



**1 Smart Construction (Springfield Campus – UoW)**

The University is looking to run a construction testbed at its Springfield Campus. Already home to the School of Architecture and Built Environment, Elite Centre for Manufacturing Skills and the Brownfield Research & Innovation Centre, the campus is the ideal place to explore how 5G can support the construction industry.

**2 Connected Stadium (Molineux Stadium)**

The city's high-flying Premier League football club Wolverhampton Wanderers is keen to explore the concept of a 5G-connected stadium. 5G has the potential to bring fans a range of benefits, from avoiding network congestion at the interval, to ordering, paying for and collecting a half-time pint missing any of the action.

**3 Digitised Culture (Wolverhampton Art Gallery)**

In 2021, Wolverhampton will host leading contemporary art exhibition, the British Art Show and as part of the event we are organising a fringe element with potential for a strong 5G digital focus, bringing art and technology together.

**4 Advanced Manufacturing (i54 Business Park)**

Advanced manufacturing companies at the city's i54 technology-based business park – home to the likes of Jaguar Land Rover – have expressed an interest in exploring the use of 5G to streamline manufacturing processes and drive efficiency.

**5 Smart Homes (Canalside Quarter)**

The flagship Canalside Quarter regeneration project will deliver 350 new 5G-enabled smart homes across five acres. Residents at the Canalside Quarter will benefit from interconnected devices ('Internet of Things') all linked directly to a 5G network for greater reliability and improved performance.

**6 5G Accelerator (UoW Science Park)**

The Science Park is home to one of WM5G's three 5SPRING accelerators. Delivered through a consortium led by O2, Deloitte, Wayra UK and Digital Catapult, 5SPRING will provide at least 2,000 public and private sector businesses from across the West Midlands with access to cutting-edge 5G technology over the next five years.

**7 Smart Health (New Cross Hospital)**

A '5G Health' working group is exploring the concept of 'Smart Health'. Together with WM5G, the council is in contact with health practitioners to identify high-impact areas to test, prove and scale. Hospitals themselves will see innovations such as smart beds and the remote monitoring of patients' vital signs over 5G.

**8 Public Sector Innovation (City of Wolverhampton Council)**

The council has bid for funding to use smart energy control across all four of its buildings in the city, reducing waste and ensuring it operates as efficiently as possible. 5G-enabled smart public services such as 3D modelling will be able to demonstrate the impact a new building on the surrounding environment.

**9 Digital Workplaces (i9 Development)**

The council is committed to futureproofing all new buildings (both residential and commercial) with Gigabit broadband and 5G to enable the technology to flourish. A landmark example is the 52,000 sq ft i9 office development currently being delivered adjacent to the revitalised Wolverhampton train station. The £13m scheme aspires to be 5G-enabled.

**10 Enhanced Digital Learning (Education & Schools)**

The deployment of 5G introduces a huge range of opportunities to enhance students' learning experiences and classroom engagement. Together with the University of Wolverhampton and WM5G, the council is exploring how VR (virtual reality) can transform the way educational content is delivered and value added to locally-funded education activities.

**Smart Street Lighting**

Wolverhampton's street lights are being upgraded with LEDs and 5G enabled smart sensors capable of monitoring air quality and temperature. This help to inform the deployment of gritters in winter months. Trials of small cell networks to support better 4G and 5G capability and upgrades to traffic management and signage are also ongoing.

**City Centre Regeneration**

5G will play a significant role in the regeneration of our city centre, providing a future-proofed and reliable platform for e-commerce. Combined with initiatives like the eBay Retail Revival Project, which provided digital skills training to 60 small retailers last year, we can ensure a more resilient retail landscape.