Association of Directors of
Environment, Economy, Planning & Transport

ADEPT President's Awards 2022

Entry form

Award category:	***Digital Innovation & Technology***
Title:	Understanding the impact of Covid on place
Entrant:	Cambridgeshire County Council
Main contact name:	Dan Clarke
Email address:	Daniel.clarke@cambridgeshire.gov.uk
Partner/s (if applicable):	Cambridgeshire and Peterborough Combined Authority, Greater Cambridge Partnership, Cambridge City Council, Vivacity Labs
Headline summary (<u>150 characters</u>, c. 20-25 words**)** Measuring the impact of Covid using new sensor technology to quantify movement around Cambridge and assess the impacts on air quality, public transport, and the local economy. Measuring the impact of Covid using sensor technology to quantify movement around Cambridge and assess the impacts on air quality, public transport, and the local economy.	

Please note we need **<u>at least one supporting image</u>** per award submission.
Supporting images should be attached separately as jpg or png files.

Please paste links to any supporting video evidence here

Link 1	
Link 2	

ADEPT

Association of Directors of
Environment, Economy, Planning & Transport

500-word project outline (please ensure you do not exceed the word count and address all the judges' criteria – for more info see here)

- Successful digital innovation and the imaginative use of new technology – including those that have been initiated as a result of Covid-19 learnings
- A service or project that has delivered improved outcomes for users
- The transformation of a service, department or organisation

Pre-pandemic Cambridgeshire County Council and partners had started to explore new IoT technologies as well as working to better utilise existing data to quantify the impact of residents, commuters and visitors' movement on the city. Technology such as vision-based mobility sensors (Vivacity Labs) that use machine learning to categorise vehicles had initially been trialled in the city and scaled for wider use, so the infrastructure was in place when COVID measures were implemented. This enabled data to be collated from new low-cost air quality sensing technology as well as unlocking road network data from legacy systems such as car park, pedestrian flow, and public transport data, including bus occupancy data.

The Council was already collaborating with the computer labs at the University of Cambridge to build an experimental real time transport data platform and were working with a local "big data" company to create a data infrastructure which allowed data to be quickly indexed, pooled and fed into open-source mapping tools and dashboards that allowed a mixed audience of officers, members and the public to draw insights and intelligence from it.

Working together when the pandemic hit, Cambridge Councils implemented a series of trial road closures in Cambridge, using experimental traffic order powers, to support the Covid-19 response and recovery through the creation of lower trafficked routes by preventing through-movements by motorised vehicles to encourage walking and cycling and support social distancing.

During autumn 2020 additional traffic sensors were deployed at each of the planned scheme locations to record pedestrian, cycle and motorised vehicle movements. This provided a snapshot of activity for each scheme whilst Cambridge City Council simultaneously monitored air quality across a range of sites. This data fed into the evidence base that formed part of a public consultation into the future of the trial road closures.

The work with sensors and data during the pandemic has led to several long-term benefits for Cambridge:

- Better collaboration and data sharing across the public sector and key partners, including the Cambridge BID (Business Improvement District), local transport operators including Stagecoach and Whippet, and other mobility solution providers such as VOI scooter company (a Department for Transport trial deployment)
- Better engagement with Cambridge residents by making the data fully available on the Council's open data platform.
- The use of data to inform policy and scheme development which gives improved outcomes for Cambridge as a place

ADEPT

Association of Directors of
Environment, Economy, Planning & Transport

This imaginative use of new technology has started to transform Council service delivery by embedding data into processes in a transformative way. One of the legacies of the partnership work has been the at scale procurement of a strategic mobility sensing network, available to all Cambridgeshire Councils that will be deployed this summer. The framework allows officers to quickly purchase and deploy sensors that will become part of the wider network. Building on this work the Cambridgeshire and Peterborough Combined Authority has now initiated a project to build a data/IoT platform that will pool data at a strategic level for all public sector partners to use.