

ADEPT President's Awards 2026

Entry form

Award category

Deploying Innovation and Technology

Project Title

Bolton Autonomous Transit Network

Local authority

Bolton Council

Partner/s if applicable

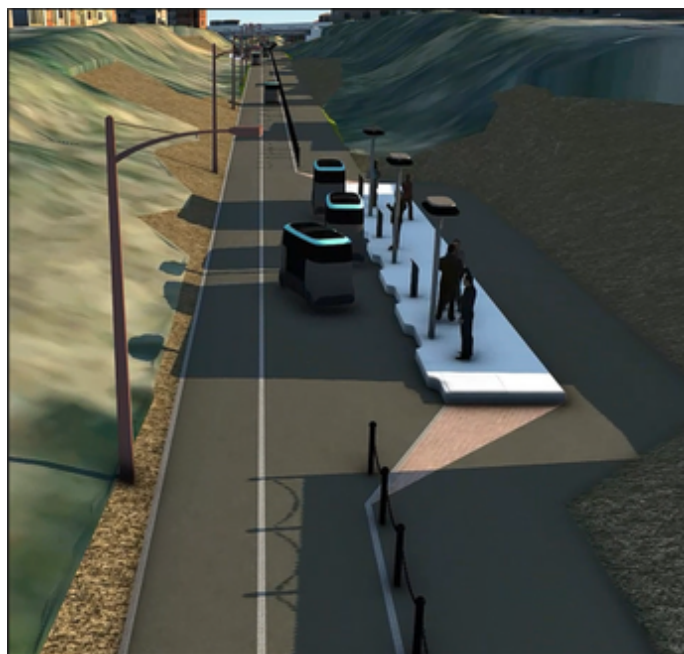
Arcadis, Dromos

Headline summary (150 characters max.)

Transforming Bolton with innovative, autonomous transit route delivering sustainable, accessible, and connected mobility for communities.

Please note we need at least one supporting image per award submission. Upload your image/s below.





Deploying Innovation and Technology: How has this project used digital innovation and/or the imaginative use of new or existing technology? (150 words max.)

The Bolton Autonomous Transit Network Corridor delivers a segregated autonomous mobility service utilising Dromos’ roadside sensing technology and Level 4-capable vehicles certified to relevant ISO standards. The scheme combines real-time digital booking, contactless ticketing and central journey management to provide a responsive, demand-led service. Digital systems engineering and advanced safety protocols are integrated with existing transport infrastructure and the Transport for Greater Manchester Bee Network to create a connected mobility ecosystem. The multidisciplinary delivery team,

spanning civil, environmental and systems engineering, ensures the technology is embedded within the place, not imposed upon it. On route sensors and decision making will enable the vehicles to 'virtually' see around corners and understand any potential hazards, slowing the vehicles as required. By deploying internationally recognised technical partners alongside local contractors, the project introduces cutting-edge autonomous capability in a UK-first context while meeting local regulatory and safety expectations.

Deploying Innovation and Technology: How has this project shown evidence of improved outcomes for users and communities? (150 words max.)

The corridor improves access to education, employment and healthcare by offering reliable, frequent journeys between the town centre, the University of Greater Manchester and the Royal Bolton Hospital. Reduced journey times and on-demand operation address travel barriers for students, patients and staff, increasing opportunities and social inclusion. The scheme prioritises accessibility and user experience, with phased delivery of fully accessible Dromos vehicles and inclusive booking options. Economic and social benefits are reinforced through local employment, apprenticeships and supply-chain opportunities created during construction and operation. Measurable outcomes such as repeat journeys and monthly trip growth will be monitored to demonstrate user retention and broader community impact. Improved journey times and safety will be prioritised to allow for more sustainable travel behaviours between the University and the Hospital, reducing travel times making studying and learning of healthcare related courses more attractive and reduce dropout rates.

Deploying Innovation and Technology: How has this project shown evidence of the transformation of a service/department/organisation by changing behaviours, delivering savings or improving ways of working? (150 words max.)

The project represents a fundamental shift from traditional scheduled services to a digital, demand-responsive mobility service. Bolton Council's governance framework, supported by Arcadis and strategic partners, has centralised risk management through development of this project, integrating stakeholder engagement and streamlining delivery through defined workstreams. The use of established procurement frameworks ensures efficient subcontracting to proven local suppliers, generating value for money and supporting the local economy. Operational efficiencies arise from flexible vehicle deployment and lower infrastructure material requirements, reducing embodied carbon and capital cost compared with equivalent bus infrastructure. The programme embeds new ways of working across the council and partners, agile decision-making, data-driven operations and cross-disciplinary collaboration, delivering both cost and service improvements. Furthermore, Bolton Council's commitment to this scheme has been demonstrated by self funding preliminary works to demonstrate intent to the external funding authority, including principal structure inspections, arboriculture/ecology surveys, ground investigations and land acquisition.

Deploying Innovation and Technology: How can the innovation/technology in this project be applied in multiple sectors/areas? (150 words max.)

The technical and delivery principles applied in the deployment of the autonomous transit scheme in Bolton are readily transferable to other urban centres, business parks, hospital sites and education campus. The modular segregated corridor and roadside sensing architecture can be adapted for freight, first-/last-mile logistics and mixed-use developments. The project's digital platform, safety protocols and regulatory engagement provide a replicable blueprint for public authorities and private developers seeking to introduce autonomous or smart mobility solutions. Close partnership with universities, transport authorities and legal/regulatory experts supports cross-sector knowledge transfer and accelerates adoption across health, education, regeneration and logistics sectors. Research suggests that the Beeching cuts of the rail network provides hundreds of disused rail routes, either completely unused or existing active travel routes, which could be transformed into multi-purpose routes providing on demand, autonomous transit on currently underutilised routes, improving links to economically valuable education, healthcare or employment sites.

Deploying Innovation and Technology: How does this project demonstrate scalability and resilience - the ability to use technology in a wider scope and in a way that encourages longevity of use? (150 words max.)

Scalability is embedded in the corridor's design: segregated infrastructure enables predictable, high-frequency operations and straightforward extension as demand grows. Multiple route extensions have already been identified unlocking development sites for innovation and housing. The technology architecture separates vehicle functions from core autonomy infrastructure, allowing fleet evolution without wholesale infrastructure change. Strong governance, ongoing engagement with TfGM and local stakeholders, and Bolton Council's ownership of key assets provide institutional resilience and a clear path to expansion. Local supply-chain participation and workforce development builds capability and reduces reliance on a narrow set of suppliers. Lower material intensity and reduced embodied carbon improve environmental resilience, while the operational model, (where vehicles are deployed in line with demand growing), supports long-term viability and adaptability as travel patterns evolve. Vehicles being able to travel very close together means capacity can grow exponentially on a route without additional infrastructure costs, promoting longevity.

All categories: please add anything else that supports your award entry

Bolton Council have been visionary in the mission to bring this innovative transport mode to the local area, with an unwavering focus on developing the best possible solution, with an evidence led approach to the challenges being faced by the key stakeholders and co-collaborators - university, hospital, college, and nearby residents and communities.