

Smart Cities Update

Date: 13th July 2022

Report of: Chief Digital and Information Officer

Report to: Scrutiny Board (Infrastructure, Investment and Inclusive Growth)

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

What is this report about?

Including how it contributes to the city's and council's ambitions

- Smart Cities (now commonly referred to a 'connected places') reports have been previously submitted to this Scrutiny Board that provided updates on technology-led projects, connectivity roll out (e.g. full fibre), and references to the 100% Digital Leeds programme, which also reports separately to the Board. This report is the latest update, and in line with recent restructuring within the Integrated Digital Service (IDS), it will in future focus on broader digital updates, including strategy and innovation.
- This report will outline the contents of the new digital strategy for the City that is currently being finalised and how it will support the Best City Ambition and three pillars of Inclusive Growth, Health & Wellbeing, and Zero Carbon.
- It will detail the digital transformation work that is underway to transform how the Council in partnership with and Leeds Health Care Partnership (LHCP) will increasingly improve how it collects, shares, and uses data and how it will utilise the latest technology to deliver 21st century services.
- It will outline the planned programme of innovation and how it will align with the digital strategy and digital roadmaps that are being drawn up by the Digital Change Team for each service area.

Recommendations

- a) Members are asked to support the approach being outlined in the digital strategy, the digital transformation approach, and the innovation programme.
- b) Agree any specific Scrutiny Board actions that may arise from this report.
- c) Continue to provide oversight of the broader digital work being delivered by IDS by continuing to receive update reports at this Board.

Why is the proposal being put forward?

- 1 Digital solutions and technologies can radically improve how services are delivered in Leeds. There are of course challenges that will need addressing to realise a more sustainable, equitable Leeds that we all aspire to. However, these should be viewed in relation to the opportunities that exist that will enable people, businesses and communities to prosper.
- 2 The use of digital technology, to support in the delivery of our services, offers many opportunities that we must encourage and embrace. This is not simply about moving services online however, we must also transform how we work. Bringing the digital services of the council and LHCP together to create the Leeds Integrated Digital Service is the start of this digital transformation, enabling us to provide a more joined up digital offer for the people of Leeds.
- 3 As outlined in the table below, we will focus on people, processes and technology to digitalise the organisation where we rethink existing manual processes and services, to not only digitise them (e.g. moving from paper to digital), but also re-invent them.

	Emergent	Managed	Optimised	Transformed
People	Digital values and behaviours	Business system transformation	User experience (staff and people)	100% Digital Leeds Paperless Optimise capacity Knowledge base Insight and live data
Process	Business as Usual vs. Programmes (prioritisation)	Application rationalisation	Live data (single source)	
Technology	Online transactions	Security Operations Centre (SOC) for city Self-service for information	Automation All transactions online Cloud-based	
	Foundation	Intermediate	Advanced	World Class

TOP THREE CITY DIGITAL PRIORITIES

- 4 The ambition to transform how services are delivered and consumed is tall, and whilst the new digital strategy (summarised below) provides a broad, high level steer, three key areas have been identified as priorities that require immediate focus and are being treated as priorities:
- 5 **System Flow:** System Flow is concerned with ensuring seamless transfers of care for patients between care settings, wherever they may be. In Leeds however, the main centre of attention has been on transfers of care out of hospital. This narrower focus is mainly due to system-wide pressures and high waiting lists.
- 6 At a basic level, transfers of care do take place as business as usual. This programme, however, seeks to transform the patient and staff experience, and ensure that transfers of care from one setting to another are safe, seamless and efficient. It has a key interdependency with shared care records and data flows; however, it should be noted that to achieve transformation in this area it will need to clearly articulate the business problem it is seeking to address, define it as an outcome, baseline deliverables and take a people-centred approach.
- 7 **Core Business Transformation:** This is a major change programme which is seeking to bring about a fundamental shift in the way Finance, Procurement, HR and Payroll activities are undertaken across the council. The main objective is to review and, where appropriate

challenge and change existing processes, systems and operations, improving them to optimise the use of modern digital technology and good practice processes whilst reducing effort and cost.

- 8 The programme arrived at a stage where we needed to engage specialists in digital and organisational transformation who can provide up-to-date and innovative thinking and experience from all sectors combined with firm industry practice and experience from other consulting projects. EY have been chosen as the preferred bidder and we will commence working with them to establish our current state, build the roadmap for transformation and technology and produce the business case to proceed.
- 9 **Security Operations Centre (SOC):** A security operations centre supports the organisation by monitoring, preventing, detecting, investigating, and responding to cyber threats 24/7, 365 days per year. Like many organisations, the council would not be able to resource and run this type of operation effectively itself, therefore the most cost effective and secure approach is to work with a partner to deliver the service on our behalf.
- 10 A city-wide approach will be taken to encourage other organisations to sign up to the same SOC agreement resulting in improved cyber security resilience across the city and deliver economies of scale.

OTHER KEY PRIORITIES

- 11 Leeds has a strong healthcare sector that has resulted in strong healthtech and medtech sectors. We are therefore uniquely placed to build on the Leeds Care Record that has revolutionised how health data is shared across the healthcare system, and apply for further funding that supports our innovation and transformation ambitions in this area.
- 12 **Shared Care Record:** Leeds prides itself on making the most of new ways of delivering health and care for our populations combined with innovating technology. A great example of this, is the Leeds Care Record which united the city to one vision – sharing information to improve care. In the past ten years it has progressed from an idea to a mature digital care record which shares relevant data with GPs, hospital, community, hospices, mental health and social care - safely and securely. It is hugely successful in ensuring that around 10,000 clinical and care staff have regular access to up to date information about a person they are caring for.
- 13 Leeds is in a good position to take advantage of evolving digital technology that supports the progression towards an integrated health and care system and delivers against national mandates to improve data sharing that transform care and digitise care settings. The City has agreed to evolve the Leeds Care Record Project further towards an enhanced Shared Care Record, by closing down the old project and launching a new Shared Care Records Programme. This is not just a name change – it will involve improvements in who can access the information, what they can see, and the technologies involved.
- 14 A new Shared Care Records Board has been established for Leeds and is in the process of setting up programme governance and scoping the full work programme to transform Shared Care Records for Leeds. The Board is chaired by Jason Broch (Chief Clinical Information Officer) with support from Nichola Stephens and Kathryn Jeffreys from IDS.
- 15 **Social Care Records:** On 1 December 2021, the government published their '[People at the Heart of Care: adult social care reform](#)' white paper which details plans to accelerate the adoption of technology and using the full potential of technology to support people's lives and

aspirations. It also pledges to ensure at least 60% of social care providers have a [digitised care record](#) that can connect to a shared care record in place by March 2023 and 80% by March 2024.

- 16 Funding has been released to Integrated Care Systems (ICSs) to facilitate this digitisation and Leeds has bid for approx. £305k to support feasibility of implementation of falls monitoring devices, digitisation of 20 registered care providers with wrap around project management, infrastructure, procurement, training and IG support in year 1. Take up by 20 providers will allow Leeds to hit the 60% target. Further funding will be applied for, for year 2 of the project.
- 17 Additional funding will be released to help digitised social care providers access a regional shared care record within 6 months of full digitisation.
- 18 **Bids:** The Strategy & Innovation Team keep abreast of funding opportunities as they materialise and submit bids to NHS England and local government in line with national and regional schemes being announced.
- 19 A bid for digitising of social care has been submitted for the sum of £305k in the first year, with an opportunity to submit a further bid in 2023/24. Additionally, a £200k bid to support the IDS innovation programme was successful and £125k bid to support the shared care record programme has also been secured.
- 20 The team are currently submitting additional bids to support a variety of digital schemes for Leeds.

LEEDS DIGITAL STRATEGY

- 21 A new City Digital Strategy is currently being finalised. It is a high-level document that outlines the measures that will be taken to assist with addressing city challenges, underpinning Leeds' Best City Ambition.
- 22 As introduced in Best City Ambition, the strategy adopts a four-stage 'life course' approach, Starting Well, Living Well, Working Well and Ageing Well, that clearly articulates the opportunities and challenges at every stage of a person's life and how digital can support them throughout their lives. For the purposes of the strategy, Living Well and Ageing Well have been combined.
- 23 Whilst the strategy is focused on Leeds, its people, and services, it is written in the context of national policies and strategies that focus on the wider challenges facing the UK and which will have a significant impact on our plans such as the NHS Long Term Plan, the UK National Data Strategy and the UK Government's Technology Code of Practice.
- 24 The following sections summarise the main sections of the strategy that will be published by the end of July 2022.
- 25 **Starting Well:** We will use modern digital technologies to understand the challenges associated with population health and education and how they affect individuals from birth through to old age. Understanding health and economic conditions prevalent across Leeds will help reduce inequalities through providing more relevant and impactful services to families.
- 26 We will work increasingly with schools, colleges and community groups to encourage children and young people to get involved in after school activities, code clubs and digital innovation

work that helps develop their digital skills and get them interested in the technology sector. We will promote the breadth of opportunities the sector offers, and ensure that they acquire work-ready digital skills from an early age.

- 27 **Living and Ageing Well:** We will implement intelligent and automated processes that make services more efficient, convenient and joined up, and that are designed around the individual and their needs.
- 28 We will use data to understand the challenges and inequalities being faced by the people of Leeds, and share this intelligence with partners to define and deliver effective, personalised services that support people to live good and healthy lives.
- 29 **Working Well:** We will build on existing collaboration across workforces in all sectors by improving information flow between organisations and supporting the city's inclusive growth ambitions.
- 30 A thriving digital community, modern infrastructure and skilled workforce will attract new and established businesses to invest in Leeds improving opportunities for the city and people of Leeds. Taking a people-centred approach to service-design, we will deliver a co-ordinated innovation network and community that champions Leeds as a city of innovation excellence. We will encourage the testing and trialling of new technology in a real-world environment that both supports local businesses and addresses city challenges.
- 31 **Digital Foundations:** Whilst the strategy outlines the ambitions for digital services and technologies in Leeds, to deliver these, we need to get the basics right. Five digital foundations have been outlined that set the baseline for which the rest of the strategy is built on and will ensure that our ambitions are grounded, achievable and inclusive:
- 32 **Data management, use and access:** Data underpins everything we do. It is a valuable resource that has the power to revolutionise how businesses are run and services are delivered. It's important however, that when collecting, using, storing, disposing, or sharing personal data, it is managed appropriately and within an information governance framework that instils confidence and is in line with data protection laws.
- 33 The Chief Data Officer for IDS will oversee the creation and delivery of a new Leeds Data Strategy. Aligned with the National Data Strategy, it will identify where current data gaps exist and outline opportunities and initiatives that will benefit the city.
- 34 We will expand the Office of Data Analytics which brings together data science expertise and technologies resulting in improved data intelligence, decision making and service delivery.
- 35 **Connectivity and infrastructure:** Protecting our data and information is of paramount importance. To ensure data and systems are protected from any threats (cyber or physical), deliberately or otherwise, we will deliver a 24/7 365 security operations centre that will prioritise the safety and security of people's data and be accessible by any organisation across Leeds.
- 36 We will follow a 'Cloud First/Multi-Cloud' approach that delivers best value for money, best technological approach, and the highest security standards. We will take an open standards approach for all software developments to ensure the maximum potential for systems integration and interoperability.

- 37 21st century connectivity and infrastructure provide the backbone for world-class service delivery and supports our 'connected place' ambitions. The council is working closely with its Full Fibre network partner BT, to provide gigabit capable fibre to 1,400 council buildings and other public sector buildings (e.g. NHS and schools). Furthermore, it will enable up to 90% of homes and businesses to access super-fast broadband by 2026, and supports the build out of a 5G network providing faster mobile connectivity across the district.
- 38 Additionally, the installation of the Leeds Wireless Innovation Network (Leeds WIN), that supports the collection of real-time data from devices, is now complete and is being used by innovators across the city and by the council to test temperature, air quality and footfall sensors.
- 39 **Digital inclusion:** The barriers to digital inclusion for many people are complex and link to wider factors beyond the common issues of lack of skills, motivation or access to a device. We will address these barriers to ensure that everyone in Leeds has equal opportunity to use digital tools, technology and services in the right way for them.
- 40 Through further investment in the city's flagship 100% Digital Leeds programme and by working collaboratively through partnerships and networks, we will continue to build a co-ordinated and connected digital inclusion ecosystem in more communities where people can gain the motivation, skills and confidence to get online.
- 41 **Digital skills:** We take a life-long learning approach that will ensure everyone in Leeds has the right skills to access services in a way that suits their needs, and that digital channels will be accessible, well designed and so easy to use that they become most people's preference. It is important however that we adopt a 'Digital First but not Digital Only' stance that recognises that not everyone will want to access services via a digital channel all of the time and that any digital offer will be complimentary to existing channels.
- 42 In addition to supporting improving digital skills of the public and the wider workforce, it is important that our own workforce has the requisite skills to facilitate the digital transformation that the organisation requires. A digital academy will be created that will upskill staff in areas such as data intelligence, cyber security and cloud.
- 43 **Digital and data ethics:** Data is easier to collect than ever before and technology is developing so quickly that it is often difficult to keep pace. It's therefore important that as these new technologies become increasingly prevalent and are introduced more widely, that we have a thorough understanding of them. Just because something can be done using technology, doesn't mean to say it should be.
- 44 We will develop data and digital ethics principles that provide checks and balances for any use of data, or introduction of new technology, and draw upon expertise from across the City to provide additional support and scrutiny. Leeds is already a champion of the "tech for good" approach by taking a person-centric approach; embedding strong governance procedures will support the approach that Leeds is regarded as the best destination for anyone who wants to deliver services ethically and equitably.

DIGITAL INNOVATION PROGRAMME

- 45 The pandemic has highlighted that when we need to move at pace and deliver digital transformation, we can succeed. Projects that may have traditionally taken months or years, were delivered in weeks or even days.

- 46 IDS provides digital services and support for both LCC and LHCP, and will oversee a programme of innovation that is strategically aligned with the Best City Ambition, and three pillars, and that takes its steer from the City Digital Strategy and Service Digital Roadmaps.
- 47 It is important however, that a co-ordinated approach to innovation is taken. A collaborative and joined-up approach will not only ensure that the best skills and capabilities are tapped into, but also avoid duplication and repetition.
- 48 Any innovation activity must focus on one, or all, of the following:
- Improves the services we deliver
 - Improves outcomes for people
 - Delivers efficiencies/savings
- 49 Technology is moving at a pace where it is often difficult to understand what works best. Adopting an innovation approach to service delivery can therefore help us:
- Identify the problems and issues that need to be addressed first
 - Understand how technology can facilitate improved outcomes
 - Take a systematic approach to how we transform our organisations to deliver 21st century services
- 50 The Strategy & Innovation team will co-ordinate and have oversight of all digital innovation activity across LCC and LHCP. Utilising a new innovation platform, it will also connect with other activity that is taking place across the city to promote best practice, ensure a co-ordinated approach, and promote the City as a 'centre of innovation excellence'.
- 51 This is a summary of the innovation activity that will take place over the next 12 – 18 months and be delivered both in the city centre and localities.
- 52 **Digital Leeds Labs:** These are an extension of our innovation lab workshops and take a human-centred approach, co-designing prototype solutions to city challenges that have been raised by the Digital Change Team and where no obvious solution currently exists. They involve a wide variety of stakeholders including members of the public, service providers, academia, suppliers and developers. Previous innovation labs have produced new technologies such as the Leeds Bins App.
- 53 Following the workshops the Strategy and Innovation Team will facilitate follow-up sessions with key stakeholders to discuss the outcomes of the Lab and possible next steps.
- 54 **IDS Supplier Days:** These are either technical or non-technical events that allow a number of suppliers to present real-life case studies, involving their solutions, to decision makers and service leads. Whereas the City Labs focus on challenges where there are no obvious solutions, these focus on how existing solutions could support the council/LHCP digital transformation agenda.
- 55 The first Supplier Day was held on 22nd June focusing on Robotic Process Automation. Six suppliers presented eight case studies focusing on healthcare and council challenges. At least four Suppliers days will be held per year focusing on a wider variety of use cases and solutions.
- 56 **Leeds Hackathon:** These are single day, one-off sessions where a broader theme is focused on, such as improving air quality or encouraging more active lifestyles. Suppliers, developers and a variety of stakeholders team up to ideate and co-design a wide range of solutions.

- 57 The purpose of the day is to generate lots of innovation activity resulting in a number of interesting ideas that can be further explored at a future date. It is proposed that the Leeds hackathon will be an annual event scheduled as part of the Leeds Digital Festival.
- 58 **GovTech Leeds:** These 6-month, longer-term innovation projects will take a deeper dive into some of the City's bigger challenges. They will follow a similar 2-phased approach taken by other successful innovation programmes such as the UK Government's GovTech Catalyst, Scotland's CivTech and the Greater London Authority's Mayor's Challenge.
- 59 IDS will set regular GovTech Challenges and invite participation from a wide variety of suppliers. These will focus on areas where there is currently no obvious solution to the challenge and where co-designing of a prototype product could:
- Lead to a better understanding of the type of solution required
 - Lead to the further development of a new product that supports service delivery
 - Leads to a partnership with a supplier that generates income to support further innovation
 - Supports local start-ups and SMEs

What impact will this proposal have?

Wards affected:

Have ward members been consulted? Yes No

- 60 The work that is being delivered and supported by the Integrated Digital Service is being done so by strategic prioritisation. In addition to the key priority areas that have already been identified at the start of this report, the digital strategy and digital roadmaps will provide a steer for the City Digital Board to determine future priorities and those that are ripe for innovation.

What consultation and engagement has taken place?

- 61 The development of the digital strategy included delivering 13 workshops, six of which were predominantly targeted at the public and Leeds-based organisations, with the remaining focusing on council and healthcare colleagues.
- 62 The work outlined in this paper has been considered, reviewed and approved by the appropriate council officer boards and Lead Member.

What are the resource implications?

- 63 The areas of work outlined in this report all have the aim of delivering more efficient services and improving outcomes for the people of Leeds. The primary focus for the innovation work is to identify how a more efficient use of data and technology can positively impact on resource allocation, whilst maintaining or improving service delivery.
- 64 The delivery of projects is funded through existing funding and capital funding which is sourced from Leeds City Council and the NHS. We also bid for money as outlined above.

What are the legal implications?

- 65 Decisions would not be subject to call-in and there are no specific legal implications or issues relating to access to information.

What are the key risks and how are they being managed?

66 Risk management of individual projects is built into the delivery of all IDS work. Programme governance includes regular reporting to IDS SLT, other leadership teams and senior stakeholders, as well as annual reports to this Scrutiny Board.

Does this proposal support the council's three Key Pillars?

Inclusive Growth

Health and Wellbeing

Climate Emergency

67 All of the work outlined in the report plays a key role in achieving the council's ambition to build a compassionate city, tackling poverty and reducing inequalities. Work is aligned with the Best City Ambition and the Health and Wellbeing, Inclusive Growth and Carbon Zero pillars.

Options, timescales and measuring success

What other options were considered?

68 Previous reports to this Board have focused specifically on 'smart cities' type-projects, that is, those that incorporate some technological approach and that are being delivered across Leeds City Council.

69 The restructure of IDS incorporating the digital functions of the LHCP, has offered the opportunity to review what is presented to this Board with the outcome being to focus on the broader digital work being undertaken by the service.

70 Unlike previous reports, the work being undertaken by 100% Digital Leeds has not been referenced in this report, as a separate, comprehensive update is provided on an annual basis.

How will success be measured?

71 The digital strategy identifies a number of key priority areas and how they will positively impact on people and businesses across Leeds. The IDS Strategy and Innovation Team will work closely with other parts of IDS and service areas to ensure priority areas are being addressed and positive outputs and outcomes are being delivered. Updates on strategy priority areas will be provided at future Scrutiny Boards.

72 The governance and success will be managed by the Leeds Digital Board and the internal Digital Board based on the priorities and outcomes we have been asked to deliver.

73 The IDS Digital Change team will complete digital roadmaps for all service areas to outline ongoing work and identify future priorities. Some of this work will filter through to become innovation projects as outlined earlier. The Strategy & Innovation Team will work closely with services to review the impact of the intervention.

74 It should be noted that not all innovation work will result in the successful delivery of a solution, however there will always be positive learning taken from each exercise and workshop that future ones will benefit from. Longer-term success will be realised through how services are delivered more efficiently, how staff resources are allocated more effectively and how staff morale is improved for example through doing less repetitive and more meaningful work.

What is the timetable for implementation?

75 The digital strategy has a 3-year timeframe however, it will be regarded as a 'live' document that will be updated and amended as dictated by external factors. A comprehensive review of the strategy will take place in 2024.

76 The innovation programme, as outlined in the innovation calendar (Appendix 1) is currently planned over an 18 month timeframe, however as additional funding becomes available, this will be augmented and extended.

77 Timeframes for the majority of the projects all have a final end date of March 2024

Appendices

78 Appendix 1 – Innovation calendar

Background papers

79 None.

APPENDIX 1 INNOVATION CALENDAR

JANUARY 2022	FEBRUARY 2022
MARCH 2022	APRIL 2022
MAY 2022	JUNE 2022
	IDS Supplier Day - RPA
JULY 2022	AUGUST 2022
Digital Leeds Labs	
IDS/Microsoft Technical RPA Supplier Day	
SEPTEMBER 2022	OCTOBER 2022
Leeds Hackathon (part of Leeds Digi Fest)	Digital Leeds Labs
Super Connected Cities 2023	IDS Supplier Day – Low Code
NOVEMBER 2022	DECEMBER 2022
Digital Leeds Labs	

JANUARY 2023	FEBRUARY 2023
	Digital Leeds Labs
	IDS Supplier Day
MARCH 2023	APRIL 2023
Digital Leeds Labs	Digital Leeds Labs
	GovTech Leeds (Discover Phase – 4 weeks)
MAY 2023	JUNE 2023
Digital Leeds Labs	Digital Leeds Labs
IDS Supplier Day	GovTech Leeds (Develop Phase – 12 weeks)
JULY 2023	AUGUST 2023
Digital Leeds Labs	
IDS Supplier Day	
SEPTEMBER 2023	OCTOBER 2023
Leeds Hackathon (part of Leeds Digi Fest)	Digital Leeds Labs
	GovTech Leeds (Discover Phase – 4 weeks)
NOVEMBER 2023	DECEMBER 2023
Digital Leeds Labs	GovTech Leeds (Develop Phase – 12 weeks)
IDS Supplier Day	