

Case Study

Bicycle Trail Monitoring

Monitor the number of bicycles using a mountain bike trail

Bicycle Monitoring



OVERVIEW

TagMaster, a key provider of Traffic Monitoring Solutions into the UK Traffic sector, installed one of their leading innovations, the CityRadar, on a mountain bike trail at Sherwood Pines in Mansfield for the Forestry Commission England.

SOLUTION

Off Road and Off Grid

The Forestry Commission approached TagMaster with the requirement to remotely record the number of bicycles using a mountain bike trail that runs through the middle of Sherwood Pines.

The key issue facing the Forestry Commission was how to detect cycles along the path without the need to tarmac a section of the trail in order to install inductive loops, the traditional method for monitoring bicycles.

The CityRadar offered the ideal solution. The unit utilises the latest radar technology to supply high quality above ground detection. The low powered nature of the unit allows power to be provided by solar panel making a fully self-sufficient monitoring location without the need for any in ground infrastructure.

The CityRadar allows for the collection of volumetric and classified data. This radar product has been designed without traditional low speed cut-out filters to be able to very accurately handle dedicated bike trails.

Enhanced Accuracy

The CityRadar's ability to count groups of cyclists and carbon fibre bikes is superior to other known sensor technologies thanks to its advanced radar sensor and sophisticated discrimination algorithms.

Cost effective installation

The CityRadar is a single integrated unit. It's ease of installation means that the equipment can be installed by a single engineer. The unit has Bluetooth for installation and configuration. It is supported by EasySetup, a modern and very well-designed Android app for setup. EasySetup provides effortless product configuration; it makes easy work of setting up the CityRadar hardware for surveys, from your SmartPhone.

Connectivity

The unit is fitted with an internal 3G modem which remotely reports to a TagMaster's Web Hosting server every 15 minutes. The client is then able to log into the data on the secure server using TagMaster's VDA-Net R2 data analysis web application.

The CityRadar is also supported by EasyAnalysis, an online service to convert local-recorded surveys to Excel reports. The output file provided by EasyAnalysis is a complete Excel file with embedded tables and graphs.

IN SUMMARY

By supplying a CityRadar solution the Forestry Commission found a suitable manner to record the number of bicycles using the mountain bike trail, without having to tarmac a section of the trail to install an in-ground sensor. This was not only a more cost effective solution but was in keeping with its surrounding and more aesthetically pleasing.

In General, the CityRadar can be installed and removed quickly allowing for rapid deployment on existing street furniture. The fast and simple deployment reduces road closures and traffic disruption.

Data collected by TagMaster's bicycle and pedestrian counting technology can be used by transport planners to make informed decisions. The data can also help justify investments and measure the success of any infrastructure projects.

PRODUCTS USED

CityRadar