

Highways England unveils successful air quality and innovation competition entries

The technology would inform drivers of the time remaining before traffic lights will change to green at junctions and suggest an appropriate speed, reducing the need for vehicles to stop on exit slip roads, which in turn could improve air quality by reducing the stop-starting of vehicles.

The project was among 11 initiatives which could tackle air quality around the country's motorways and major A roads which have awarded funding from Highways England.

The company is also set to give a financial boost to a further 13 ideas that could revolutionise roads and driving.

Mike Wilson, Highways England's Executive Director for Safety, Engineering and Standards, said:

We are delighted to be able to offer this funding to support ideas which have the potential to improve the environment around our roads, for people's journeys and local communities.

We have been seeking innovative ideas which could save lives, reduce congestion or improve air quality, and the competitions have proved a great success with so many great ideas submitted and something we will consider repeating in the future.

Highways England launched two multi-million-pound competitions, worth up to £20 million, earlier this year to encourage the country's most creative minds to come up with innovative ideas to change the way the country's motorways and major A roads are designed, managed and used.

The company received more than 200 applications from a more diverse network of innovators, with just over a third from micro companies with less than 10 employees. The projects being funded included new construction materials, different ways of tackling air quality and better use of technology to provide people with a range of information.

One competition is for unproven feasibility projects which through a second phase closed competition could be further funded for development. The other competition is for proven projects at development stage.

The funding will come from two of Highways England's designated funds – ring-fenced money which the company has set aside – for innovation and air quality projects. The competition was facilitated by Innovate UK as a small business research initiative. The awards are subject to contract negotiations.

Highways England is delivering the Government's current £15bn road investment programme and paving the way for the second programme which will start in April 2020.

In June 2018 the company launched an ['innovation portal'](#) – an online platform to help identify projects which could make roads safer for motorists and road workers, improve how information reaches those travelling around or help deliver an ambitious roads programme. In October it showcased to an international audience pioneering work to transform journeys with innovative technology allowing vehicles and the roads to 'talk' to each other.

The full list of entries that will receive funding, subject to contract negotiations, is:

Air Quality

- Dynamic air quality management – Amey OW limited
- Network Emissions/Vehicle Flow Management Adjustment – Aimsun Limited
- Green Light Optimised Speed Advisory – Amey OW limited
- Showcasing artificial intelligence – Clytell UK Limited
- Feasibility of tool to assess air quality impacts of elevated roads – Cambridge Environmental Research Consultants Ltd
- Clean efficient off grid electric vehicle charging – Intelligent Power Generation Limited IPG
- Simplifai integrated corridor management – Simplifai systems limited
- Biotecture active airflow living wall – Biotecture
- Incentivising drivers to lessen emissions – RBD holdings limited
- Motorway charging using thermo-mechanical energy storage – Cheesecake energy Ltd
- Flywheel fast charging station – Gyrotricity LTD

Innovation

- Digitally enabled and assured product based bridges – Laing O'Rourke
- Connected Digital Roads – Costain Group PLC
- Flexible, future-proof edge compute services for connected vehicles and advanced road operation – Vodafone Group Services Limited
- Video analytics service – Costain Group PLC
- Sustainable asphalt – BAM
- SRN impact – Travel AI
- Road Asset Geometry and Condition Data Capture – Bentley Systems
- Secure real time API for innovation and data monetisation – Alchera Technologies
- Connected and autonomous vehicles infrastructure appraisal readiness – Galliford Try
- Motorway Mobility – Connected Places Catapult
- Very High-Speed Communications Infrastructure – Ingram Networks LTD
- Intelligent Environmental Estate – Ramboll
- The use of eCall data to identify road incidents and hazards – Chiltech Limited

You can find [summaries of the projects online](#).

General enquiries

Members of the public should contact the Highways England customer contact centre on 0300 123 5000.

Media enquiries

Journalists should contact the Highways England press office on 0844 693 1448 and use the menu to speak to the most appropriate press officer.