

Case Study

Parking Management System for National Grid



Easier and quicker parking for National Grid

Background

The National Grid operational headquarters is based in Warwick. A key location to the business, this office is operational 24 hours a day, seven days a week and caters for 2,800 employees and numerous visitors on a daily basis. Parking at the site has become increasingly challenging in recent years as the business has expanded.

An existing car park was already in situ, but struggled with the growing number of workers and visitors to the point where it was recognised that too much time was being spent driving through the various car park zones hunting for an open space. This was resulting in growing employee frustration, due to the extra time required to get into the office.

It was decided that where possible, extra spaces were required to provide adequate facilities for the workforce. In May 2015 a 446 space, split-level car park was opened. This increased capacity on the site to 1500 spaces in total with a number of entry and exit points.

The car park complex itself is large and based on various levels and zones with no natural or obvious flow. So, it was recognised that the car park also needed a sophisticated parking management system which would minimise the amount of time (and associated pollution) spent by drivers having to traverse the extensive car park areas to find a space.

National Grid approached Clearview to understand the options that would enable them to globally count the main employees parking areas and to inform drivers of the spaces available in each car park using Variable Message Signs (VMS).

They also wanted more control over the 147 visitor parking spaces on site through the inclusion of individual bay monitoring to allow the guard house to direct visitors to known free bays. The pre-existing paper system required the visitor to park in an allocated bay, but visitors often parked in the first available bay, thus negating the whole process.

Key Benefits

- Increased visibility of car park space availability and location
- Real time management of vehicle flows in car parks and surrounding on-road area
- Easier and quicker parking experience for employees
- Reduced time spent looking for a car parking space
- Increased control of visitor parking options
- Reduced pollution and traffic congestion around the headquarters building



Solution

Having met with National Grid a number of times to appreciate the issues faced and fully define the requirements of both the company and its employees, Clearview proposed a solution that met the challenges that National Grid were facing.

Across the 9 parking zones, National Grid purely wanted to understand capacity and what spaces were available at any given time, so that this information could be shared with employees as they enter the site. As there was no simple way to provide mains power to these count locations without significant delay and disruption for the site, the added challenge here was to provide an "off grid" sustainable solution.

For the zones, Clearview's M680 Vehicle Count Classifier offered a precise, reliable and solar powered solution that counts each vehicle as they pass, and relays this data back in real-time to the central control software. This software provides intelligence to the Security / Facilities team and updates space availability information on the Variable Message Signs placed around the site.

To provide better control and true visibility over the 147 visitor spaces, Clearview deployed the M300 wireless vehicle sensor in each of the bays. This technology uses a combination of magnetometers and infra-red sensors to provide an accurate, low cost, and easy to install option that is reliable in all weather conditions. Security staff can now check whether a specific bay is occupied or not, and be confident when directing a new visitor to a space.



Clearview's web based Insight parking software uses an interactive map facility with a clear visual representation of each of the car park zones and the individually monitored bays to give a very simple tool for monitoring the status of the parking areas. This also feeds accurate real time information through to on-road Variable Message Signs near the main staff car park entrances, plus one sign on the rear exit to the split-level car park, and two further signs on the entrances to the main car park showing the availability of spaces across each zone.

The inclusion of the on-road signage supports the access strategy of avoiding the build-up of unnecessary congestion along the main road running past the National Grid premises as it provides advance information for drivers so as to direct them quickly and efficiently to where spaces are available.



Clearview worked in partnership with us and our other stakeholders during each stage of the design and installation process, with good communications throughout.

Andrew Lyle

Senior Project Manager - UK Critical National Infrastructure & Projects Department, National Grid Corporate Property