

**Flexible Research Contract:
Evaluation in the Community Safety Unit**

**Body Worn Video Projects in Paisley and Aberdeen
Self Evaluation**

Evaluation Report

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1. Introduction and methodology

- 1.1 Body worn video (BWV) camera systems are now used by a significant number of police forces and warden services across the UK. In 2010 they were being used in more than 40 police force areas. The systems are hands free and provide video and audio recording which are time and date stamped. They make it possible to record offences and to capture evidence.
- 1.2 In Renfrewshire, body worn video cameras were trialled (using just three head mounted cameras) in 2006/07. A larger scale approach (using 38 cameras) was introduced in June 2009 and is still in operation. This programme was reviewed by Strathclyde Police after the first eight months of operation (June 2009-January 2010).¹
- 1.3 In Aberdeen, a pilot programme using body worn videos started in June 2010. This was reviewed after three months of operation.² Since the review, the programme has been extended.
- 1.4 Those involved in the two areas (Strathclyde Police; Renfrewshire Council Environmental Warden Service; and Grampian Police) sought support to assist them to scope and evaluate the business benefits of using body worn video cameras.
- 1.5 They applied to the Scottish Government's Community Safety Unit for evaluation support from their Evaluation Support Framework Contract. The application was successful and the Community Safety Unit appointed ODS Consulting to provide an agreed modest level of evaluation support.
- 1.6 The evaluation work was overseen by a Project Board, made up of senior staff from Strathclyde Police, Grampian Police and the Crown Office and Procurator Fiscal Service. A Project Team, including operational staff from each of these organisations and from Renfrewshire Council, led in the evidence gathering to support the evaluation.
- 1.7 The evaluation draws together information from the previous reviews which have been undertaken; information produced in Scottish Government reports; fresh information gathered in each area; and information from the Criminal Justice Board's Management Information System.

¹ *Body Worn Video Camera Project – K Division: Post implementation review*, Strathclyde Police, 2010

² *Grampian Police Body Worn Video Pilot: End Project Report*, Grampian Police 2010

2. The objectives of the projects and the outcomes anticipated

2.1 The two projects had similar objectives and anticipated outcomes.

2.2 In Renfrewshire the objectives were:

- to effectively deploy BWV cameras through police and environmental warden patrols;
- to increase public reassurance within Renfrewshire communities; and
- to contribute towards the outcome targets in Renfrewshire Council's Violence and Antisocial Behaviour Strategy (relating to public disorder; vandalism; and fear of crime).

2.3 In Aberdeen the objectives were:

- to introduce BWV for use by staff within Grampian Police to assist the delivery of its Force priorities;
- to research and implement all legislative requirements in order that Grampian Police is fully compliant with its legal obligations in terms of BWV;
- to document Grampian Police's strategy, policy and process in line with the use of BWV; and
- to identify options and recommendations with respect to future roll out of BWV for the Force.

2.4 In Renfrewshire the business benefits which were anticipated in relation to police use of body worn video cameras were:

Strategic

- increased public reassurance/reduced fear of crime in local communities;
- reduction in criminal justice costs through increased guilty pleas;
- reduction in malicious complaints about the police;
- reduction in assaults on police officers; and
- reduction in case related paperwork.

Tactical

- increased ability to deploy BWV in areas which are not covered by fixed site CCTV or are inaccessible to mobile CCTV systems; and
- ability to provide CCTV footage for briefing purposes.

Operational

- enhanced evidence quality through visual and audio images to supplement eye witness and notebook evidence;
- increased protection of police officers from physical assault, verbal abuse and malicious complaints; and
- officer skill enhancement through review of performance at incidents.

- 2.5 In Aberdeen the specific business benefits which were anticipated in relation to police use of body worn video cameras were:
- reduced officer time spent on paperwork and file preparation;
 - reduced number of police complaints being made, with additional evidence available for any complaint that requires investigation;
 - deterring crime and improving detection rates;
 - increased officer time spent on mobile and foot patrol;
 - increased level of protection afforded to officers;
 - (potentially) encouraging more guilty pleas at an early stage of the Criminal Justice process with a reduction in trials;
 - increased convictions;
 - improved efficiency, including cash and non-cash savings;
 - improved performance;
 - increased public satisfaction; and
 - enhanced partnership working.
- 2.6 Having considered these anticipated business benefits, it was agreed that the evaluation would focus on a manageable number of areas where change may have been brought about by the use of BWV. The main areas to be investigated were:
- reduction in crime;
 - increase in early guilty pleas;
 - quicker resolution of any complaints about the police or wardens;
 - reductions in assaults on officers; and
 - increased public re-assurance and reduced fear of crime in local communities.
- 2.7 Where there was evidence of change, it was agreed that an estimate of the value of the benefits should be made – provided sufficient appropriate information was available to justify making an estimate.

3. Establishing the pilots

3.1 This section sets out the arrangements for each pilot and the costs of implementation.

Renfrewshire

3.2 During 2008/09 a successful partnership funding application was made to Renfrewshire Council to procure 38 body worn video cameras for use by Community Policing Teams and Renfrewshire Council Environmental Warden Service in an initiative designed to support the “safer stronger” outcome of Renfrewshire’s Community Plan and the Force and Divisional priority of violence, disorder and antisocial behaviour. (The number of BWV cameras has now been increased to 56).

3.3 BWV cameras were issued to 27 community police officers working from Paisley, Erskine, Johnstone and Ferguslie Park offices and police officers working in the Renfrewshire Antisocial Behaviour Team. Recorded incidents were downloaded by users to ‘stand alone’ servers located at Paisley and Johnstone police offices. Administration software provided by the BWV supplier was installed on each of the servers and an administrator was available at each site to manage the files and carry out routine activities such as copying files to DVD for court use.

3.4 During the first 8 months of deployment, BWV cameras were used on over 2,500 occasions (police and wardens), resulting in the retention of 583 evidence files for further action, including 86 police reports to the Procurator Fiscal, 21 referrals to the Renfrewshire Antisocial Behaviour Team and 158 graffiti tags.

3.5 The initial costs for Renfrewshire – divided between development costs and capital costs are shown in Table 3.1.

Table 3.1 – Renfrewshire Initial BWV Costs (Source Strathclyde Police 2011)

	Activity	Cost (£)	Comment
Development	Operating protocol; project initiation document; and training materials	£1,800	
	Staff training	£600	
Capital	All hardware and software for 38 cameras	£40,000	Paid from grant from Fairer Scotland Fund
Total		£42,400	

- 3.6 In relation to running costs, it is estimated that the annual cost of repairing damaged kit has been £450. It is believed that supporting the IT system took some additional time in the first year – as a result of this being run as a local pilot rather than having Force-wide or national IT support. After the first year the additional cost for time spent downloading videos is estimated to be £500 per year.

Aberdeen

- 3.7 Grampian Police initiated their three month pilot to introduce 18 BWV cameras to officers working primarily in the six main areas of multiple deprivation within Aberdeen Division on 1 June 2010. (Later the number of BWV cameras was increased to 39).
- 3.8 ICT support is provided by the use of laptops located at key locations, and the software is not networked to the Grampian Force system. This has been well managed and ensured the pilot has run to the initial timelines set. This has been due to the small number of BWV and laptops involved. If the number of BWV cameras (and laptops) were to grow substantially, the current ICT support may not be sufficient, could become cumbersome and also raise some security concerns.
- 3.9 Over the three month pilot period, BWV cameras were deployed over 2,500 times by operational staff within Aberdeen Division. Primarily this was within the communities that feature in the national index of multiple social deprivation, with specific concentration in the Mastrick and Northfield communities, both as part of routine day to day policing and for specific policing operations.
- 3.10 The initial concentration in the Mastrick and Northfield areas was to assist in the measurement of perceived benefits due to the limited number of BWV available. In addition, as well as some ad hoc deployment in the City Centre, they were deployed, in numbers, as part of the Weekend Policing Plan on targeted dates.
- 3.11 During the BWV pilot, 38 police reports were submitted to COPFS.
- 3.12 The costs for Aberdeen – divided between development costs and capital costs - are shown in Table 3.2.

Table 3.2 – Aberdeen Initial BWV Costs (Source Grampian Police 2011)

	Activity	Cost (£)	Comment
Development	Research; project initiation document; operating protocol and funding applications	£1,600	
	Staff training	£800	
Capital	All hardware and software for 18 cameras	£16,000	Paid from grant from Fairer Scotland Fund
Total		£18,400	

3.13 In relation to running costs, it is estimated that the annual cost of repairing damaged kit has been £600. Once the system was up and running, it is estimated that only modest additional costs (less than £1,000) were involved in reviewing video and evidence production.

4. Changes brought about by the pilots

Reduction in crime

- 4.1 It is difficult to show a causal relationship between the use of BWV cameras and changes in crime. In particular it is challenging to attribute any changes in crime to one specific intervention – given that there are other changes occurring simultaneously both at a societal (for example increased unemployment) and at a police force level (for example in terms of restructuring of police services).
- 4.2 Nonetheless, there are some indications that the introduction of BWV cameras may have brought about changes.
- 4.3 For example, the use of BWV cameras in Aberdeen was particularly focused on the Northfield and Mastrick local policing area. The End Project report for Aberdeen compared the number of offences recorded by the police in Mastrick during the pilot period (1 June – 31 August 2010) with the number of offences recorded in the same three month period the year before.

Table 4.1 – Offences in Northfield and Mastrick (Source Grampian Police 2010)

Offence	Number of offences June – Aug 2009	Number of offences June – Aug 2010	Percentage change
Breach of the Peace	195	158	Down 19%
Vandalism	187	132	Down 29%
Minor Assault	190	138	Down 27%
Serious Assault	10	4	Down 60%
Total	582	432	Down 26%

- 4.4 To make sure that the reduction of offences in Northfield and Mastrick was not a part of a general reduction in Aberdeen, we have compared these figures against the figures for the same categories of offences in Aberdeen as a whole.
- 4.5 Table 4.2 shows that, for all four categories of offence, there has been a significantly greater reduction in offences in Northfield and Mastrick than in Aberdeen as a whole. While the total of offences reduced by 26% during the BWV pilot (when compared with the year before), total offences in Aberdeen reduced by just 1%.

Table 4.2 – Offences in Northfield and Mastrick compared to Aberdeen
(Source Grampian Police 2010)

Offence	Change in Northfield and Mastrick between 2009 and 2010	Change in Aberdeen between 2009 and 2010
Breach of the Peace	Down 19%	Down 5%
Vandalism	Down 29%	No change
Minor Assault	Down 27%	Up 9%
Serious Assault	Down 60%	Down 17%
Total	Down 26%	Down 1%

- 4.6 Also in Aberdeen, the BWV cameras were used as part of the Weekend Policing Plan in the city centre on three separate Saturdays. When compared to the same Saturdays one year previously, the number of Breaches of the Peace was down by 36% and the number of cases of Consumption of Alcohol in Designated Places was down by 50%. But caution should be applied to these percentages, as the total number of incidents involved is very small – 15 in 2009 and nine in 2010.
- 4.7 Finding comparable information in Renfrewshire is more complicated – as the BWV cameras were not focused particularly on a single area. It has been possible to compare the crime figures for Renfrewshire with crime information for the entire Renfrewshire and Inverclyde Division.
- 4.8 Table 4.3 shows that the reduction in crime generally for the period of the pilot when compared with the same period one year earlier is broadly similar between Renfrewshire and the wider Division. However in the categories of crime on which BWV cameras were particularly useful, the reductions in Renfrewshire were higher than for the Division.

Table 4.3 – Crimes in Renfrewshire Division compared to all of K Division
(Source Strathclyde Police 2011)

Crime Groups	Change in Renfrewshire between 2009 and 2010	Change in Renfrewshire and Inverclyde between 2009 and 2010
Crime groups 1-5	Down 15%	Down 13%
Crimes of violence	Down 35%	Down 11%
Fire raising, malicious mischief, etc	Down 23%	Down 16%

- 4.9 Local staff noted that the introduction of a new community policing model and other initiatives may have contributed to these achievements. However, the BWV cameras were deployed into violence and anti-social behaviour hot spot areas across Renfrewshire using community police officers and the Antisocial Behaviour Team (a mobile uniformed antisocial behaviour enforcement team consisting of a sergeant and six officers). In addition to the hotspots they did regular visits to licensed premises recording offences as well. There is a logic to this having impacted on violent crime and malicious mischief.

Increase in early guilty pleas

4.10 One of the business benefits of using BWV cameras was the likelihood that video evidence would lead to earlier guilty pleas. Anecdotal evidence from police officers and others involved in Renfrewshire suggests that BWV cameras have brought about a change.

“(the footage) showed his hesitation and associated body language when answering questions, resulting in the disc being viewed by the defence and contributing to a guilty plea.” (Police officer)

“Body Worn Cameras are an invaluable tool in the investigation and prosecution of crime. The footage captured by the cameras ensures that the full nature and impact of an offender's criminal behaviour is available to the courts and can be reflected in the sentences imposed.” (District PF)

“I spoke to the accused and he told me that he pled guilty to the breach of the peace as he didn't want the footage to be shown in court.” (Police officer)

4.11 It was agreed that it would be helpful to gather quantitative information to provide additional evidence of whether any changes in early pleas have taken place. To do this, an analysis was carried out on the Court outcomes for all the Standard Police Reports that were prepared following the use of BWV cameras during the pilot periods (86 in Renfrewshire and 38 in Aberdeen). In addition, information covering the same time periods was gathered about the incidence of early pleas from the Criminal Justice Board's Management Information System for both the JP and Sheriff Courts in Paisley and Aberdeen. It should be noted that the information from the Criminal Justice Board covers only summary cases (and not solemn cases).

4.12 To make sure that we were comparing like with like, COPFS agreed to analyse the figures for the 86 cases in Renfrewshire, using their standard coding system. It was not possible to do this in Aberdeen because the reference codes used by the police and COPFS could not be matched.

Renfrewshire

4.13 Of the 86 cases in Renfrewshire, 11 had not yet been completed, giving a total of 75 completed cases. There were 16 where the Crown did not proceed with the case. In 19 cases, Direct Measures (such as a fiscal fine or a fixed penalty) were used.

4.14 This left 40 cases. In two cases a not guilty plea was accepted at the Preliminary Diet or from custody. In the remaining 38 cases, a guilty plea was recorded at the earliest stage possible (either from custody or at the Preliminary Diet) in 29 cases; a guilty plea was recorded at the Intermediate Diet in 6 cases; and in only three cases did the case go to Trial Diet (where guilty pleas were recorded – in one case following an adjournment).

4.15 We compared these figures to those produced for all summary cases at Paisley Sheriff and JP Courts between April 2010 and January 2011. These figures (which are produced by the Scottish Court Service) show the number of early pleas as a percentage of the total number of cases. So, in comparison, 29 out of 75 completed cases (39%) were disposed of through a plea at preliminary diet where body worn video was used and only three cases (4%) went to Trial Diet. The comparison between the cases where body worn video was used and all cases in Paisley is shown in Table 4.4.

Table 4.4 – Renfrewshire: Guilty pleas in BWV cases compared with all cases (Source Strathclyde Police 2011; COPFS 2011 and Criminal Justice Board 2011)

	Renfrewshire BWV cases	All summary cases Paisley Sheriff Court	All summary cases Paisley JP Court
Guilty plea at Preliminary Diet or from custody	39%	29%	37%
Guilty plea at Intermediate Diet	8%	9%	8%
Guilty plea at Trial Diet	4%	20%	14%

4.16 This shows that there was a higher rate of early guilty pleas in the cases using body worn video. Most significantly, the percentage of cases requiring to proceed to the trial diet was substantially reduced and there were no cases where a full trial was required. Only 3 of the BWV cases went to trial diet. Using the average Sheriff Court figure, it would have been expected that 15 cases would go to trial. Using the average JP Court figure, it would have been expected that 10.5 cases would go to trial. This means that the body worn video cases were 80 per cent less likely to go to trial than the average for the Sheriff Court and 71 per cent less likely less likely to go to trial than the average for the JP court.

Aberdeen

4.17 Of the 38 cases in Aberdeen, there were 15 where the Crown did not proceed with the case; where a not guilty plea was accepted; or where the case was still pending. In addition, there were three cases dealt with by Direct Measures.

4.18 This left 20 cases where the stage at which a guilty plea was made was known. In 85% of these cases, a guilty plea was made at the Preliminary Diet or from custody and 15% at the Intermediate Diet. None required a trial. This compares to the 18% of cases which went to trial at both Aberdeen Sheriff and JP Courts between April 2010 and January 2011.

Quicker resolution of any complaints about the police or wardens

- 4.19 It seems logical that the use of BWV cameras may lead to a reduction in the number of complaints about police officers. However the number of uses of BWV cameras is very small compared to all police work – and so it is difficult to get satisfactory comparative figures that would indicate that there had been a reduction in complaints as a result of the use of BWV cameras.
- 4.20 During the initial eight month period of deployment in Renfrewshire, BWV cameras were deployed over 2,500 times. Two complaints about the police were recorded at incidents where BWV had been used. Both of these involved allegations of assault. In one incident, the BWV camera recording of the officer subject to the complaint corroborated the police version of events. In the other a complaint was initiated following a casualty surgeon's examination of an accused who had an injury to his head. A BWV recording of the accused during his conveyance to Paisley police office clearly showed the accused banging his head against the cell cage. Both complaints resulted in no proceedings.
- 4.21 During the BWV pilot period in Aberdeen, there were over 2,500 deployments. There have been five separate police complaints made in circumstances where BWV has been used, only three of which were directly made against an officer who was wearing a BWV. Of the three separate complaints, each one was quickly found to be unsubstantiated on viewing the footage, which negated any formal protracted police enquiry having to be done. In addition, it could clearly be seen that the officers' actions were totally professional at all times. Of the remaining two, the actions that have been recorded on the BWV were found to vindicate the officer, although enquiry was still required in relation to the other aspects not captured.
- 4.22 Two case studies from the Renfrewshire Council Environmental Warden Team indicate the likelihood that use of BWV cameras reduces the number of complaints:

Case 1

There was a complaint from a female member of the public accusing a male Warden of accosting her and forcing her against a wall in order to issue a fixed penalty for litter. Upon reviewing the footage the complaint was found to have no substance to it. The actual footage captured the issuing of the fine and the demeanour of the offender's acquaintances. The evidence highlighted the professionalism of the Warden and portrayed the complainant in an unfavourable fashion.

Case 2

A male after being spoken to in relation to dropping a cigarette end on the pavement raised a formal complaint after the issuing Warden was accused of being highly aggressive. The footage recorded clearly showed the argumentative nature of the complainant, his

body language and the inflammatory words used at the time. Upon being reminded of the footage the complaint was dropped.

- 4.23 It is not possible to state whether 7 complaints out of over 5,000 deployments is less than (or greater than) the number that might have been anticipated.
- 4.24 What is clear is that the process of considering any complaint was made much easier by using the evidence from BWV cameras. This will have provided some reassurance to the officer involved; reduced the time taken to resolve the complaint; and reduced police time in resolving complaints.

Reductions in assaults on officers

- 4.25 In Renfrewshire there were three assaults on officers using BWV cameras in the 2,500 times that the cameras were used. All occurred during arrest procedures.
- 4.26 In Aberdeen, one officer has been physically assaulted whilst wearing a BWV and this was part of a large-scale disturbance with various officers deployed. In addition, during formal feedback from officers, a number have stated that they genuinely believe that the presence of the BWV has avoided them being physically assaulted whilst having to deal with volatile and aggressive individuals. This is seen to bring a number of clear benefits including additional protection, reassurance, security and welfare.
- 4.27 Whether four assaults are more or less than might have been expected is difficult to gauge. This is not least given the particular circumstances in which the assaults took place. However, consideration of the figures in Aberdeen gives an indication of the impact that BWV may have had. Normally there would be up to 100 police on duty in Aberdeen – with up to 30 body worn cameras available (30 % of total officers on duty). In the nine months since the BWV project began one officer wearing BWV has been assaulted and 61 not wearing BWV have been assaulted. This suggests that the BWV cameras are having an effect. If police officers wearing BWV had been assaulted in proportion to the overall number of assaults in Aberdeen, it might have been expected that 18 assaults would have taken place (rather than one).

Increased public re-assurance and reduced fear of crime in local communities

- 4.28 During February 2010, Renfrewshire Council conducted an online survey in relation to the use of body worn video cameras. There were 97 respondents.
- 4.29 In Aberdeen, a series of questions were included in City Voice 21 in late 2010. City Voice is the Citizens' Panel for Aberdeen. There were 701 responses from members of the Citizens' Panel.
- 4.30 In Renfrewshire, nearly half of those who responded to the public survey (49%) felt safer as a result of the deployment of body worn video cameras and 64 % felt that cameras would help to reduce crime and antisocial behaviour in their local communities and the town centres. A similar number (64%) thought that all police and wardens should wear cameras.

4.31 In Aberdeen:

- 44% of the Panel had heard of BWV;
- 37% said that the use of BWV cameras would make them feel safer – less than 1% of people said that use of BWV would make them less safe;
- 57% said that they believed that the use of BWV would make their community safer – just 0.1% said use of BWV would make their community less safe;
- 76% of people supported the use of BWV cameras – 7% did not support their use.

4.32 Taken together, these two samples indicate strong support for the use of BWV cameras and, importantly, that the use of BWV cameras made large numbers of residents feel safer.

5. Value of any changes (positive or negative)

- 5.1 This section considers the evidence that would allow estimates to be made or indications given of the value of any changes brought about by the use of BWV cameras.
- 5.2 There is an indication that there may have been a reduction in complaints against police officers when BWV is worn – and that the amount of police time that is required to deal with any complaints received is often less when BWV is worn. However, there is currently no information gathered on the length of time spent on investigations – and the value that could be attributed to this. Complaints against the police are investigated by a senior officer – at least at Inspector level. Every complaint is different. But it is likely that each complaint would require at least five hours investigation in the Division and a further three hours work in the police support unit – suggesting a minimum cost to the police of £320 per complaint.
- 5.3 It is hard to demonstrate the extent of any reduction in assaults on officers as a result of the use of BWV cameras. There is no comparator figure on the number of assaults per 1,000 engagements when BWV is not used. But the indications from Aberdeen are that less than 2% of all assaults on police officers happened when they were wearing BWV – when BWV was in use about 30% of the time that officers were on duty.
- 5.4 Officers have stated that they believe that the presence of the BWV has avoided them being physically assaulted whilst having to deal with volatile and aggressive individuals. This is seen to bring a number of clear benefits including additional protection, reassurance, security and welfare. If the number of assaults does reduce as a result of the use of BWV, then there may also be reductions in absence from work as a result of injuries sustained in an assault. But it is not practical, with the information available, to estimate what these savings might be.
- 5.5 There is evidence that the use of BWV cameras make the public feel safer. This is an important finding, but it is not realistic at this stage to put a monetary value on the improved public reassurance brought about by the pilots.
- 5.6 For these reasons, this section concentrates on the value of any reduction in crime and any increase in the number of early guilty pleas.

Reduction in crime

- 5.7 Home Office research³ provides estimated average costs of crimes in 2003/04 by crime type and cost category. The costs that are relevant to this evaluation are costs related to:
- the Criminal Justice System;

³ *The Economics and Social Costs of Crime against Individuals and Households*, Home Office, 2005

- health services;
- physical and emotional impact on direct victims;
- value of property stolen, damaged or destroyed;
- victim services; and
- lost output.

5.8 The estimated costs of crime contained in the Home Office research are shown in Table 5.1. The costs reported in this research from 2003/04 have been adjusted to take account of the rate of inflation (RPI) to 2011.

Table 5.1 – Costs of Crime (Source Home Office 2003; National Office of Statistics 2011)

	2003 Costs per crime	2011 Costs per crime (adjusted by RPI)
Common assault	£1,440	£1,771
Serious wounding	£21,420	£26,347
Criminal damage	£834	£1,026
Homicide	£1,458,601	£1,794,080

5.9 Section 4 of this report notes that the crime statistics for Mastrick and Northfield fell by 26% during the BWV pilot in comparison to the same time period the previous year. There was also almost as significant a difference when the reduction in Mastrick and Northfield in comparison to Aberdeen as a whole over the same time period. The 26% reduction in crime in Mastrick and Northfield compared to a 1% reduction in Aberdeen. Using the Mastrick and Northfield figures, it is estimated that the number of instances of breach of the peace and vandalism was 94 less than might have been expected; that there were 52 fewer minor assaults than expected and six less serious assaults.

5.10 Theoretically, if these reductions were attributable to the use of BWV cameras, then the saving (in three months) might equate to:

- 94 'criminal damage' = £96,444
- 52 common assaults = £92,092
- 6 serious woundings = £158,082.

5.11 This amounts to a total of £346,618 (at 2011 prices). Even if (say) 20% of the reduction was attributable to BWV cameras, the value would be £69,324.

5.12 Using the same logic, the theoretical value of the 24% greater reduction in crimes of violence in Renfrew and 7% greater reduction in fire raising, malicious mischief etc (when compared to the wider K Division), could be valued at £363,996. Again, if (say) 20% of the reduction was attributable to BWV cameras, the value would be £72,799.

Increase in early guilty pleas

- 5.13 Of the cases where BWV was used in Renfrewshire, three went to trial. Based on the percentage of all cases in the Paisley Courts at the same time, it would have been expected that 13 might have gone to trial.
- 5.14 Of the cases where BWV was used in Aberdeen, none went to trial. Based on the percentage of all cases in the Aberdeen courts at the same time, it would have been expected that seven might have gone to trial.
- 5.15 So, in total, there were 17 less cases that went to trial than would have been expected – saving significant court and police time and expense.
- 5.16 A Scottish Government report⁴ gives average costs for court costs and prosecution costs in different types of Scottish courts. Costs of Legal Aid are also provided – but since 2005/06, the system of Legal Aid has been changed and a flat rate fee (of £500) is paid. We have excluded Legal Aid from our consideration. We have also adjusted the figures to take account of inflation (RPI) to 2011.
- 5.17 The difference in court costs between a plea at Preliminary Diet and a Trial Diet is £1,722 for a summary case in a sheriff court. No information was available for the, then, district courts (which are now Justice of the Peace Courts) .
- 5.18 The difference in prosecution costs between a plea at Preliminary Diet and a Trial Diet is £563 for a summary case in a sheriff court; and £376 for a summary case in a district court.
- 5.19 Therefore the total difference in costs (but not including police costs) in a summary case in a sheriff court is £2,285.
- 5.20 If it is assumed that 17 additional cases might have gone to trial if BWV had not been deployed, in broad terms, additional court and prosecution costs would be in the order of £38,845.
- 5.21 In addition, it would be reasonable to consider that in a ‘typical’ case, three police officers may need each to spend 3 hours on evidence preparation and paperwork and 5.5 hours in court. This would be 25.5 hours at £29 per hour, giving a total cost to the police for 17 additional cases of £12,571.
- 5.22 If it is assumed that the BWV pilots reduced the number of cases requiring trial by 17, this equates to an estimated saving of £51,416.

Summary

- 5.23 The total costs that might have been saved as a result of the use BWV cameras in the two pilot areas might amount to about £50,000 savings in court, prosecution and police costs. In addition there are wider social and economic benefits through the reduction in crime, for which there is some evidence. If it

⁴ *Costs and Equalities and the Scottish Criminal Justice System 2005/06*, Scottish Government, 2008

is assumed that the use of BWV led to 20% of the additional reduction in crime which has been identified in the areas that they were deployed, the wider value of their use would be estimated to be in the order of £140,000.

6. Conclusions

- 6.1 There is good information gathered by the staff involved in the two pilots on the use of BWV. This indicates, among other things, that:
- There is some evidence of a reduction in crime as a result of the use of BWV. This is most persuasive in Northfield and Mastrick, where the Aberdeen BWV pilot was focused.
 - There is evidence from the pilot that when cases go to court, it is more likely that the case will be resolved at an early stage – with a higher proportion of guilty pleas in advance of the Trial Diet stage.
 - It has not been possible to provide evidence on whether the number of complaints against the police falls when BWV is used. However, there is evidence that the process of considering any complaint is easier (and often takes less time) when there is video evidence.
 - There is some evidence that the use of BWV may have reduced assaults on police officers. It appears that a significantly lower proportion of officers using BWV in Aberdeen were assaulted when compared to their colleagues who were not wearing BWV.
 - There is evidence that the public are reassured by the use of BWV – with about half saying that they feel safer as a result of the use of BWV. In the pilot areas, the public are also strongly in favour of the use of BWV.
- 6.2 There is evidence that there will be savings for the police, the courts, other public agencies and the public through the use of BWV. But it is very hard to make a sound estimate of this for two main reasons. Firstly, comparative information is not always available. Despite being able to access the data in the Criminal Justice Board Management Information System and the assistance of COPFS, it has taken some time to compare the outcomes of court cases using BWV and not using BWV. Secondly, average costs of processes are not readily available. For example, there is no national estimate of the average cost in police time of attendance at a court case – or the cost to the police (on average) of investigating and resolving a complaint against the police.
- 6.3 Given the importance of prevention and early intervention and of efficient delivery of public services, it would be wise for improvements to be made in the way that information about costs is gathered and shared.
- 6.4 Nonetheless, having made a number of assumptions and gathered information from a range of diverse sources we have been able to make an estimate of the cost and potential direct savings brought about by the use of BWV.
- 6.5 Capital costs for the cameras and IT equipment and other set up costs amounted to about £60,000 for the two pilots. Ongoing costs are reckoned to be very modest (for example, about £1,000 annually for repair to equipment).

- 6.6 We have identified that, when BWV is used, the number of cases requiring to go to trial are lower than would normally be expected. We have estimated a saving (over the eight months of the Renfrewshire pilot and the three months of the Aberdeen pilot) of £50,000 savings in court, prosecution and police costs. This would equate to an annual saving £125,000.
- 6.7 We have also noted that the recorded crime levels in Northfield and Mastrick fell, both when compared to the previous year and when compared to Aberdeen as a whole. And there were also some reductions in the recorded level of crime in Renfrewshire. In the report we consider the wider economic benefits if even 20% of the reduction in recorded crime was due to BWV. During the pilots, the estimated saving was £140,000. This would equate to £275,000 in a full year.
- 6.8 It is clear that the use of BWV has made a positive impact in the pilot areas. Although the cost estimates have to be treated with considerable caution, they would suggest that the initial costs are likely to be offset over a relatively short period of time by savings in the court system and in the wider social and economic cost of crime.
- 6.9 If the pilot use is to be extended we would recommend:
- providing robust central IT support, learning from the lessons of the different approaches in the pilot;
 - the establishment of information gathering and monitoring arrangements from the start; and
 - improvements in the national analysis of cost data (for example for court time; dealing with complaints; and the cost of assaults).