

Case Study

Monitoring Kepax Bridge



Clearview Intelligence | Connex Vision: Smarter Insights for Active Travel

Background

When Worcestershire County Council undertook the development of a new bridge across the River Sever - linking Gheluvelt Park to the Kepax site - they required an effective way to monitor usage and enhance safety. Installing fibre for connectivity was ruled out due to cost and time constraints. Traditional monitoring systems previously used on other local bridges had proven to be inaccurate, struggled with detecting non-ferrous bicycles and couldn't keep pace with emerging transport modes such as e-scooters. These legacy systems also suffered from vulnerability to flooding and vandalism due to their low-level placement.

The Council needed a wireless, high-speed monitoring solution that could be easily deployed, minimise long-term maintenance costs, and offer the flexibility to scale.

Solution

Clearview Intelligence provided the answer through the deployment of our Connex Vision AI Sensor and integration with the City's wider 5G-supported CCTV network. This solution delivers robust, real-time monitoring via our secure cloud-based platform - removing the need for expensive infrastructure investment.

To ensure maximum coverage and ease of installation, the project team, working closely with Worcestershire County Council's Street Lighting and Traffic Data teams identified an optimal position for a lowering lamp column. This design enabled quick and safe mounting of both the CCTV and the Connex Vision sensor with minimal disruption.

The Result

The 5G-connected CCTV system enhances citywide safety monitoring, while Connex Vision provides continuous insights into how the bridge is used whether for commuting, leisure, or multimodal travel. The sensor captures patterns influenced by factors such as weather, time of day, and public holidays, as well as the mix of cyclists, pedestrians, and e-scooters.

The data is already helping Worcestershire County Council assess the return on investment for Kepax Bridge and identify future infrastructure needs. As trust in the system grows, additional use-cases are being explored, offering a scalable platform for smarter mobility decisions across the county.

The installation was supported by the River Sever Partnership's Advanced Wireless Innovation Region Programme, with funding from the Department for Science, Innovation & Technology (DSIT).

Key Benefits

-  **Accurate Multimodal Detection** - reliably counts pedestrians, cyclists, and e-scooters
-  **Wireless & Low-Cost Setup** - no need for fibre—easy 5G deployment with minimal disruption
-  **Real-Time Insights** - cloud-based data reveals usage trends to guide better infrastructure planning



Over 116,000



Nearly 116,000