

# Commonplace case study GATEway Driverless Vehicles

#### **Project Name**

**GATEway Driverless Vehicle trials** 

#### Client

Consortium R&D project funded by InnovateUK

Started: 2015

**Ended:** Ongoing (completes Dec 2017)

#### Other consortium members

TRL, Royal Borough of Greenwich, 02, Royal College of Art, Heathrow, Oxbotica, Westfield

**Outcome:** All elements of Commonplace delivery to time and budget (to date)

#### **Brief**

GATEway (Greenwich Automated Transport Environment) is an £8m research project, led by TRL, to understand and overcome the technical, legal and societal challenges of implementing automated vehicles in an urban environment. Commonplace is using sentiment mapping to understand and contrast views of local people before, during and after the trials.

# **Exemplar smart city project**

GATEway is a current exemplar smart city project. As the first public trial of driverless vehicles in the UK it will be instrumental in defining the design trajectory of urban spaces incorporating driverless technologies in the near future.

# Research to inform policy

GATEway is an R&D project that is not about driverless technology, it is about understanding the application of this technology in the urban environment. The whole focus is to gather data about how people interact with and respond to these vehicles in order to inform policy, design and planning of urban spaces in the future.

Commonplace has been an excellent partner on the GATEway project, offering specialist community engagement and mapping that provides insights into community sensitivities and opportunities that would be hard to achieve any other way.

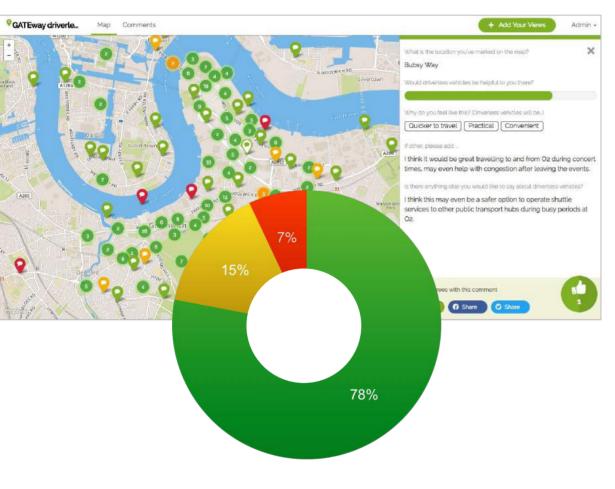
Dr Nick Reed, Technical Lead, TRL



# Innovative use of data

### Mapping sentiment before, during and after the trials

Commonplace is creating heatmaps of the Greenwich Peninsular, which will produce analysis that shows how people's views about the opportunities, challenges and risks for driverless vehicles map geographically, demographically, and over the course of the project. We have already collected close to 1000 responses from local people about where they feel challenges and opportunities exist for driverless vehicles



Before the trials start, we have been asking people to identify places they think could be opportunities for driverless vehicles, or alternatively could create local risks.

78% of contributions so far have rated the positive opportunities for driverless vehicles - significantly higher than the negative risks

60% said they thought driverless vehicles would be good for local people, and 61% said that they would be more convenient.

# Comparative mapping during and after trials

Commonplace will be mapping how public views of driverless vehicles change, once they see the them operating in their neighbourhood - or ride on them. Using Commonplace they will be able to provide feedback during their ride, and those who observe the vehicles will also be given an opportunity to say what they think.

#### Correlating sentiment with vehicle data for riders

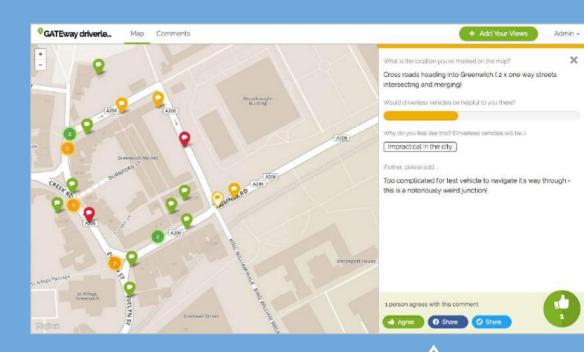
We will also be attempting to map anomalous data produced by the vehicles (such as unexpected sharp stops) with sentiment data collected from people in the vehicles to understand their sensitivities, and what causes concern.

# Supporting collaboration between citizens and the public sector

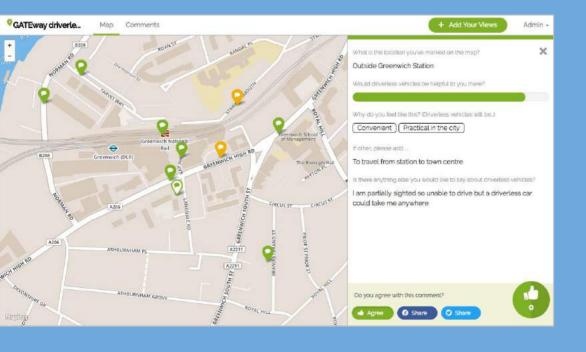
#### **Data-informed future planning strategies**

Commonplace data has already started to inform how the Royal Borough of Greenwich think about their future planning strategies to incorporate autonomous vehicles.

For example, particular junctions are perceived to be hazardous. Whether or not it turns out to be the case that driverless vehicles increase the hazard, the perception itself is important because it may make other road users behave irrationally.



"They need thorough research first to confirm they are safe with unpredictable situations like kids chasing a ball. Also, please use teenage hacking experts to prevent this happening to the vehicles"



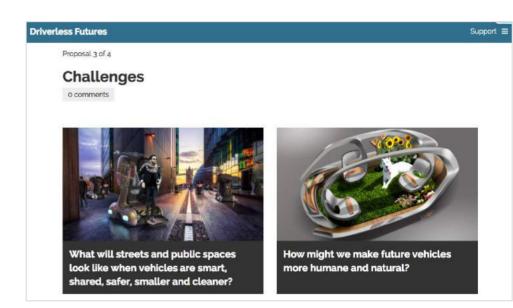
People with disabilities have been strong in their support for the potential benefits of these vehicles. We will compare this to their perceptions once they have ridden in them.

# Our approach to the client and project

#### Platform and service

Commonplace works as a core consortium team member, helping to achieve the overall goals of the research project as well as delivering the specific components of data gathering and analysis that is our remit.

For example we are supporting the RCA in their research by hosting some of their design provocations on our Design Feedback module, so that members of the public can take part in the debate on driverless futures.



# Specialist skills in community engagement, co-design and urban design

This project required specific skills in design and data analytics, and a sensitivity to urban planning. It also required previous experience working as part of large consortia to manage relationships and facilitate action.



Mike Saunders, CEO Entrepreneur, senior manager in large organisations, city thought leader, engagement expert



David Janner-Klausner, MSc sustainable architecture Applied urban design expert



Andy Pols, CTO
Data visualisation and web
application expert.
Experience in finance and
transport.



**Fee Schmidt-Soltau,** Designer Previous experience in designing IoT and city transformation projects.























