



# NWAS creates innovative, IoT-enabled, digital ambulance station

## Story Snapshot

North West Ambulance Service (NWAS), an NHS Trust, wanted to create a digital, connected and effective facility to enable its staff.

Working with Insight, the Trust was able to implement new workplace management solutions to transform into a modern, smart station by:

- Adopting 'digital wallboards' to eliminate paper-based noticeboards and improve efficiency.
- Significantly reducing energy usage through smart occupancy, light controls and waste management.



Modern Workplace & Intelligent Edge

## Background

NWAS is an NHS Trust serving more than seven million people across Cumbria, Lancashire, Greater Machester and more. It employs around 7,000 staff in over 300 different roles. Operating in such a critical industry, maintaining the efficiency, safety and wellbeing of staff is an absolute priority for NWAS.

NWAS worked with Insight and partners to produce a connected, effective and digitalised facility to enable remote capabilities and support staff.

## Challenge

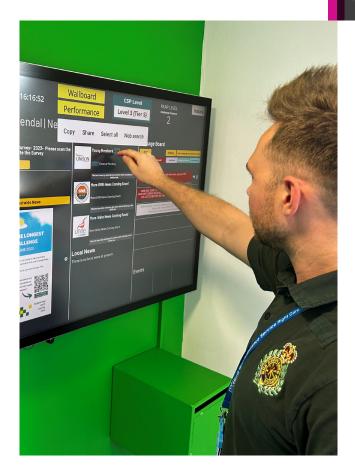
Previously, the ambulance stations were relying on paper-based systems and manual processes. They used physical whiteboards and noticeboards to communicate everything from vehicle status and location to patient safety plans, hospitals arrivals and local road closures. The issue became prominent in the COVID-19 pandemic where services were stretched particularly thin.

There were also inefficiencies around both physical waste and energy usage of heating and lighting in the station. Not only was this creating unnecessary costs, but unsuitable equipment, such as the fluorescent lighting was potentially detrimental to staff wellbeing, contributing to issues like eye strain.

"The goal of this digitalisation project was to deliver one of the major aims in our digital strategy, in using digital solutions to radically improve how we meet the needs of patients and staff, every time."

John Martland, Head of IT Support Services, NWAS





#### "The digital solutions within our Smart Stations have also allowed us to make energy efficiency improvements and reduce the amount of waste we produce, contributing towards sustainability."

John Martland, Head of IT Support Services, NWAS

## Solution and Outcome

To address these challenges, NWAS worked with Insight on developing the 'Smart Station' concept which is made up of numerous technologies. For example, NWAS replaced its written noticeboards with 'digital wallboards', and invested in interactive tablets. This allows staff to browse bulletins, containing critical information which may impact their daily operations such as overnight incidents, and search for other relevant information as needed.

The station garage was fitted with occupancy monitoring technology to indicate the status of ambulance parking spots on the digital wallboard. Updated in real-time, the system uses Internet of Things (IoT) parking sensors, and external green and red traffic lights positioned above the bays on the outside of the building. Tuneable, circadian LED lighting was fitted throughout the station, to produce a full, self-testing Power over Ethernet (PoE) emergency lighting system. The smart occupancy and light level controls mean NWAS has achieved over a 70% reduction in energy usage.

Bin level sensors allow waste collection to be conducted more effectively, saving time, costs and reducing waste. NWAS was also able to save over £2,000 in landfill and facility-management costs over six months.

New heating controls allow target temperatures to be set for the facility, but also includes a manual override, reducing costs and energy usage.

## Why Insight?

Insight's consultancy was instrumental in helping NWAS to shape the 'smart station' concept. The team was able to advise on what tools would work best together as part of the organisation's current tech stack, and ultimately provide employees with the most effective user experience.

Insight is on 82 public sector frameworks including all the major frameworks for procurement within the NHS. NWAS procured the project through the HealthTrust Europe framework as it enables Insight to provide the Trust with flexibility and variety for both current and future projects.

## FAST FACTS

'Digital wallboards'

rolled out across 25 sites. 70% reduction in energy usage through smart occupancy and light level controls.

#### £2,000+ Saved in landfill and facility-management costs over six months.

Smart lighting

Produced full self-testing PoE emergency lighting system.