In September 2018, Ito World launched The Mobility as a Service Manifesto: Smart data and accessing a city’s potential to share our vision for truly smart “seamless cities”, where transportation systems are built around the needs of citizens.

In Kicking the UK’s car habit we narrow the focus to Britain, asking how key stakeholders can drive a mobility revolution that will allow the country to move on from its toxic relationship with the car.

The UK’s dependency on the car is imposing major costs on society, in terms of lost productivity, pollution and poor health.

It doesn’t have to be this way. We look at some of the things that need to happen if we are going to shift to a Mobility as a Service (MaaS) model where shared, multi-modal and autonomous vehicles - working as part of an integrated data-driven system - will transform transport in our cities.

In short, we are asking how we can begin a healthier and happier relationship with mobility, one where our cities work more efficiently and become better places to live, for everyone.

In this document we set out our ideas for how we can achieve this change - but we also want to hear from you. We all have a stake in this critical debate about the future, so please get in touch with your ideas for how we can get the UK to kick its car habit.

Johan Herrlin, CEO Ito World
A relationship that turned toxic

Britain’s love affair with the private car has lasted almost a century. But what started out as a romance is now harmful to our wealth, health and well-being. Cars are imposing a growing cost on our communities and environment.

Counting the cost

Today there are almost 32 million cars on the roads in the UK – one car for every two adults in the country. Road traffic is expected to increase by more than half over the next thirty years or so. The majority of these vehicles, for most of this period, will be powered by petrol-fuelled engines.

The sheer number of vehicles presents a major challenge for road management. Last year, motorists in London were estimated to have lost 227 hours to traffic jams. Across the UK, motorists on average lost 178 hours, costing £1,317 per driver. By 2030, the reduced productivity arising from congestion could be costing more than £307 billion - twice the annual budget of the NHS last year.

Not being able to get where we need to be is a source of stress: a 2018 survey found almost two-thirds of city-dwellers are frustrated by the level of traffic congestion on British streets. But even more concerning than the effect on our quality of life is the impact on public health. The gases and particulates pumped out by vehicles are the single biggest contributors to air pollution, estimated by The Institute of Public Policy research to cause as many as 40,000 deaths a year in the UK.

Our toxic relationship with the privately-owned car is damaging our health and the life of our cities. The rising costs of the UK’s car dependency are unsustainable, but there is another way.
It’s time to kick the habit

Many cities around the world are moving to a ‘people-centric’ system called Mobility as a Service (MaaS). Is the UK public ready to make the switch?

MaaS is the appliance of technology to integrate various forms of transport services into a single mobility service, accessible on demand. Instead of the private car ruling the road, MaaS puts people at the centre of the transport system, with traditional and shared transportation options available to serve their needs. Under most MaaS models, people would pay a simple flat charge or subscription to use the service.

Many industry experts are convinced that MaaS will change transport for the better, helping the UK find effective solutions to the problems caused by a private car-centred system. The majority questioned for the Second Annual Survey of MaaS in the UK believe this new approach will make it easier and more convenient to get around on public transport by integrated journey planning (89%) and ticketing (82%). Most anticipate that it will improve congestion (75%) and air quality (72%).

The adoption of MaaS does not mean that private cars would disappear from the streets of the UK’s towns and cities. While most transport industry experts believe MaaS will mean fewer private cars on the road, they will remain part of the mobility mix - but we will use them in more efficient and sustainable ways.

Getting from A to B

MaaS is about making transport simple and seamless, helping you get where you need to be quickly, cheaply - and with minimum impact on the environment we all share.

Say you need to get to a meeting at a business park in Hounslow from your house in Catford, south east London. Tap in your destination and when you need to be there and the MaaS app on your phone does the rest. It maps out your trip, door to door, finding the best mix of transport modes to complete your journey. These could include public transport options such as bus and rail, plus taxis and maybe even ride share and autonomous vehicles when these become mainstream.

Happy with the trip plan? Click to confirm and everything’s booked and paid for as part of your mobility subscription. The app will guide you through each step of your trip, making sure everything runs like clockwork, and you arrive at your destination on time and with the minimum of hassle.

In a MaaS system, all the transport modes are digitally connected so unexpected delays are almost completely eradicated.
The public’s view on MaaS

While transport industry experts are united on the benefits of MaaS, it is not so clear that the public is persuaded. Asked in a survey specially commissioned for Ito World what would convince them to switch from their private car to alternative modes of transport, the most popular reply from the general public was “nothing”, offered by 44% of respondents; only 5% would consider giving up their car for environmental reasons.

What accounts for the reluctance of so many respondents to give up their car? One study carried out in 2018 into Londoners’ attitudes to MaaS found half (49%) of people would feel “trapped” by subscribing to a MaaS. 52% worried they would run out of their subscribed amount. An earlier study by the UK’s technology and innovation centre for Intelligent Mobility - the Transport Systems Catapult - suggested that concerns their consumer rights could limit the uptake of MaaS services.

The studies cited here pose theoretical questions. When the public are given the practical opportunity to use an integrated MaaS-style transport system, they appear to embrace it. The extension of Oyster to National Rail lines in London is a case in point. Making it easy for Londoners to switch between buses, tubes and trains saw traffic increase by between 5 - 6%.

Another example of the power of practical experience comes from Manchester. In 2018, Transport for Greater Manchester (TfGM) carried out a trial which allowed citizens to experience MaaS. Participants received daily personalised travel plans including buses, trams, car-share, taxi, bike-share, on-demand shared mini-bus and walking - all offered via a single ticketing option. By the end of the trial, 26% of the sample were more willing to use public transport, and 21% more willing to cycle to work. Most tellingly, six months after the trial’s conclusion, 82% of participants said they wanted MaaS back.

<table>
<thead>
<tr>
<th>Which of the following would convince you to give up your privately-owned vehicle in favour of alternative modes of transport?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,568 respondents</td>
</tr>
<tr>
<td>Nothing</td>
</tr>
<tr>
<td>More accessible public transport</td>
</tr>
<tr>
<td>Cheaper public transport</td>
</tr>
<tr>
<td>Improved cycle routes</td>
</tr>
<tr>
<td>Improved ‘shared’ transportation services</td>
</tr>
<tr>
<td>Positive impact on environment</td>
</tr>
<tr>
<td>Don’t drive (+)</td>
</tr>
<tr>
<td>(Other responses)</td>
</tr>
</tbody>
</table>
Putting the pieces together

Most of the key components for a MaaS system are already in place. The challenge is to join everything up and get data flowing freely across the system.

Even with the dominance of the private car, the UK has an extensive alternative transport infrastructure. Public transport (bus, tram, metro or rail) is available in major cities. There are more than 285,000 licensed taxi and private hire vehicles in England, with 108,000 of them in London. This includes black cabs, but also mini cabs and rideshare schemes such as Uber and Lyft.

The rise of rideshare taxis, on-demand shared minibus services and car clubs is underpinned by a shift in public attitudes to driving and car ownership in the UK, which is particularly marked among younger generations. Under a third of people aged 17 - 20 hold a driving licence, down from nearly half in the early 1990s.

While more investment will be needed, the basic transport infrastructure and services to enable MaaS largely exists today. The core technology platform is in place too, with UK smartphone penetration approaching 90%.

Lilian Greenwood, Chair of the Transport Select Committee, wants to increase public understanding:

“An integrated MaaS app [...] could substantially reduce reliance on the private car; ease congestion; increase productivity; and lead to more pleasant, healthier cities with better air quality. Integrated MaaS is a much talked about concept, but it is not generally well understood. We want to increase public understanding; find out if the bold claims are justified; and, if they are, recommend ways of overcoming some of the barriers to implementation in the UK.”
The vital ingredient: open data

Transport infrastructure and technology are crucial, but not enough for MaaS to take flight. For the service to be deployed effectively - and in a way that will convince the public it is viable and will benefit them - data needs to flow freely between all the parts of the integrated system.

Public transport authorities in some UK towns and cities already make their data freely available. For example, Transport for London (TfL) offers its data to developers to stimulate the creation of innovative travel information services. In 2017, the operator reported that more than 13,000 developers were taking advantage of its open unified API - and this release of open data was generating annual economic benefits and savings of up to £130m a year.

Not all transport providers have been as willing as TfL to share real-time information. To promote comprehensive MaaS, the industry experts consulted for the Second Annual Survey of MaaS in the UK believe providers may need to be “compelled” to make their data freely available.

The UK government is taking steps in this direction. They propose to require bus operators to make information on routes & timetables, tickets & fares (and location information) openly available. The Department for Transport (DfT) is creating a digital platform to index or reference the data. Ito World is partnering with KPMG to deliver this repository for the DfT.

Transport organisations must be compelled to produce high quality open data, to reduce the estimated 40,000 deaths that fossil fuel powered vehicles cause annually.
Kicking the UK’s car habits: key considerations

What steps can we take to accelerate the growth and adoption of MaaS in the UK?

In September 2018, Ito World published The MaaS Manifesto. This set out five key drivers to unlock the true potential in the world’s mega-cities, exploring how MaaS can help them tackle the critical issues of our age including sustainability, public health and economic prosperity.

As discussed in this paper, adopting MaaS across the UK is anticipated to reduce congestion and improve air quality, which in turn can drive improvements in productivity and public health. Would these theoretical benefits be enough to persuade motorists to give up their cars? The evidence, according to the survey commissioned for this paper, says not.

Instead of talking about likely benefits, advocates for MaaS need to be able to point to practical, real world examples. Ideally, giving the public the opportunity to experience MaaS for themselves, allowing them to see how MaaS could fit with their lifestyles.

"The introduction of alternative transportation providers such as ride hailing, on-demand shared transit, bike and scooter sharing companies is changing the way citizens move about their communities, creating new opportunities for public transit agencies and cities. The future of mobility has arrived and it’s here to stay, as customers embrace the power of choice."
Here, we offer key considerations for transport stakeholders - including regulators, local authorities, and transport providers - on how actions we can take, together, will help convince the public, and motorists in particular, that MaaS will benefit them, and the wider community.

**Start an intelligent debate on transport**

Get people talking about problems inherent in today’s car-orientated transport system. Inform them about the true costs of the car, and tell them about alternative solutions. The public could be the most effective advocates for MaaS.

**Take practical steps to change transport**

- Give people an opportunity to experience a world where the private car is no longer dominant, for example via trials such as the 2018 one carried out by TfGM. Infrastructure planning should encourage and prioritise shared mobility services, from public transport to bikes, in favour of privately-owned cars.

- Put in place incentives to encourage public and private operators to provide services. This may be needed to fill the gaps in service provision - at least until Mobility as a Service develops critical mass.

- Continue to make shared forms of transport as convenient as the car. Cars won’t go away - but their negative impact can be reduced.

**Make data open and available**

- To encourage the adoption of multi-modal shared transport services accurate, high quality data is essential. Some transport providers already share their data, this practice should become more widespread.

A change for the better is achievable. A transport system that makes the UK more productive, happier and healthier is within our reach.

To find out more about how the UK can kick its car habit, contact: info@itoworld.com or visit www.itoworld.com
Notes and references


Google Pulse survey commissioned by Ito World for this paper. 1168 respondents. Survey carried out February 2019.


The Transport Committee’s Inquiry into Mobility as a Service. November 2017.

