Driverless Mobility in Greater Manchester – embedding new mobility as part of the sustainable urban fabric

Anna Craciun, Innovation Strategy Officer, Transport for Greater Manchester

TfGM Roles and Responsibilities

Key Priorities for 2018/19

Current work on driverless mobility

Visions of the Future

Futureproofing

Get involved!

Contents

What we do

- Own **Metrolink** – the UK's largest light rail network – and plan for its future, including the new Trafford Park line.

- Work closely with **bus, tram and train** operators to help improve the full journey experience.

- Promote and invest in **walking and cycling** as safe, healthy and sustainable ways to travel.

- Keep traffic flowing on some of Greater Manchester's busiest roads by managing a 360 mile '**Key Route Network**'.

- Own Greater Manchester's bus stations, stops and shelters and invest in new, modern transport interchanges.

- Subsidies more affordable fares to help older people, children and disabled people get around.

- Develop easier, smarter ways to travel and plan your journey by using data and technology.

Transport for Greater Manchester

Priorities 2018/19 & Beyond

- Clean Air Plan 2019 - GM's plans to reduce transport-related air pollution.

- Expansion of GMEV Network

- Bike sharing models and investment in infrastructure - create a city-region-wide cycling and walking network made up of more than 1,000 miles, £160m of £500m Transforming Cities Fund allocated

- Autonomous vehicle trials – A6, Stockport/ Manchester Airport

- Integrated ticketing on public transport – shift from flat fare to zones on Metrolink– working towards MaaS

Transport for Greater Manchester
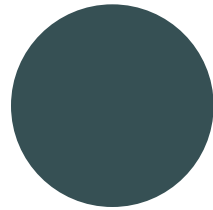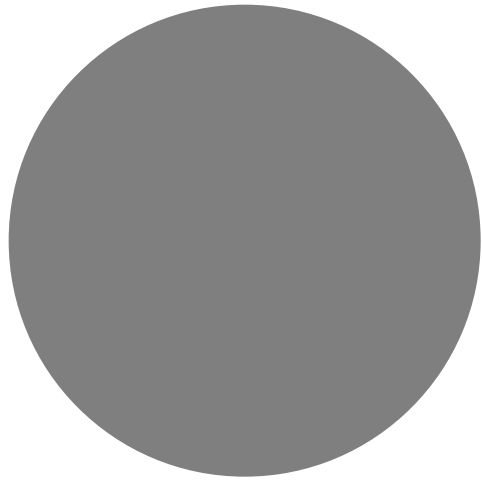
The need for innovation and new thinking

Transport for Greater Manchester

A growing future for Greater Manchester

Rapidly increasing population currently at 2.8m with a forecasted 15% increase by 2030

Over 2.1 billion journeys are generated every year - **ONLY** 268 million of which are made by public transport modes

More than 800,000 additional trips on our transport networks every day by 2035

A third of journeys under 1km journeys are made by car

Congestion costs GM businesses £1.3bn

Are we ready to see full autonomy on UK roads by 2021?

- Technology
- Regulation
- Public perception

Two visions of the future

Utopian

- Improved Safety
- Individually Tailored Travel
- Better Network Performance
- Fewer Vehicles
- Healthy Streets
- Journey Time efficiency
- Extended personal catchments
- Convert Parking to Parks

Dystopian

- More accidents, hacking
- Fixed Routes
- More vehicle kms
- More single occupancy vehicles
- Decrease in activity levels
- Congested Roads
- Inequality in provision
- Dedicated Space Required

Existing Policy Documents

2040 Strategy inclusion of autonomous vehicles

- Careful deployment based on long-term strategic objectives (modal shift, sustainable journeys, improved access and reduced vehicle ownership …)

- Benefits require partnership working (public, private and research)

- Data could enable better demand management and planning

- Changes to bus, freight and logistics: improved service and reduced costs

GM Prosperity Review and Local Industrial Strategy

- Review the infrastructure needs of GM to raise productivity, inc. potential for new approaches to unlock additional investment

Emerging pilots and investment

- Synergy, University of Salford, MMU, MCC, SMBC, MAG, Bolton Council

Project Synergy Objectives

Understand how CAVs can help address key transport challenges and opportunities within GM

CAV testing (initial ideas):

- Platoons of 3 electric powered sports cars to travel 10km, from Stockport train station to Manchester Airport (and vice versa)

- 3 autonomous pods to ferry passengers between a car park and passenger terminal of Manchester airport (over a distance of 2km for platooning)

- Develop secure vehicle to vehicle and vehicle to infrastructure communications

- Develop an in-vehicle Virtual Concierge / assistant

Policy development:

- Assess gaps in existing Government policy

- Understand policy requirements as trial unfolds (e.g. highways, infrastructure)

- Policy framework for GM to help guide future trials and adoption

Future Work

- Define the role of driverless mobility in the Future of Mobility Strategy

- Understanding the value of road space and allocations for autonomous vehicles – land value mapping

- Shared vs Private – working with industry partners

- Future proofing our region through a robust and evolving Policy Framework

Thank you

Get in touch

- innovation@tfgm.com

- anna.craciun@tfgm.com