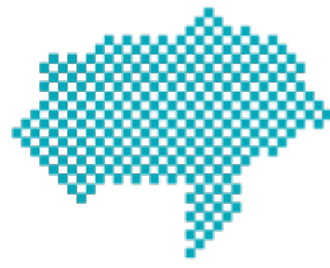


Police and Crime
Commissioner
North Yorkshire



BODY WORN VIDEO (BWV) AT NORTH YORKSHIRE POLICE – BUSINESS CASE



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DOCUMENT HISTORY

2.2	31 st January 2017	RW Jones	Final draft incorporating all feedback
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EXECUTIVE SUMMARY

Body Worn Video (BWV), the wearing of an overtly visible video recording device has been widely adopted by UK police forces over recent years, in the belief that a range of benefits to police officers and the public can be realised.

Despite this there is limited “hard evidence” of the quantifiable benefits forces have secured.

NYP have been watching the national landscape develop and tracked the maturity of the technology vendor’s products & solutions and feel now that the time is right to deploy BWV to its officers.

The Operational Technology team, having assessed BWV vendors and accessed the experience of other forces selected Reveal Media’s (<https://www.revealmedia.co.uk/>) solution as being the best fit with their operational requirements. Reveal Media supply BWV solutions to 29 other police forces. The East Midlands forces have provided a glowing testimonial for our chosen BWV solution provider and their solution, which is included in an Appendix.

It is prudent for NYP, given its particular context and circumstances to adopt an approach that confirms the benefits available here at this time, and so the BWV Project will adopt a Wave & Gate approach, where service roll out is undertaken in a number of Waves after which Gateway reviews are undertaken to confirm the benefits and affordability (amongst other things).

In 2017 NYP deployed a tactical BWV solution in support of “Op Kingfisher” from which we will be able to draw on limited learnings. The strategic roll out begins with “Wave 2” where between 261¹ and 300² cameras will be deployed to address the most urgent operational requirements, and provide a sample large and diverse enough to provide the data required to assess if the case is made for further deployment(s).

To deploy 261 cameras will cost £250k, funding the cameras, docking stations, minor estates work and project resources.

Changing from a 5 to a 4 shift pattern as is being planned at the moment may³ have the effect of increasing the number of officers on duty at any time, requiring 300 cameras to service the most urgent operational requirements, increasing the wave 2 costs to £270k.

Expenditure on Network upgrades and BAU resource increase to support the system has been removed from the Wave 2 costs on the basis they may not be necessary. A contingency of £100k has been requested to allow for selected upgrades and staff should they be evidently required during the wave.

This business case is seeking approval for a budget of £270k to purchase 300 cameras and associated peripherals, with a contingency of £60k, for any essential network capacity increases. The total figure of £330k, is within the MTFP provision of £360k for BWV and so affordability for confirmed Wave 2 costs is confirmed.

Further waves are currently not budgeted for.

Should Wave 2 confirm that the benefits for NYP of BWV are strong then a decision will be made to make budget provision for further waves.

Wave 2 will build and deploy NYP’s BWV v1 solution, which will allow video from BWV to be captured, stored, produced and published. Future projects will be necessary to Integrate BWV (and other sources of video) with existing policing systems and to be exploited by new Digital capabilities.

¹ A calculation error in the previous version of the business case has been corrected in this version, as a result 261 cameras are required (an increase of 7 from 254) to service the most important operational requirements set out later in the document based on the current 5 shift pattern.

² The number of officers on shift in the new 4 shift patterns is not precisely known, this is upper limit anticipated for it.

³ Based on current abstraction rates this would be true, but a different abstraction rate may limit the number of on duty officers to current levels.

BUSINESS REQUIREMENTS

Investing in BWV has the intention of “**Helping the public of North Yorkshire be and feel safe**”, the requirements to equip Police Officers with overt Body Worn Video in this business case enable the “**21st Century Police officer**” who can improve policing **Effectiveness** and **Efficiency** and provide an **Excellent** customer service. For reasons to do with the nature of this document they are classified as:

COMPLIANCE

The Government and NPCC have in recent years developed and issued policy and advice that is applicable to NYP and so must guide this business case.

1. In January 2016, the National Police Chief’s Council (NPCC) decided that BWV **must** be introduced as soon as practicable to overt Authorised Firearms Officers (AFO).
2. In 2017, the NPCC decided that BWV **should** be introduced for Taser carrying officers.
3. In 2017, HMIC have **advised** police forces to use BWV when attending domestic incidents.
4. In January 2017 the Police Deaths in Custody review, **recommended** Body worn cameras should be rolled-out nationally to all police officers working in the custody environment or in a public facing role.

STRATEGIC OBJECTIVES & RISKS

Equipping officer with BWV will enable NYP to meet a number of strategic objectives & manage risks:

1. Improving public safety by securing improved conviction rates.
2. Protecting NYP’s organisational and individual officer’s reputations by having our own digital evidence. E.g. during public order incidents.
3. Enhancing public confidence & improving police legitimacy by improving officer’s behaviour during public contact.
4. Improved morale, recruitment & retention of police officers by providing them with support in challenging circumstances e.g. by reducing assaults on officers & handling vexatious complaints.
- 5.

ECONOMIC

It is believed that the national picture with regard to economic benefits should be achieved here at NYP. The areas in which other forces believe they have saved money include:

1. Savings in officer and staff effort and reductions in elapsed time, by:
 - o Encouraging early guilty pleas
 - requiring less time spent gathering other evidence
 - reducing time in file preparation and numbers of attendances at court
 - o Reducing the number of complaints against officers
2. Reduction in number of financial claims against NYP, and possibly a corresponding reduction in insurance premiums.

OUR DIGITAL BWV SOLUTION

Having undertaken research into the BWV market and considered what other forces have deployed, the NYP Operational Technology Team proposed deploying the same product(s) as used by West Yorkshire Police (WYP)

The team compared the functionality of a number of products and concluded that the combination of hardware and software offered by our chosen provider, met all known operational requirements and had an active development plan that will bring new features to aid the future innovative use of the solution.

With this as a starting point, the ICT team at NYP devised a solutions design for “BWV Product version 1”, the highlights of which are:

- Purchasing a number of BWV cameras, all as shared equipment
- Installing a number of BWV dedicated PC Kiosks in NYP locations around the county, attached to which are docking stations for between 6 and 18 cameras each.
- *Kiosk PCs will be able to burn copy of videos to DVD should this be operationally necessary*
- Uploading from the kiosk PC's the retained video on the NYP strategic storage solution⁴, where it can be accessed force wide and shared with the CPS etc.
- The Kiosk PCs and the Wide Area Network being configured so as to upload the retained video within an acceptable timeframe without impacting the use of key online systems.
- Upgrades to the Wide Area Network only if required to ensure that the retained video is held centrally within an operationally acceptable timeframe (assumed to be 48 hours).
- Video editing software bundled with the cameras will enable officers to complete their own 'processing' e.g. editing of relevant sections and redaction of public faces, to produce material suitable for court purpose. There will be no need for an in-house nor bought in video production capability.

The NYP BWV Product Version 1 will initially be deployed and grow its capability over a number of years through product development iterations. (E.g. upload direct from camera to server via NYP corporate Wi-Fi)

⁴ NYP has “spare” capacity in its infrastructure, to meet initial demand. We will prioritise the development of a Cloud based Digital Evidence Management Service (DEMS) in the Digital Policing Transformation (DPTP) Programme and to migrate all BWV content there in due course.

THE CLOUD OPPORTUNITY

As a key strategic principle, “Cloud First” is an axiom for NYP, and future versions of the BWV solution will definitely be Cloud based, however at this time NYP is not ready to implement Version 1 of the BWV solution on the “Cloud”. We have not got the relevant stakeholders signed up behind the strategy, something to be done as a part of the Digital Strategy development.

As they stand these costs are not attractive to us as the cost of the Cloud storage is inflated by the Microsoft network costs and because the cameras are offered on a managed basis only increasing the costs significantly.

BWV & DIGITAL TRANSFORMATION

The diagram below illustrates the information lifecycle for video captured whether it be from BWV or other sources such as CCTV, Drones or Dash-cams etc.



Version 1 of the NYP BWV solution will permit the Capture, Store, Production & Publish stages of the BWV Information lifecycle, and deliver a level of value to NYP.

Further significant value exists within the Integrate stage, where BWV evidence can be integrated within and processed by other systems. Such systems might range from Policing records Management systems such as Niche or large warehouses where Artificial intelligence applications can automatically process video to identify individuals and establish their relationship to multiple incidents helping establish new intelligence.

Only when we are able to Integrate video data capture from BWV and other sources and exploit it will the solution have made a contribution to NYP’s Digital Policing Transformation aims.

DELIVERY APPROACH

STRUCTURE

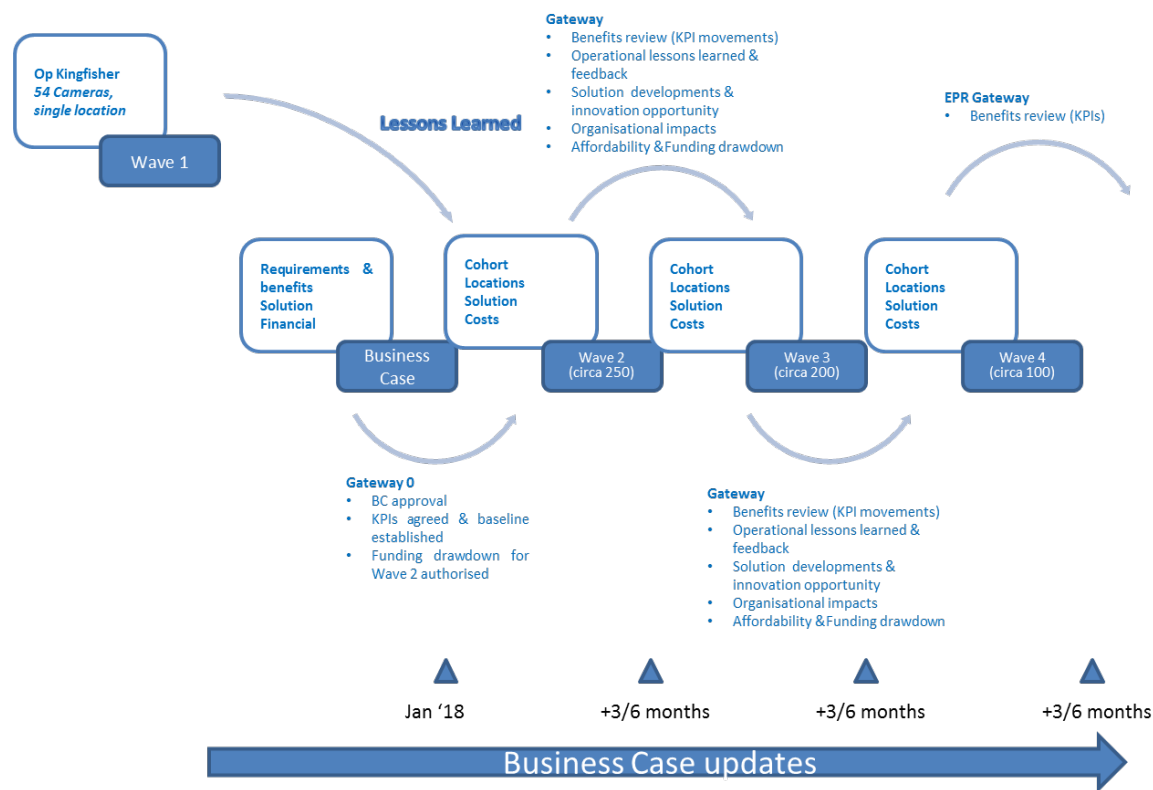
The project will be broken down into a number of “Waves” each followed by a Gateway review, which will do a number of things, including:

- Assessing the benefits realised from the previous wave(s)
- Capture and utilise any lessons learned
- Identify opportunities for innovation & consider product improvements opportunities
- Assess the organisational impacts (e.g. DISG resources)
- Confirm affordability of future Wave(s)

Only when Authority to Proceed (ATP) is granted during a Gateway review will the project be able to move onto the next Wave.

THE END-TO-END VIEW OF THE CURRENT PROJECT’S SCOPE

NYP already has a tactical solution of 54 cameras deployed to support Operation Kingfisher⁵. At an appropriate point in time the lessons learned from it will be incorporated into this project’s solutions design and plans.



⁵ During the first full month of usage, 1,987 recordings have been made, 80 of which are marked evidential resulting in 14 hours of footage being available to support prosecutions. 2 (of 54) cameras have developed faults and been replaced by the vendor under warranty.

BUSINESS CASE

COSTS

ESTIMATED TOTAL “ENVELOPE”

To implement a BWV solution force wide would require circa 550⁶ cameras to support 1100 users, costing an estimated £1.4m over three years.⁷ See Appendix 2 below for a breakdown.

Using this new “Agile” (Wave & Gate) approach, allows us to break these costs to “Must” & “Might”.

To deliver a force wide solution we “Must”:

- Buy Cameras
- Fund storage costs
- Have a project team
- Total : £805K

And we “May” have to:

- Upgrade the NYP Wide Area Network upgrades
- Uplift DISG resources
- Total : £630k

- **Grand total £1.4m**

AFFORDABILITY

During the 2014 planning cycle an entry for BWV was included in the Medium Term Financial plan. The figure of £360k was based on very limited information and so is significantly less than the £1.4m shown above.

The current financial climate is challenging and so an approach that allows us to assess the benefits, including any economic benefits during the roll out is warranted.

The “Must” costs of Wave 2 as shown are within the MTFP estimate and so this part of the deployment is affordable, access to the contingency, should it be necessary will within tolerance fit within the £360k.

Based on the Gateway review, a decision will be made to made additional provision to support further waves or not.

WAVE 1 (OP KINGFISHER)

We have already deployed BWV tactically in support of Op Kingfisher, based on the same vendor’s products, the costs of which were £32.5k

WAVE 2

Wave 2, deploying the minimum number of cameras to meet urgent operational requirements, and to allow us to confirm the benefits of the solution, the year 1 “Must” costs work are shown below:

Analysis undertaken with the Operational Technology team confirms that:

⁶ The decision to move to a 4 shift pattern, may cause this number to increase, as a result the No of officers on duty on each shift may increase depending on the new abstraction levels. The total number of cameras required will be determined at the gateway review for wave 2.

⁷ Excluding Op Kingfisher tactical solution which was funded from an operational budget.

Body Worn Video (BWV) – Business Case

1. To satisfy the minimum of the most urgent operational requirement will require 205⁸ cameras, and cost £200k. Initial estimates based on the change of shift pattern indicate a further
2. To fully satisfy the most urgent operational requirement across all uniform roles will require between 261 and 300 cameras (depending on the impact of the shift changes), costing £250k or £270k respectively.

Option 2 above is the preferred options as it will meet the greatest number of urgent operational requirements.

During Wave 2, in order to minimise expenditure only the 'Must' costs are shown above, it may be though that during deployment of Wave 2 we learn that it is necessary to upgrade the NYP Wide Area Network upgrades

In the event that access to the contingency is required then clear compelling evidence of operational problems will need to be produced before further approval will be sought, via our exception process, to access it.

COST QUALIFYING ASSUMPTIONS

1. Pooled use cameras for everyone
2. Cameras used or Op Kingfisher will be returned once the operation has been completed, which is expected to be later than the start date of Wave 2.
3. The Digital Information and Services Group (DISG) can for this phase support BWV without the need to increase BAU capacity
4. The costs of NYP wide network upgrades are avoided at this time because the operational requirement for the time to upload media is not less than 48 hours
5. The network link to WYP is currently available and does NOT need upgrading
6. The central storage for these phases is already installed and available for use by the BWV project for the initial 12 month period
7. Training will be done in-house, by operational super users learning then training other officers and so requires no separate budget
8. The refund for the Op Kingfisher cameras have not been factored as we may not be able to secure all of them

WAVES 3 & 4

The costs of Waves 3 & 4 will not be greater than the balance of the estimated costs. The precise figures will be confirmed through the gateway reviews at the end of each preceding Wave.

WAVE 2 GATEWAY REVIEW

The costs for this part of the project are limited to a small project team who will undertake the activity to analyse, present the benefits data and prepare for approval a Business Case for Phase 3.

The programme will in conjunction with NYP and PCC

- Analyse all data gathered during phases 1 and 2 to confirm that the benefits expected in this business case have been confirmed
- Confirm the extent to which wide area network upgrades are necessary or not
- Confirm what the storage strategy is for BWV (Digital Evidence Management Service or other)

COST QUALIFYING ASSUMPTIONS

1. BAU resources NYP & OPCC are available to work with the project team

PHASE 3

Based on the findings of the benefits review, phase 3 of the project might:

- Roll out BWV to the balance of the force (currently estimated at 269 cameras)
- Upgrade the NYP wide area network
- Deliver a Cloud based Digital Evidence Management Service

The activity, costs and benefits will be developed during the previous business benefits review phase.

COST QUALIFYING ASSUMPTIONS

- Not applicable at this time.

⁸ Based on 5 shift calculations

BENEFITS OF BWV AT NYP

BENEFITS

Data available from a variety of sources ⁹ suggest that NYP might expect that BWV should provide benefits in the following areas:

1. Increased victimless prosecutions
2. Evidence to improve investigations of deaths & injuries in custody
3. Reduced complaints against NYP
4. Evidence for claims against NYP
5. Evidence supporting investigations into use of force
6. Increase in early guilty anticipated pleas cases (GAP)
7. Improved prosecution and conviction rates
8. Improved prosecution for assaults on officers/staff
9. Reduction in assaults on officers/staff
10. Improved officer behaviours (in challenging circumstances)
11. Enhanced Force Reputation with the public (Legitimacy)
12. Organisational Learning

Such benefits arise and affect processes and people in the following areas:

1. Victims & Witness
2. Officers in Policing
3. Officers and staff in our Criminal Justice Department
4. Lawyers in the CPS & the Courts

BENEFIT TYPES

Benefits to NYP from BWV can be classified as:

- **Compliance**, ensuring conformance with NPCC, Home Office policies and other “best practice”
- Enabling NYP to achieve our **Strategic Objectives &** to Treat our **Strategic Risks**
- **Economic**, saving officer and staff time & reducing compensation

MEASURING BENEFITS

The challenge for NYP is to source the necessary data to enable quantitative analysis and information to enable qualitative assessment of the positive benefits and to identify any potential dis-benefits.

NYP’s systems and processes are partially ‘instrumented’, and the process for gathering and processing the data is currently often manual, it is therefore essential that we select carefully the data and information we gather and analyse so as to balance the effort and the benefits from the analysis.

Using contemporary information about the connection between theory, evidence and outcomes, the table below shows which NYP activities are necessary to gather the evidence of the benefits of BWV (or not).

ACTIVITIES, EVIDENCE AND BENEFITS

BENEFIT	MEASURES	TYPE
OPERATIONAL		
1. Increased Victimless Prosecutions		

⁹ College of Policing reviews, academic reports, MoPAC, Other forces and vendors marketing materials

<p>Outcome: BWV cameras will increase the proportion of violent incidents attended by response officers that result in a criminal justice outcome.</p> <p>Theory:</p> <ul style="list-style-type: none"> • The availability of independent evidence will enable the CPS to consider prosecution without victim testimony. • Officers are likely to capture more and better evidence at the scene; • Offenders are likely to admit guilt because of availability of independent evidence; • Officers are likely to follow expected process 	<p>Evidence:</p> <ul style="list-style-type: none"> • Increase in converting an incident into a crime; • Increase in Penalty Notices for Disorder (and administration detections); • Increase in charge/summons; and • Increase in sanction detections. <p>NYP activities:</p> <ul style="list-style-type: none"> • CJD Prosecution Team and CPS measure to develop method to identify Victimless Prosecutions. • Case Studies provided by Prosecution Team of victimless prosecutions. 3 monthly review in line with wave timeline. 	<p>Strategic</p>
<p>2. Evidence to improve investigations of deaths & injuries in custody</p>		
<p>Outcome: Use of BWV will enhance accountability of officers / staff actions in a custody environment.</p> <p>Theory:</p> <ul style="list-style-type: none"> • Increased accountability. • Enhanced transparency. • Provides opportunity to learn from failings. • Protect an officers risk of their own or a colleagues avoidable failure 	<p>Evidence:</p> <ul style="list-style-type: none"> • The use of BWV to examine the procedures and process surrounding death and serious incidents in custody. • To examine and understand the reasons and obstacles to those investigations in respect of family’s needs and expectations. • To identify areas for improvement and development. <p>NYP activities:</p> <ul style="list-style-type: none"> • Performance will provide required data across force and by custody suite. • 3 monthly review in line with wave timeline. 	<p>Compliance</p>
<p>3. Reduced complaints</p>		
<p>Outcome: Reduction in complaints against officers/staff</p> <p>Theory:</p> <ul style="list-style-type: none"> • Reviewing Officers making the initial assessments of complaints view the BWV as part of their assessment. • Less likelihood of notices being served on officers because the severity assessment can be made immediately and accurately. • BWV assists with assessment by use of force trainers and resolution service delivery complaints. • Independent Police Complaints Commission will request the BWV as part of any appeal against investigation; this should lead to a reduction in the number of upheld appeals. 	<p>Evidence:</p> <ul style="list-style-type: none"> • Reduction in complaints • Reduction in investigative effort/ time • Timeliness of complaint resolution <p>NYP activities:</p> <ul style="list-style-type: none"> • PSD are required to provide national statistics on recorded police complaints. This will be comparable moving forward. • 3 monthly review in line with wave timeline. 	<p>Economic</p>
<p>4. Evidence for claims against NYP</p>		
<p>Outcome: Reduction in claims against NYP</p> <p>Theory:</p> <ul style="list-style-type: none"> • Better evidential capture will enable better outcome for both NYP and complainant. • BWV may act at a deterrent to false claims 	<p>Evidence:</p> <ul style="list-style-type: none"> • Number of claims against NYP • Timeliness of claim resolution • Cost of claims paid <p>NYP activities:</p> <ul style="list-style-type: none"> • Due to the enormous variables to arrive at a claim decision quantitative data is not appropriate. 	<p>Economic</p>

	<ul style="list-style-type: none"> • Case studies provided as evidence. • 3 monthly review in line with wave timeline. 	
5. Evidence supporting investigations into use of force		
<p>Outcome: Reduction of use of force (both lethal and non-lethal)</p> <p>Theory:</p> <ul style="list-style-type: none"> • Increased use of tactical communications by officers. • Change in behaviours towards proportionality of force offered / used. • De-escalation of incidents through overt use of BWV 	<p>Evidence:</p> <ul style="list-style-type: none"> • Reduction of allegations of assault against officers / staff. • Reduction in use of force by Taser - red dot aim v firing comparison. <p>NYP activities:</p> <ul style="list-style-type: none"> • Use of force is recorded. Statistics can be provided by force, area, officer, method. • Used in all Taser reviews. • 3 monthly review in line with wave timeline. 	Strategic
6. Increase in early guilty anticipated pleas cases (GAP)		
<p>Outcome: An increase in early guilty pleas</p> <p>Theory:</p> <ul style="list-style-type: none"> • With the capture of evidence on BWV offenders will tend to accept the evidence at an earlier stage of the prosecution process 	<p>Evidence:</p> <ul style="list-style-type: none"> • National TSJ Rankings <p>NYP activities:</p> <ul style="list-style-type: none"> • Niche Systems Admin will provide data totals for GAP and NGAP charges for the all North Yorkshire Magistrates Court. This can be further broke down to each court. • CPS data - Guilty Plea at first hearing. • 3 monthly review in line with wave timeline. 	Economic
7. Improved prosecution and conviction rates		
<p>Outcome: BWV cameras will increase the proportion of incidents that result in a criminal justice outcome.</p> <p>Theory:</p> <ul style="list-style-type: none"> • The availability of BWV evidence will enable the CPS to consider more prosecutions. • Officers are likely to capture more and better evidence at the scene. • Offenders are likely to admit guilt because of availability of independent evidence. • Officers are likely to follow expected process. • Domestic Abuse and public order offences will area of focus as these criminal investigations will benefit from BWV more than others, and some not at all. 	<p>Evidence:</p> <ul style="list-style-type: none"> • Increase in converting an incident into a crime; • Increase in Penalty Notices (and administration detections); • Increase in charge/summons; and • Increase in sanction detections. <p>NYP activities:</p> <ul style="list-style-type: none"> • Prosecution Team and performance measures that are already in place or can be developed • 3 monthly review in line with wave timeline. 	Economic
8. Improved prosecution for assaults on officers/staff		
<p>Outcome: Enhanced recording of assaults on officers/staff.</p> <p>Theory:</p> <ul style="list-style-type: none"> • Accurate recording of assaults against officers/staff. • Enhanced evidence of minor assaults may assist in reaching charging threshold and secure successful prosecutions against suspects. 	<p>Evidence:</p> <ul style="list-style-type: none"> • Increase in recording of assaults against officers/staff • increased conversion rate from arrest for assault police / resist arrest to prosecution for the same <p>NYP activities:</p> <ul style="list-style-type: none"> • CJD Prosecution Team to develop in place measures to monitor which cases include BWV evidence. • 3 monthly review in line with wave timeline. 	Strategic
9. Reduction in assaults on officers/staff		

<p>Outcome: Overall reduction of assaults on officers/staff.</p> <p>Theory:</p> <ul style="list-style-type: none"> • Accurate recording of assaults against officers/staff may see initial increase • Enhanced evidence of minor assaults may assist in reaching charging threshold and secure successful prosecutions against suspects. • Anticipated improvement in recording of assaults on officers/staff may increase recorded assaults when balanced against any reduction. • De-escalation of incidents through overt use of BWV. 	<p>Evidence:</p> <ul style="list-style-type: none"> • Reduction in number in officers assaulted • Increase in recording of assaults against officers/staff <p>NYP activities:</p> <ul style="list-style-type: none"> • Health and Safety Dept. through analysis of RIDOR data can provide number and circumstances of assaults of officers and staff. • Measure impact on sickness and restricted duties. • 3 monthly review in line with wave timeline. 	<p>Economic</p>
<p>ORGANISATIONAL</p>		
<p>10. Improved officer behaviours (in challenging circumstances)</p>		
<p>Outcome: That any internal / Public Attitude Survey shows NYP officers / staff and residents are supportive of BWV, with their opinions of the technology positively associated with their views of how ‘procedurally just’ the police are.</p> <p>Theory:</p> <ul style="list-style-type: none"> • BWV will introduce a layer of accountability for the police and public, which would impact on the quality and nature of interactions. • Officers and members of the public are likely to be aware of their behaviour during contact with each other; and • Unsubstantiated complaints and complaints with little grounds are likely to reduce because of availability of independent evidence. • Improve the transparency and legitimacy of the stop and search process. • Transparent crime recording 	<p>Evidence:</p> <ul style="list-style-type: none"> • Officers are likely to feel more supported, less vulnerable to complaints, and more confident; • Officers are more likely to report better interactions and follow expected process; • Victims are more likely to feel supported and satisfied; <p>NYP activities:</p> <ul style="list-style-type: none"> • Snap Survey's for Officers to realise confidence in performing their role. • Use of public surveys to understand public confidence • 3 monthly review in line with wave timeline. 	<p>Strategic</p>
<p>11. Enhanced Force Reputation with the public (Legitimacy)</p>		
<p>Outcome: That any internal / Public Attitude Survey shows NYP officers / staff and residents are supportive of BWV, with their confidence in the NYP.</p> <p>Theory:</p> <ul style="list-style-type: none"> • The public will feel more confident in the police; and • Interactions with the police will be reported to be better, particularly for specific groups, e.g. those being stopped and searched. 	<p>Evidence:</p> <ul style="list-style-type: none"> • The use of BWV enhances the customer satisfaction rates for NYP <p>NYP activities:</p> <ul style="list-style-type: none"> • Snap Survey's for Officers to realise confidence in performing their role. • Use of victim and public surveys to understand public confidence • 3 monthly review in line with wave timeline. 	<p>Strategic</p>
<p>12. Organisational Learning</p>		

<p>Outcome: Increase in officer / staff confidence and effectiveness in their roles with the use of BWV in their working environment</p> <p>Theory:</p> <ul style="list-style-type: none"> Through organisational learning BWV can be deployed to the most effective scenarios 	<p>Evidence:</p> <ul style="list-style-type: none"> Ongoing feedback / assessments from officers / staff <p>NYP activities:</p> <ul style="list-style-type: none"> Snap Survey with staff to measure Officer and Staff Confidence. All areas of business with feed into Organisational Learning processes. 3 monthly review in line with wave timeline. 	<p>Strategic</p>
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In order to secure the required insight into the benefits of BWV we will need assign resource to gather the data, capture the information, and analyse them. The natural choice for the function to undertake this work is the Nexus team.

To be able to understand when BWV material is available and has been used to support policing, DISG will work with NEXUS to confirm if any systems developments may enable their work.

The project requires a benefits report prior to each gate review, but “benefits reports” will produced monthly and included in the performance report for the Operations Board.

Where the benefits are economic, the analysis will seek to estimate the number of hours of effort avoided or saved, and using average hourly cost data will translate this into economic savings.

CHANGE MANAGEMENT

Weekly team meetings will be chaired by the Project Manager or delegate. These will include Digital Information and Services Group (DISG) staff, business representatives and third parties by request.

Weekly/Monthly Project Reports – to be issued to the project sponsors. These will include high and low lights, tasks for the following week and early sight of potential bottle necks to progress.

Biweekly meetings with the Programme Manager – these will serve as an early warning to the DISG management team and allow early sight of any issues.

Monthly Project Boards – the AIDD log, risk mitigation plans, targets, options and decisions will be agreed as well as the performance against project milestones.

The Project also reports into the Digital Policing Transformation Programme board.

Quality and Communications plans will also be mandated as deliverables.

Person	Area	Feedback
ACC Oliver / Rich Jones	Investment	RJ – Feedback incorporated into v1.0
Supt Walker / Matthew Kennington	Solution Approval (Operational & Delivery)	Supt. W – Feedback incorporated into v1.0
Darren Armstrong	DISG Programme	DA – Feedback on approach. Business Analysts engaged to review document
Michael Porter / Jane Palmer	Affordability	S. Craggs and S. Wright – consulted and questions responded to. Pending Cash and Revenue forecast
Fraser Sampson / Julie Mulligan	PCC Approval	

STAKEHOLDERS

The table below indicates who has been consulted regarding this Business Case or who has assisted in its development.

Stakeholder	Comments/Involvement	RACI
Julia Mulligan/Fraser Sampson	OPPC	Consulted
ACC Amanda Oliver	Digital Policing Transformation Programme (DPTP) Sponsor	Accountable
Rich Jones	Digital Policing Transformation Programme (DPTP) SRO	Accountable
Hanna Hope	OPCC – Policing Policy & Scrutiny	Responsible
Superintendent Mike Walker	Business requirements, process	Responsible
Chris Vickers	Digital Policing Transformation Programme (DPTP) Manager	Responsible
Matthew Kennington	Solution Project Manager	Responsible
Jeff Hall	Technical Business Analyst, requirements gathering	Responsible
Sgt Simon Blyth	Business Process Change	Responsible
Jackie Evans	Service Delivery, acceptance into service	Responsible
Sarah Wintringham/Jo Edgar	Information Management	Consulted
Dan Sharp	Regional Imaging	Consulted
Trevor Foster	Policy & Procedure	Consulted
Will Eastwood	Federation	Informed
DCI Steve Fincham	Complaints/PSD	Informed
Barry Wright	PSIU	Informed
Ashley Malone	Force Legal, Publication Strategy	Consulted
Chief Inspector Ed Noble	Criminal Justice	Consulted
Caroline Morrell, Julie Pratt	Niche SysAdmin	Consulted
Inspector Trish Hope	Minerva Project	Consulted
Graham Powell (NYP), David Wilson (Regional)	Procurement	Responsible
Jane Palmer	Finance	Responsible
Amy McGregor	Training	Consulted
Stations Inspectors	Operational Use, camera custodians	Responsible
Rosie Holmes	HR	Consulted
Victoria Lilley-Bell	Corporate Communications	Consulted
Ruth Williams	Equality & Human Rights	Consulted
Inspector Alex Butterfield	CoT, Staff Officer	Responsible (Benefits)
Inspector Simon Caukwell	Operational Technology Team	Responsible (Benefits)

APPENDICES

BWV EVALUATION RESEARCH - BUSINESS CASE BENEFITS

There have been numerous trials in this country and the USA and as a result of which a number of academic evaluations conducted. Below is an accurate synopsis of such detailed under each business case benefit heading;

- Additional evidence gathering, helping to corroborate an officer's written statement.

The IPCC considers BWV to be a useful tool, but not the complete answer to fair and effective policing. The additional evidence gathering of BWV was further emphasised in the recent independent report published in January 2017 into Deaths and Serious Incidents in Custody. This report followed the decision in 2015 by the then Home Secretary Theresa May to carry out a full review of deaths and serious injuries in custody. The independent report highlighted that the roll out of BWV would assist in the accuracy of evidence retrieval. It went on to make the following recommendation; Body worn cameras should be rolled-out nationally to all police officers working in the custody environment or in a public facing role.

In addition the Home Office are currently carrying out a consultation which ends on the 6th December 2017 relating to the use of BWV for suspect interviews. This follows successful trials in other forces.

There are proposed significant changes to the content and format of Codes E and F which introduce a revised approach to the audio (Code E) and visual recording (Code F) of suspect interviews. These provide for clarity, consistency and more effective and efficient recording of interviews, with improved safeguards for suspects and the police. The key features of the revised approach are that:

- (a) it extends the range of devices that may be used and enables the police to use the latest recording technology, including any suitably compliant 'body worn video' (BWV) equipment to record suspect interviews;
- (b) for any interview, irrespective of the type of offence and whether or not the suspect has been arrested, whenever a suitably compliant authorised recording device is available and can be used, it must be used.

Further direction will be provided from the Home Office upon completion of the consultation

- Increased guilty pleas, therefore officer time is saved through reduced file preparation and court attendance.

Reports by the College of Policing and the HMIC both recognise the importance of BWV in Domestic Violence cases, with HMIC going as far as saying they were not being used as widely as they hoped.

Bedfordshire attempted to quantify the savings these would make for both police and partners. In 2015/16 they estimated 9% of all positive disposals in custody would be affected by BWV, in terms of an early guilty plea, leading to a saving of over £1,000,000.

In the 2015 Houses of Parliament report it states that through trials of BWV, its use improved efficiently in delivering criminal justice for domestic abuse cases via early guilty pleas or higher prosecution rates

- Increased successful prosecutions.

Again linked to Domestic Violence, in 2017 HMIC Inspector Zoe Billingham stated that; "body-worn cameras should be mandatory when police attend domestic violence incidents. Trials of the technology by the College of Policing have shown a significantly higher proportion of violent offenders charged when officers filmed their attendance at crime scenes". This stance was backed at the 2017 International Women's Day by NPCC, CPS, DPP and the Attorney General.

Continuing the focus on domestic violence the University of Portsmouth reported that a study within Hampshire and the Isle of Wight in 2015 demonstrated changes in criminal justice processing on the Isle of Wight; from a sample of 21 Domestic Violence Incidents in which BWV was present in 10 incidents;

- 7 of the 10 camera footage cases led to arrests, of which 4 led to sanctioned detections and charges. These resulted in 2 early guilty pleas without trial, 1 guilty plea in court before trial commencement, and a not guilty verdict
- In the remaining 11 cases where no camera footage was taken, only 1 case proceeded to arrest and resulted in community resolution.

This was a clear indication that the footage was key to the increase in successful prosecutions

- Reduced numbers of complaints against officers (and reduction in time taken to resolve some complaints).

In 2015 the University of Cambridge found a 93% reduction in complaints against police. Although a recent study in Washington DC, published in the New York Times has a contrary view, with no significant differential between those officers with or without BWV. However, criminologists highlighted Washington officers training and supervision alongside an existing transformation to tackle excessive force issues, as potential reasons for those findings. It was also suggested that those officers involved in the trial without BWV, still behaved as though they had BWV as colleagues with cameras were working alongside them.

In the jointly commissioned Mayor's Office for Policing and Crime (MOPAC) and College of Policing (2015) report on the BWV trial in the Metropolitan Police, one of their key findings was that allegations against officers reduced and in particular those reporting oppressive behaviour. During the randomised controlled trial in the Met, officers interviewed stated that behaviours did change in particular instances where BWV was used. The report suggested the reason for this was that officers and members of the public were more likely to be aware of their behaviour due to the presence of cameras. They also suggested that complaints with little grounds were likely to be reduced due to the availability of independent video evidence.

- Reduced assaults and aggressive behaviour towards police officers and police staff.

The Police Federation note that BWV is a useful deterrent to those who may wish to assault an officer. West Yorkshire Police in their October 2017 BWV benefits review, highlight that minor assaults, which might previously have been written off as part of the rough and tumble of an arrest, are now provable and chargeable due to video evidence (this is a national trend).

- Positive behaviour change in officers.

BWV cannot be the sole arbiter of officer behaviour, as the Washington DC study considered the amount of training and supervision with regard officer behaviour as part of the reasons why complaints were reduced. The 93% reduction in complaints shown by University of Cambridge's study could be likewise attributed to some large degree to BWV but that alone could not be the sole reason and elements such as those found in the Washington DC study (training and supervision) could also have an impact.

- Enhanced reputation of the Force leading to increased police accountability and transparency.

West Yorkshire Police PSD quite accurately comment BWV footage now enables WYP to defend claims alleging damage to property during searches etc. A recent claim for £500 of damaged furniture was refuted as officers used BWV to film all rooms on completion of the search. Solicitor time is also saved by shortening the process. Conversely where WYP are liable, BWV enables quick resolution and saved time e.g. during a violent arrest, officers fall on to and damage a member of the public's car. Figures for these events have recently started to be collated by the Force Solicitor's office.

Over the last few years there have been several trials of BWV in the UK. One of the largest was the peer reviewed MPOAC and College of Policing study of a BWV pilot. The study found a number of positive key findings including the strong public support for the use of BWV. Following the pilot the Mayor of London and the Police Commissioner agreed to introduce 22,000 cameras across the Metropolitan police area.

The Bedfordshire Police survey also highlights increased public confidence due to BWV.

Operation Kingfisher

No formal evaluation of the rollout of BWV to Op Kingfisher has been conducted due to the short length of time it has been in operation. However feedback has been captured since the beginning of October in areas such as investigation, professional development and incident de-briefing.

BWV has been in operation during Op Kingfisher since the beginning of October 2017 and the Investigation Hub believe that it is proving very useful in terms of gathering additional evidence that would otherwise be unavailable. Although in many Op Kingfisher arrest cases EGT evidence has been available, there have been some notable cases where the BWV has been either vital or at the very least highly corroborative in allowing for a charging decision to be made. The Investigation Team have found it very useful for several cases. They believe that the video footage will help to fend off later challenges by defendants and their legal teams about conduct and lack of reasonableness by officers, when in fact the footage shows the very opposite.

The availability of BWV at Op Kingfisher has also allowed the Bronze and Silver commanders to review specific incidents and conduct urgent risk assessments and policy changes. One such incident related to an attempted 'vehicle surf', when officers grabbed an activist on the side of a HGV, resulting in officers and the activist falling to the ground very close to the HGV's wheels. The ability to view this from several officers' prospective allowed the Bronze commander to write policy to prevent such a dangerous incident occurring in the future. Learning such as this is excellent and continual, now that most officers at Op Kingfisher have BWV.

Another policy written at Op Kingfisher involved a proven false allegation of sexual assault against an officer using force to prevent a protester from approaching a convoy vehicle. This officer was then targeted via social media and the duty of the Op Kingfisher command was to protect the officer from this targeting by protesters/activists. One of the means in which they were able to do this was by making the policy decision that the officer in question would always be issued with BWV to mitigate similar risks and provide their supervision with the ability to specifically review footage of any abuse focussed towards the officer.

Overall in terms of the BWV at Op Kingfisher, officer feedback illustrates that it has a positive impact on their morale as they feel a greater sense of protection from allegations made during the operation.

SUMMARY

The consensus of opinion is that the issue of BWV to AFO and Taser officers will be regarded as mandatory by the CCC and as such NYP should attempt to address this and equip those officers that carry the responsibility of both lethal and less lethal firearms support with BWV.

The rationale for equipping officers attending Domestic incidents with BWV supports our victim focussed approach of protecting vulnerable victims and also enhancing the evidential opportunities of bringing those responsible to justice. This is strongly supported by academic research.

Lastly as highlighted in the report, BWV has now been recommended for use by all frontline officers and persons working in custody suites. This recommendation sits within the Independent review of Police Deaths in Custody by Rt. Hon. Dame Elish Angiolini DBE QC in January 2017. This recommendation must be strongly considered and can be achieved with NYP's BWV rollout plan.

Author – Supt Mike Walker

Head of Department – ACC Amanda Oliver

BWV SOLUTION PROVIDER CLOUD OFFERING

OVERVIEW

Our chosen solution provider provides hardware, software, support services and a Cloud based storage option.

Their Cloud based storage utilises Microsoft's Azure Infrastructure as a Service platform, which is priced according to the amount of storage used plus the number of accesses of the data stored.

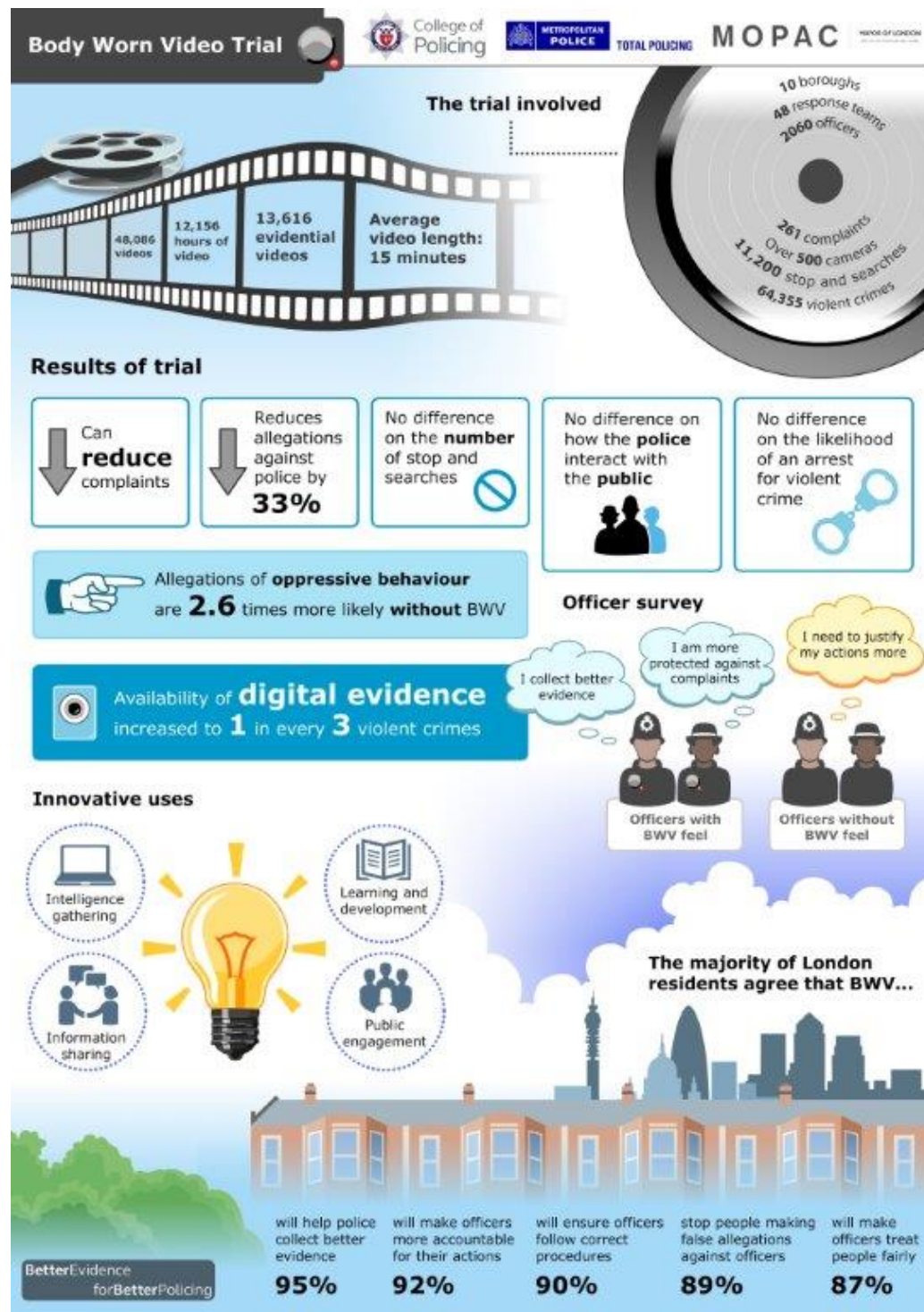
COST QUALIFYING ASSUMPTIONS

This estimate is based on the following assumptions:

- 3 year contract period
- 539 cameras used on 1 shift per day on average
- Average record time per shift – 20 minutes
- Recording resolution- 720p
- 75% of recordings deemed non-evidential and deleted after 30 days
- 25% of recordings deemed as evidential
- Non-evidential played or downloaded on average one time in its entirety
- Evidential footage played or downloaded on average 14 times in its entirety
- 5% additional videos created as sub clips
- 10% of evidential videos redacted
- Streaming function not utilised

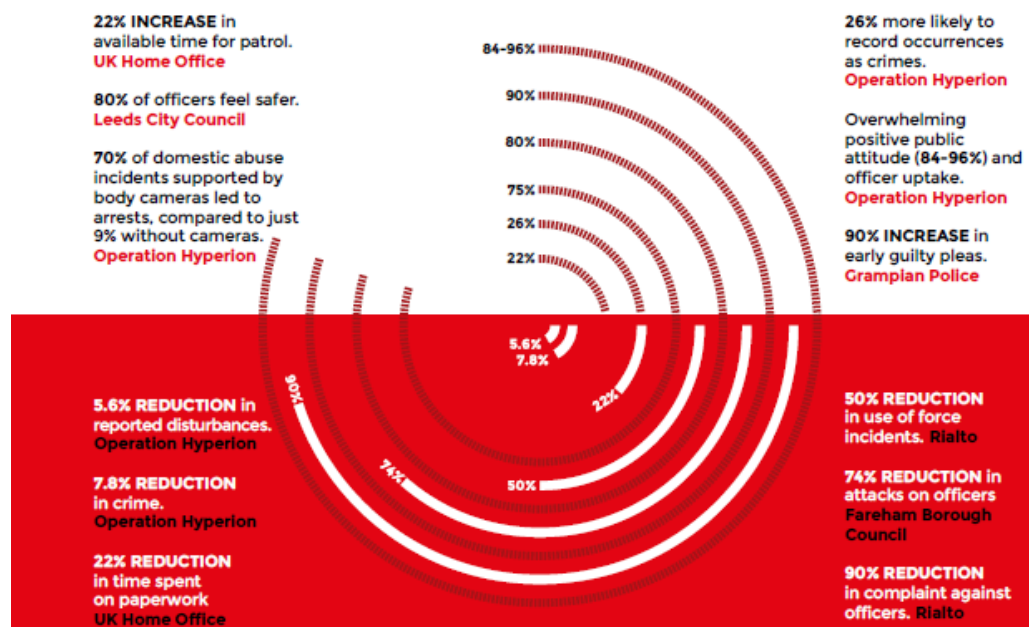
The assumptions about the amount of storage are 'stable' but those related to access are an 'estimate' based on other clients usage, and without understanding NYP's usage patterns it is not safe to rely on them.

COLLEGE OF POLICING- BWV TRIAL FINDINGS



APPENDIX 4: BENEFITS OVERVIEW (MARKETING MATERIAL)

The Case For Body Cameras: The Evidence



PUBLIC PERCEPTION OF BODY WORN VIDEO

The Reveal Policing Perspectives Report 2015

"The clear support of body worn cameras shows that both law enforcement and the public are looking for a strong and transparent solution to support modern day policing."

Alasdair Field, CEO Reveal

- 88%** of people are in favour of body cameras for police.
- 60%** of people believe body cameras would improve community/police relationships by reducing tension.
- 1 in 10** people would need body worn video to trust the officer's account.
- More than 1 in 10** people would capture evidence of vandalism with a camera before calling 911 or taking another action, illustrating the value held of video evidence.



Find out more at revealmedia.com or call us on +44 (0) 203 070 2723

BWV SOLUTION PROVIDER TESTIMONIAL FROM WEST MIDLANDS

We have used NYP's chosen BWV solution provider's solution since 2013 in 2 different generations of camera and currently have over 1500 deployed predominantly as personal issue and with Pool stock available for those who do not or cannot have personal issue.

As part of the East Midlands Operational Support Service (Regional 5 Force joint Firearms/Dogs/Roads/Tactical Support Group) have just purchased 300 of the new cameras for a head mounted Firearms Officer solution. We have used the BWV solution provider DEMS software throughout.

I can confidently say that we as a force are very satisfied with the products, support and service provided by NYP's chosen BWV solution provider throughout this time.

The cameras are continually evolving as is software and support. Failure rates are relatively low and repairs quick and efficient when needed. The warranty covers all "Policing Use" damage which I am sure you can imagine covers all sorts of Officer error mishaps and incidents.

The features of the current camera are sufficient for our needs at present but we are continually assessing and reassessing our needs and will no doubt be moving to new versions in the next 12-18 months, and consequently moving to their cloud based storage as a result.

Our professional relationship with BWV solution provider is well established and has been a 2 Way Street in terms of research and development and the current structure of regional and national account managers and technical support works well.

I personally would recommend the products and support without reservation.

There are other cameras and systems out there but none that I have seen through the recent procurement exercise for EMOpSS come close to NYP's chosen BWV solution provider for quality, practicality and value for money.