

CASE STUDY: Southampton City Council



Known as the cruise capital of Europe, Southampton covers an area of 51.1 km² with a permanent population of more than 250,000. The city hosts over four million visitors a year and boasts an impressive cultural offering, from museums, music venues and art galleries to award winning parks and shopping facilities. Southampton has also been designated by Defra as one of the first five Clean Air Zone cities.

The Challenge

Southampton City Council wanted to automate the enforcement of bus lanes across the city to reduce the number of high level of offences by drivers and speed up bus journey times. Procurement of the system was through Balfour Beatty Living Places (BBLP) which has a ten-year contract to manage all highway infrastructure assets on behalf of the council. A mobile enforcement vehicle was also procured to support multiple traffic enforcement and community safety applications.

The Solution

Southampton City Council conducted a formal procurement process before selecting Videalert's DfT Manufacturer Certified hosted solution. This unique platform does not require any hardware or software to be installed on customer premises and allows the rapid introduction of unattended traffic enforcement services.

According to Paul Walker, Travel & Transport Manager at Southampton City Council: "The Videalert system will enable us to reduce the incidence of vehicles misusing bus lanes. Automating the enforcement of these contraventions will improve driver compliance, allow our public transport services to achieve faster, more reliable journey times and improve access to services for vulnerable road users."

The Installation

Cameras and processing units were installed at bus lane locations where there were high levels of driver non-compliance to provide video processing at the network edge. Significantly, some of the chosen enforcement locations included very long bus lanes requiring multiple wireless cameras to be strategically positioned using a single RDS unit. Evidence packs are retrieved from the RDS units via a cellular 3G/4G connection using a dedicated hosted server within Videalert's Virtual Server Farm. This dedicated virtual server environment provides the highest level of security and integrity with cloud storage used for backup.

The Benefits

The Videalert system combines automatic number plate recognition (ANPR) with video analytics to automatically track moving objects. It delivers accurate and reliable enforcement in busy traffic conditions by accurately capturing only those vehicles actually committing an offence. This enables the system to deliver the highest productivity at the lowest operational cost.



The ability to deploy multiple cameras on bus lanes has increased the overall effectiveness of the enforcement system. It enables the capture of more vehicles that contravene restrictions at different points of the longest bus lanes and will help to achieve both improved and effective compliance. To eliminate the processing of duplicated offences captured by multiple cameras monitoring longer bus lanes, only a single evidence pack is generated when a vehicle triggers more than one camera.

“This was our first experience of working with Videalert and we have been impressed with the speed with which the solution can be deployed,” commented Brian Hammersley, Contract Manager at BBLP. “In our role as highways contractor for Southampton, we also liked the ability of the Videalert platform to support other potential CCTV activities that the council may consider using in the future.”

Outsourcing to a hosted enforcement environment enables Southampton City Council to improve efficiency, maintain greater control over budgets and reduce both hardware and software costs. It also eliminates the potential

support issues that often occur when sharing IT resources with other council departments

Mobile Enforcement Vehicle

Southampton City Council further expanded its enforcement capability with the addition of a new mobile enforcement vehicle from Videalert. It supports multiple traffic enforcement and community safety applications simultaneously and integrates fully with Videalert’s hosted Digital Video Platform.

John Harvey, Highway Manager at Southampton City Council, commented: “This new vehicle is easy and cost effective to deploy as it integrates with our existing Videalert enforcement infrastructure. It will be used strategically across the city to enforce a range of parking contraventions and enhance community safety.”

The vehicle patrols the city targeting vehicles that stop unlawfully on the keep clears outside schools in response to complaints and concerns raised by parents and teachers whose children are being put at risk by irresponsible

parking. It is also used to enforce illegal parking at bus stops which causes unnecessary delays for other road users and potentially puts people at risk.

This innovative mobile enforcement vehicle features a roof-mounted Pan/Tilt/Zoom camera and two roof mounted cameras that provide ANPR and colour image capture for evidence collection. Evidence packs are downloaded from a USB for access and review by trained council operators prior to sending confirmed offences to the back office processing system to issue PCNs.

Conclusion

Videalert’s hosted Digital Video Platform delivers significant benefits to councils by enabling them to quickly extend enforcement to other areas without having to make further investment in IT infrastructure.

Southampton is now able to further exploit this investment to support other initiatives including the Clean Air Zone which is required to be fully in place and operational by 2020.