LEEDS CITY REGION

HEALTH AND INNOVATION

NOVEMBER 2014
AN ECONOMIC POWERHOUSE WITH GLOBAL REACH, LEEDS CITY REGION BRINGS TOGETHER ENERGY, AMBITION AND A WEALTH OF TALENT TO FUEL A GROWING ECONOMY. SET AGAINST THIS BACKDROP IS A UNIQUE AND INFLUENTIAL HEALTH AND INNOVATION ECOSYSTEM THAT MAKES OUR REGION UNLIKE ANY OTHER, PROVIDING AN UNEQUALLED OPPORTUNITY FOR INVESTMENT AND GROWTH.

WHEN YOU THINK HEALTH AND INNOVATION, THINK LEEDS CITY REGION.
THINK

HEALTH

A unique opportunity
Health and innovation is a priority issue worldwide. nowhere more so than in the UK which boasts the largest single health economy in the world. we aim to position Leeds city region at the centre of this activity. for centuries, Leeds has built a reputation for enabling healthy and productive lives, enabled by our unique ecosystem. our ambition is to become the UK’s first health innovation hub and cement our position as an ideal investment launch pad into the UK health market.

Time to put health first

The changing population

Global population growth and the rise in numbers of people with dementia two common global drivers will place a greater demand for healthcare services.

Higher interest in personal health and rising incomes

Global increases in concerns over health combined with rising incomes and increasing consumerism will accelerate demand for healthcare services.

Increasing prevalence of health conditions

Global population growth and the rise in numbers of people with dementia will place a greater demand for healthcare services.

Investment in regenerative medicine

One of the eight great technologies to watch and investment is being channelled into this sub-sector.

Technological advances

The increasing importance of big data and the development of robotics and autonomous systems, synthetic biology and new advanced materials, will lead to innovations in the health and personal care sector and demand for technical skills and support.

The personalisation agenda and independent living

Policy changes are underway to give adults more control over the support they need, which impacts a key health sector: adult social care.

193,000 health & life sciences jobs within Leeds city region

Well positioned to leverage the global drivers for health and innovation
THINK  INNOVATION
A UNIQUE ECOSYSTEM, UNRIVALLED ACCESS TO MARKET, EXCEPTIONAL TALENT POOL AND ATTRACTIVE SUPPORT PACKAGES MAKES LEEDS CITY REGION PERFECTLY POSITIONED FOR INVESTMENT IN HEALTH AND INNOVATION.

Leeds City Region at the heart of the UK’s commitment to Digital Health and Care:

- The UK will continue to dominate the EU telehealth market
- It has the world’s largest unified healthcare market with a spend of £120 billion in 2013/14
- The UK is dedicated to moving towards an integrated health and care system
- eHealth has been identified as a major growth area
- The UK is the world leader in open data
- The country is set to have the best superfast broadband network in Europe by 2015
- The Government and NHS are investing £1 billion in technology over the next 3 years
The Leeds City Region has a unique health and social care ecosystem, and is proud of its collaboration across private, public, and voluntary sectors. This is perfectly complemented by our support for the collaboration between clinical innovation, medical technologies, and engaging communities.

We are also a recognized leader in commissioning and delivering integrated health and social care services – both in the UK and internationally.

We believe that our health ecosystem is unique for both its connectivity, locally and its reach, nationally (with government) and offers a distinctive opportunity to launch and accelerate investor growth ambitions in the UK and beyond.

**AN ECOSYSTEM LIKE NO OTHER**

**Main areas of investment focus**

- Medical technologies
- Engaging communities
- Health informatics

**THE NHS FIVE YEAR FORWARD VIEW STATES THE NEED TO**

**IMPROVE THE NHS’ ABILITY TO UNDERTAKE**

**RESEARCH AND APPLY INNOVATION – INCLUDING BY**

**DEVELOPING NEW ‘TEST BED’ SITES FOR WORLDWIDE**

**INNOVATORS, AND NEW ‘GREEN FIELD’ SITES**

**WHERE COMPLETELY NEW NHS SERVICES WILL BE DESIGNED FROM SCRATCH**
LEEDS CITY REGION’S HEALTH PRIORITIES

CITIZEN CENTRED
Quality outcomes delivered at pace on the citizen’s terms. From prevention to after care, it will be enabled by data supporting proximity and with genuine compassion at the point of care.

ACCELERATED INNOVATION
Through a commitment to personalisation and the use of anonymised data we will provide improved understanding and better insight to drive better health outcomes.

CONNECTING HEALTH THROUGH INTEGRATION
Our health system will draw on global capabilities to deliver the highest standards while remaining local and personal. Technology will enable new, user-friendly interfaces delivered to patients’ standards and preferences.

SUPPORTING GROWTH IN OUR HEALTH ECONOMY
The transformation will create new opportunities for both private, public and third sector organisations in a wide mix of new collaborative delivery models.

EFFICIENT AND EFFECTIVE
We will support the redesign of care models alongside the strengthening of workforce skills spanning the whole clinical pathway.

We want investment that accelerates personalisation, making these solutions available to all and quickly.

We need investors who can help us deliver the best social and technological innovation to support our focus on Technology Enabled Care Services.
Leeds City Region is at the forefront of global research and development in health and innovation, with world-leading academic talent delivering world-leading results. This in turn drives our health informatics and manufacturing capability. Our strength in health and medical manufacturing stems from close links fostered between industry, academia and government.

We are building our future on an integrated health and wealth agenda that significantly contributes to the UK Government’s Health and Wealth Strategy. Our competitiveness in medical technology manufacturing is based on a global reach supported by a committed local base. That derives from a culture that values manufacturing capability, particularly design engineering, both for past contributions and its future critical role in securing the rapid growth of the region’s economy from £54 billion to £60 billion by 2019.

We will achieve this by continually deepening and broadening the relationships within our health ecosystem through an ambitious programme of investment to catalyse innovation across Bio Informatics (including Diagnostics), Bio-Incubation (including Bio marker and sensors) and Clinical Training and Simulation.

**A FORMULA FOR SUCCESSFUL HEALTH AND INNOVATION INVESTMENT**

**CENTRES OF EXCELLENCE**

Centres of excellence for medical research in Leeds, York, Huddersfield and Bradford universities.

**KEY DECISION MAKERS**

Informal access to key decision makers – home to NHS England, the Health and Social Care Information Centre, the NHS Leadership Academy and Health Education England.

**AN ESTABLISHED HUB**

For health and innovation, leveraging our expertise in med tech and health informatics through community engagement.

**HEALTH INFORMATICIANS**

The largest number of health informaticians in the UK.

**STRENGTHS IN DATA AND TECHNOLOGY**

A health ‘test kitchen’ using our strengths in data and technology, using the demographics of the region which are perfectly representative of the wider UK population.

**INTEGRATION THAT OFFERS UNRIVALLED OPPORTUNITIES**

Leeds City Region is at the forefront of global research and development in health and innovation, with world-leading academic talent delivering world-leading results. This in turn drives our health informatics and manufacturing capability. Our strength in health and medical manufacturing stems from close links fostered between industry, academia and government.

We are building our future on an integrated health and wealth agenda that significantly contributes to the UK Government’s Health and Wealth Strategy. Our competitiveness in medical technology manufacturing is based on a global reach supported by a committed local base. That derives from a culture that values manufacturing capability, particularly design engineering, both for past contributions and its future critical role in securing the rapid growth of the region’s economy from £54 billion to £60 billion by 2019.

We will achieve this by continually deepening and broadening the relationships within our health ecosystem through an ambitious programme of investment to catalyse innovation across Bio Informatics (including Diagnostics), Bio-Incubation (including Bio marker and sensors) and Clinical Training and Simulation.

**A FORMULA FOR SUCCESSFUL HEALTH AND INNOVATION INVESTMENT**

**CENTRES OF EXCELLENCE**

Centres of excellence for medical research in Leeds, York, Huddersfield and Bradford universities.

**KEY DECISION MAKERS**

Informal access to key decision makers – home to NHS England, the Health and Social Care Information Centre, the NHS Leadership Academy and Health Education England.

**AN ESTABLISHED HUB**

For health and innovation, leveraging our expertise in med tech and health informatics through community engagement.

**HEALTH INFORMATICIANS**

The largest number of health informaticians in the UK.

**STRENGTHS IN DATA AND TECHNOLOGY**

A health ‘test kitchen’ using our strengths in data and technology, using the demographics of the region which are perfectly representative of the wider UK population.
THINK SMART
Leeds City Region has a large and skilled labour pool (including the UK’s largest manufacturing labour pool). Economies of scale in science, engineering and technologies drive high levels of productivity and engrained commitment to quality and technical excellence. Six sigma principles are widely recognised and applied across the region’s manufacturing base.

The region’s unique ecosystem also ensures a great depth of capability and talent. In addition to that, there is a ready-made collaborative network critical to driving innovation and establishing a value-added supply chain.

With GVA at £55 billion and a forecast growth of £5 billion over five years, as well as the UK’s largest workforce (1.3m) outside London, our economy is individually bigger than nine EU countries.

Equally as impressive, is the fact that thanks to close links between business and the region’s nine universities, Leeds City Region boasts one of the UK’s most highly skilled workforces with 100,000 graduates being produced each year. As the region has one of the highest graduate retention rates in the UK, you can readily access the right talent and skills for growth.

THE QUALITY, EFFICIENCY AND DEDICATION OF THE WORKFORCE IN THE AREA HAVE INCREASINGLY ALLOWED TUNSTALL TO BRING EVEN MORE OF ITS MANUFACTURING DEVELOPMENT AND SERVICE ACTIVITIES TO THE LEEDS CITY REGION.

Gill Baldwin, Chief Executive, Tunstall (world’s leading provider of telecare and telehealth)
MEDICAL TECHNOLOGIES, BIOTECHNOLOGIES AND PHARMACEUTICALS

Leeds City Region is home to over 100 companies specialising in medical devices, biotechnology and pharmaceuticals. Together they employ over 3,500 people. They produce a diverse range of products within the main sub sectors of medical and surgical equipment, orthopaedic prosthetics, wound care, personal appliances, specialty ICT solutions and dentistry.

The region boasts a strong manufacturing and support services base in the field of specialised medical devices, with many award-winning companies exporting to a range of overseas markets.

ROBOTICS AND AUTONOMOUS SYSTEMS

The demand for medical robots makes this a high growth area. Both Leeds and York universities are developing research in this field and the University of Leeds will host the Engineering and Physical Sciences Research Council (EPSRC) National Facility for Innovative Robotic Systems.

REGENERATIVE MEDICINE

The University of Leeds is one of only 10 UK universities to receive research grant funding in this field. Leeds City Region has an important concentration of health expertise intent to improve hospital and NHS infrastructure.

BIG DATA

Leeds Institute of Data Analytics has ten specialists in data analysis with a joint up approach to data and NHS England’s patient record system. The University of Leeds is recognised as one of the top universities in the UK for Big Data analytics. In addition, many elements of the large Yorkshire services sector in Leeds City Region are at the forefront of commercial Big Data applications.

THINK CAPABILITY

REGENERATIVE MEDICINE

The University of Leeds is one of only 10 UK universities to receive research grant funding in this field. Leeds City Region has an important concentration of health expertise intent to improve hospital and NHS infrastructure.

BIG DATA

Leeds Institute of Data Analytics has ten specialists in data analysis with a joint up approach to data and NHS England’s patient record system. The University of Leeds is recognised as one of the top universities in the UK for Big Data analytics. In addition, many elements of the large Yorkshire services sector in Leeds City Region are at the forefront of commercial Big Data applications.

THE UK’S LARGEST NHS TRUST AND LARGEST TEACHING HOSPITAL IN EUROPE

The trust treats around 1 million patients a year with a budget of £1 billion. It is internationally renowned for clinical expertise in transplant surgery, oncology, radiology and radiotherapy.

Leeds City Region is a powerhouse in terms of its contribution to the UK healthcare sector, with world leading companies, clinical expertise and research and development capacity across its universities, hospitals, healthcare and medical device manufacturing sectors.
THREE REASONS TO INVEST

THINK KNOWLEDGE

• 12 universities in the wider city region
• Over 210,000 students from 150 countries
• Contributing £2.6bn to the economy
• Generating jobs, driving innovation and driving enterprise
• Over 36,000 qualified nurses, midwives and health visitor professionals currently employed within the NHS
• The region has the largest number of health informaticians in the UK with over 2,000 in public and private sector

THINK INNOVATION

• National Institute for Health Research (NIHR)
• Leading centre for Covance Clinical Trials
• Academic Science Network
• Health and Social Care Information Centre (the world’s largest clinical audit)
• Leadership of the National Diabetes Audit

THINK OPPORTUNITY

• Home to one of the largest networks of primary and secondary care in Europe
• Hosts one of the UK’s largest pathology labs
• UK’s largest workforce outside of London (1.3 million)
• The UK is the world’s largest health economy with a £120bn spend on health and social care in 2014
• Four out of five UK National Health Service bodies headquarters are in Leeds City Region
Unrivalled access to market.
Leeds City Region is located in the heart of the UK with excellent transport links to the rest of the country as well as further afield. Thanks to this broad network of road, rail, air, and sea routes even the largest shipments can be transported quickly and efficiently.

Our exceptional transport network allows for reliable and affordable public transport which in turn provides easy access to a large pool of potential employees.

This connectivity is set to go on improving with major investment coming in the form of the high-speed railways HS2 and HS3. A sure sign that the Government recognises the importance Leeds City Region has to play in the country’s continued economic growth.

As well as this, we are also improving our digital connectivity. Leeds City Region already has extensive broadband coverage, but plans are underway to make it even better through significant private and public investment. This includes around £100 million public sector investment over next 3 years.

Uniquely, Leeds City Region is home to the headquarters of four of the most important UK National Health Services bodies:

- NHS England, responsible for over £100 billion annual healthcare spend
- The Health and Social Care Information Centre, which hosts national health and social care data collections
- The NHS Leadership Academy, responsible for leadership development and training throughout the NHS
- Health Education England, the national body for organising healthcare education and training. Leeds Teaching Hospitals Trust is the largest in the UK and includes one of the largest teaching hospitals in Europe.

**WELL PLACED FOR SUCCESS**

**WELL CONNECTED**

<table>
<thead>
<tr>
<th>Location</th>
<th>Distance</th>
<th>Transport Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LONDON</strong></td>
<td>175 miles</td>
<td>Two hours by train (44 direct trains a day from York, 37 from Wakefield and 36 from Leeds) and three hours by road</td>
</tr>
<tr>
<td><strong>MANCHESTER</strong></td>
<td>40 miles</td>
<td>One hour by road and rail</td>
</tr>
<tr>
<td><strong>SHEFFIELD</strong></td>
<td>35 miles</td>
<td>45 minutes by road and rail</td>
</tr>
<tr>
<td><strong>HULL AND Humber Ports</strong></td>
<td>50 miles</td>
<td>One hour by road and rail</td>
</tr>
<tr>
<td><strong>NEWCASTLE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GLASGOW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LIVERPOOL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BIRMINGHAM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BRISTOL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDINBURGH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SHEFFIELD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HULL</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AIR TRAVEL TO KEY BUSINESS DESTINATIONS**

- Leeds Bradford International Airport serves 70 destinations in 30 countries across Europe, North America and Asia.
- Six other airports within easy reach:
  - Leeds Bradford International Airport (within one hour by road and rail)
  - Manchester Airport (within two hours by road and rail)
  - Edinburgh Airport (within two hours by train)
  - London Heathrow (within one hour and 15 minutes by train and Amsterdam Schiphol, which is one hour and 15 minutes by direct flight from Leeds Bradford International Airport)
SUPPORT PACKAGES TO ENCOURAGE GROWTH

LEEDS CITY REGION WORKS CLOSELY WITH INWARD INVESTORS TO IDENTIFY FUNDING THAT CAN FACILITATE PRACTICAL BUSINESS SOLUTIONS. THIS INCLUDES THE USE OF OUR INVESTMENT FUND WHICH HAS BEEN TAILORED TO THE NEEDS OF INVESTORS AND REDUCE THEIR RISK.
We’re very proud of our region’s high standard of living, which includes a wealth of rich cultural attractions and stunning scenery. Our three National Parks as well as stunning coastlines make us the perfect place to relax and make the most of life. Whether for those seeking more excitement, our cosmopolitan and modern cities offer a vibrant mix of retail, culture and commerce. We love our sport, well versed in hosting major sporting events from the ICC Cricket World Cup and the Rugby World Cup 2015.

Together these factors ensure Leeds City Region is thriving, dynamic and desirable place to live and work. The addition of excellent schools, a first class health service and endless leisure activities help businesses attract and retain the very best talent.

WE’RE SO MUCH MORE THAN JUST AN INVESTMENT OPPORTUNITY

THRI VING, DYNAM I C AND DE SIR ABLE
TO FIND OUT MORE ABOUT LEEDS CITY REGION AND HOW YOUR BUSINESS CAN BENEFIT HERE PLEASE CONTACT:

LIZ CASHON
Director of Inward Investment Operations
liz.cashon@leedsandpartners.com

LEEDS AND PARTNERS
City Exchange, 11 Albion Street,
Leeds LS1 5ES
United Kingdom
Tel: +44 (0)113 378 1555

investleedscityregion.com

LEEDS CITY REGION