

AUTOMOTIVE

WE ARE DRIVING INNOVATION.

Image courtesy of Virtual Engineering Centre



**EVERY 90 SECONDS,
A CAR IS PRODUCED IN
LIVERPOOL CITY REGION.**

That's not surprising, because we are internationally renowned for manufacturing and are home to some of the world's leading automotive brands.

With millions invested every year, a strong supply chain, a skilled talent pool and an established cluster, there are countless opportunities for automotive businesses in Liverpool City Region.

We are home to a diverse range of automotive industry businesses, from global giants to innovative SMEs. We succeed because we bring together international OEMs, supply chain companies, university research institutions and government agencies to keep our industry competitive.

We have the businesses, the R&D partners, the facilities, the infrastructure and the support to help you grow in one of the most successful automotive hubs in the world.

Since you started reading this page, another car has been built in Liverpool City Region – another car that delivers a return on investment to our region's automotive businesses. Be part of that.

Liverpool City Region is the exemplar location in the UK leading the way with LCR 4.0

UNPARALLELED SCALE AND DIVERSITY

Liverpool City Region offers unrivalled access to the automotive industry: 95% of the UK's car production is within a three-hour drive.

Our region's automotive sector turns over £95 billion, through a range of household names, niche manufacturers and supply chain businesses.

The breadth and scale of automotive manufacturing ranges from the Briggs Automotive Company, which hand builds 40 ultra-high performance BAC Monos a year, to Jaguar Land Rover, which is based at Halewood, producing more than 160,000 vehicles each year in one of the most flexible and productive automotive operations in the world.

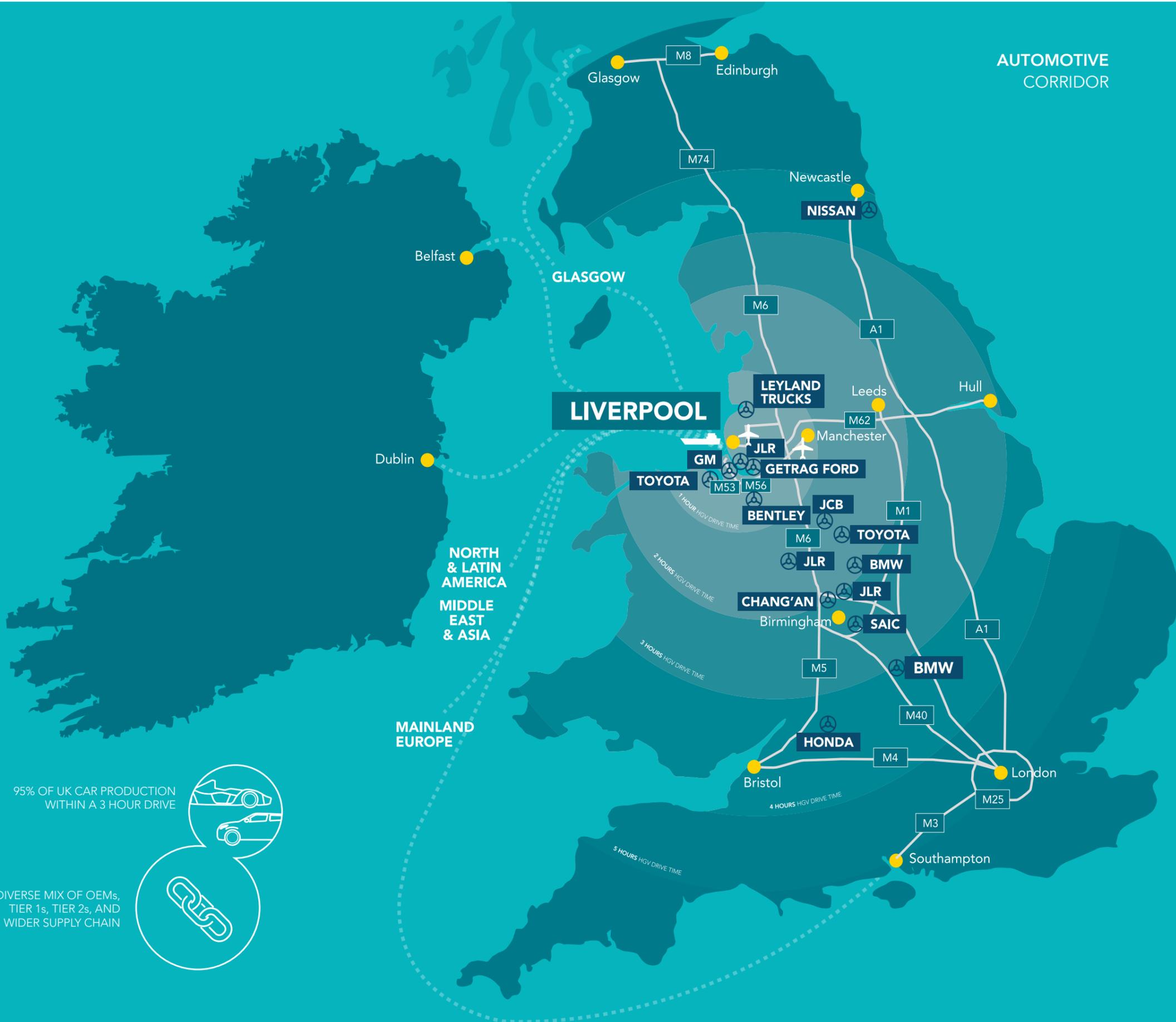
GM's car plant, in Ellesmere Port, is the region's largest. Leyland Trucks are manufactured less than an hour up the road and Bentley's state-of-the-art facility is less than an hour in the opposite direction.

Our automotive cluster has been pioneering innovations, developing skills, building partnerships and delivering returns for many years. Liverpool City Region also offers cost and productivity advantages when compared to other regions:

- The cost of land and property is extremely competitive and operating costs are among the most favourable in the UK.
- Our location and key infrastructure assets make us an ideal base for international manufacturers.
- The proximity to OEMs, not only in automotive but also in aerospace, chemicals, energy and advanced manufacturing, has created fully integrated supply chains.
- Access to the rest of the UK and international customers is made easier thanks to Superport – a £1 billion infrastructure investment, including the deep-water Liverpool2 facility, which is able to service 95% of the world's largest container ships, opening up faster supply chain transit for at least 60% of the existing UK container market.
- Exceptional North/South and East/West road links, main line rail networks to the rest of the UK, including to London and an international airport, with another major airport less than an hour away.

95% OF UK CAR PRODUCTION
WITHIN A 3 HOUR DRIVE

DIVERSE MIX OF OEMs,
TIER 1s, TIER 2s, AND
WIDER SUPPLY CHAIN



BREAKING NEW GROUND

Our long-term automotive strategy for sustainable growth offers a wealth of support to businesses.

It's based on a commitment to building a strong network of global brands, international OEMs, SMEs and larger businesses, which creates a fully-integrated industry cluster, able to capitalise on opportunities, reduce operating costs and grow together.

In that network are the academic, R&D and innovation sectors, which make Liverpool City Region unique. With pioneering work in the low carbon economy and leading the way on such innovations as hydrogen fuel cells, our sci-tech and engineering talent is world-class.

The University of Liverpool's Virtual Engineering Centre, at Sci-Tech Daresbury, is the UK's leading centre of virtual engineering technology integration for industrial and commercial applications.

Its virtual design and manufacture capabilities use the latest 3D visualisation and physics-based simulations, allowing businesses to explore designs and optimise manufacturing and maintenance processes.

Liverpool John Moores University is one of the largest, most dynamic universities in the UK. Its Faculty of Engineering and Technology Research Institute brings together a broad range of disciplines with industrial and commercial applications.

Its Manufacturing Technology Centre is the first regional offshoot of the national Manufacturing Technology Centre Catapult. This boosts Liverpool City Region's links with Innovate UK, the national innovation agency, to provide an innovation hub for local businesses that builds and commercialises new products, offers funding streams and maximises the benefit of emerging technologies for our businesses.

Within an hour of our city region, there is more great engineering talent at universities in Manchester, Salford, Lancaster and Preston. In addition to our universities, there are several internationally significant science assets, such as STFC Daresbury Laboratory and The Cockcroft Institute, based at Sci-Tech Daresbury, along with 100 other technology companies, including IBM and Lockheed Martin.

As part of our commitment to the Industrial Internet of Things and Industry 4.0 Liverpool City Region is leading on sensors, big data and robotics.

As the exemplar region in the UK, our 'LCR 4.0' programme is creating an infrastructure that connects physical and digital assets and creates partnerships between our manufacturing and digital sectors.

Projects include Sensor City – a University Enterprise Zone and one of the world's first incubators dedicated to the development and exploitation of sensor technology – and the world-class Engineering and Technology Research Institute, with internationally renowned facilities that include the Advanced Manufacturing Technology Research Laboratory.

We also have the Hartree Centre, a leading collaborative research and innovation centre focused on accelerating the adoption of data-centric computing, big data and cognitive technologies by industry to create a competitive advantage for our businesses.

Our long-term strategy and vision creates the environment for businesses to collaborate with a world class research community, which drives sustained commercial success.

INDUSTRY 4.0
EXEMPLAR REGION



UK HUB FOR HIGH
PERFORMANCE
COMPUTING
AND BIG DATA



CASE STUDY: HOME OF ICONIC BRANDS

The scale and diversity of our vehicle manufacturing operations is enormous, with cutting-edge, niche makers and high-volume, household names producing some of the world's favourite cars.

BAC (Briggs Automotive Company) produces 40 vehicles a year and has an eager international market clamouring for the Mono hypercar. At the other end of the spectrum is Jaguar Land Rover, which produces more than 20 of the world's best-selling vehicles every half hour.

The **BAC Mono** is a lightweight, ultra-high performance hypercar, designed and manufactured using the latest racing technology. BAC has gone from start-up to global sales and has won both accolades and admirers around the world.

The firm proudly sources from local companies, thanks to our pool of automotive suppliers and with BAC showrooms in North America, Hong Kong and Japan, our region's automotive products and components have made an international impact.

Not far from BAC is Jaguar Land Rover's factory, where a car comes off the production line every 90 seconds.

This 300-acre site is home to the **Land Rover Discovery Sport** and the **Range Rover Evoque** – two of the most-loved vehicles from this globally-iconic brand.

The workforce has more than trebled, since 2010, with over 4,000 people now employed at the premium full body and assembly plant. Production has also trebled, during the same period, thanks to £500 million of investment in new machinery and infrastructure.

Much of the assembly is carried out by nearly 800 advanced robots in a body shop that is the size of 22 football pitches and the cars built here are exported to more than 170 markets around the world.

UNRIVALLED OPPORTUNITIES

Liverpool City Region is the place to be for automotive industry businesses. We offer unrivalled opportunities and strong returns on investment.

Jaguar Land Rover awarded £6.5 billion in UK supplier contracts between 2011 and 2014 and the Halewood factory benefited from investment of more than £130 million in 2016/17.

There are huge opportunities in the electronics sector, within Liverpool City Region's automotive industry and across advanced manufacturing and engineering. With incentives and support available to businesses, this area could generate significant returns.

With 3,000 manufacturing and engineering companies, including internationally recognised aerospace and marine engineering businesses, across the region, there is already an established integrated supply chain.

Businesses, such as Jaguar Land Rover, GM, Getrag Ford, Mackie Automotive Systems, Delphi Delco Automotive Systems, Lear Corporation, Rolls Royce, Airbus and BAE are part of major manufacturing and engineering sectors that employ 50,000 people skilled in fabrication, manufacturing and assembly. This is the largest talent pool in UK with expertise that is directly relevant to or transferable to the automotive sector.

Major manufacturers, established automotive businesses and innovative start-ups choose to locate to and invest in Liverpool City Region because of the cost and productivity advantages over other regions.

The cost of land and property is competitive and operating costs are among the most favourable in the UK. Our people are highly productive, with Liverpool leading the UK in productivity growth.

From 2004-2012 we showed a 34% increase in productivity, with economic output per job in advanced manufacturing at £47,305, 7% higher than the UK average.

Our location and infrastructure make Liverpool City Region an ideal base for businesses trading across the UK and internationally, with our growing ports, road and rail links and airports.

Right in the middle of Britain, Liverpool City Region has superb links, both across the country and to the North and South of the UK. We are also a gateway to the world, with the Superport cluster of logistics assets benefiting from a £1 billion intermodal infrastructure investment and the deep-water Liverpool2 able to service 95% of the world's largest container ships, opening up faster supply chain transit for at least 60% of the existing UK container market.

Liverpool John Lennon Airport has flights to all major European business centres, while nearby Manchester Airport has direct flights to 200 destinations and extensive freight and logistics facilities to support the import and export of goods to and from all major global markets.

For the UK market, the region is well-connected. London is just two hours away by train – with services every hour – and our motorway connections put the majority of UK cities, from Glasgow to Southampton, within a five-hour drive time.

Liverpool City Region's role in the national and global automotive industry has never been more relevant, as we offer businesses the opportunity to reach customers across the UK and around the world.

CASE STUDY: CUTTING-EDGE INNOVATION

Our automotive industry is backed by some of the most innovative facilities anywhere in the world.

The **Virtual Engineering Centre (VEC)** is the UK's leading centre for virtual engineering technology. Working with **Bentley Motors**, the Northern Automotive Alliance and local tech firms, it pioneered 'STRIVE' (Simulation Tools for Rapid Innovation in Vehicle Engineering).

By creating a unique framework to evaluate the assessment, verification and integration of VR technologies and immersive environments, VEC helped Bentley cut the development time of its flagship **Mulsanne** from 54 to 48 months.

Mark Harding, Manufacturing Project Leader for Continental and Flying Spur at Bentley Motors said: "The positive impact on the business gained from the deployment of the new toolsets at the Bentley site has been a direct result of this innovative collaboration between us, the University's Virtual Engineering Centre and agile, North West-based SMEs."

Sigmatex develops and manufactures carbon fibre textiles for composite material applications, supplying woven carbon fibre textiles to the world's top supercar manufacturers, as well as high-performance leisure brands and major aerospace companies.

Sigmatex are opening up new approaches to design, which achieve higher technical performance through lightweight strength. Its automotive R&D team in the Lightweighting Centre of Excellence, works with brands, including **Nissan**, **Bentley** and **Emerald Automotive**.

Surface Transforms plc is the UK's only manufacturer of carbon-ceramic brakes for automotive use. It develops proprietary technologies to create innovative, lightweight, high energy-dissipating braking system materials for high-performance applications.

Founded here in 1992, Surface Transforms supplies high-profile brands, such as **Koenigsegg** and **Briggs Automotive Company**, as well as providing aftermarket products. It also won the contract to supply carbon ceramic brakes for the **Aston Martin Valkyrie** hypercar, which is being designed in conjunction with the **Red Bull Formula 1** team.



Image courtesy of Peel Ports



SUPPORTING YOUR INVESTMENT

Liverpool City Region's long term automotive sector strategy is built on years of expertise and sustainable growth.

Since 2009 during a prolonged period of economic uncertainty in the UK and across the globe, Jaguar Land Rover's Halewood factory showed a 390% increase in volume. This is testament not only to the firm's own offer and strategy but also to Liverpool City Region's resilience, stability and forward thinking.

We do this by supporting growth and investment, with specialist teams across the six local authorities, the Local Enterprise Partnership and our networks of business and research institutions that work together to ensure prosperity and strong returns.

Liverpool City Region offers a range of incentives and support, including funding packages to businesses. Liverpool is within an assisted area and has several Enterprise Zones, which offer additional incentives.

Financial support includes:

- The LCR Single Investment Fund
- A range of financial products from Merseyside Special Investment Fund
- Lower rate corporation tax
- Innovate UK funding
- R&D Tax Credits
- Patent Box (a further reduction in Corporation Tax)
- Funded R&D partnerships
- Recruitment
- Training support

To find out more about this support, visit www.investliverpool.com



THE RIGHT PLACE FOR YOUR PEOPLE

Liverpool City Region offers a lifestyle and quality of life to suit everyone: it is one of the best recruitment and retention tools when relocating.

With the historic and cosmopolitan city of Liverpool at its core, along with breath-taking coastlines, unspoilt woodland, grand Georgian terraces and leafy country lanes, our region is an excellent place to live and work.

Our region boasts some of the top universities and ranks consistently highly in lists of the UK's friendliest cities.

A vibrant nightlife of music venues, clubs and restaurants always offers something new, with cuisines from across the globe, world-class fine dining and a rich musical culture that continues to break new ground.

We have the largest collection of museums and galleries of any UK region outside of London and are home to a range of internationally renowned theatres, which contribute to our world class cultural offering.

In Liverpool, there is the £1 billion Liverpool ONE retail and leisure development, with shops, cafés, restaurants and bars spanning 42 acres. There is also a range of other leisure and retail developments across the city. As you explore our region you will find everything from bustling markets to vibrant village centres.

A spectacular National Trust coastline, nature reserves and wildlife, a UNESCO World Heritage Site, Open-hosting golf courses, the world's greatest steeplechase (the Grand National), two Premier League football clubs and Super League rugby clubs are just some of our leisure and sports offerings.

If you want to attract the best people, you need to offer them the best place to live and work and Liverpool City Region truly delivers.

10 cars are produced in Liverpool City Region, in the time it takes to read this brochure from cover to cover.

We have a team of business location experts from across Liverpool City Region that can assist you with your next project.

We can provide detailed research on markets, sectors and workforce demographics. We can put you in touch with the right contacts at industry networks and partner organisations. We're happy to introduce you to potential partners at our world-class universities and our existing businesses. We can help you to identify all the available support to help your expansion and show you a wider range of sites, premises and development opportunities.

Email us at LCR@investliverpool.com or telephone +44 (0)151 600 2930 for help and we look forward to working on your plans with you.

investliverpool.com

INVESTLIVERPOOL

ADVANCING THE CITY REGION

