GMCA HOUSING, PLANNING AND ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE
14 MARCH 2019 AT 6.00PM AT THE GMCA OFFICES

Present:	Councillor Lisa Smart (Stockport) (in the Chair)
Bolton:	Councillor Shamim Abdullah
Manchester:	Councillor Paula Sadler
Manchester:	Councillor Ben Clay
Oldham:	Councillor Barbara Brownridge
Rochdale:	Councillor Linda Robinson
Salford:	Councillor Tanya Burch
Tameside:	Councillor Mike Glover
Wigan:	Councillor Michael Winstanley

** This meeting had 9 of its Members present and was not quorate **

In attendance

Stockport Council	Councillor Alexander Ganotis
GMCA Officers	Julie Connor (Assistant Director Governance and Scrutiny)
	Mark Atherton (Assistant Director Environment)
	Matt Berry (Governance and Scrutiny Officer)
Speakers	Clare Cornes, Westfield Technology Group
	Glenn Lyons, University for the West of England, Bristol
	Rafael Cuesta, Transport for Greater Manchester

M111/HPE   **APOLOGIES FOR ABSENCE**

Apologies for absence were received from Councillor Laura Booth (Stockport), Mike Glover (Tameside), Dorothy Gunther (Bury), Catherine Preston (Bury), Michael Winstanley (Wigan), Stuart Dickman (Salford), Andrew Morgan (Bolton), Lynne Holland (Salford) and Graham Whitham (Trafford)

M145/HPE   **FUTURE INNOVATION IN TRANSPORT**

Autonomous Vehicles

Clare Cornes, Intelligent Mobility Manager for Westfield Technology Group delivered a presentation to Members on autonomous vehicles. The following points were highlighted:

- The definition of an autonomous vehicle is one that does not need human input to operate, this includes levels of autonomy which range from 0-5, with 0 being all functions are controlled by the driver, to level 5 where human intervention in the vehicle operations is not required
- The benefits of autonomous vehicles were highlighted such as an increase in safety for transport users and giving passengers more free time

- Disadvantages were stated as computer errors or malfunctions causing incidents with results potentially worse than human error and the potential knock-on impacts to current employment opportunities in operating manual vehicles
- The UK is pro-active in supporting developments through competition funding and the publication of a Code of Practice for testing
- The majority of deployments are on a trial or testing basis and are not integrated into the wider transport network. A number of trials in the UK are supported by the Centre for Connected and Autonomous Vehicles and Innovate UK
- Before full-scale, commercial deployment, additional guidance, policy and regulatory parameters would be required
- In terms of impacts for towns cities and regions: autonomous vehicles offer an opportunity to change how transport is planned, but guidance and policies are required to shape delivery
- Infrastructure requirements could be changed to meet the needs of people instead of vehicles
- Autonomous vehicles could provide greater flexibility in street design, allowing for the incorporation of green spaces and flexible shared areas

Future Mobility and Accessibility

Glenn Lyons, Mott MacDonald, Professor of Future Mobility at University for the West of England, Bristol delivered a presentation to Members on Future Mobility and Accessibility.

The following Points were made:

Travel mobility is in a constant state of flux
- There has been a 20% reduction in commuter trips per person per week since the 1990s
- The rise in on-line shopping has coincided with a 30% decrease in physical shopping trips over the past decade
- On the motorway network there is significant traffic growth
- van traffic is growing at 5% per year
- "29% of all 17-20 year olds had a full driving licence in 2014 compared to 48% in 1992/94"

At the end of July 2018, the UK Department for Transport issued a call for views and evidence on the future of mobility. Ten principle points responded by Glenn Lyons on behalf of Mott Mcdonald were highlighted and noted below:

1. Mobility is a derived demand. There is a risk that any future of urban mobility strategy is too inwards looking and monopolised by transport sector thinking
2. Access is fundamental. The purpose of the transport system is to provide access to people, goods, services and opportunities
3. Look at what is already happening. Unlike Connected Autonomous Vehicles and Mobility as a Service, take up of cycling, e-bikes, bike sharing schemes and electric moveable's is already a phenomenon in cities across the world

4. Sharing is key. The presumed trend in sharing of mobility requires much closer scrutiny. Sharing is a necessary condition for new transport technologies and services to be able to deliver some of the benefits that are being promised
5. Prioritise the end over the means. Ongoing development of urban infrastructure should be aligned to fulfilment of higher level 'sustainable cities' goals rather than being aligned (solely) to the facilitation of technological innovation
6. More mobility for more profit. Private sector providers of future mobility solutions are rational actors
7. Mass transit is under threat. The erosion of mass transit should surely be a concern for future urban mobility since trends in urbanisation demand more efficient not less efficient people movement within limited transport system capacity
8. Be careful what you wish for. It has been the very liberating force of the motor car that has played its part in land use changes that have moved services and opportunities further away from people
9. Health and safety are not synonymous. An important distinction must be made between health and safety when it comes to the design of our urban mobility systems
10. Beware solutions looking for problems. It can sometimes appear that it is already a given that the solution to future urban mobility will be connected, electric, autonomous and shared and the task is to work out how to get the public on side

Transport Innovation in Greater Manchester

Rafael Cuesta, Head of innovation Transport for Greater Manchester delivered a presentation to Members on Transport Innovation in GM. The following points were highlighted:

- Supporting sustainable economic growth with the increase in population, homes and jobs resulting in an expected increase to 800,000 more trips on transport networks everyday by 2040 is a major challenge
- Adapting to the requirement to reduce carbon use is being introducing such as increased cycle routes, expanding public transport such as Metrolink and making electric car charge points available.
- There is a rapid change in:
  - Technology: such as materials, engine technology, automation,
  - Place: such as connected neighbourhoods, clean air, decarbonisation,
  - Behaviour: shared economy and social norms
  - Data & Analytics: sensors, digitisation,
- There is an opportunity to reimagine the future of transport includes intelligent and shared mobility, connected infrastructure and place and Partnership and collaboration.
- Addressing the current fragmented GM transport system with frequent delays with mismatch in supply and demand is a priority
- Increase in digitalisation for things like drones, cycling, ride sharing and on demand public transport

- Possible applications of autonomous vehicles as part of a diversified public transport system include autonomous car sharing vehicles, autonomous vehicles used as feeders to public transport and 'robo taxis' and on demand shuttles

Members welcomed the presentations from the speakers and raised the following questions and comments:

A Member asked what guidance is in place around autonomous vehicles, and what the current challenges and hurdles are.   It was clarified that in terms of challenges, the current autonomous vehicle shapes and sizes don't fit into current U.K. vehicle classification, and it is difficult to conduct any crash tests and there is a limit to what can be tested.   Decision making by the vehicle when faced with a certain crash scenario is also problematic. There are also issues with getting the public to accept autonomous vehicles which may require a transition period, their initial ownership will likely be very limited between public and private ownership. National guidance and standards will be required as per current manual vehicles. There are also complications with the question as to whether fully automated level 5 vehicles should have the option of any human input.

A Member asked a if/how congestion and air pollution can be reduced with autonomous vehicles. It was stated that automated cars can be programmed to drive more efficiently operating with a reduced gap between vehicles. The most ideal solution to reducing carbon is still to have less cars, with even electric cars not being particulate emission free. The potential problem that fully automated vehicles being readily available and more convenient could mean that there are more vehicles on the road.

The challenges around introducing an effective car share scheme was highlighted, with success being limited to private arrangements set up between internal existing friend groups rather than any attempt to establish corporate schemes. The Uber share system was highlighted as having some success, but that hasn't been very widely used in GM or the U.K. Sharing vehicles with unknown individuals can potentially create trepidation and safety issues.

In terms of introducing a change in behaviour with using clean transport methods, it was stated that advances in technology can act as an enabler for increased road vehicles with the added convenience potentially encouraging more people to use it.

The point was made that most vehicle owners only use their car for around 50 minutes per day with most vehicles being idle the rest of the time. A publically shared vehicle system would be far more efficient than widespread car ownership.

In relation to the question as to the safety of autonomous vehicles, It was stated that all computer systems have the potential to be hacked, with there never being 0% risk in this regard. It was stated that TfGM continue to work towards resilience to cyber threats.

A Member queried whether a drivers license would still be required for autonomous vehicle operation. It was clarified that a' safety driver' with a valid drivers licence would likely have to be present in the

event that intervention is required. Having a supervisory individual in the car was discussed with the 'school run' example given as requiring supervision.

A Member made the point that the major road networks could potentially require complete redevelopment to accommodate autonomous vehicles. The impact on potential job losses of drivers of manual vehicles was also highlighted. Employment positions relating to autonomy are likely to be much higher skilled. It was stated that there is already an awareness of this problem, with the shift of employment opportunities likely to be complex and may not be directly transferable. These shifts and changes have been occurring since industrial revolution, with change happening fairly gradually. It was noted that advances in technology can bring benefit to the city and available public transport.

The Uber self-driving car trial crash which involved a fatality in 2018 was discussed. It was stated that there has been limited information released surrounding the circumstances of this incident.

It was highlighted that most modern aircrafts are at around level 3 automation. The economy of scale of air travel being viable for this technology which is not yet replicated for smaller/shorter journeys with fewer people. It was stated that the increase in automation in the airline industry has resulted in a decline in the experience level of pilots, with the same expected should automobiles evolve in the same way.

Transport costs were stated as being too expensive in certain areas of the city region, with a need to reduce marginalisation. In order to facilitate this the transport options available need to be right mix/ blend of options.

It was clarified that the expectation on autonomous vehicles would be that they could navigate smaller side roads and housing estates to take passengers on the full destination journey. However, long distance journeys are not currently viable. It was highlighted that some autonomous vehicles are currently being tested at high speeds. The point was made that the general public are currently not comfortable have autonomous vehicles traveling at high speeds near them.

In terms of any ability for cars to operate in three-dimensional space, it was clarified this is not viable.

The importance of remaining 'outcome focused' in terms of future mobility was highlighted. The goal should be for the creation of 'better places' and more liveable cities, attracting emerging generations and bringing economic stability.

TfGM will continue to push transport innovation, their current priorities remain focussed on getting fundamental basic changes such as single ticketing for public transport and reducing fragmentation, improving transport infrastructure and reducing the number of cars on the road.

A Member queried whether GM's targets of reducing cars from 3.4 million to 3.2 million is ambitious enough.

Resolutions
- To identify if any local policy and guidance exists regarding the above transport concepts and, to share with this Committee

- To provide more clarity and visibility to Members of what is currently being worked on in Greater Manchester in terms of new innovative transport concepts
- For this item to come back to a future meeting of this Committee as a TfGM item with more focus on funding and resources and also integration with other GM strategies

RESOLVED/-

Members received the briefings on the innovation in transport item and provided questions, comments and recommendations.

M146/HPE   DRAFT 5 YEAR ENVIRONMENT PLAN FOR GM

Councillor Ganotis, GM Green City Region Portfolio Lead for Green City Region delivered a presentation to Members on the Draft 5 Year Environmental. The following points were highlighted:

- The Green Summit this year is focussed on achieving huge reductions in carbon emissions. The Draft 5 Year Environment Plan sets out how the City region will achieve Carbon neutrality by the year 2038 as set out as a target by the GM Mayor in order to make GM's fair contribution to the Paris Agreement.
- The draft plan is based on feedback from GM residents attending Green Summit 2018 and was published in the Springboard report July 2018.
- The 2019 Green Summit will be used to raise awareness and get comments for the plan to incorporate and take to the GMCA meeting at the end of March for sign off. The challenge will be how GM implements what is proposed in the Draft Plan.
- It was clarified that this work is aligned with the other GM strategic plans. The GMSF includes a proposal to require all new housing developments to be Net 0 Carbon by 2028, The GMCA and 10 GM districts are working with professionals to test whether this date to explore whether it can be brought forward. It was highlighted that good quality homes can save money on heating, provide comfort and provide better health for their occupants. The green agenda work is also linked to the GM Local Industrial Strategy which is also going to the March GMCA meeting for sign off.
- In terms of environmental threats and challenges to GM, five key areas have been identified. Improving air quality and making equitable share to carbon reduction highlighted as pressing challenges. Improvements for People, Places and the Economy and increase prosperity are also highlighted.
- The Draft Plan is not just for the GMCA or 10 GM districts, but it focussed on all stakeholders as it can only be successfully achieved if all parties take actions. The Draft Plan will be used it to track progress on reporting on achieving its targets.
- The first 5 years is focussed on low carbon energy generation and efficiency measures. There is a need to create an environment to stimulate technological, social and financial innovation.

- A scientific evidence approach has been taken, which highlights that meeting targets by the Paris Agreement carbon emissions need to be reduced by 15% from now which requires prompt action.
- A graph was used to illustrate how there is a shortfall in attaining carbon reduction and emissions targets based on current plans and what is achievable, which highlights the scale of the challenge.
- The single biggest contributor to carbon emissions is the way GM heats buildings and the energy use within them.
- The GMCA and 10 GM districts need to develop proposals for investment vehicle potentially with an energy innovation company with a view to delivering renewable energy generation on the public estate to begin with. This is to remove the reliance on the national grid.
- Over the next 5 years, 6 areas have been identified such as energy supply , demand in buildings, travel and transport, consumption and productions, natural environment, and adaption to climate change. All of these areas link together and have knock-on impacts for one another.
- The climate agenda must create investable propositions such as social housing with energy efficiency was highlighted. Innovative models need to be scaled up. Increasing peoples knowledge and awareness making sure skills are there use this to upskill for jobs for the future.
- There is a need to stimulate the demand for retrofitting of housing, making it clear how the investment can lead to saving on energy bills with models available which don't require large upfront costs

Members welcomed the presentation from Councillor Ganotis and raised the following questions and comments:

A Member noted that incorporating any changes to the Draft Plan following the Green Summit may be challenging given the tight timescales between these meetings.

A Member thought that the 'cost of doing nothing' is a cost in itself and is something that can be stressed more strongly. It was clarified that the last substantial report looking at global implications for GDP is from 2008 and would be costly to repeat, presenting a lack of data issue in making this case more forcefully.

A Member raised the issues of the cost of gas being cheaper than electricity and it being the most viable option for most residents as energy bills in general keep increasing with the question asked as to whether the new commodities will be any cheaper. It was highlighted that for the models to be successful, there must be a cost saving incentive to switch to greener energy sources. The Green Switch campaign to switch to renewable energy has saved money for all parties. The choice to use gas will not be taken away from people, but there must be a shift over time to reduce/eradicate gas use. Gas is carbon, but its use must be reduced in a way that is not more expensive, potentially using powers over capital spending and creating innovative models. It was highlighted that most GM council housing stock boilers have been recently replaced in most social housing, in a way that costs are recouped over time.

It was noted that the Government is starting to move away from gas for new build developments. Social landlords have been utilising Renewable heat Incentive to install air source heat pumps which are more

energy efficient than gas boilers. Financial models are available to help landlords save money and tenants save money on energy bills.

It was stated that the current reliance on energy prices is risky, with global prices of oil and gas supplies from Europe fluctuating and subject to volatile huge spikes in costs. There is a need to de-centralise the source of energy which will create more control of energy prices.

A Member queried where the increased demand for energy will be sourced from moving forwards with increased demand. It was clarified that the predicted energy demand required cannot be achieved via renewable sources alone. This creates debate for other uses such as nuclear power which is part of the Low Carbon agenda, but has other environmental issues.

A Member noted the challenge with some of the big decisions regarding carbon reduction requiring 'pain for people now' with benefits that come in the future. The challenge of whether the economy can be grown in an entirely clean way was highlighted. It was stated that the clean agenda should not be something that is potentially damaging to GM's economy. The issue with market signals not reflecting the long-term sustainability of oil and gas consumption was stated. Part of the longer-term work of the plan is to clarify what is meant by sustainable economic growth and to raise its awareness.

Retrofitting was highlighted as giving many benefits such as improving homes, lowering carbon footprint and creating employment opportunities. It was also noted as presenting a significant opportunity, with lighter touch measures such as cavity wall insulation being utilised more. There is a need for the initial financial hits of more costly adaptions to be supported/ offset with policies such as Green Leases and Green Mortgages that are financed over a period of time or when the property is sold.

It was clarified that aim has always been to not create financial consequences for people, but they will need to deliver on finance models, it will need to be implemented correctly and deliver on finance models so people are not paying large upfront costs.

It was noted that the GM Pension Fund is aligned with GM objectives on carbon. Investments are held within finances sector as well as fossil fuels.

Battery technology was highlighted as being vital for solar power use. The target for battery storage was stated as being 45 megawatt in GM. It was noted that GM will never divorce entirely from the National Grid, however other measures will reduce the dependence with a need to generate and store much more energy in GM. The City Region should seek to lobby Government to decarbonise the National Grid. The generation and pipeline of district heating may present a viable option to move away from gas. Offshore wind was also highlighted as becoming far cheaper than nuclear new build.

The point of retaining the profit of energy generation within GM was raised with £5 billion spent on energy in GM last year, the more that is generated internally , the more that will be retained in the City Region.

RESOLVED/-
That the report be noted.

M147/HPE   WORK PROGRAMME

The April meeting of this committee is scheduled to cover:
- GMS six monthly update on Performance and Implementation Plan
- GM Housing Strategy
- The Smart Energy Plan

It is likely that the May meeting of this committee will not go ahead due to local elections

RESOLVED/-

That the work programme be noted.

ITEMS FOR INFORMATION ONLY

1.   REGISTER OF KEY DECISIONS
         https://www.gmcameetings.co.uk/downloads/download/92/register_of_key_decisions

2.   DATE AND TIME OF NEXT MEETING
         Thursday 11th April 2019 10.00, Boardroom, Churchgate House