

Future Mobility Zones
Department for Transport
3/27, Great Minster House
33 Horseferry Road
London
SW1P 4DR

North East Regional Transport Team
2nd Floor, Gateshead Civic Centre
Regent Street
Gateshead
NE8 1JN

By email only: FutureMobilityZones@ dft.gov.uk

24th May 2019

Dear Sirs,

North East England Future Mobility Zone: Expression of Interest (EOI)

Thank you once again for providing the North East with the opportunity to submit an EOI to the Future Mobility Zone programme and for the time you have dedicated to helping the team in developing this proposal to date.

We are very excited to have reached this stage in the process, we appreciate your consideration of our offer and hope you agree this proposal demonstrates a huge amount of ambition for this Region.

This proposal will deliver a North East-wide FMZ over the next 3 years, responding to the ambitions of the Department for Transport.

Our response will focus on:

- Integrated journey planning and ticketing;
- Trialling of Future Mobility Gateways – first and last mile connections;
- Roll out of mobility credits for lower income households;
- Micro-mobility and Shared Dynamic Demand Responsive Transport;
- Intelligent Transport System enhancements for prioritising bus;
- Creation of an Institute for Future Mobility (IFM), leading the way in transport innovation.

We have developed 7 innovative and interlinked proposals based on the four pillars of our FMZ Mission:

- Improving customer experiences in transport through a user-centric approach;
- Global decarbonisation and local air quality issues;
- Delivering a local industrial strategy; and
- Responding to an ageing population.

These are detailed in full in our EOI and demonstrate how this approach can be rolled out globally allowing successfully innovations to be replicated in other areas.

To supplement our EOI we have numerous letters of support to strengthen the proposal and underline the regional commitment to developing a NE FMZ. These have been attached as **Appendix 1**.

The contact for queries relating to this bid is as follows:

Mike Scott
TCF Project Lead
North East Regional Transport Team, 2nd Floor Gateshead Civic Centre,
Regent Street, Gateshead, NE8 1HH.
Email: mike.scott@northeastca.gov.uk
Contact numbers: 0191 433 4424 / Mobile: 07967 274170

Kind Regards

Philip Meikle



Transport Strategy Director

North East Regional Transport Team

APPENDIX 1: LETTERS OF SUPPORT



20 May 2019

Via email: mike.scott@northeastca.gov.uk

Mike Scott
Project Lead
Transforming Cities Fund, North East Bid
North East Regional Transport Team
Civic Centre, Regent Street
Gateshead NE8 1HH

Dear Mike

NORTH EAST FUTURE MOBILITY ZONE

Thank you for the opportunity to provide comments on the proposal for a Future Mobility Zone within the North East region.

The Proposition acknowledges the existing strong and sustainable transport networks in place across the majority of the region, which is an excellent base on which to develop unique future transport solutions. Whilst core urban areas and links between urban centres have particularly strong public transport linkages provided by bus, heavy rail and Metro, there are clear opportunities to strengthen the gaps between these networks and in the more rural areas, with a flexible solution.

The digital information proposals will strengthen the exiting networks by delivering a 'one-stop' solution to travel planning. This in itself will make the provision of public transport services in the region more sustainable as the target markets widen.

We very much hope that this bid is successful and look forward to playing a full part in future discussion.

Yours sincerely

A handwritten signature in purple ink that reads "Nick Knox".

Nick Knox
Area Managing Director
Arriva North East

Arriva North East
1 Admiral Way
Doxford International
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www.arriva.co.uk



To Whom it may concern,

The North East is positioned to be a UK leader in micro-mobility, and Bird will work tirelessly as their trusted partner to help achieve this vision. At no cost to taxpayers, we aim to complement an active and healthy community, while working to help the North East become cleaner and greener through an scooter sharing pilot in the region.

Bird welcomes the opportunity to participate in the North East's forward-thinking Future of Mobility program which proposes electric scooter trials. We look forward to partnering with the North East Combined Authority to provide access to safe, affordable, and sustainable transport. Bird was founded with the goal of creating a sustainable, affordable, and convenient alternative to the 40% of car trips that are less than 5 kilometers in our communities.

The North East's great cities can become more liveable by reducing car usage, traffic, and emissions. Bird is a last-kilometre electric vehicle sharing company committed to bringing safe, environmentally friendly, and affordable transportation solutions to communities across the world.

Our vehicles are 100% electric, reducing reliance on cars that pollute our world and clog our streets. And this is done with no cost to the host city and with a commitment to take our vehicles off the streets at night, something that no other e-scooter sharing company does. We are singularly focused on making e-scooters the best transportation solution in cities by replacing short trips that would otherwise have been made by car.

It is right that any trial should prioritise safety; Bird is the most trusted operator and originator of e-scooter sharing and recently published a first-in-industry safety report, "[A Look at E-Scooter Safety: Examining risks, reviewing responsibilities, and prioritizing prevention](#)". The report was prepared under the guidance of, and with input from, David Strickland, former Administrator of the US National Highway Traffic Safety Administration and the Chair of Bird's Global Safety Advisory Board. It examined internal Bird data as well as information available via third parties to produce an analysis of the safety of shared e-scooters. The publication of this report shows how seriously we take safety. Our commitment to safe and responsible riding does not stop at studying the industry as a whole. We act.

We are advocates and supporters of street design that makes our streets safer and prepares cities for the mobility needs of the future. Bird is actively engaged in this movement, and is closely allied with advocacy groups pursuing these goals in all markets where we operate.

The last few decades have seen tremendous growth in the North East. We at Bird understand the need to work to improve and expand its transport options. Our e-scooters will integrate with existing road, rail, bus and cycling networks, thereby improving mobility and facilitating employment and economic opportunity. Birds are an ideal link to public transport, enabling people to flexibly travel to bus stops or rail stations without the need to use or park a car. Data from Bird's internal surveys, and as a study conducted by the Portland, OR, USA Bureau of Transportation (PBOT), reflect that nearly one in three riders use an e-scooter in conjunction with the bus or train. In Portland, use of the city's bikeshare system also grew during the scooter pilot period, strengthening the evidence that greater transportation options help people make the decision to ditch their cars; we hope and expect to see the same trend in the North East.



Bird invented the e-scooter sharing industry in August 2017; since then, more than 100 cities around the world have benefitted from the last kilometer urban mobility solution we offer. Around a kilometer driven in the average family car adds nearly one pound of CO₂ to the environment. Transferring that ride to a Bird eliminates this harmful emission and can go a long way towards supporting efforts to reduce CO₂ emissions and help the North East's cities to become carbon neutral. In our first year of operations, Bird riders took more than 10 million trips, preventing an estimated 6 million kilograms of CO₂ from entering the air had those been car trips. This amount of CO₂ is equivalent to the output of over 22.5 million kilometers driven by cars.

We know the NECA wants to provide equitable access to high-quality, inter-connected public transport services. A growing North East has been met with infrastructure investment from Government, but we know that in addition to capacity building on road and rail, innovative planning and public transport accessibility are key to keep a growing city moving. Transportation is essential for economic opportunity. Without affordable mobility options, communities are cut off from jobs, schools and community resources, making it difficult for people to get ahead and achieve their full potential. Equitable access to new mobility options is an economic and moral imperative. By offering reliable, low-cost transportation alternatives, Bird helps residents get to their jobs more easily and cost-efficiently.

As metropolitan populations increase, more cars are added to already congested streets. This in turn exacerbates traffic, parking, and the strain on infrastructure. As a result, commute times will increase, and air and noise pollution will continue to threaten the environment and our quality of life. To reverse this trend, we need a future with fewer cars. Bird is proud to be a part of that effort and prove that with the right solutions people can get around without the devastating impact that comes with a reliance on cars.

We greatly appreciate the time officials are taking to consider the first ever trials of e-scooter sharing in the UK and we are very excited by the opportunity to partner with NECA to provide safe, affordable, and enjoyable transportation for all residents and visitors.

Yours sincerely

A handwritten signature in black ink, appearing to read "Patrick Studener". The signature is stylized and fluid, with a large initial "P" and "S".

Patrick Studener
VP, Head of EMEA
Bird



Kings House
King St
Leeds LS1 2HH

Mike Scott
NECA, Regional Transport Team,
Civic Centre,
Regent Street,
Gateshead, NE8 1HH

16.05.19

Dear Mike

Re: CoMoUK support for the development of shared transport mobility hubs.

CoMoUK is a charity playing a leading role in the UK's transition to integrated mobility solutions designed for the public good. CoMoUK supports the development of shared modes; car clubs, bike share, 2+ Ride share, emerging modes such as "on demand" buses and scooter sharing to enable mobility lifestyles which present an alternative to private car ownership. This is achieved through advocacy, research and development.

CoMoUK is working with EU partners from 2019-21 to raise the profile of shared transport solutions. This work will utilise the expertise from both sides of the North Sea. The aim of the project is to develop, implement, promote and assess shared transport options such as car clubs, bike share, ride sharing and other shared transport options. One key element of this project is to support partners in the UK to create mobility hubs on kerbside and pavement space.

Mobility hubs are a new tool which is being used to create space designed specifically to house different mobility modes. They are taking different forms from large city centre hubs to suburban mini mobility stations or those tailored to workplace and housing developments. The advantages of combining modes together include:

- Convenience for local residents and multi modal trips, providing instant switches between modes.
- Choice for different forms of transport for different needs.
- Improved safety and more comfortable especially for more vulnerable users.
- Raised profile for the range of alternatives to private car, giving them a new status and appeal.

- Increased patronage of sustainable modes.
- Opportunities for public realm to be improved for the benefit of the pedestrian and improve footfall for business owners
- Provides an impetus for reductions in parking provision and creation of high-density development.

Mobility hubs can be as simple as a bus stop combined with either car or bike share facilities. More elaborate hubs accommodate a wider range of modes plus personal bike storage, delivery lockers, a ticketing & travel information terminal and electric charging points. There are often non transport related additions such as seating, planting, public art, WIFI and retail outlets.

CoMoUK is offering support to NECA and regional partners with the Future Mobility Zones Fund proposal on the development of mobility hubs.

CoMoUK support will include:

- Sharing expertise and advice from EU partner projects on the design, planning, consultation and implementation phases
- Linking NECA and partners into a network of local authorities developing on mobility hubs in the UK
- Monitoring and reporting on impacts using a nationally agreed framework.

SHARE-North is providing 50% match funding for staff time and external costs associated with work carried out as part of this project. CoMoUK would require 50% of costs for an agreed package of support.

Yours faithfully



Antonia Roberts

Deputy Chief Executive

CoMoUK

antonia@como.org.uk

07792274825

23rd May 2019

Connected Places Catapult
3rd Floor, The Pinnacle
170 Midsummer Boulevard
Milton Keynes MK9 1BP

Mr Mike Scott
Project Lead
Transforming Cities Fund, North east Bid
Regional Transport Team
Civic Centre
Regent Street
Gateshead
NE8 1HH

Dear Mike

Re: Letter of Support – FMZ North East Combined Authority

The Connected Places Catapult (CPC) is a UK-based neutral, not for profit, Technology and Innovation Company. We accelerate smarter living and travelling in and between the places of tomorrow. We focus on growing businesses with innovations in mobility services and the built environment that enable new levels of physical, digital and social connectedness. The Connected Places Catapult operates at the intersection between public and private sectors and between local government and transport authorities. We convene the disparate parts of the market to help innovators navigate the complexity of doing business, creating new commercial opportunities and improving productivity, socio-economic and environmental benefits for places were created to drive and promote Intelligent Mobility using new and emerging technologies and novel commercial models to transport people and goods in a smarter, safer, greener and more efficient way between places.

With a clear emphasis on collaboration, we are bringing together diverse organisations across different modes of transport, breaking down barriers and providing a unique platform for meeting the world's most pressing transport and smart city challenges.

The Future of Mobility is one of four Grand Challenges at the heart of the Government's modern Industrial Strategy. Companies across the world are currently investing billions of pounds in the expectation that we are at the dawn of a whole new era in mobility. New technologies, modes and business models enabled by data and connectivity, automation and electrification are transforming how people and goods move.

We need to analyse, understand and trial future mobility, which could help to foster new mobility innovation, reduce congestion and improve air quality. We have a strong expertise in the evaluation of emerging trends and technologies in the mobility sector, which has matured thanks to the development of Agent Based Modelling and Activity based modelling at large-scale in projects like Mobility on Demand Laboratory Environment (MODLE) and MERGE Greenwich. The North East has already adopted the mindset and the data-driven approach to transport planning, being the test bed for the large -scale demonstrator developed under

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The Connected Places Catapult is one of a network of elite technology and innovation centres established by Innovate UK, as a long-term investment in the UK's economic capability. Applying business-led research, Catapults help businesses transform great ideas into valuable products and services to compete in the global markets of tomorrow.

The Connected Places Catapult is a company limited by guarantee, registered in England and Wales with company number 11837978.

Registered office: 3rd Floor, The Pinnacle, 170 Midsummer Boulevard, Central Milton Keynes, MK9 1BP.

the Demand Modelling and Assessment through a Network Demonstrator (DeMAND) project, also funded by the Department for Transport.

We will use our expertise in Agent based modelling to support the FMZ North East Combined Authority to test the impact of New Mobility Services on the network and the environment, and select the most appropriate solution to achieve greater sustainability and inclusiveness at a regional level. We believe this approach will de-risk the introduction of emerging services whilst supporting innovation.

The Connected Places Catapult will enable the region to continue to develop this capability through the participation to the Institute of Future Mobility, which will allow the region to further consolidate and transfer the learnings from the demonstrators to other places.

The participation to the activity of the institute will include, but are not yet fully scoped, guidance for governance on Mobility as a Service schemes, the development of Activity-based models able to handle CAV logistics and Maas: CAV solutions, Artificial Intelligence applications for data analytics and user research for social inclusiveness of an aging population in mobility initiatives.

The institute of Future Mobility will act as a focal point between local stakeholders, government, industry and Universities and activities will be also supported by the CPC SME Programme and Academic Engagement Programme, which also includes Newcastle University – a partner for the Institute of Future Mobility, as deep academic alliance.

As set out in our Delivery Plan, CPC has a focus on New Mobility services and Connected and Autonomous Transport, which includes a focus on multimodal, data driven-business and service models. This project will help support our focus in this area.

We look forward to working with you on this exciting opportunity.

Your sincerely



Helen Wylde
Chief Engagement Officer



Mike Scott
North East Combined Authority

Dear Mike,

I am writing to you on behalf of Flash to express our support for North East Combined Authority's Future Mobility Zone bid, which includes an ambition to trial electric scooters when the regulatory framework allows.

By way of background, Flash is Europe's micro-mobility champion. We are driven by a shared vision to create cleaner, safer, better-connected journeys. Our custom-made personal light electric vehicles are designed for constant use, offer the highest safety-standards and are built to last. We take our responsibilities very seriously as a partner of city authorities, local communities and all road users in seven European countries already.

Flash wants to help the region, and the UK, meet its transportation and environmental goals by creating more affordable and sustainable travel options.

Currently 68% of UK car journeys are under five miles. We believe that, if managed responsibly and in cooperation with local authorities, e-scooters have the potential to transform cities by reducing congestion and improving air pollution. In particular, we believe they can provide an alternative to short-distance car journeys, especially when used to complement existing public transport networks.

We would welcome the opportunity to work together to specifically address the priorities of creating flexible shared transport links that fill gaps in urban and suburban transport networks, providing first/last mile links to mass transit networks.

In particular, Flash would be best-placed to help the North East deliver some of the interventions set out in its Future Mobility Zone bid, including:

- **Introducing innovative micro-mobility modes** – combining our proprietary vehicles and safety-first, responsible approach, we can best deliver the first UK public trial of e-scooters.
- **Future mobility gateways** – as Europe's largest micro-mobility company, we have the greatest experience of how e-scooters contribute to existing and future transport gateways.
- **Supporting mobility credits** – using our experience from seven different countries, we can best advise how, through technology, micro-mobility can integrate with smart ticketing.

We are an ideal partner for the North East as we are dedicated to changing the way people travel through an environmentally-friendly transportation system, starting with next-generation e-scooters. Flash would be delighted to work with the North East Combined Authority to explore how e-scooters can best meet the region's transport aims. Through trialling such a service we can help the UK to achieve its goals of improving air quality, connectivity and deliver innovative micro-mobility solutions. Accordingly, we are looking forward to a positive evaluation of the North East Combined Authority's proposal.

We look forward to working with you to shape the future of responsible mobility in the UK.

Kind regards,

Gareth Mead
Chief Communications Officer
Flash

Enabling Smart Mobility.

Fluidtime



A Kapsch Group Company >>>

Expression of interest – Future Mobility Zone North East of England

Fluidtime Data Services GmbH

Neubaugasse 12-14/25, 1070 Vienna
Austria

FLUIDTIME is an Austrian IT company providing solutions for integrated mobility applications. The core offering is a cloud-based service (FluidHub) including APIs providing customers with a unified access to information, booking and payment of various transport modes and services. Additionally, the company offers white label APPs giving Mobility Service Providers (incl. Mobility-as-a-Service operators) tools for offering customer services.

The following co-operation opportunities will be investigated:

- Use of the FluidHub technology acting as standardized and aggregated mobility marketplace to launch local MaaS services.

As a supplier of innovative transport technology systems, we support the NEXUS proposal for the Future Mobility Zone in the North East of England.

Fluidtime Data Services GmbH



Masabi Ltd
37 Bevenden Street
London
N1 6BH

NE Regional Transport Team
Civic Centre, Regent Street
Gateshead
NE8 1HH

Friday, May 17th, 2019

RE: North East Future Mobility Zone

Dear Mr Scott,

I am happy to write this letter as a stakeholder in support of the North East's proposal for the Future Mobility Zone funding.

Masabi is a London based, global provider of smart ticketing solutions that make it easier for people within a city to ride public transport by removing the friction associated with buying a ticket. These solutions are significantly more cost effective than traditional approaches as they rely less on ticket media and the associated infrastructure.

I believe that the goals of the North East Future Mobility Zone around ticketing - including a focus on providing solutions for older people, students, people on low income and those without smartphones, points to an inclusive strategy which is very much in line with the objectives set-out in the FMZ call for tenders.

Masabi would like to support the North East Future Mobility Zone by bidding to provide its technology but also bringing together best-in-class partnerships, such as those we have with Mastercard and Uber among many others, to find use-cases that would provide opportunity for a commitment of funding and/or resources to support the implementation of the program, as we have done in cities such as Athens and Adelaide where projects received commercial funding.

Kind regards,

A handwritten signature in black ink, appearing to read "Josh Nicklin".

Josh Nicklin
Head of Global Sales
Masabi, Ticketing for Smarter Cities

LETTER OF SUPPORT FROM MOOVIT

We write in support of the North East Future Mobility Zone (FMZ) proposition that we have reviewed. We are delighted to see the government launch this process. Further to our meeting with the Minister of Transport earlier this year to discuss future mobility, we are particularly encouraged with the government's overall ambition in this policy area and see the North East proposition as a very strong offering based on our experience as a global public transit app operating throughout the world. It is conceivable that the UK can be a world leader in urban mobility in the next few years.

As the leading Mobility as a Service (MaaS) company and the maker of the world's most popular urban mobility app, Moovit serves over 430 million users across 90 countries – including the UK - and over 2,800 cities and metro areas. The app simplifies travellers' urban mobility, making getting around town via all forms of mass transit, including bus, train, tram, metro, walking, bicycles, taxi and on demand services as well as private and shared mobility, easier and more convenient.

By generating over 5 billion passive location data points a day Moovit comprise the world's largest and freshest repository of transit data. The company is aided by its unique community network of more than 550,000 local editors, who help map out and maintain local transit information in cities that would otherwise be under-served. This provides unparalleled and up-to-date coverage, even in cities where transit information is not publicly available.

We have been in dialogue with the North East region for a number of months and welcome their vision on developing an FMZ for the region. Indeed, we are particularly impressed with the level of detail and focus a successful bid would deliver.

As a potential regional stakeholder and working with global partners we are well-placed with our experience to support the North East in the various programme pillars. That could be in underpinning the aspiration for an integrated mobility app, which amongst other things is truly user friendly and accessible for all demographics. Our technology can meet the unique nuances of cities, whether that is incorporating new mobility modes such as e-bike and scooters to supporting first and last mile challenges which if addressed properly will improve the mobility of a city exponentially.

The proposal for an Institute of Future Mobility is an innovative proposition and rightly recognises the power of collaboration which Moovit will look to support. Moovit is keen to further discuss with the North East region as further details emerge.

Moovit sees the huge potential for the North East should it become an FMZ and are committed to help. We are encouraged by the vision set out; the aspiration which though ambitious can be delivered and we hope the department will give strong consideration to the North East in this process.

Yours sincerely,

Alon Shantzer
Vice President, International



National Innovation Centre for Data
Urban Sciences Building, Science Central
Newcastle upon Tyne, NE4 5TG

Mike Scott
NE Regional Transport Team,
Civic Centre,
Regent Street,
Gateshead,
NE8 1HH

Dear Mike,

Letter of Support - North East Transforming Cities Fund Future Mobility Zone

I would like to show our enthusiastic support for your proposal to make the North East one of the Government's three additional Future Mobility Zones (FMZ), as part of the Transforming Cities Fund process.

At the National Innovation Centre for Data (NICD), we aim to deliver data analytics skills into the workforce of UK organisations, enabling them to generate insight and create value from their data. A flexible rolling programme of collaborative projects focussed on organisations' specific data challenges and opportunities help us to transfer practical data skills into the workforce of those organisations so that they can innovate through data - by optimising existing operations or launching new data-driven products and services.

Aimed at encouraging more people to use public transport through an informed transport network, the FMZ proposal is tightly aligned to NICD's overall aim to encourage innovation through insight from data. If the proposal is successful, the FMZ Data Insights Team will collaborate with the NICD core technical team to focus on transport related data science questions. The collaboration will leverage NICD's:

- core technical team skill set. A data science team of PhD qualified experts with skills ranging across data wrangling, scalable computing, maths and statistics, machine learning and data visualisation that can assist and advise on transport specific projects. We envisage input to transport specific projects at 0.2FTE per week each year. (est.~ £30,000p.a.)
- the Catalyst building. A new ground breaking facility that hosts a suite of bespoke facilities and a range of flexible office space designed to deliver new insights through data analytics. Occasional hot desk provision for FMZ personnel. (est.~ £10,000p.a.)
- programme of awareness raising events and activities that are specific to transport domain (est. £5,000p.a.)

We believe the North East FMZ proposal can make a valuable contribution to improving the experience of public transport in the North East, creating experiences and lessons that others can learn from.

Yours Sincerely,

Barry Hodgson, Deputy Director

Mike Scott
Project Lead: Transforming Cities Fund, North East Bid
NE Regional Transport Team,
Civic Centre,
Regent Street,
Gateshead,
NE8 1HH

22/05/2019

Dear Mr Scott

STATEMENT OF SUPPORT - Future Mobility Zone (FMZ) proposal

First of all, I thank you for inviting Newcastle University to be part of this exciting proposal for investment in FMZs in the North East Region. We are well aware from our pioneering research that there is a need to deliver radical changes in the way we travel in the future, if air quality objectives are to be achieved and the climate change challenges are to be met. Tinkering at the edges is non-negotiable when planning for the provision of transport for the 80million population forecasted for the UK by 2050. Instead an integrated approach to providing sustainable first and/or last mile services, linked to current but more effective and efficient mass transit networks, is essential. The actions outlined in your FMZ proposal offer less expensive, seamless, viable, door to door travel options that have real potential to deliver substantial mode shift away from private vehicles to more attractive sustainable options including public transport and non-motorised options.

Therefore, we thank you for allowing us to be proactive in creating the vision for the FMZ proposal, and confirm our full commitment to the FMZ project, and more specifically to the Research Institute, if successfully funded.

Currently we have EU funded projects including Mobility as a Service (MaaS) and eHUBS that are generating new knowledge in terms of data, models and tools, which is transferrable to the NE Region. In eHUBS we will build on recently completed research and identify potential locations for public transport interchange facilities in Manchester where sustainable first and/or last mile innovative services will be provided. These facilities will accommodate pedal and electric bikes, scooters, share ride, car clubs, and freight carriers, and will act as a catalyst for developing new small businesses and innovative services. In addition, stated preference/intention questionnaires will be designed, executed and analysed, collecting data from 5 European cities. Within this project we have resources to transfer the concepts and know-how to other cities in the UK. Therefore, if the FMZ is funded, resources will be available within eHUBS to transfer knowledge and support similar data analysis in the Newcastle Region. In addition, a PhD project funded by the EPSRC, commencing September 2019, is fully aligned with this FMZ proposal in that it is developing mechanisms to understand and influence behavioural change to more sustainable innovative and integrated transport services across the North East.

Our current unique facilities at Newcastle that will support the FMZ and the Research Institute include:

- Access to data from one of the largest charging networks in Europe for electric vehicles, integrated data collection facilities developed with industry capturing and processing urban data in real-time;
- Vehicle and systems data from connected and autonomous vehicle trials (with the only two operating corridors in the UK in the NE);

- Liaison with the regional traffic management and control centre hosted at the University as a research tool;
- Innovative and ultralow emissions logistics trials using remote sensing coupled with simultaneous real-time air quality, noise and meteorological conditions monitoring through the Urban Observatory, a multi-million pound facility monitoring across multiple sectors and scales across the Newcastle and the Region.

The FMZ complements other research at Newcastle University, and therefore the relationship has benefits to the University with respect to:

- Vehicle to grid implementation and second life battery research (through the Siemens Smart Grid Lab and the EPSRC National Centre for Energy Systems Integration);
- Modelling and user-centric design (jointly with the Transport Systems Catapult);
- Mobility for an older population (with the National Innovation Centre for Ageing)
- Smart cities, big data and IoT for intelligent mobility through the National Innovation Centre for Data and the UK Collaboratorium for Research in Infrastructure and Cities (UKCRIC).
- The UK Rail Research and Innovation Network co-funded by Industry and the UK Research Partnership Investment Fund.

The Newcastle University is delighted to be part of the FMZ and Research Institute, and our in-kind contribution to the project will include:

- The equivalent of 6 months of Research Associate resource in eHubs, with Newcastle as a transfer City;
- Participation of staff in the project's stakeholder engagement throughout the project duration, of the region of half a day per month from two staff, 36 days in total
- Participation in management meetings and associated feedback, of the region of half a day every four months from two staff, 9 days in total

Also, it is anticipated that the FMZ will open up new opportunities for on-going and essential research given that transport is at the cusp of a revolution delivering radical changes in provision for mobility. These will render fundamental travel, behaviour, transport and network theories no longer valid and traffic and transportation planning models not fit for purpose. We see the proposed Research Institute will act as a catalyst enabling the North East to become a National Centre for delivery and best practice in sustainable Future Mobility Services.

Yours Sincerely



Phil Taylor

Head of School



**Northumbria
University**
NEWCASTLE

Professor Steven Kyffin Hon Dcl, MDes RCA, BA (Hons), FRCA
Pro Vice-Chancellor (Business and Enterprise)

Date: 20th May 2019
Mr Mike Scott.
NE Regional Transport Team.
Civic Centre
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Vice-Chancellor's Office
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Newcastle upon Tyne NE1 8ST, UK

Executive Assistant: Georgia Elwell

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E: steven.kyffin@northumbria.ac.uk
W: northumbria.ac.uk

Re: Future Mobility Zone Project.

Please accept this letter as confirmation of support from Northumbria University for the Future Mobility Zone project.

Northumbria University is a research rich university with a strong focus on engagement with businesses and developing partnerships.

Our philosophy is to build strong and mutually beneficial collaborations and we have a long and proud history of successful partnerships, Regionally, Nationally and Internationally.

Some of our strengths relevant to this project include:

Data mining and analysis, Mathematical modelling, Electric vehicles and charging systems, Geography and urban studies, Logistics, Design principles, Air quality technology and Customer experience methods.

The University continues to develop its research and teaching offer and will continue to invest in the areas defined by projects like the Future Mobility Zone. We would expect this investment to be increased and accelerated, should this bid be successful.

Professor Steven Kyffin

Professor Steven Kyffin

Vice-Chancellor Business and Enterprise

Northumbria University is the trading name of the University of Northumbria at Newcastle

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stagecoachbus.com



Our Ref: SW/ME

22 May 2019

Mr M Scott
NE Regional Transport Team
Civic Centre
Regent Street
Gateshead
NE8 1HH

Dear Mike

Further to your bid for Future Mobility Zone funding, Stagecoach North East would wish to express its support for the aims of the bid.

We currently have a wide ranging public transport network, offering customers an extensive integrated choice to access employment, leisure and health care. However, this could be further improved using technology to deliver simple, improved information to customers, coupled with improved first and last mile integration making the journey experience even better.

At Stagecoach North East we have also identified further opportunities to enhance the current network using demand responsive transport, linking housing, the airport and business parks to the north of the region. We believe that with the right support in technology and pump primed funding this would deliver a commercial offering to link up the north of the region and be an example of how innovation and investment could improve the economic and environmental benefits to a thriving city region.

In summary we fully support the bid and we are committed to working with Nexus to deliver the public transport strategy the area wishes and deserves.

Yours sincerely



STEVE WALKER
MANAGING DIRECTOR