The Role of Public Transport in the Future
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Transport for Greater Manchester oversees transport and travel across Greater Manchester

*We keep Greater Manchester moving*
Transport for Greater Manchester

2.7 million residents

10 authorities working together

The heart of the north

UK’s first Combined Authority

Centre of innovation, education, industry and culture

Economic potential exceeds all other UK city regions
The challenge
Supporting sustainable economic growth

Supporting population growth
- 1991: 2.4M
- 2011: 2.68M
- 2040: 3M+

Rapidly increasing population: 3 million by 2040

An increase in employment
- +350,000 jobs
- 2011: 1.25 million
- 2040: 1.6 million

Requiring at least 200,000 more homes
- 2011 dwellings: 1.2 million
- 2040 dwellings: +1.4 million

+800,000 more trips on our transport networks everyday
IMPROVING THE QUALITY OF LIFE

1/5 of the GM population lives in one of the 10% most deprived areas of the UK.

31% of households have no car.

1/2 of all adults do not get the recommended level of physical activity.

£35m: The cost to the NHS in Greater Manchester of physical inactivity.

By 2040, 1-in-4 adults will be over 60.

1-in-6 adults will be over 70.

17% of all trips in Greater Manchester are for commuting.

25% of all trips are for shopping.

15% of all trips are for education.

Half of all short trips are less than 2km.

And 38% of these short trips are by car.

Greater Manchester has reduced accident rates to below the national average.

KSI's per 100,000 population GM: 26, UK: 39.

But we still have a high number of pedestrian and cycle injuries.

1000 Pedestrians injured on GM roads (2014).

569 Cyclist injured on GM roads (2013).

And many of these involve children.

Over 1/3 were children (aged 0-15yrs).
PROTECTING OUR ENVIRONMENT

TRANSPORT IS RESPONSIBLE FOR A THIRD OF CARBON EMISSIONS

48% CARBON REDUCTION BY 2020

£20bn ECONOMIC COST IF WE DO NOT TACKLE CLIMATE CHANGE

13% INCREASE IN WINTER RAINFALL

AND ANNUAL MEAN TEMP RISE OF UP TO +2.3°C BY 2050

1000 DEATHS PER YEAR FROM AIR POLLUTION
The Role of Public Transport in the Future

- Ultra-Low Emission Vehicles
- Flexible on Demand
- Mobility as a Service
- Autonomous Vehicles
Ultra-Low Emission Vehicles
Efficient Vehicles and Efficient Utilisation – ULEV Car Club Opportunity

Approx. 7 older, high-emission vehicles are substituted...

...through 1 brand new, low-emission or zero-emission vehicles...

...which is 3-5 times better utilized than privately owned vehicles.

- Privately Owned Vehicles: 60 min
- Shared DriveNow Vehicles: Up to 300 min

ICE
£14.14

EV
£2.40
Flexible on Demand Transport

*Shared door-to-door pop up mobility services and applications.*
"Tell us where you want to go."

“Choose when you want to leave.”

"Book days or minutes in advance."

"Know the fare before you book."

"Walk to your pick-up spot."

"Track your trip in real time."

Source: Bridj
Mobility as a Service Next generation city transport

Mobility as a Service (MaaS) creates a new alternative to private transport.

It puts users at the core of transport services, offering tailor made mobility solutions based on individual needs and preferences.

Users can pay for multi-modal journeys with a single account - paying per trip or via a monthly subscription.

Transportation services from public and private providers are combined through a unified gateway that creates and manages a complete journey from A to B.
Maas system – a digital transport network integration
Autonomous Vehicles

Navya

1 in 4 of us will experience a mental health problem in any given year...

Transport can provide a lifeline, keeping people connected and active

For more on the connections between transport and health visit our public health hub at: http://www.urbantransportgroup.org/resources/public-health
Possible applications of autonomous vehicles (AVs) as part of a diversified public transport system

High capacity core network with fixed line service

Swarm of AVs as Robo-Taxis and on-demand shuttles

AVs used as feeders to public transport stations

Area-based on-demand autonomous mini-buses

Autonomous Car-sharing vehicles

Source: UITP/iustra
Reimagining public transport

Technology
- Materials
- Engine technology
- Design
- Automation

Place
- Liveable cities
- Healthy streets
- Local links

Data Analytics
- Sensors
- Digital & IoT
- Dynamic management

Behaviour
- Nudging behaviour
- Social norms
- Shared mobility
Public Transport in the Future – A lifestyle enabler

Transport’s contribution to health...

Opportunity for easy, everyday physical activity
Wellbeing benefits of keeping connected & active
Staying independent

Enabling access to...
...healthcare
...healthy activities
...shops selling healthy, affordable food

For more on the connections between transport and health, visit our public health hub at: http://www.urbantransportgroup.org/resources/public-health
Collaboration to explore new opportunities

EMTA
European Metropolitan Transport Authorities

POLIS

UITP
ADVANCING PUBLIC TRANSPORT

European Commission
Thank You

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