

Knowledge Quarter

Liverpool

Where great discoveries are made

Transport Vision

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The Bigger Picture

KQ Liverpool

Transport is fundamental to all our lives – getting to work, college, hospital, visiting the city, the cathedrals, the theatres, commuting in, travelling across, by car, by train, taxi, bike or foot. We’re conscious too that the choice isn’t always in our own hands. Working hours, disposable income, travelling out to customers, making deliveries, attending meetings during the day, childcare or caring for the elderly, all dictate our daily routine.

So, what we need in Knowledge Quarter Liverpool (KQ Liverpool), the City Centre and wider City Region, is a fully integrated transport system, where you can easily switch from one transport mode to another, that is green, affordable and accessible. Something that sets us apart from other cities, so that businesses choose us first. We need to be a place that is easy to get to and easy to move around in, a place not only connected locally but internationally too by sea and air.

That’s why connectivity is one of our three priorities in KQ Liverpool, along with creating a fantastic place (a world-leading innovation district, rich in culture) and attracting new investment.

At 450 acres, the KQ Liverpool Mayoral Development Zone is almost half of the city centre, so what we do here with transport will impact across the city region and beyond.

Using the very latest technology, we want to make our city the best connected and easiest to access in the UK, so join us in taking on that challenge. The proposal here, to attract a futuristic transport pilot, is just the start of what we can achieve together.

Colin Sinclair,
CEO, KQ Liverpool



Executive Summary

Our vision is for KQ Liverpool to be a world-leading innovation district, where integrated transport solutions come together to create one of the most economically and environmentally sustainable knowledge clusters in the world.

We’re working closely with Merseytravel and Liverpool City Council to deliver strategic connectivity schemes which will bring forward growth across the city. Our key transport priorities include the development of a new KQ Liverpool rail station, the delivery of enhanced walking and cycling links to create a ‘green grid’ at the heart of KQ Liverpool and a futuristic transit system to better connect people and place.

The 20-minute uphill walk from Liverpool Lime Street to the extremes of KQ Liverpool isn’t practical for everyone, that’s why we need a new ‘last mile’ transit solution to better connect us to the wider city.

We therefore, invite you to work with us on an exciting and innovative opportunity to create an enhanced transit link between KQ Liverpool and key destinations within the city centre.

We’re inspired by the likes of Tallinn, Estonia and Gelderland, Netherlands where recent trials of fully automated, driverless shuttle buses have capitalised on growing interest from global technology giants such as Microsoft and Google to invest in driverless technology. We want to lead the way in the UK on cutting-edge transport technology like self-driving vehicles. We invite innovators to speak to us and discuss what we can achieve together in this field to deliver the high frequency, short distance, round the clock connections that KQ Liverpool needs.

In the longer term we want to be able to build on the success of KQ Liverpool’s transit system and deliver connections to key destinations towards the Arena and Convention Centre, Liverpool Waters and eastward towards Edge Hill Station.

This is just the start of the journey and we’d love to have you on board.



Movement Matters

Every global city has challenges, but we are turning ours into opportunities for change and investment.

Scale - KQ Liverpool is the same size as the historic city centre that is known worldwide. We need to deliver seamless, integrated journeys throughout KQ Liverpool in order to drive productivity and growth.

Wider Connectivity - The 20-minute uphill walk from Liverpool Lime Street to the extremes of KQ Liverpool isn't practical for everyone, that's why we're working on ideas for more innovative transit to link KQ Liverpool with both the city centre and the waterfront. Disruptive collaboration is at the heart of what we do and so, we invite you to help us be innovative in futuristic transport provision. It is this 'last mile' that is our challenge.

Improving the KQ Liverpool environment - We are continually looking to reduce the extent to which cars and other vehicles impact upon KQ Liverpool in order to deliver a more attractive environment for walking, cycling, living, learning and knowledge transfer.

Delivering Safe, 24/7 Access - Our hospital and cultural institutions operate around the clock, so we need to provide safe, convenient transport options for staff, visitors and patients.

Making the Place - This Transport Vision forms only one part of the bigger picture. Joining it together with careful spatial masterplanning, public realm and wayfinding, will be crucial to the success of KQ Liverpool and the wider City Region.

Meeting Travel Demand

The Business User

As KQ Liverpool grows, we will be attracting more and more of the best scientists, innovators and business people.

A priority for us will be to deliver direct connectivity between KQ Liverpool and the city centre towards areas such as the Arena & Convention Centre (ACC), providing seamless integration for professionals who might be visiting a laboratory in Paddington Village in the morning and attending a conference at the Exhibition Centre in the afternoon.



The Tourist

The world-class culture on offer in Hope Street and the surrounding area, including Liverpool Philharmonic, Everyman and Unity Theatres, Metropolitan & Anglican Cathedrals and top bars and restaurants, is a real competitive advantage for KQ Liverpool over a number of other innovation districts, both nationally and internationally.

Investment in enhanced connectivity is needed to reduce the barrier between KQ Liverpool and the city centre for the tourist market. We need to deliver sustainable solutions 'up the hill' between the city and KQ Liverpool, so that for instance, the Cruise Liner passengers can readily move between the different districts more easily.



The Healthcare User

KQ Liverpool is home to a remarkable concentration of assets in healthcare and medical research. Headline investments being delivered in KQ Liverpool include the new Clatterbridge Cancer Centre and Liverpool Royal Hospital as well as the Royal College of Physicians (RCP North) at Paddington Village. These new investments will build upon our world recognised, long established assets including the Liverpool School of Tropical Medicine, founded in 1898.

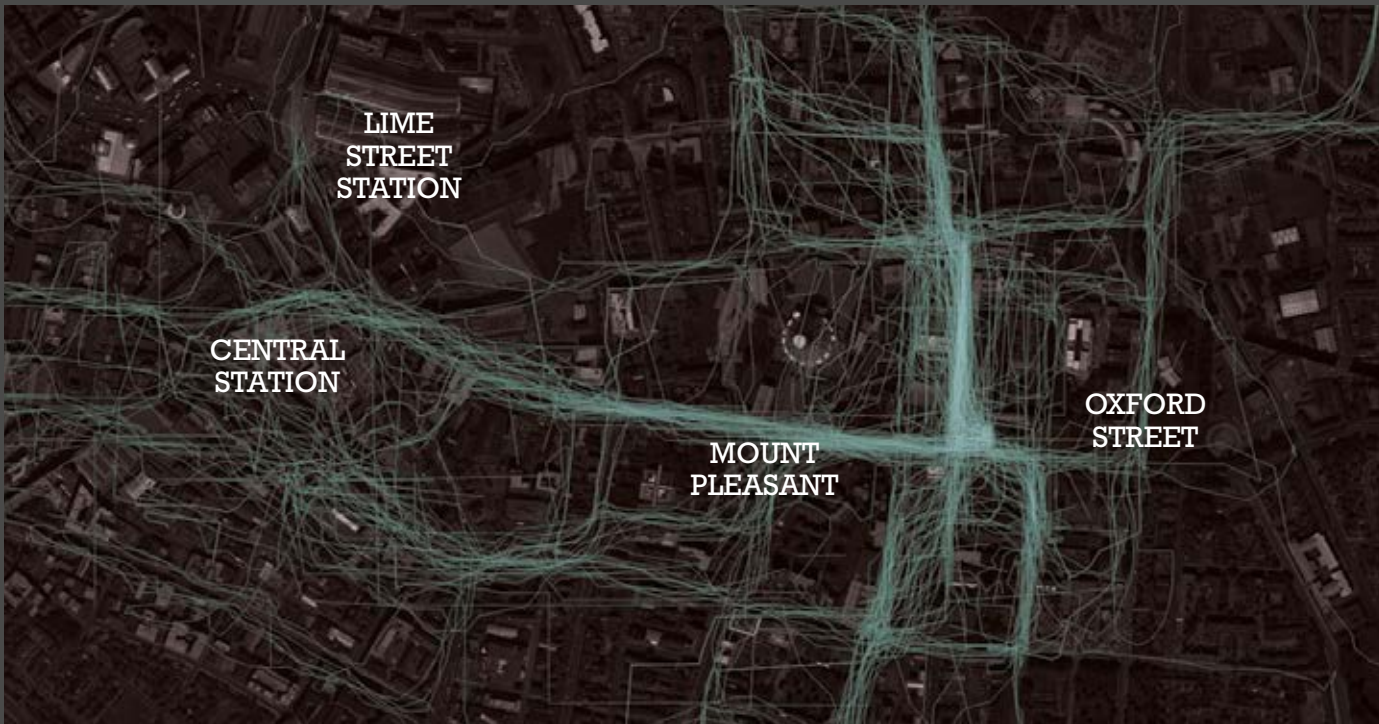
Our existing and emerging healthcare assets generate a significant proportion of total demand for movement to, from and within KQ Liverpool. We must ensure that patients, visitors and staff have 24/7 access to sustainable, safe and convenient travel options.

The Student or Academic

An integrated approach to mobility for all KQ Liverpool users is crucial for informing investment in key infrastructure and making the area a truly connected place. We're making more and more use of mobile data to understand the movement patterns of academic staff, visitors and deliveries, which will enable us to best plan pedestrian and cycle routes, green spaces, car parks and public transport across KQ Liverpool.

The heat map below is part of a study by the University of Liverpool looking into student movements, and demonstrates that Oxford Street/ Mount Pleasant is by far the most well used route between the campus and city centre.

This corridor becomes a focus for us in terms of upgrading walking and cycling routes between KQ Liverpool and the city.



Considering Future Trends

How can we deliver a transport system fit for the 21st century?



Profile & Futureproofing

The raised busway on Boulevard Carnot in Cannes is highly recognisable owing to the use of raised coloured tarmac along its route. The design incorporates attractive stops, enabling it to be converted, if desired, into a conventional tram system in future.



Innovation

Trials of driverless shuttle buses took place in Tallinn in summer 2017, with two-thirds of the trial cost covered by private sector partners. These driverless buses are well suited for high frequency, short distance travel, like many of the connections needed in KQ Liverpool.



Responsive

On the West Virginia University Personal Rapid Transit (PRT) system in Morgantown, services are a mix of scheduled and on-demand trips depending on total network travel demand, providing convenient journeys for users throughout the day.



Scale & Image

Tampa's Street Car system connects the downtown bay area over a 2.7 mile route with 11 stations. A similar transit link for Liverpool would not have to be a city wide network with multiple lines, as Merseyrail already does that. Simple city centre lines could serve key destinations, and link people and places, enhancing our 'city brand'.

Gateways to KQ Liverpool

Current and Future

Lime Street Station is a key gateway into KQ Liverpool, with rail services providing connectivity to regional and national destinations. As part of a £35 million investment into the Lime Street area, public realm will be upgraded further to the front of the station, reducing the domination of traffic. This will create a more pleasant environment for all KQ Liverpool users arriving into and departing the city from the station.

Meanwhile, a short walk to the east of KQ Liverpool is Edge Hill Station, which connects to destinations across the North West and beyond. Better connecting Edge Hill Station to KQ Liverpool could also be hugely beneficial.

With the support of the Mayor of Liverpool we have been working with Merseytravel to deliver a new underground station in KQ Liverpool. The proposal

is to connect Edge Hill to Liverpool Central Station by bringing the existing Wapping Tunnel back into use. The new types of rolling stock make provision for this step change, as trains will in future be able to travel through the underground, onto other parts of the city region and beyond.

The same project could also lead to a new St James underground station serving the Baltic Triangle.

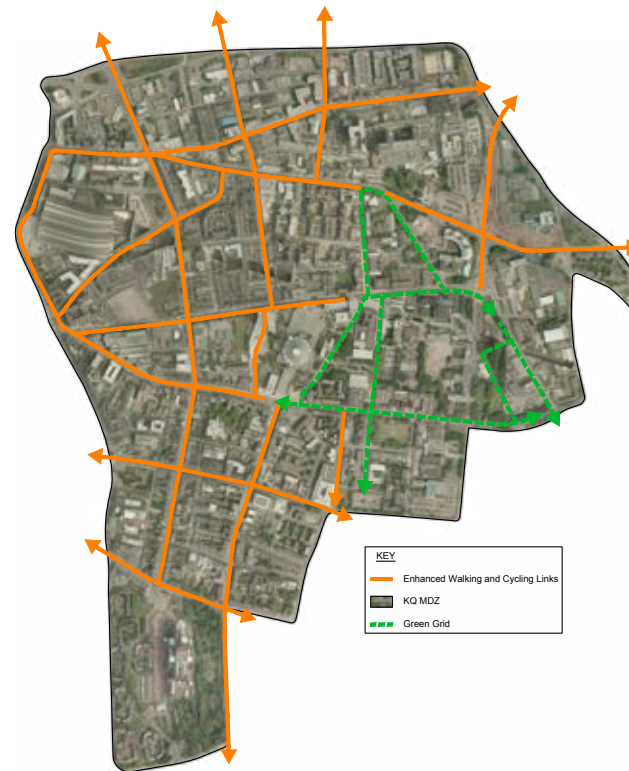


Walking & Cycling

Delivering our vision

The importance of links to, from and within KQ Liverpool for pedestrians and cyclists cannot be underemphasised. These connections are vital to fulfilling our vision to making the place and creating an environment that attracts people to KQ Liverpool to live, work, play and stay.

We are looking at the benefits of a green grid, where the access and movement needs of pedestrians and cyclists are prioritised. Restaurants, theatres and other venues underpin our first-class cultural offer, encouraging connected thinking.



Parking

A collaborative approach

Our transport vision for KQ Liverpool is underpinned by collaboration with our key stakeholders and landowners, including Merseytravel, Liverpool City Council and other private sector partners. Car parking operations is a key focus for our collaborative approach to transport, with previous round table discussions with our partners highlighting their aspirations for a significantly enhanced parking offer in KQ Liverpool, moving away from small pockets of off-street parking to quality gateway locations.

Our aspiration to provide fit-for-purpose and environmentally sympathetic car parks is shared by the city council who are upgrading their car parking offer at six city centre locations, starting with Victoria Street, which is on site now. Through ongoing collaboration with our partners, we'll ensure that car parking in KQ Liverpool is of high quality and easily accessible from the wider road network, reducing the need for vehicles to travel through the area, opening opportunities to rationalise local routes and improve the local environment for pedestrians and cyclists.



Future Transit

A contemporary solution, with its roots in the 20th century

Over the first half of the 20th century electric trams operated along 156km of track across the city centre. Both Brownlow Hill and Mount Pleasant were directly served by the tram system, connecting passengers to the City Centre, Waterfront and the suburbs.

The fundamental aspiration for transit remains much the same, we want to directly connect KQ Liverpool from Brownlow Hill into the city centre and towards the waterfront, delivering seamless journeys for the students, tourists and business users who travel to, from and around KQ Liverpool.

KQ Liverpool is seeking to establish itself as an internationally significant place of innovation - this innovation should be reflected in our transport systems.

Through the research done at our world-class universities and the work being done at places like Sensor City, we can truly lead the way nationally on cutting edge technology, like driver-less vehicles. Crucially these vehicles could help enhance the last-mile link between Lime Square, a proposed scheme at the epicentre of the city, to Paddington Village and Edge Hill Station.



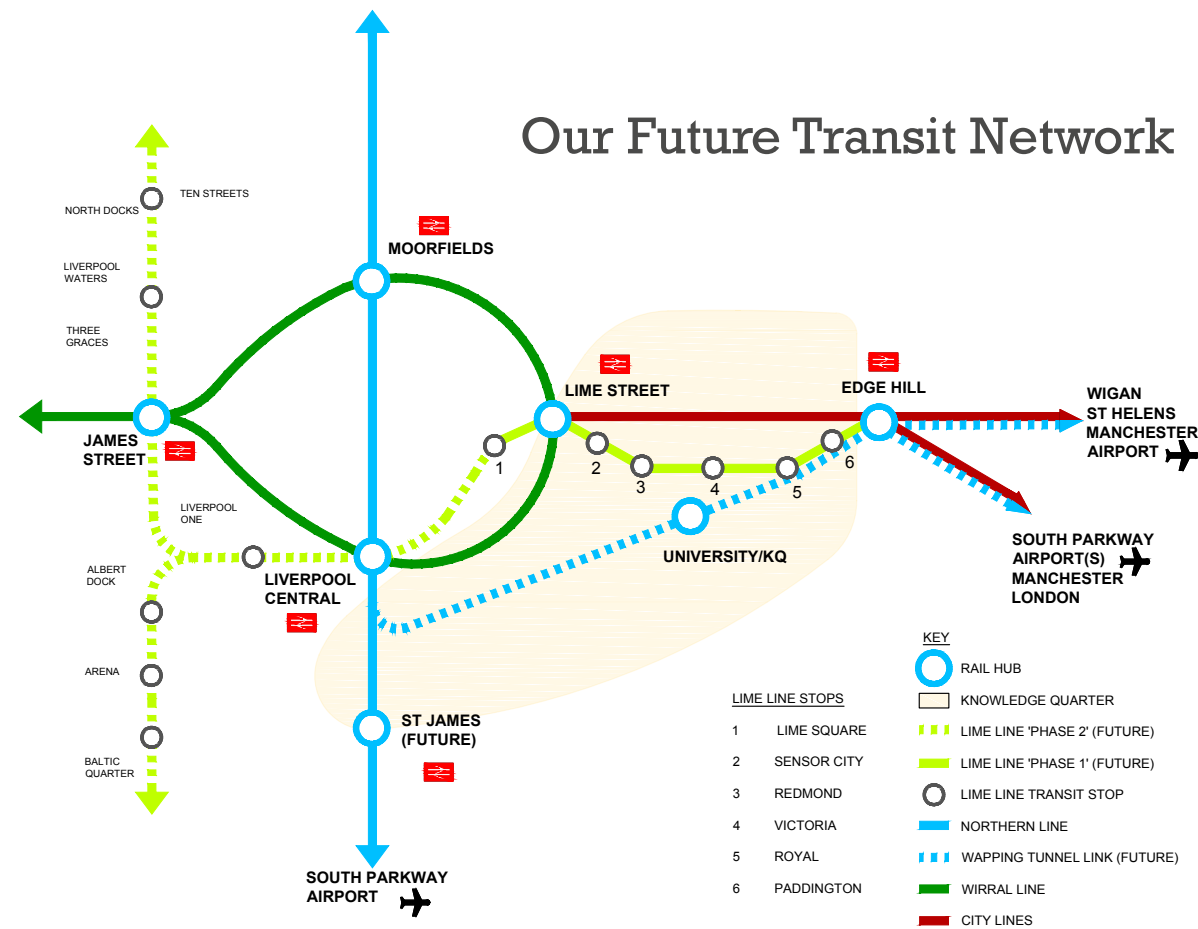
Introducing the Lime Line

How might a new transit system for KQ Liverpool look?

We want to work with partners across the city, and further afield, to deliver a high frequency, convenient transit route, which we are calling the Lime Line, to connect KQ Liverpool with the wider city. This system would provide a functional service for businesses, medical and educational users across KQ Liverpool, as well as being a highly legible service to visitors.

We'll explore opportunities to work with authorities and organisations in other countries which have, or will soon have, completed trials of technology like automated vehicles, with the aim of bringing the most advanced technology to the city. We envisage that the new Lime Line will run from the proposed Lime Square to Edge Hill station, with a further phase linking to the waterfront. Opportunities for technological leadership are strong including delivering safe, flexible, 24/7 connectivity.

This process wouldn't be achieved overnight, but given the growing concentration of world-leading research and technology partners in KQ Liverpool, we have the raw ingredients to drive the development of the Lime Line transit network forward.



Bringing the Lime Line to Liverpool

What happens now

Successful delivery of our transport vision requires joined-up thinking and collaboration with our partners across KQ Liverpool and the wider city region.

Over the past year, discussions within the Joint Stakeholder Transport Group (JSTG), chaired by The University of Liverpool, has helped shape our understanding of our partners' key transport issues, priorities and aspirations, all of which have fed into this KQ Liverpool Transport Vision.

The JSTG represents a wide group of stakeholders from the cities cultural attractions, universities, colleges, hospitals and other public sector bodies such as Liverpool City Council. This strategy has been made possible through that collaboration and now it is time to develop a shared vision.

As explored through this document, we are focused on enhancing KQ Liverpool's connectivity across a range of scales and spaces, ranging from planning and delivering a new KQ Liverpool train station to enhanced strategic connectivity for our area, to delivering a step change in access within KQ Liverpool for pedestrians and cyclists.

We will continue to act as a single point of contact for leads and enquiries in KQ Liverpool and support our existing and emerging businesses and institutions as they flourish. We will achieve this by establishing green links between key employment and education sites, our world-class cultural offer at Hope Street and the surrounding area, by improving connectivity through supporting investment in transit and an upgraded parking offer.

We invite innovators in transport and technology to engage with us and explore the potential of the Lime Line and how we can bring it to Liverpool.



The Bigger Picture

