



Basingstoke and Deane

CCTV & ANPR at Community Bring Bank Sites

Basingstoke & Deane Borough Council – Fly-tipping Intervention Grant

Basingstoke and Deane Borough Council's project aim was to install surveillance cameras, some with ANPR, at community bring bank sites to deter the misuse and abuse of these sites and promote compliance with disposing of waste correctly and lawfully. It also enabled the council to obtain evidence of person/s depositing waste unlawfully resulting in our ability to carry out enforcement actions. Overall, the project has been successful and a reduction in fly tipping at the sites is visible, we have also issued 24 Fixed Penalty Notices with a further 4 cases likely to proceed to prosecution.



Bring bank site hotspot view from surveillance camera

The Fly-tipping Issue

There have been extensive problems with fly-tipping at 6 hotspot locations over the last two years.

- Hotspot 1 Enclosed area for recycling/charity bins within a small retail park
- Hotspot 2 Location of recycling/charity bins at a town centre car park
- Hotspot 3 Recycling/charity bins located at a community centre
- Hotspot 4 Recycling/charity bins located in a car park in a rural village
- Hotspot 5 Recycling/charity bins located at a Community Centre
- Hotspot 6 Recycling/charity bins located in parking spaces at a small urban centre

The fly-tipping occurring at these sites consisted **of recyclable items that were not being correctly disposed of,** and residents leaving **non-recyclable household items**, including furniture, electrical items, miscellaneous garden items, large children's toys and garden waste. The sites were also experiencing **commercial fly-tips** – large quantities of building waste and household materials.

The Intervention

Surveillance Cameras: At four sites, an ANPR camera and a smart camera have been erected to provide cover to the use of these sites. At the two other sites there are two smart cameras operating. It was not possible to install ANPR at these two sites due to the absence of accessible main power.

Each site had to be handled differently in terms of how and where the equipment was installed. At 3 locations it was necessary to liaise with and get the agreement of the controlling interests at community buildings to be able to connect to mains power – these being two different community centres and one local church. Licence applications and fees were also necessary to the Highways Authority for excavations on the highway verge to install a column for the cameras to be attached to. The fourth location where mains power is being used is in a council owned carpark.



ID Pro Camera with ANPR



ANPR Camera

The camera at the other two locations capture footage of events, but lack the resolution needed for consistent and accurate number plate recognition.

Additionally, the sites and the position of recycling bins had to be re-configured to optimise the area the cameras could capture. Colleagues in the Waste Team coordinated this and installed new signage at all sites as part of the project.



Sign advising what to recycle

Sign warning surveillance cameras in use

From the nature of the incidents the council have seen since the cameras were installed, and based on feedback from some of the persons the council have dealt with, it is clear that many people who leave waste in these areas have no concept that leaving items on the floor is not recycling, a useful donation or an unlawful deposit of waste. To try and address this, further signage is planned which will consist of weighted, freestanding boards making it clear that items must not be left on the floor.

Rationalising Bring Sites: Limiting the number of bring sites in the borough was part of the approach to reduce the number of locations where waste was routinely deposited. This was a measure implemented to reduce the number of locations that appeared to attract this behaviour as well as other anti-social behaviour. Fewer sites meant a surveillance project for the remaining sites would be more achievable and affordable, as well as the management of these locations. The decision to reduce the number of sites was made in

September 2021. Twenty-six sites were rationalised to 6. These covered various land ownerships where recycling and charity banks were available. However, the cost of dealing with their misuse was deemed disproportionate to the benefit. The 6 remaining sites are spread across the borough and are intended to provide residents with a more focussed provision that could be better managed.

Communications: At the point most cameras were operational, a press release was issued which the local press published. It featured in Borough magazine which reached 80,000 residents' doors. It also attracted the attention of national media where ITV interviewed the Head of Service on the project. The news of the camera installation at the bring site locations was covered in a news item on Heart FM.

The Result

Overall, there is a very positive reflection on the reduction in number and quantity of waste being seen at these sites. The council have had feedback from key stakeholders and feedback from the street cleansing crew who service these sites such as;

"Fly-tips at this site have gone down and improved a lot. People still dumping small items, but nothing compared to pre-cameras."

"Before cameras there were mattresses, furniture and large items, but that's not the case now. The size and scale of things being dumped has reduced, but it is still regular."

Fly-tipping Data: It is worth noting that the data collected pre-intervention has a significant amount of under reporting and does not reflect the true extent of the fly tipping problem at these sites. What would be considered the baseline is unreliable. The data collected post-intervention is focused on incidents cleared rather than reports and is much more reliable; the sites are also being attended more regularly which allows a much more accurate picture of fly-tipping incidents at these sites. It also means smaller incidents are being recorded more regularly, than perhaps appearing as one large incident.

Location	Intervention	Pre-Intervention Monitoring	Post-Intervention Monitoring	
Hotspot Location 1	CCTV x2	6 1 st April 2022-30 th September 2022	10 1 st November 2022-1 st April 2023	
Hotspot CCTV & ANPR Location 2		2 1 st April 2022-30 th September 2022	30 1 st November 2022-1 st April 2023	

Hotspot Location 3	CCTV & ANPR	5 1 st April 2022-30 th September 2022	13 1 st November 2022-1 st April 2023
Hotspot Location 4	CCTV X2	9 1 st April 2022-30 th September 2022	2 1 st November 2022-1 st April 2023
Hotspot Location 5	CCTV & ANPR	7 1 st April 2022-30 th September 2022	17 1 st November 2022-1 st April 2023
Hotspot Location 6	CCTV & ANPR	3 1 st April 2022-30 th September 2022	21 1 st November 2022-1 st April 2023

Data Source: Colleagues in the Waste Team & Street Cleansing Crews

Other Relevant Data

Enforcement: In terms of enforcement activities, part of the objectives was to provide an evidential tool to hold persons who fly-tipped responsible. Since installing the cameras, and at the time of writing **24 Fixed Penalty Notices have been issued for s33 (unlawful deposit of waste) offences**, 4 cases are being prepared with a view to taking prosecution proceedings and one littering FPN is to be issued. This is significant uplift in disposals for offences at these sites.

It is expected that this figure will grow and the number of disposals of this nature will increase significantly. There is a regular stream of offences taking place and being captured. To date, these have all been householders depositing relatively small quantities of waste. These may be bagged items, packaging, household waste, single (small) furniture items or other miscellaneous household, garden or electrical items. There have not been any instances of commercial or construction waste being deposited at these sites since the cameras went in.

These offences would not have been captured in the past and represent interventions against those who would previously have got away with this behaviour. The images of the offences taking place were captured on the surveillance cameras, with ANPR providing imagery of the licence plates in many (but not all) of the incidents. Outcomes and disposals will be publicised to ensure credibility is given to the deterrent message of there being cameras at these sites.

The breakdown of disposals across sites is broadly consistent with the extent of issues/incidents at these locations. There is one exception to this, where in the absence of an ANPR camera, it has proven difficult to capture evidence of the perpetrators.

Community Engagement: The subject matter receives significant response and engagement on social media platforms, and this will continue to be an effective way of gauging public knowledge and response about lawful waste disposal.

Feedback

What went well?

The camera project is a clear deterrent and an effective evidential tool where the deterrent is not enough. While anecdotal evidence supports there having been an improvement, it is very satisfying to have the evidence of persons committing offences who are not heeding the advice and warnings. Once the council can publicise disposal/enforcement outcomes, this gives an enduring credibility to the messaging relating to 'cameras being in use', and that there are consequences to not disposing of waste lawfully which will hopefully reduce incident further. Furthermore, where this has historically focused solely on litigation outcomes, the council intends to draw more attention to fixed penalty notice use to deal with lower end offences to try and change behaviours and highlight accountability for poor behaviour.

The council has received anecdotal reports from stakeholders at the sites where bins are located noting an improvement/reduction in fly-tipped waste.

As alluded to above, the nature of the signage in place is to be added to, in order that it can be no clearer that items, whether they be recyclables, donations or any waste, are not allowed to be left on the floor in these areas. This will hopefully go some way further to tackling those acts that appear to arise from a lack of knowledge and understanding.

The council's ability to pursue and achieve enforcement outcomes has gone well to date. However, this can only really be considered a success in the long term if patterns of behaviour measurably change. This is yet to be shown.

Has there been any difficulties?

There are limited suppliers in the market who provide products and capability for this purpose. Due to the timescales of the project, full market testing could not be undertaken. As the figures indicate, the cameras have had a positive impact and more people are being caught disposing of waste unlawfully with fines and proceedings being taken where none would previously have been possible. While the investment and the unit cost of equipment is significant, there remain limitations to its performance, primarily in low light conditions and where headlights and number plates cause reflections.

The performance of the cameras and the AI software has fallen below that originally stated. While satisfactory results have now been achieved, this has used a considerable amount of officer resource in liaising with the suppliers and operators. Some important

issues, especially around the automatic detection of deposits, remain unresolved and further work will be required. This has not been a business-as-usual piece of work that could be absorbed within existing resources. It should not be underestimated how much time such a project demands from scoping, to preparing a brief, consultation, the procurement process and delivery. Positive results can be achieved, but resources must match ambitions.

There were many things that caused delays in delivery that were beyond the council's control. However, understanding the legal regime and information obligations around deploying overt surveillance systems have to be part of initial planning and scheme design. Obligations around consultation, data retention and management, Data Protection Impact Assessments are all significant pieces of work that should be factored into projects of this type.

What key information would you pass on so others can deliver this project?

At the initial stages of this project, significant amount of officer time was spent working with Hampshire County Council's (HCC) street lighting team and Enerveo (HCC's PFI contractor for managing street lighting assets around the county) to try and find a solution to using street lighting columns to attach cameras to as well as connect to the electricity supply. The council were unable to overcome these difficulties. In part, this can be attributed to the Highway Authority and its PFI partner being separate organisations to us. Unitary authorities may find it easier to overcome such difficulties.

This meant the council had limited options for accessing mains power for the ANPR cameras (which cannot be run on solar). After much effort and time spent trying, accessing power via the utility companies and Highways could not be overcome. Beyond these, constraints around land ownership were different for each site which complicated deployment and installation and necessitated 3rd party agreements, and fundamentally the goodwill of other stakeholders to enable delivery. Ultimately it was not possible in the timescales of the project or within the available budget to acquire mains power at two of our sites to power ANPR devices. This could be overcome with more time and as these sites are developed.

Much of the likely success of the project has hinged on the ability to connect ANPR cameras to mains power. The reason this is so important to the project is that reliable and accurate detection of number plates are critical if any credible enforcement action is to follow. The identification of vehicle details allows the council to hold registered keepers accountable for incidents, if the council has reason to believe that person has committed the offence.

Equipment Inventory

Item	Supplier	Unit Cost	Quantity	Total Value
1 x ID Cam Pro with bridge and batteries	Vodaphone/Idefigo	1,605	4	£6,420

2x ID Cam Pro with bridge and batteries	Vodaphone/Idefigo	2,230	2	£4,460
Solar Packs	Vodaphone/Idefigo	330	12	£3,960
ANPR Camera	Vodaphone/Idefigo	3,255	4	£13,020
Subscription Plan (per camera)	Vodaphone/Idefigo	75	144	£10.800
Camera Installation	Vodaphone/Idefigo	675	6	£4,050
Ground Screw & Mast	Vodaphone/Idefigo	495	5	£2,475
Ground Screw & Mast Installation	Vodaphone/Idefigo	295	5	£1,475
Install of additional ground screw & mast	Vodaphone/Idefigo	225	1	£225

Contact Details

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Defra's Fly-Tipping Intervention Grant: The Fly Tipping Intervention Grant supported projects trialling approaches and interventions to tackle fly-tipping. Administered by WRAP on behalf of Defra, this grant provided capital funding for projects at known fly-tipping hot-spots that showed the potential for improving infrastructure, raising awareness, and supporting enforcement activity.