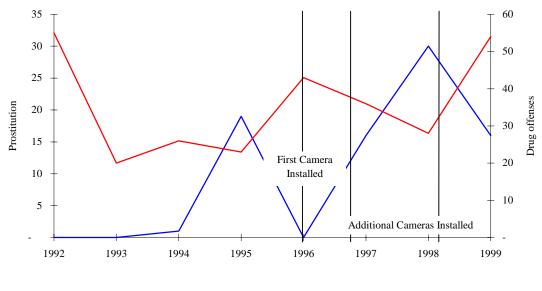
Disturbing the peace

Selected Anti-Social Behaviours - Downtown Area

Sudbury Regional Police Service

Prostitution and drug offenses, however, experienced increases following the installation of the CCTV system. This increase in offenses is not due to the fact that this type of crime is new to the downtown core. A more reasonable explanation would be that the Lion's Eye in the Sky project has enhanced the Service's ability to detect and respond to these types of offenses, resulting in a higher level of offenses. This is reflective of the dual role of CCTV monitoring, providing both a deterrent to crime and enhancing the ability of police to react to criminal activity.

#### Prostitution and Drug Offenses – Downtown Area



---- Prostitution

---- Drug offenses

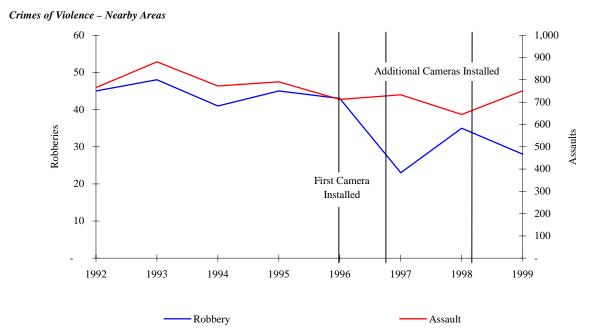
| Total Offenses Committed - Selected Anti-Social Behaviours                                      |    |       |     |     |    |     |     |     |  |  |
|---|----|-------|-----|-----|----|-----|-----|-----|--|--|
| 1992         1993         1994         1995         1996         1997         1998         1999 |    |       |     |     |    |     |     |     |  |  |
| Prostitution  | _  | _     | 1   | 19  | _  | 16  | 30  | 16  |  |  |
| Drug offenses   | 55 | 20    | 26  | 23  | 43 | 36  | 28  | 54  |  |  |
| Total   | 55 | 20    | 27  | 42  | 43 | 52  | 58  | 70  |  |  |
| Increase (decrease)   |    | (64%) | 35% | 56% | 2% | 21% | 12% | 21% |  |  |

### Impact of Video Monitoring on Other Areas

Displacement of crime to nearby areas

One of the major concerns surrounding CCTV monitoring systems is the possibility of displacing criminal activity from the area being monitored to nearby areas that are not covered by the system.

Overall, crimes of violence do not appear to have been displaced from the downtown core to nearby areas as a result of the CCTV monitoring system.



| Total Offenses Committed - Selected Crimes of Violence - Nearby Areas |      |       |       |      |       |       |       |       |
|---|------|-------|-------|------|-------|-------|-------|-------|
|   | 1992 | 1993  | 1994  | 1995 | 1996  | 1997  | 1998  | 1999  |
| Robbery   | 45   | 48    | 41    | 45   | 43    | 23    | 35    | 28    |
| Assault   | 765  | 881   | 772   | 791  | 713   | 733   | 645   | 751   |
| Total   | 810  | 929   | 813   | 836  | 756   | 756   | 680   | 779   |
| Change – Nearby areas   |      | 15%   | (12%) | 3%   | (10%) | 0%    | (10%) | 15%   |
| Change – Downtown area  |      | (20%) | (15%) | 12%  | 2%    | (21%) | (11%) | (11%) |
| Change – Northern Ontario   |      |       |       |      |       | (2%)  | (7%)  | (5%)  |
| Change – Similar sized  |      |       |       |      |       | (1%)  | (6%)  | 1%    |
| Change – Other Ontario  |      |       |       |      |       | (2%)  | (7%)  | 10%   |

### Impact of Video Monitoring on Other Areas

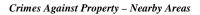
As noted in the analysis, changes in crimes of violence in the areas surrounding the downtown core, while not reflective of Zone 20, are comparable to the other communities surveyed. The number of crimes of violence in 1999 is approximately 3% lower than 1996 levels, representing the last year before CCTV monitoring was implemented in Sudbury. This is generally consistent with the other communities surveyed (percentages represent the decrease in offenses from 1996 to 1999):

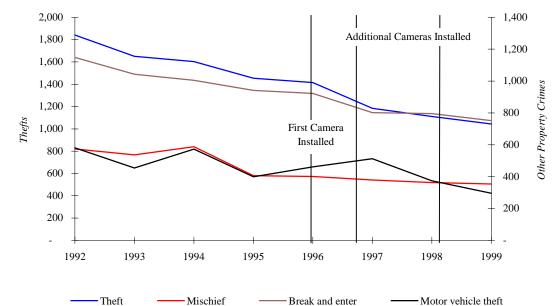
- ➢ Northern Ontario communities − 13%
- ➢ Similar sized communities − 4%
- > Other Ontario communities -0%

While the overall number of offenses in the nearby areas does not appear to have been affected by CCTV monitoring, the increase in assaults during 1999 could be an indication that crimes of violence are beginning to move outward from the downtown area.

### Impact of Video Monitoring on Other Areas

As with crimes of violence, crimes against property in the nearby areas did not experience a long-term increase following the implementation of CCTV monitoring, indicating that crime likely has not been displaced from the downtown core.





| Total Offenses Committed - Selected Crimes Against Property – Nearby Areas |       |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
|  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  |
| Theft  | 1,841 | 1,650 | 1,603 | 1,454 | 1,416 | 1,185 | 1,111 | 1,044 |
| Break and enter  | 1,148 | 1,042 | 1,005 | 942   | 923   | 802   | 796   | 752   |
| Motor vehicle theft  | 581   | 454   | 573   | 399   | 461   | 513   | 374   | 295   |
| Mischief   | 772   | 702   | 793   | 573   | 573   | 535   | 516   | 506   |
| Total  | 4,390 | 3,912 | 4,021 | 3,375 | 3,373 | 3,041 | 2,800 | 2,597 |
| Change – Nearby areas  |       | (11%) | 3%    | (16%) | 0%    | (10%) | (8%)  | (7%)  |
| Change – Downtown area   |       | (4%)  | (2%)  | (10%) | 6%    | (3%)  | (20%) | (28%) |
| Change – Northern Ontario  |       |       |       |       |       | (8%)  | (9%)  | (9%)  |
| Change – Similar sized   |       |       |       |       |       | (15%) | (13%) | (9%)  |
| Change – Other Ontario   |       |       |       |       |       | (12%) | (9%)  | (4%)  |

# Assessing the Reasonableness of the Evaluation Results

| Results from other<br>communities using video<br>monitoring | The results of our evaluation have indicated that CCTV monitoring<br>in Sudbury has been successful in reducing both crimes of violence<br>and crimes against property. While crime rates are decreasing<br>across Canada, the fact that crime is dropping more rapidly in the<br>downtown area is an indication that CCTV monitoring is an<br>effective deterrent to crime.                                     |  |  |  |
|---|--|--|--|--|
|   | In order to provide additional credence to the results of our<br>evaluation, we have conducted research into the impact on criminal<br>activities in other communities that have implemented similar<br>systems.   |  |  |  |
|   | Given the fact that Sudbury is one of the only services in Ontario<br>and Canada using CCTV monitoring systems, we have based our<br>additional research on the impacts of CCTV monitoring in the<br>United Kingdom. On the following page, we have provided a brief<br>summary of the impact of CCTV monitoring systems on crime<br>rates in the communities surveyed.  |  |  |  |
|   | For the most part, criminal offenses decreased immediately<br>following the installation of CCTV systems. However, criminal<br>activity in these areas has risen over time. The studies reviewed<br>seem to indicate that while CCTV systems are effective in deterring<br>crime, the awareness of the risk of detection posed by the cameras<br>must be maintained (through such efforts as increased signage). |  |  |  |
|   | Based on discussions with a representative of the Home Office, the government of the United Kingdom is convinced that CCTV monitoring, if used properly, is an effective means of deterring crime. To this end, government funds are available to communities to finance the capital costs of CCTV systems. Ongoing operating costs, however, are the responsibility of local communities.                       |  |  |  |

## Assessing the Reasonableness of the Evaluation Results



#### King's Lynn, England

### Brantford, England

- CCTV monitoring commenced 1987
- Thefts from vehicles and assaults decreased significantly compared to remainder of the community
- Thefts from vehicles and thefts of vehicles decreased significantly following the installation of CCTV cameras

#### Glasgow, Scotland

- CCTV monitoring commenced November 1994
- No reduction of crime was attributed to the CCTV monitoring system during the first 12 months of operation

#### Airdrie, Scotland

- CCTV monitoring commenced November 1992
- The rate of crime in the area under CCTV monitoring decreased by 21% more than the general trend
- No displacement of crime occurred from the downtown core to the surrounding area

#### Newcastle upon Tyne, England

- CCTV monitoring commenced December 1992
- Significant decreases in burglary and theft were noted after the installation of the cameras
- The effectiveness of the cameras in deterring criminal activity decreased as time progressed

### Birmingham, England

- CCTV monitoring commenced March 1991
- Robbery and theft from individuals remained relatively constant in the area being monitored, compared to substantial increases in other areas of the community

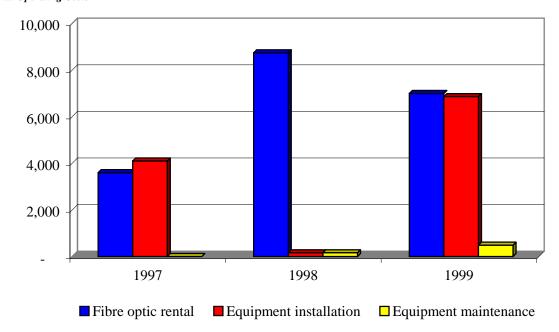
### Hartlepool, England

- Thefts from vehicles and thefts of vehicles decreased following installation of CCTV system
- Criminal offenses rose in subsequent years

| Determining the costs and<br>benefits of video<br>monitoring | Based on the results of the evaluation, it is clear that expectation<br>the Service have been met. While this demonstrates that the Lio<br>Eye in the Sky project is effective, the question remains as to the<br>economy of the project.   |  |  |
|--|---|--|--|
|  | Economy is the term traditionally used to describe an evaluation of<br>whether resources have been acquired at appropriate times at the<br>best cost.   |  |  |
|  | Obviously, there were other ways in which the Service could have<br>accomplished the reductions of criminal activities attributed to the<br>CCTV monitoring. For example, the Service could have increased<br>the number of officers on duty in the downtown area.<br>Accomplishing this, while not adversely impacting safety in other<br>areas of the Region, would have entailed hiring additional officers.<br>Needless to say, this would have represented an expensive method<br>of reducing crime given the cost associated with increased staffing<br>complements.                                    |  |  |
|  | In order to determine whether the Service demonstrated economy<br>with respect to the financial aspects of the CCTV monitoring<br>system, we have attempted to quantify not only the costs of the<br>project, but also the financial benefits resulting from CCTV<br>monitoring.  |  |  |
| Video monitoring costs                                       | The operation of the CCTV monitoring system has been<br>accomplished without the use of municipal tax dollars. The full<br>cost of acquiring and installing the CCTV cameras has been<br>financed through contributions from community organizations and<br>private companies.  |  |  |
|  | Ongoing operating costs have also been financed from non-taxation<br>sources. The Service has avoided the necessity of incurring salary<br>costs relating to the monitoring of the CCTV system by using a<br>combination of Ontario Works clients, placement students from<br>Cambrian College and officers who are on light-duty. In return for<br>offering Ontario Works clients job experience, the Service receives<br>funding from Ontario Works to offset training and administration<br>costs. In addition, the Service also receives donations and<br>fundraising revenues to offset operating costs. |  |  |

In the three years that the CCTV system has been in place, operating costs have totalled \$31,000. Fibre optic rental charges are by far the largest expenditure. However, we understand that Sudbury Hydro is providing fibre optic rentals to the Service at a rate that is substantially lower than market rates. Other operating expenses include equipment maintenance and installation.

As noted earlier, these operating expenses are fully funded by contributions from Ontario Works and donation and fundraising revenues.



Total Operating Costs

*Video monitoring benefits* While determining the cost of CCTV monitoring to the taxpayers of the Region is a relatively simple process, quantifying the financial benefits that have arisen from the reduction of criminal activity is more complicated.

The benefits from reduced crime reflect a number of different components. The most obvious financial benefit of avoiding thefts, break and enters and robberies is the avoidance of property losses. Preventing assaults and other violent crimes saves health care costs. These costs are relatively easy to determine.

However, criminal activity has other costs that are not as easy to quantify. Criminal acts often result in psychological stress for victims and placing a value on the amount of fear, frustration and anger saved by the CCTV monitoring is not an easy task.

Because of the difficulties in quantifying the full cost of crime, we have focused solely on the direct monetary costs of crime. The basis for our analysis is a study conducted by the Fraser Institute entitled "The Cost of Crime – Who Pays and How Much?". While the cost estimates are in 1996 dollars, they provide a good indication as to the amount of monetary costs saved by the installation of CCTV monitoring in the downtown area.

Overall, we have estimated that CCTV monitoring in downtown Sudbury has saved between \$600,000 to \$800,000 in direct monetary losses. Once again, this estimate represents a minimum cost savings as other costs, such as increased insurance premiums, pain and suffering have not been factored into our calculations.

|                     | Low Range of Estimate |      |      |       | High Range of Estimate |      |      |       |
|---------------------|-----------------------|------|------|-------|------------------------|------|------|-------|
|                     | 1997                  | 1998 | 1999 | Total | 1997                   | 1998 | 1999 | Total |
| Robbery             | 11                    | _    | 23   | 34    | 20                     | 6    | 17   | 43    |
| Robbery<br>Assault  | 43                    | 52   | 60   | 155   | 53                     | 71   | 95   | 219   |
| Theft               | _                     | 40   | 258  | 298   | 62                     | 102  | 219  | 383   |
| Break and enter     | 9                     | _    | 53   | 62    | —                      | 2    | 76   | 78    |
| Motor vehicle theft | _                     | _    | —    | —     | —                      | —    | —    | —     |
| Mischief            | 8                     | 17   | 2    | 27    | 8                      | 20   | 29   | 57    |
| Total offenses      | 71                    | 109  | 396  | 576   | 143                    | 201  | 436  | 780   |

Direct monetary losses saved (in thousands of dollars)

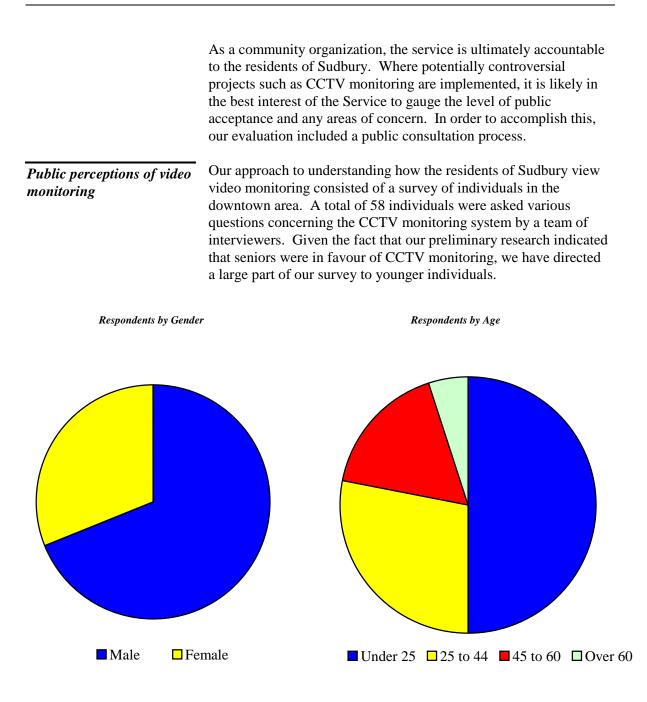
### Other benefits

While the focus of our evaluation has been on the impact of CCTV monitoring on crime rates and anti-social behaviours, our review has indicated that the presence of CCTV monitoring in the downtown area has resulted in other benefits.

Our discussions with members of the Service's communications team indicate that CCTV monitoring has enhanced the safety of officers working in the downtown area. When an officer makes a traffic stop or is otherwise involved in an incident downtown, the communications team provides camera coverage of the officer and monitors the situation. We were informed of situations where the communications team was able to dispatch assistance to officers before being requested to do so. This has a significant impact on officer safety, especially in those instances where the officer is unable to request assistance.

This concept of improved safety is not limited to police officers. We were informed of several occasions where the CCTV system was able to locate patients missing from the Sudbury General Hospital, identify individuals requiring medical assistance, find missing children or prevent attempted suicides. These benefits, while not the primary intent of the Lion's Eye in the Sky project, are another indication of how CCTV monitoring provides positive benefits to the downtown area.

# Acceptance of Video Monitoring

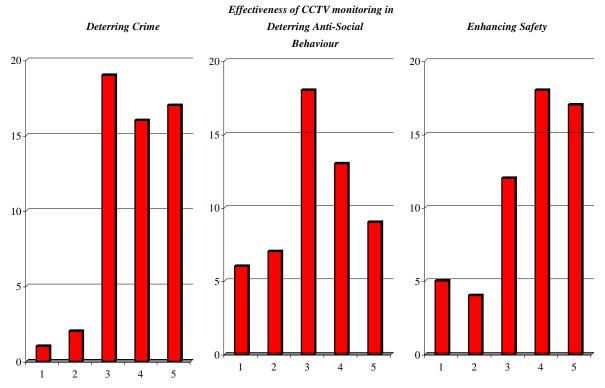


## Acceptance of Video Monitoring

Based on the results of our survey, it appears that the residents of Sudbury approve of CCTV monitoring for law enforcement purposes.

- 84% of survey respondents were aware of the cameras downtown
- ➢ 79% agree with the use of CCTV monitoring
- ➢ 75% would like to see the current system expanded
- 65% did not feel that CCTV monitoring was an invasion of privacy

Using a scale of one to five, with one representing poor and five excellent, the survey respondents were asked to rate the effectiveness of the cameras in deterring crime, deterring anti-social behaviour and creating a safer environment. The survey results indicate that the public perceives the cameras as being effective, but more so in deterring crime than anti-social behaviour.



### Based on our survey results, downtown businesses strongly **Business perceptions of** approve of the use of CCTV monitoring in the area. video monitoring > 96% of the businesses surveyed were aware of the presence of CCTV cameras downtown ▶ 98% agree with the use of CCTV monitoring ▶ 86% would like to see the current system expanded > Only 2% of the businesses surveyed consider the use of CCTV monitoring to be an invasion of privacy When the businesses surveyed were asked to rate the effectiveness of the cameras, the results were generally consistent with the public evaluation. Businesses downtown tend to consider the cameras to be effective in deterring criminal activity and creating a safer environment, but less effective in dealing with anti-social behaviours. Effectiveness of CCTV monitoring in **Deterring** Crime **Deterring Anti-Social** Enhancing Safety **Behaviours** 25 25 25 20 20 20 15 15 15 10 10 10 5 5 5

# Acceptance of Video Monitoring

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## Acceptance of Video Monitoring

**Does the presence of video monitoring improve trade** One of the possible benefits of CCTV monitoring in any downtown area is the potential that trade could improve. The use of CCTV monitoring to create a perception of safety could result in more people coming downtown for shopping and entertainment purposes, providing a direct benefit to merchants and business owners in the area.

> Based on our survey of both individuals and businesses, this does not appear to be the case. Only 9% of the individuals surveyed indicated that they have increased their shopping in the downtown area because of the CCTV monitoring system while only 6% of the businesses surveyed indicated that they have experienced an increase in business since the installation of the first camera.

# The Future Direction of Video Monitoring

| Future expansion and<br>enhancement of video<br>monitoring | The results of our evaluation clearly indicate that the Lion's Eye in<br>the Sky has been successful in both deterring crime and enhancing<br>the Service's ability to deal with crime and anti-social behaviour.<br>Additional benefits have also resulted from the implementation of<br>CCTV monitoring in the downtown area, including enhancing<br>officer and public safety.                                |
|--|--|
|  | Given these benefits, the Service may wish to consider expanding<br>CCTV monitoring to other parts of the Region. In addition to<br>expanding CCTV monitoring, the Service may wish to enhance the<br>existing system as well.   |
|  | The Service has been extremely pragmatic in approaching the issue<br>of funding for CCTV monitoring, relying on donations, fundraising<br>and Ontario Works clients to avoid passing the cost of CCTV<br>monitoring to the taxpayers of the Region. While we appreciate the<br>Service's efforts to keep costs at a minimum, we question whether<br>this somehow limits the potential of CCTV monitoring.        |
|  | The decision not to assign full-time staff to the CCTV system has<br>recently resulted in periods when the cameras are unmanned,<br>particularly at night and on weekends. While we have not<br>performed an analysis to determine the peak times for criminal<br>activity in the downtown core, we would assume that most crime is<br>committed during these periods.   |
|  | In addition, we understand that Ontario Works clients are assigned<br>to the Service for a relatively short period, after which time new<br>clients are assigned. This turnover in camera operators limits the<br>extent to which that Service can benefit from experience and<br>training, as we understand operators are replaced every 24 weeks.<br>Participants' terms can be extended to 48 weeks, however. |

# The Future Direction of Video Monitoring

|                                    | In the United Kingdom, where CCTV monitoring has resulted in<br>larger decreases in crime, we understand that CCTV systems are<br>staffed on a 24-hour basis and the operating costs are paid for, in<br>part, by the police service and the local municipality. GO Transit,<br>which operates an extensive CCTV monitoring system, funds the<br>entire cost of CCTV monitoring internally.  |
|------------------------------------|--|
|                                    | In order to ensure that the benefits of CCTV monitoring are fully<br>achieved, additional funding for both capital and ongoing<br>operations is required.  |
|                                    | The Service may wish to consider approaching the Municipal<br>Restructuring Transition Board for this additional funding. The<br>Board has recently announced that savings resulting from<br>municipal restructuring will amount to \$10 million per year. By<br>demonstrating the benefits of CCTV monitoring, the Service could<br>apply to have a portion of these savings applied to an expanded and<br>enhanced CCTV monitoring system. |
| Items for consideration            | While the results of our evaluation are positive, our review has<br>identified potential shortfalls in the CCTV monitoring system. We<br>have outlined these concerns below and have provided suggestions<br>for the Service's consideration.  |
| Gaps in existing video<br>coverage | During our discussions with members of the Service's communication team, we were informed that significant portions of the downtown area cannot be monitored by the CCTV system, including:  |
|                                    | <ul> <li>Larch Street from Durham Street to Paris Street</li> </ul>  |
|                                    | St. Anne's Road from Notre Dame Avenue to Elgin Street<br>(obstructed from view by the City Centre Shopping Mall)  |
|                                    | Memorial Park  |
|                                    | In addition to these areas, we understand that numerous other blind<br>spots exist in the downtown area, primarily laneways and<br>alleyways.  |

### The Future Direction of Video Monitoring

Given the characteristics of Memorial Park, including low lighting conditions and obstructions from trees, effective CCTV monitoring of the area may not be possible. However, the Service should consider the installation of additional cameras to monitor the Larch Street and St. Anne's Road areas. Both of these areas contain seniors' residences and the installation of CCTV cameras would improve the safety of this group, who we understand are higher risk targets for crime and aggressive panhandling. Currently, the Service has installed signs on the major roadways *Increased signage* leading into the downtown area indicating the presence of a CCTV monitoring system. However, we are not aware of any signs physically located within the downtown core itself. As our evaluation has demonstrated, CCTV monitoring has the potential to significantly deter crime. Maintaining this ability means making criminals aware of the presence of the cameras. In order to accomplish this, the Service may wish to consider increasing the amount of signage relating to CCTV monitoring. We would suggest that the Service install signs in the downtown area itself, thereby maximizing the awareness of the cameras. The use of signs located within the downtown core is being implemented by the West Nipissing Police Service, which has recently installed a CCTV monitoring system in the Sturgeon Falls area. In addition, several of the businesses surveyed indicated that

monitoring.

increased signage would improve the effectiveness of CCTV