MAKING CITIES SMART. SMART LONDON: TRANSPORT AND MOBILITY.
WHY DO WE NEED SMART LONDON?
WHY DO WE NEED SMART LONDON?

We estimate that London’s population became bigger than ever in February 2015. We reached a population of 8.6 million people, the same as the last peak in 1939.
Why Do We Need Smart London?

By 2050, we estimate we will need the following across the city:

This is our current view investment requirement and does not include innovation or potential technological changes that might change these requirements.
TRANSPORT SPECIFIC

Transport – a better connected city
The consultation confirmed the need for substantial investment, supporting and connecting residential and business growth across the city. Jobs growth in central London alone will require a 50% increase in public transport capacity. Meanwhile new growth poles will emerge (like Stratford and Old Oak Common) and development will occur all over London.

All of this needs to be connected up. Other transport improvements are required to lift Londoners’ quality of life, improve health outcomes and support London’s international connectivity.

Below are just some strategic schemes to support these overarching objectives, which the following pages discuss in more detail:
Why do we need Smart London?

Cost estimates
Our best cost estimates to meet all our infrastructure needs would almost double expenditure as a proportion of the economy. Housing and transport make up three quarters of the total costs. Hence the need to prioritise and otherwise reduce costs and increase funding sources (see section 5).
WHY DO WE NEED SMART LONDON?

CO₂ challenge
NEED TO BE INNOVATIVE
COST, PRIORITY ES AND FUNDING

Our best cost estimates to meet all our infrastructure needs still imply a significant increase in investment.

Decades of underinvestment in the 1970s and 1980s, when London was shrinking, and today’s difficult public finance context compound the funding challenge.

To plan for the future we need:

- To priorities investment
- Fiscal devolution
- Collaborative construction
- Land and asset intensification
- Demand management
- Technological innovation
- The following pages discuss these.
REDUCE DEMAND / SHIFT MODE
REDUCE DEMAND - INCENTIVISE MORE WALKING AND CYCLING

Typical CO₂ emissions by mode

Walking and cycling encouraged for short trips

-improve public transport to promote shift from car

Walking & Cycling
Underground
Rail
Bus
Car
INCENTIVISE MORE WALKING AND CYCLING

Green infrastructure

We can enhance and expand the All London Green Grid, so that by 2050 we will have a network of green infrastructure providing flood protection, shade, biodiversity, space for cycling, walking and recreation, and a more attractive environment.
EDUCATION, BEHAVIOUR CHANGE AND AWARENESS CAMPAIGNS

TfL Business Engagement Behaviour Change Team

air TEXT

FORS

STARS

Guidance for workplace travel planning for development

Construction and Servicing Management Plans

Legacy
DATA TO USE THE CITY MORE EFFECTIVELY
A DATASTORE FOR LONDON
Infrastructure programme plan and map

We are developing a map and database of all infrastructure activity, so that we know what’s in the pipeline in the short term (circa 0-5 years), how efficiencies can be achieved in the medium term (c. 5-15 years) and so we can start plotting the next generation of infrastructure investments to meet predicted long-term demand (c. 15+ year).

We aim to release this information to infrastructure providers and boroughs and make a public version available by summer 2015.
TEST IDEAS
TOWARDS A SMARTER LONDON

AGILE URBAN LOGISTICS

NETWORKED UTILITIES
CONNECT THE INNOVATORS WITH THE CHALLENGES
CLEAN MOTORISED TRANSPORT
ZERO EMISSION CAPABLE VEHICLES (BUSES AND TAXIS)

TfL is working to reduce emissions from its buses, taxis and PHVs and to increase the number of zero emission capable vehicles.

This will create demonstrator fleets in London, boost industry sales and lead the transition towards this technology.
ULTRA LOW EMISSION VEHICLES

- **Olympics used 200 electric vehicles in their fleet**
- **Currently 8 pure electric buses and 8 hydrogen buses in fleet with 300 zero emission buses by 2020**
- **Trialling wireless charging with 4 inductively charged hybrid buses from 2015**
- **All newly licensed taxis and mini-cabs to be zero emission capable by 2018**
FOCUS ON THE PUBLIC REALM
ROADS IMPROVEMENT PROGRAMME
ROADS IMPROVEMENT PROGRAMME
ROAD TUNNELS STUDY

- N/S circular upgrades, un-tolled (£20 billion)
- Inner orbital tunnel (£30 billion)
- Larger orbital tunnel (£70 billion)
- Cross-London tunnels (£70 billion)
WHAT WE’VE LEARNT

- Set the ambition
- Get political and senior ‘buy-in’
- Use resources, be a resource (networks)
- Listen to the citizens
- Partnerships are key
- Start small, think big
- Collect experiments, and talk about them
LEARNING OPPORTUNITIES

Madalina Ursu
Principal Policy Officer Infrastructure and Competitiveness
Greater London Authority
madalina.ursu@london.gov.uk