



---

## Executive

20 July 2010

Report of the Director, City Strategy

## Operation of the City of York CCTV System

### Summary

1. This report describes the Closed Circuit Television (CCTV) system operating in the City, and outlines protocols and opportunities for expanding the system.
2. As well as providing a description of the current system, this report seeks approval to formalise the funding arrangements for new camera installations and adopt as Council "CCTV Code of Practice" the draft revised Code of Practice for System Operation. A copy of this draft code of practice is attached as appendix A to this report.
3. The need to adopt the revised Code of Practice (CoP) arises from advances in the technology the system uses that mean operating procedures have changed. Revision of the CoP to reflect these changes and remain relevant are therefore required.
4. Formalising funding arrangements for third party camera provision is required to limit growing budgetary pressures on the system and ensure the system continues to be operable within its current level of funding. Adopting this as policy will ensure the existing budget for operation is not overstretched by new additions to the system whilst at the same time giving clarity to those wishing to pursue new cameras as to the budgetary commitment that will be required of them.

### Background

#### Description of the current System

5. This section of the report presents a description of the size, scope and operation of the CCTV system, and identifies some areas of expansion and alteration that are likely to happen in the medium term.

#### *Current CCTV System*

6. The City Council is currently operating a CCTV System of over 70 cameras throughout the City. Installation of the system commenced 15 years ago utilising traditional fibre-optic analogue technology and comprises the following elements;

- 69 analogue video cameras, the majority with pan-tilt-zoom (PTZ) heads and fibre-optic connections;
  - 3 digital video cameras (2 with PTZ heads) and wireless connectivity;
  - A central communications and switching matrix at St Leonard's Place;
  - Digital Video Recording system at St Leonard's Place;
  - A control room at Fulford Rd Police Station (staffed 24 hours per day)
7. Additionally, trials are now underway to test the suitability of digital 'Internet Protocol' cameras that use commercial wireless communications services such as 3G. This offer an alternative to traditional fibre optics or short-range 'wi-fi' wireless communications for remote locations where fibre or wi-fi installation costs would be prohibitive. Currently four cameras, from two different suppliers have been installed and are being evaluated. An additional benefit of this 3G based technology is it's portability; moving such cameras is relatively straightforward allowing them to be re-deployed quickly as and when required. Whilst this technology is unlikely in the foreseeable future to match the quality of fibre optic systems, it does offer real advantages in terms of cost and ease of deployment. It is anticipated that rather than being an alternative to the fibre-optic system for live city centre monitoring, where its lower quality would be a disadvantage it will allow us to provide CCTV of acceptable quality in areas and for purposes where fibre optic would be prohibitively expensive. This will enhance the ability of the system to respond to requests from third parties where a need for CCTV has been established but for whom funding the cost of a full fibre optic camera would not be feasible.

#### *Operation of CCTV System*

8. The system is monitored from Fulford Road Police Station in a control room that is operated and staffed by City Council personnel but who work in close co-operation with North Yorkshire Police colleagues. The control room is equipped with three control keyboards capable of controlling the cameras and 21 display screens. A further control keyboard is available within the Police Station for use during emergencies and major incidents, and further two keyboards and display screens are located at St Leonard's Place and used mainly for traffic monitoring. The CYC control room staff are all trained and certified to current SIA (Security Industry Authority) standards; this is a legal requirement for staff engaged in monitoring CCTV covering areas of public realm. They are also all Criminal Record Bureau (CRB) and enhanced security cleared to allow them to work in the Police Station and have access to the police radio system. The above requirements have a significant effect on staffing the control room and the additional limitations and costs of meeting them impacts greatly on the process of appointing and retaining operators. The operators are on the Network Management team establishment; they do however undertake the full range of monitoring tasks and work closely with the police in providing CCTV support for crime and disorder activities. At present, the control room is staffed by two operators during the both the day and night time (seven days a week). The operators have access to the police radio system and City centre 'Shopwatch' and 'Pubwatch' anti-shoplifting and pub security radio systems. Access to these

various radio systems allows them to monitor and react to police activity and assist with operational matters

9. At the heart of the CCTV system is the communications and switching equipment located at St Leonard's Place. This equipment collects the images from the cameras and distributes it to the users and recording facilities and allows the users to operate the pan, tilt and zoom controls of each camera. At the core of this control equipment is a Matrix – basically a large video switch that allows signals from any camera to be sent to any control keyboard or display screen. The central in-station at St Leonard's Place also includes the Digital Video Recording system. This uses an array of hard-disk recorders to store a rolling 31 days of footage for each of the cameras on the system the DVR also includes terminals that allow operators to review footage and burn recordings to DVD or CD-Rom.
10. In operational terms the cameras generally fall into one of three operational areas; those which are primarily used for monitoring the City Centre, those which are primarily used for monitoring traffic conditions and those which are used to monitor the operation of car parks.
11. Although each of the cameras was originally installed to meet a particular operational area, they are now normally considered to be a single system, albeit one where the operational priorities differ depending on the time of day and particular camera locations. The three original operating areas of the system are now expanding with the provision of cameras at non-City centre locations (including the deployment of wireless cameras), paid for from other funding sources. This has added the task of monitoring social disorder at non-City centre sites to roles of the system.
12. The operation of the system lies with City Strategy's Highway Network Management Team, reflecting the fact that two of the three main operational purposes of the system (highway network monitoring and car park security) are Network Management functions. Additionally, Network Management's Systems Team possesses the necessary technical expertise to manage the maintenance and expansion of the system.
13. The staffing levels of the CCTV control room are determined by the ability of individual operators to watch and respond to numerous cameras. As well as undertaking particular duties at certain times of the day, the operators are responsible for monitoring the full bank of 21 monitors, and expected to react to events they see. The addition of more cameras to the system, and the need for more monitors to view them on will start to overload the abilities of the Operators and require additional staffing resource. Also, as each of the separate uses of the system increases, it will become sensible to allocate operators by function. This could mean dedicated operators specialising in Traffic monitoring, crime and disorder or car park security. In either case there will be a need for additional funding to be found to increase the staffing resource available, and this will need to come from the body promoting the various areas of expansion.

14. In operational terms, the uses that the CCTV system is put to divide up by time as much as camera location – It is expected that operators will devote their energies to traffic network monitoring during the peak traffic periods, City centre and car park crime and security during the day, and disorder issues (particularly around the bars and pubs) during the evening and night.

#### *New Headquarters*

15. As part of the plans to relocate City of York Council services in the City centre to a new headquarters building, the CCTV control room will be moved from its current location at the Fulford Road Police Station to a new, purpose built accommodation within the new building. This offers the opportunity both to undertake a 'technology refresh' and replace current life expired system components with new, and to ensure we provide the type of accommodation for the control room that will allow the growth of the system as outlined above.
16. Network Management are currently working with the new headquarters project team to ensure our requirements for the control room, and the technology systems we need to house in the new building are met. It is planned that as well as moving to a more flexible 'video wall' layout for the monitoring of the cameras, the opportunity will be taken to provide more operator stations and possible demarcation of duties as outlined in section 11. Additionally, it is also proposed to provide a dedicated suite for the review of recorded footage and a separate monitoring room specifically for traffic monitoring and control.

#### *Managed Service*

17. In January 2010, the Council commenced a Managed Service Agreement (MSA) covering all aspects of communications between Council sites and the wider world with a solutions provider named Pinacl Systems. As part of this arrangement Pinacl are responsible for the delivery of all communications to the authority and staged improvements to the various communications systems in use. This includes the provision of a network of private fibre optic around the City that will carry Council communications and allow the many rental agreements in place with providers such as BT to be terminated. To take advantage of this move to private fibre, a project will be commenced during summer 2010 to trial the migration of CCTV. This is not a trivial task, as the current analogue fibre system we use although expensive, offers extremely high levels of operability and reliability.
18. Assuming the trial is successful, the migration of the CCTV camera network to the private fibre will commence in 2011. As well as offering a significant reduction in operational costs this development should offer increased flexibility in terms of camera location. Although it will not alter the underlying principal of promoters paying for the full costs of cameras they wish to install, it should significantly reduce to costs involved.

## The CCTV Code of Practice for Systems Operation and Code of Practice for the Production of Footage

19. Public Space Surveillance Systems owned and operated by public bodies are subject to a wide range of legislation governing their use. To ensure the council does not breach any of the legal requirements placed upon it, it is necessary for a structure to be laid down detailing how the system is to be used. This takes the form of a Code of Practice (CoP) which whilst not legally binding, represents an important tool in demonstrating that the system is being operated in a professional, responsible and controlled manner.
20. Since the City of York Council first installed its CCTV system, it has always been covered by a relevant CoP and from time to time it becomes necessary to update this CoP for reasons such as changes in legislation or updates to practice and technology.
21. This report presents an update to the current Code of Practice which is necessary to maintain its relevance to the current system, (see Appendix A). The changes primarily relate to technological updates which have been integrated to the system, namely the movement to a purely digital recording system and removal of analogue recording components. Other changes throughout the document are minor and relate to re-wordings to clarify certain paragraphs, as well as a new structure and additional guidance relating to third party footage requests.
22. The main changes to the Code of Practice relate to:
- *Technological updates* - Within the last 2-3 years, improvements in technology have seen the obsolete analogue recording components within the system replaced with modern digital devices. This change in technology requires an update to the operational practices involved with using this technology.
  - *New section on policy for the release of footage to third parties* - This section provides a quick reference for third parties to ascertain whether they will be able to request recorded material from the system. It does not represent a change in policy, but is a mechanism to more easily facilitate requests.
  - *New Structure* - The document has been re-ordered to create a more logical and easy to understand format. For example, all relevant legislation relating to The System has been brought together in one section to provide a single reference point for queries relating to laws and legislation.

## Managing operation and expansion of the CCTV System

23. There are serious issues around the funding of the systems operation and expansion. Due to the systems success in dealing with crime and disorder, and acting as a tool for managing the City's transport network, there is constant

pressure to expand the system, particularly through the provision of additional cameras. Whilst in principal there is no problem with this, and indeed the system has been designed to be capable of growth, there are issues around staffing levels and on-going revenue commitment that need to be addressed.

24. In general, the Network Management team does not have access to a capital budget for the expansion of the system it does however, have strong aspirations for the expansion of the system in terms of highway and traffic monitoring. These aspirations are generally met by ensuring the provision of CCTV is included in all major highway schemes as appropriate. By these means Network Management is promoting the steady expansion of the system to cover the main radial routes into the City. Recently this has been successfully achieved on Fulford Road, where cameras have been provided as part of the on-going improvement scheme, and is planned for the A59 and B1363 corridors as part of the proposed Access York works. It is proposed that this expansion of the system through opportunities presented by larger highway schemes be formalised as policy.
25. Where new cameras are required for non highway related purposes, it falls onto the party promoting their provision to provide funding for purchase and installation. This approach is well understood, and over the years has been used widely to procure new cameras, mainly for crime and disorder purposes (and funded by Safer York Partnership), or highway monitoring purposes, funded by the budgets of specific highway schemes.
26. The issue that is less well understood by parties promoting the expansion of CCTV coverage is the need to provide on-going revenue support for each camera that is installed. Fixed line, fibre optic cameras require between £2000 and £5000 per annum to cover costs associated with communications line rental, maintenance and their recording by the DVR, and it is not possible for the Network Management Team to allocate on-going resources for this. For this reason, it is now the case that new cameras must be fully funded, both in terms of capital for their provision and revenue for their yearly operation. In cases where on going funding is not provided cameras may be disconnected from the system and removed. Parties promoting the provision of cameras, and funding their ongoing operation may also consider their removal or relocation; were, for instance, a camera is located for crime reduction purposes it may become apparent that the need for the camera has diminished, or is greater elsewhere then the promoting party may request removal or relocation. Network Management will assist with such requests, subject to all associated costs being met by the promoting party. Generalised costs for the provision and operation of a new camera are shown below.
27. Additionally, there are issues around the staffing of the control room that will be exacerbated by the continued expansion of the system. Even assuming sufficient monitors could be provided, there is a limit to number of cameras that a single operator can, or should be expected to, monitor simultaneously. Although the current arrangement of operating with two staff present during the day, and one during the night is sufficient for current camera numbers, a point will be reached in the future when it is not (as outlined in section 11 above).

Unless a solution for the expansion of staffing is planned out in the near future, this issue will become a limiting factor on the expansion of the system.

### *Technical Authority*

28. Cameras may be provided for a number of purposes, and funded by various promoting parties but the Network Management team will in all cases remain the system's Technical Authority. This means that where new cameras are requested, it will be the responsibility of Network Management to specify the equipment to be used and arrange its procurement and ongoing maintenance. Also, although it is the responsibility of promoting parties to prioritise their CCTV requirements and satisfy themselves that the locations they propose met their aims and offer value for money, the final decision on the exact location of equipment will remain with Network Management. This is to ensure that locations that are compatible with CCTV operation are chosen and equipment operates to the best of its ability. It is also to ensure that the overall system develops in a coordinated and logical way.
29. Network Management, as Technical Authority is also responsible for the operation of the system and coordination of staff resources. Although best efforts are made to ensure cameras are successful in achieving the purpose they were installed for, the system will always be viewed as a single entity and the right is reserved to use any camera for any legitimate purpose as required by operational demands.

### **Consultation**

30. A process of ongoing discussion has been held with the CCTV operational staff regarding the development of the Code of Practice, such that the Code for which approval is sought fully reflects their input and operational expertise.
31. The proposed funding and technical arrangements for the development of the system have been developed through experience gained to date by working with third parties to provide cameras, and are based on the ongoing discussions and negotiations with such parties and in effect, regularise the informal procedures already in place.

### **Options**

32. This report deals with two issues, namely the formalisation of funding arrangements for expansion of the CCTV system (and the establishment of a Technical Authority) and the adoption of the draft Code of Practice. For each of these issues a single option is presented.
33. In the case of the funding arrangements this is because the recommendation seeks to formalise the approach to new camera provision and operation that has been operating informally for some time, and is considered to be operating successfully. In the case of the Code of Practice this is because the new code of practice for which approval is sought closely follows current national practice

## Analysis

34. This report outlines the current situation with the City of York CCTV system and sets out the costs and issues associated with expanding it. The need to consider expansion is growing, as pressure to provide CCTV both solely for CYC needs and in partnership with North Yorkshire Police, across wide areas of the City increases.
35. The operation of the system is governed by a Code of Practice (see appendix 1A), which has recently been rewritten to reflect changes in the legislative framework in which the CCTV system is operated, and technology used by the system. The attached document should be formally adopted as the Council's CCTV Code of Practice.
36. The system as it exists at present is funded from CYC Network Management budgets, although future expansion will be subject to the requirements outlined above. There is a significant shortfall in this budget in terms of covering fibre optic line rentals. Until the costs savings of the move to private fibre as part of the MAS are realised, additional revenue funding will be required.
37. This report should form the basis of any planning being undertaken for the development of the system. Where new cameras are being considered, the funding model outlined herein should form the basis of any budgetary planning.
38. As a general principle, coverage of the highway network for traffic monitoring purposes will be expanded. This will be achieved by the inclusion of funding for CCTV provision (as appropriate), in all major highway improvement schemes.
39. The need to ensure costs of additional cameras are fully funded (in capital and revenue terms) by their promoters should be adopted as policy. Also, the fact that no additional funding to operate new cameras exists within Network Management budgets, and that support for unfunded cameras may be ceased must be considered by those promoting new camera provision.
40. The Network Management team are the Technical Authority for the system and retain ultimate control of the types of equipment proposed, the location of cameras and the management of equipment and staff resources. It is however, for the individual promoting parties to prioritise their CCTV requirements.

## Corporate Strategy

41. The York CCTV system plays a central role in managing traffic on the city's road network and assisting in realising secure and safe communities and addressing crime and antisocial behaviour. The recommendations presented in this report will allow the system to continue to expand in a way that meets the aspirations of its users and the wider community and ensure that its future operation is properly governed and regulated.



- **Thriving City** – The presence of CCTV ensures that public realm within the City remains safe and inviting for residents, business and visitors. It also greatly assists the police in dealing with crime and securing convictions. In this way the CCTV system has a central role to play in helping the City to continue to thrive and the outcomes sought by this report will ensure it is capable of continuing to do so, both by appropriate and sustainable expansion of the system and ongoing properly managed and controlled operation.
- **Sustainable City** – One of the primary roles of the CCTV system is to allow the Network Management Team to monitor conditions on the City's transport network and quickly react to events. This allows incidents to be dealt with efficiently and ensures the network works as reliably and predictably as possible. This in turn both reduces the negative effects of congestion and pollution and increases the degree to which public transport is able to operated as an effective alternative to private car use. The recommendations presented in this report will secure the continued contribution of the CCTV system to achieving a sustainable transport system.
- **Safer City** – As outlined above, the CCTV system is a essential tool available to the police, Safer York Partnership and other promoting parties to tackle crime, disorder and antisocial behaviour. Our ability to collect and store footage of events in a manner that ensures they are admissible as evidence has assisted in numerous convictions. The adoption of the current draft Code of Practice will ensure this continues and is able to react to new practices and technology. Secondly, our ability to offer the opportunity of a range of very high quality, managed CCTV solutions to communities can play an important role in dealing with localised issues. The adoption of a formal framework that allows organisations who work with communities to fully understand the issues surrounding CCTV provision, and gives them certainty of budgetary implications is viewed as being central to ensuring this can continue to be offered in the future in a way that is financially and operationally sustainable.
- **Inclusive City** – The ongoing properly managed, sustainable operation and expansion of the CCTV system ensures that the role it plays in dealing with crime and antisocial behaviour will continue. In securing this, we will also secure the benefits it offers in ensuring the City's highways and public spaces remain safe and inviting for all members of society.
- **Healthy City** – As above, CCTV has a role to play in ensuring all members of society are able to feel safe and secure when out in public places. This has a benefit in helping give people the confidence to walk and cycle around the City and reduce the sense of vulnerability that may people perceive. Setting protocols to ensure the system can be expanded into new areas, where such barriers still exist will increase the contribution it is able to make to this priority.

## Implications

42. **Financial** – Ongoing pressure on the current CCTV budget has led to the proposal to formalize the process for third parties who want to promote CCTV installations. This will involve all such proposals needing to be brought forward with a capital and revenue budget identified. This is to ensure the system can grow to meet needs whilst protect the existing CCTV budget from incurring additional expenditure.
43. **Human Resources (HR)** – The existing CCTV operating staff will be required to adhere to the draft Code of Practice, if adopted. No other HR impacts
44. **Equalities** – None anticipated.
45. **Legal** - There are 3 main areas of legislation pertinent to the operation of a PSS (Public Space Surveillance) system by a public body. These are;
- *The Human Rights Act 1998* which states that a Local Authority has a duty to use its CCTV system proportionately, legally and in an accountable and necessary manner. Failure to abide by the Human Rights Act may result in unlawful operation of the system.
  - *Data Protection Act 1998*, which relates to the way personal information collected about individuals is collected, stored and released. As The System is capable of, and deliberately attempts to, collect personal information this act is of specific importance. Failure to abide by the Data Protection Act could present a legal liability to the Council.
  - *Freedom of Information Act 2000*; because of exemptions to this act relating to commercially and personally sensitive data the Freedom of Information Act only occasionally has relevance to CCTV operation. Nevertheless, there are some instances in which an Fol request becomes pertinent.
- The CCTV System Code of Practice whose adoption as policy is proposed by this report deals with our obligations under the above acts and is the mechanism by which compliance with them will be assured. It should also be noted that the system is currently operating in a legal manner with respect to these issues, as outlined in the current Code of Practice. The updated Code of Practice presented by this report relates to changes necessary due to advances in technology, optimised working practices and updated working procedures more suited to fulfilling the stated legal obligations.
46. **Crime and Disorder** – As outlined above, the York CCTV system has a significant role to play in dealing with crime and disorder in the City. The adoption of a protocol for system expansion will give certainty to those proposing new CCTV installations and clarify the process for bringing such requests forward. Adopting the CCTV Code of Practice will ensure the system continues to develop and be operated in a manner that is compatible with the use of footage by the police in investigations and prosecutions.
47. **Information Technology (IT)** – None immediately, but work is ongoing with ITT to ensure that when the system migrates to the proposed new HQ building, any

synergies between corporate IT requirement and those of the CCTV system are realised.

48. **Property** - None anticipated.

49. **Other (Highways)** – The CCTV system is central to the effective management of the city’s transport network. It’s ongoing development and operation, in line with the recommendations of this report is essential to the Authority meeting it’s obligations under the Traffic Management Act and aspirations to operate the highway network efficiently and minimize congestion.

## **Risk Management**

50. In compliance with the Council’s risk management strategy there are no risks associated with the recommendations in this report.

51. However, significant risks can be associated with the failure to adopt a formal funding arrangement for new cameras. The pressure from third parties to add cameras to the system is likely to increase going forward. Without a protocol for dealing with this that clearly states the capital and revenue funding such parties need to provide then the expectation that such new provisions could be funded from the CCTV budget would continue to prevail. This would inevitably lead to more pressure on the budget and would result in either a reduction in the level of service we are able to offer or the need to find additional revenue resource within City Strategy.

## **Recommendations**

It is recommended that;

52. The draft Code of Practice for System Operation is adopted as the formal “City of York Council CCTV System Code of Practice” for those using the system and that agreement to abide by it be a prerequisite for all staff engaged in operation of the system.

Reason: To ensure the operation of the CCTV system continues to conform to national guidance, and is compatible with users requirements (such as the police, for evidence purposes)

53. The principles that promoting parties fund the installation and ongoing operation of cameras they promote as outlined herein be adopted as policy.

Reason: To ensure a clear protocol covering procedures for requesting and funding new camera installations is in place that can be easily understood by third parties requesting new cameras.

## Contact Details

<b>Author:</b>	<b>Chief Officer Responsible for the report:</b>			
Author's name: Darren Capes Title: Transport Systems Manager Dept Name: City Strategy Tel No: 01904 551 651	Chief Officer's name: Dave Carter Title: Head of Network Management			
Co-Author's Name: Christian Wood Title: Transport Systems Technician Dept Name: City Strategy Tel No: 01904 551 652	<b>Report Approved</b>		<b>Date</b>	
	Chief Officer's name: Bill Woolley Title: Director of City Strategy			
	<b>Report Approved</b>		<b>Date</b>	
	<b>Specialist Implications Officer(s)</b>  None			
<b>Wards Affected:</b>			<b>All</b>	
<b>For further information please contact the author of the report</b>				