



Department  
for Environment  
Food & Rural Affairs



WARRINGTON  
Borough Council

# Re-deployable 'Smart Cameras' & Signage

## Warrington Borough Council – Fly-tipping Intervention Grant

Warrington Borough Council installed **re-deployable smart cameras in key locations, both urban and rural**. The cameras feed high quality images to a secure platform that could be accessed remotely by council staff to allow for investigations and further action to be taken against perpetrators. The council also displayed '**No fly-tipping, CCTV in operation**' signs, in conjunction with the CCTV. The signage remained in place once the cameras moved to another location. Their aim was to capture footage but also reinforce the idea that areas have the capability for CCTV which would hopefully **change long term behaviour**. The project started in June 2022 and the results show an **increase in related enforcement actions**, overall positive response from the community and a **decrease in fly tipping reports** whilst cameras are in place.



Hotspot location pre-intervention (left) and post intervention (right)

## The Fly-tipping Issue

They selected a variety of unique location types in order to put the cameras and signs to the test:

**Hotspot 1:** a road in a housing association estate. Cameras were focussed on a communal bin cage area with a high level of bulky waste dumping and some domestic waste dumps.

**Hotspot 2:** a semi-rural area where there is a relatively high level of fly-tipping, but caretakers remove waste on notification from residents meaning the council receive a low number of individual complaints from residents, virtually no intelligence, but high demands and expectations to 'tackle the fly-tipping'.

**Hotspot 3:** A densely populated residential terraced street with an alleyway identified as the target area. The area contains a higher-than-average level of private rented housing (excluding social housing) - 39% of households. This contrasts with the national average of just over 16%. The council have a high level of fly tipping complaints across a number of local roads where domestic waste management is poor including excessive side waste.

## The Intervention

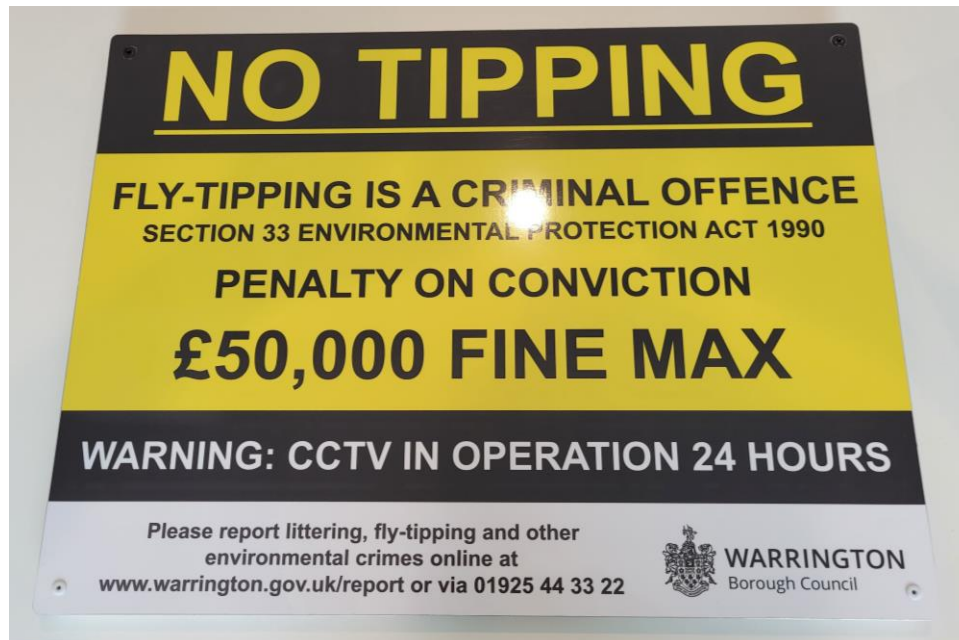
**CCTV:** Remote locations require specialist surveillance equipment that can be either battery or solar powered to maximise its effectiveness. It needed to be capable of capturing quality images within areas of low natural light, used in areas that are without streetlights or heavily wooded/tree lined. Idefigo could meet these requirements, providing 'Smart cameras' powered by solar panels, feeding images to a secure platform via a Vodafone package that can be readily accessed on an IT App by council staff.

The CCTV has met expectations in regard to speed of deployment, taking approximately 30 minutes to install, which enables staff to move the cameras to other locations, when necessary, at ease. The idea is once the cameras were moved, they continued to monitor the fly-tipping complaints and reports and if necessary, they can return the cameras to the previous location to reinforce the message that the council still have CCTV capability in the area, endeavouring to change long-term behaviour. The cameras are very overt in nature and so for those conscious of the cameras being there previously, it is obvious when they have gone.

After initial installation no visits to the actual site to view footage have been required as images can be observed remotely. This reduces reviews of sites to minutes, freeing up Officers to undertake investigative work in other fly-tipping locations. The monitoring portal is accessible to Officers via their laptops and can be viewed securely at any location. The platform enables images to be saved for further investigation, whilst also deleting those in line with the GDPR and Data Protection Act Council policy.



**Signage:** The 'No fly-tipping, CCTV in operation' signage is good quality and has been fit for purpose. The intention has always been to leave the signage in place once the cameras have moved to another location to act as an ongoing deterrent. The signage also outlines a point of contact for reporting flytipping as well as satisfying the requirements of the surveillance commission.



Fly-tipping sign

**Community engagement:** At each location of camera deployment an Officer visited local households to explain the justification, impact and objective of the CCTV deployment. This has resulted in positive community engagement and has led to both additional information and intelligence being fed back by the local residents.

## The Result

**Hotspot 1:** In the 12 months prior to the CCTV being installed there were 32 fly-tipping reports, none of which led to any identification of a perpetrator. For the first 2 months the CCTV had a significant impact on actual fly-tips. The cameras currently remain in place and fly-tipping complaints have decreased within the sight of the cameras, but this has not had an impact on the wider location, and the council have received footage of fly-tipping by locals from residents on the wider estate.

Although this footage was not captured on the CCTV it appears to have been provided because of the renewed confidence that the council would investigate and pursue the perpetrator thanks to the presence of the CCTV and signage in that area. The council has not received footage from residents on this estate pre-intervention.

**Hotspot 2:** The CCTV was in a car park backing on to the woodland at the end of a residential cul-de-sac. The cameras identified waste being dumped, it was generally singular items, that were minimal in size. The items appeared to be removed within a day by caretakers. The CCTV did however capture clear footage of a perpetrator fly-tipping household furniture.

**Hotspot 3:** As a result of the CCTV being deployed in this area there was a decrease in fly tipping incidents, community engagement was good and also provided residents with confidence in reporting fly-tipping reports, even when not in the cameras scope.

Once the cameras were moved to a neighbouring street, it was 10 weeks before there was another fly-tipping report for this location, resulting in further fly-tips taking place. This is a great example that whilst the cameras were in situ the fly-tips decreased but crept up once cameras were removed.

Location	Intervention	Pre- Intervention Monitoring	Post- Intervention (with CCTV) Monitoring	Post- Intervention (without CCTV) Monitoring	Results
<b>Hotspot Area 1</b>	CCTV & Signage	32 reports 1 <sup>st</sup> June 2021- 31 <sup>st</sup> May 2022	23 reports 1 <sup>st</sup> June 2022-31 <sup>st</sup> May 2023	CCTV is still in situ	<b>28% Decrease</b> (with CCTV)
<b>Hotspot Area 2</b>	CCTV & Signage	2 1 <sup>st</sup> June 2021- 31 <sup>st</sup> May 2022	1 1 <sup>st</sup> June 2022-1 <sup>st</sup> December 2022	0 2 <sup>nd</sup> December 2022- 31 <sup>st</sup> May 2023	<b>100% Decrease</b>
<b>Hotspot Area 3</b>	CCTV & Signage	7 1 <sup>st</sup> June 2021- 31 <sup>st</sup> May 2022	3 1 <sup>st</sup> June 2022-1 <sup>st</sup> December 2022	6 2 <sup>nd</sup> December 2022-31 <sup>st</sup> May 2023	<b>57% Decrease</b> (with CCTV) <b>14% Decrease</b> (Without CCTV)

**Data Source:** Logs on Civica database that come from the public including Councillors via the councils Contact Centre or via the web form plus any Officer reports.

## Other Relevant Data

### Enforcement:

**Hotspot 1:** The footage we received of the fly-tip from a local resident resulted in the council being able to issue a 'Home Office Simple Caution' to the perpetrator.

**Hotspot 2:** The council took a successful prosecution as a direct result of the footage captured on the camera. The perpetrator was fined £100 and ordered to pay £466 in costs and a £34 victim surcharge.

**Hotspot 3:** With the assistance of a local resident, the council currently have a 'live' investigation that will likely move to prosecution stage. There are also two further live investigations that have been captured in the neighbouring street where the location 3 cameras were re-deployed.

**Community Feedback:** The deployment of CCTV and the deterrent it offered vastly improved their quality of life and made them feel pride in their local neighbourhood again, adding that it instilled confidence that the council were taking a pro-active stance on fly-tipping.

## Feedback

### What went well?

A key achievement throughout this process is further developing confidence and communication with local residents who have been previously negatively impacted by fly-tipping in their area of residence and have a perception that the Council are unable to take action to prevent this.

The time saving provided by using cameras rather than consistent Officer visits will allow the council to divert officers to wider proactive project work. Vehicle mileage and staff hours reduced in patrolling these hot spot areas – reducing carbon footprint and supporting the Council's Green Energy Strategy.

### Has there been any difficulties?

There was an initial delay in the supply of the cameras to the council which was understood to be due to supply chain disruption because of the Ukrainian crisis and a delay in obtaining parts. Camera reliability has been inconsistent with a limited time when 100% cameras have worked at the same time. There have also been some delays to issue resolution. Officers have been frustrated and have begun to lose faith in the product capability despite the good quality footage when it is captured and the ease of download and footage management. There is a reputational risk where there have been fly-tips within sight of the cameras but no footage available where a camera has stopped working.

A meeting with the provider highlighted an issue with systems; not necessarily rebooting following firmware updates, too wide a distance between a camera bridge and a camera, signal dipping in certain locations and a potential issue with signal jamming. The provider has offered to undertake the next set of redeployments for us and provide additional onsite training for Officers to assist to eliminate any potential installer error.

### **What would you do differently?**

A key consideration would be to have had the council in-house streets team at the inception for kit capability and function awareness. Time scales have become a factor on re-deployments due to Idefigo's commitments, the re-deployments have not occurred in a timely manner, resulting in the councils Streets team taking a more active involvement in the movements to save time and money. This has provided 'teething' problems on re-installation. Telephone and email communication rectified the situation, although over a pro-longed period.

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

**Partnership working:** The council collaborated with a Housing Association in respect of the CCTV installation in hotspot 1 to tackle the wider fly-tipping issues across the location. As part of this the Housing Association sent letters to 500+ of their properties to highlight they were working with the council to tackle fly tipping; identify that the bin collection cages were only for specific residents not a general dumping ground; inform about recycling and contaminated bins; and advise how to access the Council's bulky waste collection scheme and report fly tipping to the Council.

The council mapped the locations of the most recent fly-tipping incidents reported to them and the Housing Association identified their hot spot areas from intelligence provided from their caretakers who were clearing waste. The mapping identified that many of the fly tipping reports related to 'bulky waste' which were generally items bigger than would fit in an average saloon vehicle. The council therefore ensured that the 'bulky waste' service information was included within the letters for this location too. The council and the Housing Association-worked together from the early stages agreeing camera locations, disseminated the letters, and then deployed the cameras and signage.

**CCTV Equipment Risk Assessment:** Ensure that your internal IT service has reviewed the equipment / software to ensure data security and ensure that they have signed off on this. Ensure the risk of criminal damage to the CCTV is minimised with thorough risk assessments. The council have worked in collaboration with Idefigo to establish suitable fittings that enable evidence to be captured safely, whilst ensuring the solar panels functioned correctly. The deployments have been to date overt, with appropriate signage, so a risk of damage will always ensue. Ensure you alert your Risk / Insurance Team of any purchase you want insured.

**Fly-tipping Displacement:** It was anticipated some fly-tipping reports would be received within the area but out of the sight of the cameras, which has occurred. Whilst it is disappointing to have fly tipping displacement so close to the cameras location without the

ability to utilise camera footage, the council have been able to investigate a case as there has been evidence within the waste itself and a resident’s camera footage which appears to has been provided due to their knowledge of the Council CCTV and the greater perception the Council would act proactively. The council would endorse robustly investigating cases that fall outside the sight of any cameras in order to be able to ultimately publicise positive outcomes in the wider area.

**Finance:** Internally the council's finance systems were hampered through finance related staffing changes, staffing capacity issues and confusion which resulted in delays to payments and consequentially delays in feedback reports to WRAP. Feedback has been provided internally to Managers. Advice is to have key finance people who understand the project and what the forthcoming actions will need to be. If those officers change then brief new Finance Officers as soon as possible so that newcomers understand from the outset to minimise delays and confusion.

## Equipment Inventory

Item	Supplier	Unit Cost	Quantity	Total Value
Re-deployable, smart camera CCTV, with Kit, training and mobile contract included	Idefigo / Vodaphone	3,590.00 330.00 55.00	4 Surveillance Kits 1 Id Pro Camera Solar Panel 192 “Standard self-monitoring” capture communicate and review	£25,250
‘No Fly-tipping’ Signage	Normanton Screen Print	31.80	20	£636.00

## Contact Details

**Name & Position** – Linda Smallthwaite BEM Investigations & Enforcement Manager

**Email** – [environmentalcrime@warrington.gov.uk](mailto:environmentalcrime@warrington.gov.uk)

**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.