

A leader in city innovation



New approaches required

- a rapidly rising population (34% 2010-2028)
- an ageing demographic & rising cost of healthcare
- traffic congestion and air quality issues
- pressure on infrastructure, public services and environment, understanding 'roads of the future'
- threats to jobs and the economy from globalisation and technology

London's population in 2011 is equal to these 24 cities



Strategy

- In 2015, Greenwich published its comprehensive smart city strategy – one the first in the UK, and possibly the most comprehensive strategies of its kind: <http://www.digitalgreenwich.com/wp-content/uploads/2014/06/Greenwich-Smart-City-Strategy1.pdf>
- The focus is on understanding and using advances in technology to ease the pressures on infrastructure, public services and the environment caused by rapid growth
- It aims to create the conditions for a new high value, higher skilled economy linked to the digital economy

Core Themes

The strategy is focused on four themes, transforming:

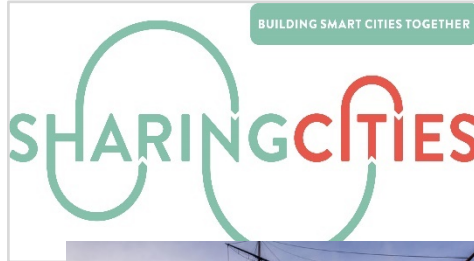
- (1) neighbourhoods and communities
- (2) infrastructure and planning
- (3) public services
- (4) the Greenwich economy

New strategy new team

As well as a new strategy for smart city innovation, 2 new teams were created:

- Digital Greenwich sits within the Council & reports directly to the Chief Executive; it helps develop and implement the strategy
- DG Cities was also formed – a small, self-funded council owned company that works with the Council, industry and academia, enabling the Council to work in more agile ways and secure other funds

DGCities Timeline



2015

RBG's Smart City Strategy published
Digital Greenwich and DGCities established
GATEway driverless car bid to Innovate UK is successful

2016

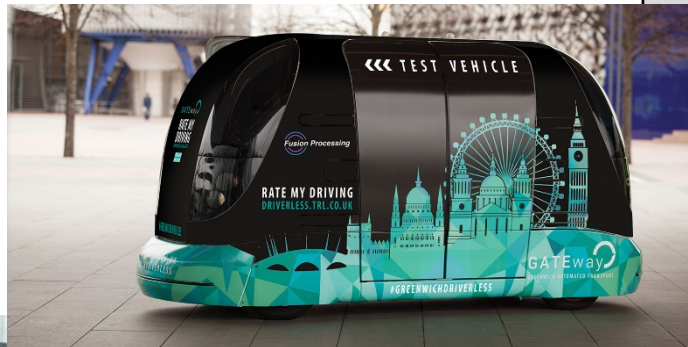
Successful funding bids to European Commission
Sharing Cities - Smart city and communities demonstrator

MAVEN: Autonomous vehicle platooning

Successful funding bids to Innovate UK

Atlas: Mapping and navigation requirements of autonomous vehicles

Move-UK: new validation methods for autonomous vehicles



2017

Greenwich recognised in UK **Smart City Index** of leading cities

Successful funding bids to Innovate UK:
eRCV – first refit of diesel vehicle to electric power train

Merge – Autonomous ride sharing sim

Roabeam Robotics and additive manufacturing for off-site construction of housing

Smart mobility living lab: London – national test bed for CAV and new mobility solutions funded by IUK and Industry

2018

GATEway completes with first UK public trails of autonomous pods on the Peninsula and autonomous cargo pods in Woolwich

IUK funding of £19m **SMALL:L** confirmed, 18 month buildout commenced April '18

IUK funding for second **eRCV re-powering** project (£1.7m)

IUK funding for **dRisk** a knowledge graph feeding adaptive tests of the AV safety case (£3m)

Understanding and managing our highways of the future

Complex projects such as MAVEN (a collaborative EU funded project) exemplifies the type of funded research which is taking place and which RBG is party to. MAVEN aims by September 2019 to :

- provide solutions for managing automated vehicles in an urban environment (with signalised intersections and mixed traffic)
- produce roadmap for the introduction of road transport automation to support authorities in understanding potential future changes in their role and in the tasks of traffic management
- Produce a white paper on “management of automated vehicles in a smart city environment” to position the MAVEN results in the broader perspective of transport in smart cities

Details are available at: <http://www.maven-its.eu>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 690727



Why we have identified this challenge

As innovative and complex projects such as MAVEN show work is underway to enable the Highway Authorities to navigate the period between now and the introduction of AVs

However:

- at an underlying level for the Traffic Manager congestion and its resulting impacts are complex issues to solve - the first stage of attempting to do so is to understand causation.
- At present, the process of building this understanding often comes at a significant cost in terms of time and resources, and with mixed results given a reliance on manual surveys, sparse fixed sensor points, and occasional spot checks on the road network.
- Finding new and less resource intensive methods which also improve the quality of the data and analysis methods is central to understanding the causes of local congestion and providing innovative solutions.

For Greenwich the aim of this competition is to help local areas better understand and respond to traffic congestion by harnessing the power of data.

The GovTech Congestion Challenge

Timeframe:

- 13 August 2018: Competition opens
- 20 August 2018: [London briefing event](#).
- 19 September 2018 12:00pm: Registration closes
- 26 September 2018 12:00pm: Competition closes
- 16 November 2018: Applicants notified
- 14 December 2018: Feedback to applicants and Phase 1 contracts awarded.

The Congestion Challenge

Your proposed solution must:

- try to better understand and respond to traffic congestion
- be suitable for testing in a real world environment after phase 1 development in the UK
- take affordability into consideration
- be innovative

What we'd like to see

We are particularly encouraging applications that:

- explore how data or analysis can support local areas in both real time traffic interventions and longer term strategic considerations
- look at solutions which are scalable and could be applied within other local areas
- anticipate possible constraints on budget and data skills within local areas
- consider how existing data sets could be better used
- consider the possible value additional data sets could bring and how they could be used and analysed in low cost ways
- consider the types of innovative interventions that could be deployed using this improved data or analysis in order to reduce congestion
- as well as local areas, consider how data or interventions could directly influence the behaviour of motorists across the country

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