Digital Planning

TRANSFORMING PLACES TOGETHER

Scotland's digital strategy for planning

Digital Scotland

Scottish Government
Riaghaltas na h-Alba
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CONTENTS

INTRODUCTION

MINISTERIAL FOREWORD
A PLANNING SYSTEM FOR THE FUTURE

"It is time to create the environment that empowers planners to do what they do best – deliver great places which make Scotland a great country."

As Scotland's Minister for Local Government, Housing and Planning, I have seen first-hand how the planning sector has responded to the COVID-19 pandemic by adapting to new systems and ways of working.

The Planning profession has been using digital systems and technology to keep the system operating at a time that has proven difficult for all of us. The resilience shown is inspirational and illustrates the commitment and resolve we all have to making Scotland a great place to live, work and play no matter the adverse circumstances we may face.

As we begin to stabilise and recover both socially and economically, a resilient and efficient planning system designed to meet the needs of people will be more important than ever. We need to give communities easier ways to engage with a system that can often prove challenging to navigate and understand. We need to give planning authorities the tools to create and shape their places. And we need to give developers confidence and certainty that Scotland is open for business.

Planning should be inspirational and influential. It shapes how we go about our business and live our lives. It helps to keep the economy growing, enables us to protect our natural and built environment, and also to deliver development in the right places. The work we are delivering to reform the planning system has created a strong legislative foundation that will help us make some vital choices about the future of our places. Now it's time to change how we work and operate.

Over the last two years, we've been talking to those that work across the whole planning sector, those that regularly interact with it, as well as those in communities with interests in planning and place. We've listened and have heard about the issues that many experience in planning, about what works well and what could work better, and the opportunities that a digital transformation programme could deliver. This strategy is the vital next step forward and I am delighted that Scotland is one of the first countries to have a national sector wide Digital Strategy for Planning, supported by the commitment to deliver the priorities outlined within this document.

This next step will set the framework for long-lasting change and improvement, putting data and technology at the heart of a planning system designed for the future.

The contents of this Strategy are ambitious and will require collaboration across the planning sector and beyond to shape and implement new systems and ways of working. I am confident that by working together we will achieve the missions set out in this strategy.

It is time to create the environment that empowers planners to do what they do best – deliver great places which make Scotland a great country.

Kevin Stewart MSP
Minister for Local Government,
Housing and Planning

EXECUTIVE SUMMARY
PLANNING IN SCOTLAND IS CHANGING

Even before the COVID-19 pandemic a package of work to transform Scotland's planning system was underway, combining far-reaching policy reform and legislative change, a renewed focus on place-based planning and the digitalisation of planning. Together these measures will deliver a forward-looking planning system that works for everyone. The pandemic has sharpened our focus on the importance of our places and links to health and wellbeing and ensuring that planning plays a vital role in our economic and societal recovery.

This document, Scotland's Digital Strategy for Planning, defines a long-term strategic direction for how Scotland's planning system will digitally transform, embracing the opportunities new digital technologies and data present. It sets out what we intend to deliver, why this is needed and the benefits this transformation will bring. It evidences how we can be confident these changes will produce real improvements by targeting the things that matter most to those involved in planning. It lays the foundation for a forthcoming digital transformation programme that will start to implement the actions contained here. Working at a sectoral level to support and strengthen the ambitions of the Digital Strategy for Scotland, and position Scotland as an inclusive and outward looking digital nation.

Our Vision **for Scotland to have a world leading digital planning system that helps connect people with their places to deliver a prosperous, green and fair country** can only be achieved through collaboration and partnership working, with all parts of the planning system working together and building on the great work already taking place across Scotland. The Strategy establishes a framework of Five Missions, with set Goals and Priority Actions, which we believe together will digitally enable Scotland's planning system:

- Mission 1: Unlock the value of planning data
- Mission 2: Deliver an end-to-end digital planning experience
- Mission 3: Create the conditions for digital to flourish
- Mission 4: Use digital tools to drive collaboration and engagement
- Mission 5: Embed a culture of digital innovation

To deliver these Five Missions, a 5 year programme of digital transformation will begin in spring 2021. Working with partners across the sector, the joint programme coordinated by Scottish Government will make Scotland an attractive place to invest and do business in, support new, good and green jobs and enable everyone to have the opportunity to have a say in their community.

"…these measures will deliver a forward-looking planning system that works for everyone."

PREFACE

This Strategy is evidence based, it has been borne out of stakeholder engagement, dialogue and research. To understand the things that work well in Scotland's planning system and also to understand the things we can do better – the problems and challenges that have real impact on those that work in planning or those trying to get involved.

We have invested time to investigate and fully understand different stakeholder experiences and views, which can vary greatly across the planning system, and used these to define a programme of improvements through digital. It is a Strategy for Scotland's planning sector and has been shaped and informed by a broad cross section of those that work or interact with planning.

We would like to acknowledge and sincerely thank the many individuals and groups who have been involved in its preparation, including members of the public, community representatives and those representing business and industry interests. In particular we would like to thank members of the Digital Taskforce, the Economic Advisory Group on Digital Planning, Heads of Planning Scotland, COSLA, The Royal Town Planning Institute (RTPI), the Improvement Service and the Local Government Digital Office together with individual members of local authority staff who have provided invaluable direction and expertise during Strategy development.

The Strategy is structured in three main sections: **The Vision** – which sets out the ambition, aims and benefits of this transformation; **The Opportunity** – which explains the foundation and scale of possibility; **The Transformation** – which sets out our goals and priorities for delivering transformation.

This Strategy marks the start of a long and complex journey to digitally transform Scotland's planning system. As we progress it will continue to be refreshed and evolve as we learn and adapt. It will flex to respond to future technologies and as we deliver improvements through the transformation programme. We don't underestimate this challenge but believe in Scotland we have the right ingredients and drive to succeed and help create a planning system fit for the future.

John McNairney FRTPI
Chief Planner
Scottish Government

"Scotland has the right ingredients and drive to create a planning system fit for the future."

THE VISION

→ Our Vision

→ Five Missions

→ Impacts, Outcomes and Benefits

→ Guiding Principles

OUR VISION

For Scotland to have a world leading digital planning system that helps connect people with their places to deliver a prosperous, green and fair country.

Scotland's planning sector is ready for change. It is ready to look forward and become digitally enabled, to help planning realise its full potential. This bold vision for digital describes a way forward that is both aspiring and achievable for Scotland's planning system and by working alongside policy reform will deliver real change. It sets a long-term, compelling ambition for a Scotland embracing the opportunities digital brings.

Our Vision reflects the key role digital will play in ensuring the planning service becomes an enabler of sustainable development, supporting our net zero interests and bringing people together to deliver great places. We start from a position of solid understanding of those aspects that need to change, how to change and with a clear view of the pivotal impact this transformation will bring. Most crucially, we know that our partners in local government, in business and industry and in community sectors share the vision set out here. We are committed to work in partnership, benefiting from the wealth of expertise, knowledge and commitment that exists across the sector, to realise the vision.

To achieve this requires a coordinated approach through a cohesive national programme that will deliver benefits to all corners of Scotland. This Strategy defines how we start the journey towards delivering the vision of a digitally enabled planning system. It sets out a framework that form the cornerstone of the digital transformation programme to create a planning system that is flexible, responsive and ready to embrace future change.

THE FRAMEWORK

OUR VISION

Our ambition for Scotland and its people

FIVE MISSIONS

What we will do to deliver our vision

IMPACTS, OUTCOMES & BENEFITS

Why this matters for the people of Scotland

GUIDING PRINCIPLES

How we will work together to deliver this

FIVE MISSIONS

At the core of digitally transforming planning are Five Missions setting out our priorities for delivery.

In shaping this Strategy, we have seen and heard compelling evidence that digital transformation is not solely about data and technology, it is equally about people, culture and ways of working. To succeed digital transformation has to reflect all of these components and build a programme that can deliver long lasting change by addressing underpinning challenges that on the surface may not seem to relate to digital, but which are vital for comprehensive transformation. We have therefore identified key missions centred on the themes of **data, digital technologies and services, ways of working, people and innovation** that together will have a transformative impact on planning.

Detailed in The Transformation section for each mission we have identified the overall objective, 5 Year Goals and the initial 18-24 month Priority Actions to start work on once the programme formally begins in spring 2021.

MISSION 1
Data
Unlock the value of planning data

MISSION 2
Digital Technologies
Deliver an end-to-end digital planning experience

MISSION 3
Ways of working
Create the conditions for digital to flourish

MISSION 4
People
Use digital tools to drive collaboration and engagement

MISSION 5
Innovation
Embed a culture of digital innovation

WHY DIGITALLY TRANSFORM?

"Intangible value for people to be able to see what is happening with planning – monitoring data – enables people to understand it better, which would benefit everyone – politicians, offices responsible for delivering, communities and industry."

A property professional

We live in an age where we can instantly check news and weather, order goods and services, and receive delivery updates using our devices or voice assistants like Alexa. We should be able to access and engage with public services, including the planning system, with the same level of ease. Public sector services urgently need to meet and surpass expectations of our digital services.

Imagine being able to ask a voice assistant, "What is the current status of my planning application?", or being able to view and comment on a 3D interactive model of the local development plan for the place you live – having a system which allows you to get involved in shaping the place you are in, not just by commenting on existing applications, but by giving your community the online digital tools that it needs to suggest, promote and collaborate on concepts like 20-minute neighbourhoods to create places where everything people need is within a 20-minute walk.

We recognise that increasingly digital is the way people want to interact with public services, and that expectations continue to speed up. We also know that planning in Scotland faces the challenges experienced elsewhere in the public sector, achieving more with finite resources.

We need to do things differently, to look at how technology and data can help us make the best use of our resources, delivering a streamlined, efficient and high-performing planning system.

So in one sense, the drive to deliver digital services for planning follows the global trend towards digitalisation that continues to pick up pace, delivering services in a way that people want to interact. However the impacts, outcomes and benefits are wide ranging, complex and diverse across stakeholder groups and policy areas. By having clear missions and priorities defining what the digital planning programme will deliver, we can identify the strategic benefits resulting from the transformation. Analysis of the potential impact of digital transformation in planning helps us see the far-reaching benefits it will have for not only the planning sector but in addition the national outcomes for Scotland.

To accompany this Strategy, we commissioned a series of research pieces from the RTPI to explore and determine the supporting evidence for 'The benefits of investing in a digital planning service'.

This research provided a clear understanding of the economic effects, wider policy impacts and benefits released to customers of the planning systems and planning authority users.

IMPACTS, OUTCOMES AND BENEFITS

DIGITAL PLANNING WILL...
(Five Missions)

- Unlock the value of planning data
- Deliver an end-to-end digital planning experience
- Create the conditions for digital to flourish
- Use digital tools to drive collaboration and engagement
- Embed a culture of digital innovation

SO PLANNING IS...
(Impacts)

- Focused on improving quality of outcomes with renewed emphasis on place-based initiatives
- A forward looking profession with high quality digital skills, successfully attracting young people to join the profession
- Vital in our response to climate change and delivering net zero targets
- A key enabler in Scotland's economic and societal recovery from COVID-19, supporting inclusive economic growth and job creation, designing sustainable and connected places and tackling health and wellbeing inequalities
- Ambitious, innovative and future-ready
- Evidence based, using data to support and communicate decision making
- High-performing, streamlined and efficient, achieving better results with available resources
- Open and accessible to all, by ensuring services and information are easy to find and understand
- Collaborative and joined up
- Empowering. Enabling everyone to get involved and shape their communities
- Delivering the right development in the right places

AND SCOTLAND CAN...
(Outcomes)

- Build confident, empowered communities that actively shape their places
- Increase inward investment and Scotland's role in the international community by reducing risk and uncertainty
- Build a sustainable and highly skilled workforce now and for the future
- Deliver high quality, future-proofed public services that are continually improving
- Deliver inclusive economic growth, building the housing and infrastructure Scotland needs, and creating jobs
- Drive the digital economy by opening up data services and opportunities
- Deliver sustainable development, connected places and ensure progress towards climate change targets
- Unlock the power of digital innovation

THE BENEFITS

How will you benefit from the digital transformation of planning?

The benefits
As a citizen and community

- An **accessible, next generation Planning Scotland Gateway** online portal providing easy access, in one place, to all information about planning including 'what is happening in my area?' and 'do I need planning permission?'

- A simpler and easier-to-use smart application process which allows **real-time tracking and notifications**

- Explore **potentially suitable sites** which are ready to develop and build on

- Understand how to **engage with the planning process** by commenting on applications and local development plans to get involved in shaping your place as an individual or community

- Use online visual tools to **understand the value and impact of your contribution** to planning proposals and decisions

- A **more consistent and coordinated planning process** across different geographic areas

- Support your community to **shape and re-imagine your place** with a new digital toolkit providing access to data and digital technology including mapping/visualisation tools at a local level

- Gain the **skills, confidence and information literacy** required to make the most of digital planning

- Across Scotland, **up to 1,600 jobs and £200 million generated** in economic benefits

The benefits
As business and industry (including architects, planning agents, investors and developers)

- Location based data, including mapping and visualisation, available on the Planning Scotland Gateway to **discover opportunities** for you and your clients, and **inform investment decisions**

- Build **marketplace value-added services** for citizens and business on a modular, interoperable platform that combines data standards with new innovative technologies

- A **more consistent, streamlined and coordinated planning process** across different geographic areas reducing complexity and resulting in downstream income generation for developers and investors with costs to large house builders reduced by c.£25,000-£30,000 per application

- Collaborate in **partnerships across private, public and academic sectors within a PlaceTech Innovation Lab** as a research incubator and an accelerator programme to solve planning and place related technology challenges, improve public service delivery, create economic development opportunities and foster an entrepreneurial mindset within government

- A **more consistent, streamlined and coordinated planning process** across different geographic areas

- A simpler and easier-to-use smart application process which allows **real-time tracking and notifications**, reducing the need to contact planning officials

- Find **potentially suitable sites** which are ready to develop and build on

- **Access relevant existing data** to assist your planning and application process

- **Reduction of invalid applications and inconsistency** across planning systems

The benefits
As central, local government or public sector body

- Bringing **all Development Planning and Development Management information together in one place** to allow forward planning data and policies to inform consented developments and enable the effectiveness of policies to be monitored in near-real-time

- A **more consistent, streamlined and coordinated planning process** across different geographic areas, enabling workflow across local authorities

- **Automated reporting** – reducing manual intervention and administration

- **Reduction of invalid applications**

- **Increased community engagement** without an additional resource requirement to assess, using digital community engagement tools that analyse responses digitally

- Timely **availability of information to monitor the impact of policy changes**, allowing for targeted interventions and updated policy amendments

- **Reduced potential for vendor lock-in** so that Scotland's planning technology and data is not bound to any particular provider's proprietary system

- **More productive land use** in support of the Scottish Government commitment to the place principle, joining up across organisational and policy boundaries to look at the outcomes for places holistically

- **Avoid costs of £23 million** in the case of doing nothing to update or change the current planning system, with **potential income generation of £5.5 million** for reinvestment in the planning system

- Streamlining process and workflow – removing time-consuming manual handling tasks and a reduction in inbound calls with **estimated savings to planning authorities of up to £20.4 million**

Drive prosperity and economic recovery
Benefits Case Study 1

Foreign Direct Investment (FDI) added 10,000 jobs to the Scottish Economy in 2019, but Scotland is in global competition to attract investment.

Planning in the broadest sense plays a key role in influencing the **attractiveness of an area**. Investment by global firms in production, service centres or regional headquarters bring the potential for significant increases in both the quality and quantity of jobs to an area.

Planning can influence location-based investment in two direct ways:

1. '**Ease of doing business**' through regulatory impact, transactions and processing costs

2. Accessibility of **investment portfolio data**, such as location availability, local land values, skill levels, infrastructure and environmental data etc.

Physical and digital connectivity is seen as the foundation to allow place-based investment, which will support planners and investors to make compelling and bold investment choices in Scotland.

Digital transformation will open up national data and facilitate this placed-based collaborative foundation.

Resulting in:

- **Increased output/higher growth (recovery) rates**
  Incentivised additional economic activity via improvements in planning efficiency, ensuring planners have the capacity to deal with additionally incentivised case load

- **More productive land use**
  From better capture and application of spatial data to determine the most economically efficient locations for new development

- **Increased land values**
  From the range of effects, i.e. via data analytics, community engagement, and value capture from benefits to developers, that support quality place-making and amenity value at new and existing sites

- **Welfare benefits for households and residents for increased 'utility of place'**
  New digital platforms will better facilitate informed engagement with communities, ensuring planning decisions are better informed from a welfare perspective

- **Better matching of employment land to sector needs in local areas**
  Data availability and accessibility will enable planning strategy and vision to better integrate economic development objectives

- **Lower costs for business and increased inward investment**
  From system efficiencies which reduce the perceived burden of engagement (time and cost) of applying for planning permissions

A green Scotland, environment and climate change
Benefits Case Study 2

The built environment is one of the most significant impactors on **place-based environmental quality and carbon emissions**. Both through energy demand in the construction and ongoing operation of developments, and the transport patterns of people who live and work in new developments.

Spatial planning provides a more proactive approach to supporting net zero carbon and environmental quality objectives having the biggest potential for positive change.

Helping to **determine transport connectivity** – including by sustainable means; the location of homes and jobs – and thus how individuals are required to travel; and the **density and land-use of communities** – which is a key determinant in how efficient they are at consuming resources, will all play key roles in speeding or slowing the transition to a **net zero economy**, depending on how they are provided for.

Digital transformation, through cloud hosting which enables significantly more **place-focused data**, including engagement data, has the potential to significantly improve the evidence base available to planners to **promote 'good' planning** that supports sustainable development.

Resulting in:

- **Lower energy demand**
  The ability to use better data and engagement to plan for efficient accessibility (e.g. between homes and jobs) and density

- **Better integrated (and local) energy supply**
  From the ability to use better spatial data and engagement with the private sector, communities and statutory consultees to inform the efficient development of generation and supply in relation to new and existing communities

- **Lower transport demand and emissions**
  From place-making that encourages modal shift; and from planning for improved accessibility that lowers non-active transport requirements. And support wholly new environmental solutions, for future places

- **Ability to support the achievement of incoming building regulations**
  Through smart applications and the planning gateway that better informs and educates applicants

- **Reducing emissions of individuals and communities via behavioural changes**
  Through place-making and planning that encourages sustainable ways of living, working and socially engaging within communities

Ensuring a healthy and fair society
Benefits Case Study 3

As noted by the King's Fund in their determinants of health and wellbeing; **places and communities**; the **environment around us** and **behaviours and lifestyles** are three of the four key determinants of health outcome for individuals.

Better data and engagement, particularly engagement that enables marginalised communities to be reached could deliver a significant improvement in understanding how **planning decisions impact health and wellbeing outcomes** for those already suffering from the unequal distribution of these kinds of effects.

The ability to engage with a **more representative** breadth of local communities has a potentially to dramatically improve the **democratic quality of planning engagement** in the plan-making process.

Digital transformation will provide better data, the integration of data sources and data collection for the purposes of analysis for smarter planning providing the opportunity to **better plan places**, minimising the negative impacts of development, and maximising the forms of development which are most likely to reduce health and wellbeing inequalities.

Resulting in:

- **Reduced NHS costs**
  Utilising spatial data will ensure sufficient provision of active transport, green space, and the social infrastructure to support physical and mental health in communities

- **More inclusive engagement**
  Digital tools to encourage individuals to take a stake in their communities

- **Overcome organisational and sectoral boundaries**
  'Place-based' data to encourage better collaboration and community involvement, and the positive impact of combined planning of energy, resources and infrastructure investment

- **Freeing up planners' time**
  More efficient systems and processes to undertake more effective community engagement as required

- **Reducing crime and increasing community engagement**
  A smart application system that can help better enforce and explain planning guidelines, standards and regulations

- **Planning decisions better informed to support welfare objectives**
  Through new digital platforms that better facilitate informed engagement with communities in both place-making and development management

GUIDING PRINCIPLES

These Guiding Principles set the tone for the digital transformation of planning, and act as a set of values for how we will work whilst delivering the transformation programme. Given the complexity, breadth and depth of the planning system, spanning multiple public sector organisations, these principles will:

- Provide greater clarity to partners about the spirit by which new (digital) development will take place

- Assist multiple partner organisations and digital teams remain clear on common goals and purpose

- Allow teams and individuals to assess whether deliverables align with our principles, allowing more decision-making to take place within development teams.

We will use these Guiding Principles to guide the delivery of the programme and development of each new digital service set out in the Five Missions.

1. **Design and develop together**
   Work with users to shape an accessible easy to use digital planning system.

2. **Collaborate and work in partnership**
   Create opportunities for industry, academia and public sector partners to deliver change together.

3. **Data driven**
   Put data at the heart of planning to inform decision-making.

4. **Build on our success**
   Deliver early benefits and capabilities of transformation by delivering new features and improvements to existing services.

5. **Be responsive to change, ready to learn and adapt**
   Start small and grow, discovering new ways of working to build services in an agile way that continually evolve and improve.

6. **Be ambitious, embracing innovation**
   Stimulate creativity and harness the innovation taking place in the PlanTech sector, enabled by the right procurement approaches.

7. **Develop flexibility**
   Make it easier for planning authorities to integrate new technology within a digital ecosystem where apps and services can be adopted and reused as components of a flexible, cloud-based, modular platform.

8. **Think end-to-end**
   Take a holistic approach to designing services, working across organisational boundaries and bringing Development Planning and Development Management together to enable a plan-led system.

9. **Value and integrate non-digital interactions**
   Promote greater digital inclusion and recognise that digital should support professional judgements in planning.

"The values for how we will work."

→ **Planning Reform**

→ **Broader policy alignment**

→ **Understanding how to digitally transform**

→ **Shaping digital transformation**

THE OPPORTUNITY

PLANNING REFORM

CHANGING WAYS FOR CHANGING PLACES

Planning changes places and in doing that it changes people's lives and livelihoods. Effective planning is about change; positive change. That is why planning matters to people – each of us individually, and collectively within our families and communities. In reforming our planning system, change is not just about how we do things. It is much more about why.

Scotland's new Planning Act defines the purpose of planning: to manage the development and use of land in the long-term public interest. That isn't simple. Planning is charged with a multitude of great expectations to achieve many different things on very different scales, and sometimes with priorities and aspirations pulling in different directions.

The choices and decisions we all make through our planning system need to help meet our ambitions and obligations: for addressing climate change and radically accelerating emissions reduction; for realising the clear benefits from high standards in placemaking for our physical and mental health and wellbeing. And now more than ever, planning must support our green economic recovery, the strategic investment we need now and in the long-term.

The choices made through planning need to ensure we have the homes that people need, in the right places with good access for work, education, services, utilities and leisure – the vital components that help us form well-functioning, sustainable communities.

"Scotland's new Planning Act defines the purpose of planning: to manage the development and use of land in the long-term public interest."

"... reposition planning to be much more inspirational, focused on actively delivering better development and places."

The planning system, and profession, cannot do all of this in isolation. It takes its place in a much bigger policy context that influences and coordinates strategic infrastructure investment. It works with other policy drivers to support sustainable economic development in all parts of Scotland, to tackle poverty and inequalities and promote wellbeing for the long-term benefit of all our communities.

To do planning well we need to carefully interrogate a great deal of complex information and data, to listen intently to different perspectives and to act both swiftly and fairly in making what can sometimes be pressured and difficult decisions.

So we expect a lot of our planning system and of its 'users' – the people who work within it and those who participate for their different interests – whether they be long-term experienced professionals or those involved just the once.

When we embarked on our programme of planning reform, we knew there was a need to reposition planning; to be much more inspirational, focused on actively delivering better development and places we need.

The whole policy context of planning is already changing, facing up to some significant challenges for our society and for the way we live. The statutory planning system is already changing, improving collaboration across public, private and community interests to strengthen decision-making and to bring a greater focus on delivery of high-quality planned development.

So too can we change the way we all embark on planning and engage with the system; in how we make best use of data, information and opinion to tackle the needs and challenges together and bring our future places to life. That is what digital planning can help us to do.

SCOTLAND'S PLANNING IN NUMBERS

5.4m+ PEOPLE IN SCOTLAND

Scotland's spatial plans
setting out where development happens

01 National Planning Framework

14 Indicative Regional Spatial Strategies

36 Local Development Plans

02 National Park Plans

20K HOUSES BUILT
During 2018/19

30% increase over last 5 years

1,600 PLANNERS
Age breakdown

<30	6%
30-39	24%
40-49	26%
50+	**35%**

34 PLANNING AUTHORITIES

1,200+ Community councils

29,069 Planning applications 2019/20

43% APPLICATIONS
Deemed valid on receipt
Avg. of 23 authorities

£7.1 BILLION
Scotland's homebuilding sector contribution to GDP

25% REDUCTION
In public sector planning authority workforce over the past decade

THE DIGITAL OPPORTUNITY

Creating 1,600
New construction and development jobs

Up to £200m ECONOMIC BOOST

£25-35K SAVING
Per application for large housebuilders

28% TIME SAVED FOR PLANNERS

BROADER POLICY ALIGNMENT

Planning does not operate in a bubble. We must collaborate and work together to find solutions across organisational boundaries and sectors and deliver the best public services. Similarly, the reach and impact of digital planning is not confined to traditional planning processes and issues that fall within the boundaries of the Planning Act.

The Scottish Government's Programme for Government, recognises the profound impact on our health, economy and society that COVID-19 has had and continues to have on our lives. It outlines the opportunity not to simply go back to how things were, but to look afresh and deep-seated challenges, committing to delivering a fairer, greener and more prosperous Scotland as we emerge from the COVID-19 crisis.

Planning sits at the intersection of many policy areas, with a broad policy context, and can play a vital role helping Scotland recover from the pandemic. As an example, in planning at the national level we are collaborating widely with stakeholders from across sectors and different interests to develop Scotland's fourth National Planning Framework (NPF4). The framework will set out a long-term spatial plan looking to 2050. It will identify where development and infrastructure is needed to support sustainable and inclusive growth. To do that, NPF4 cannot be standalone. It must both influence and fit well with the policy objectives set by a whole range of other plans and strategies; for example, on climate change and net zero targets, infrastructure investment, housing, transport strategy, air quality, town centres and more.

Equally digitally transforming planning has far reaching policy impacts and collaboration is already underway on a range of cross cutting policy interests. For example, on the affordable housing data tool, support for a strategic approach to infrastructure investment set out in the IIP and joint working on the Mission Clyde initiative. In the immediate response to COVID-19 we saw how digital tools and data analytic techniques previously used on digital planning could help track and monitor the £350 million investment to support communities dealing with the pandemic, providing valuable information and insights into the spend coverage.

"Planning sits at the intersection of many policy areas, with a broad policy context, and can play a vital role helping Scotland recover from the pandemic."

COVID-19 Community Fund Mapping Tool
Feature

A vital aspect of the £350m community support package announced by the Scottish Government at the outset of the COVID-19 crisis, was the ability to track the spread of funding across Scotland, identify any gaps, and support rapid decision-making.

Early in the crisis, the Scottish Government's digital planning team was able to pull together complex spatial and non-spatial data, analysing and visualising results, turning complex inputs into clear and valuable insight. This helped policy teams and analysts to understand the distribution of funds. For example, data analysis and visualisation work helped to highlight the range of different funds supporting the delivery of food packages beyond that of the 'Food Fund', demonstrating the impact of this support more clearly.

Publicly available dashboards (see Community Funding Overview) also provide a summary of how each Local Authority has been supported by a range of available funds, at a total and per capita level, allowing people to understand how the funding is supporting their Local Authority.

The work undertaken during the crisis to date has shown the benefits of agile ways of working, rapid deployment, collaboration across teams and the vital part that data plays in timely decision-making.
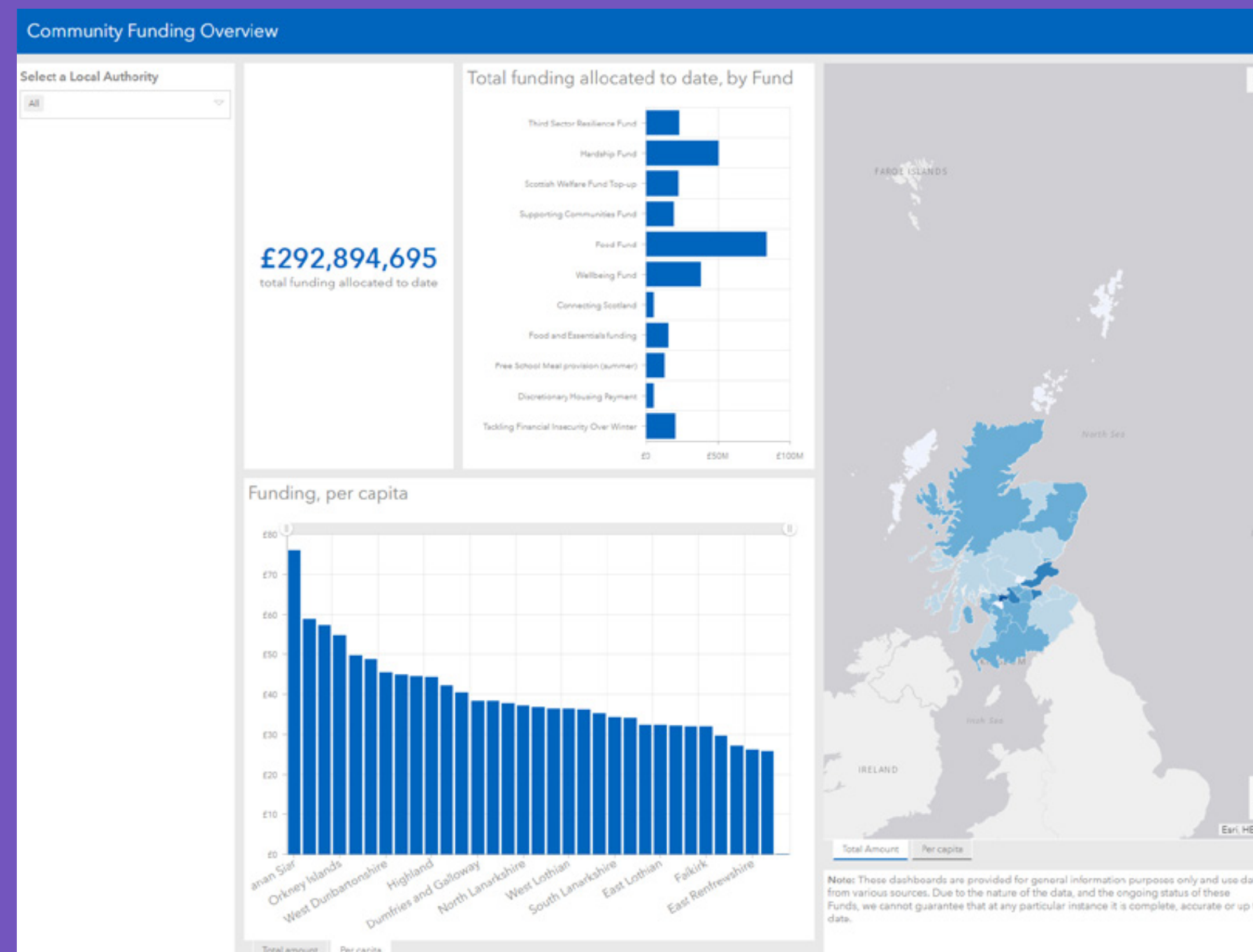
"Ensure that Scotland is recognised throughout the world as a vibrant, inclusive, greener, open and outward-looking digital nation."

As we move forward, Scottish Government's commitment to the place principle and focus on 20-minute neighbourhoods, localism and placemaking, signals the importance of joining up across organisational and policy boundaries to look at the outcomes for places holistically. The tools, technologies and different ways of working delivered through the digital transformation of planning are well suited to support this; helping design and create places that work for us all, regardless of background.

Significant emphasis and positive change is taking place more broadly around community empowerment and civic engagement, both at central and local government levels, with digital tools supporting this drive in some areas, helping citizens engage in democratic processes. The work by Connecting Scotland is playing a vital role in supporting digitally excluded households to get online, and access essential services. The social justice and renewal programme of work, led by the Social Renewal Advisory Board, aims to bank the policy and practice shifts seen during COVID-19 and utilise our current practice and knowledge with an emphasis on delivering equality and social justice. Aligning with the principles of this work will help ensure equalities and digital exclusion are key considerations as we deliver this programme.

The way we are transforming the planning system through innovative digital technologies and solutions is not unique; it also sits within a bigger picture. Public services everywhere, as in most walks of life, are putting digital at the heart of their futures.

Our Digital Strategy for Planning reflects the broader ambitions set out within Scotland's national Digital Strategy refresh: Renewing Scotland's full potential in a digital world. The revised national strategy to be published in early 2021, continues to provide a focal point for all of the digital recovery work taking place across government, and a blueprint that individual digital strategies – including the digital planning strategy – can align with.

The national strategy's vision – to ensure that Scotland is recognised throughout the world as a vibrant, inclusive, greener, open and outward-looking digital nation – is now even more compelling in light of the coronavirus pandemic.
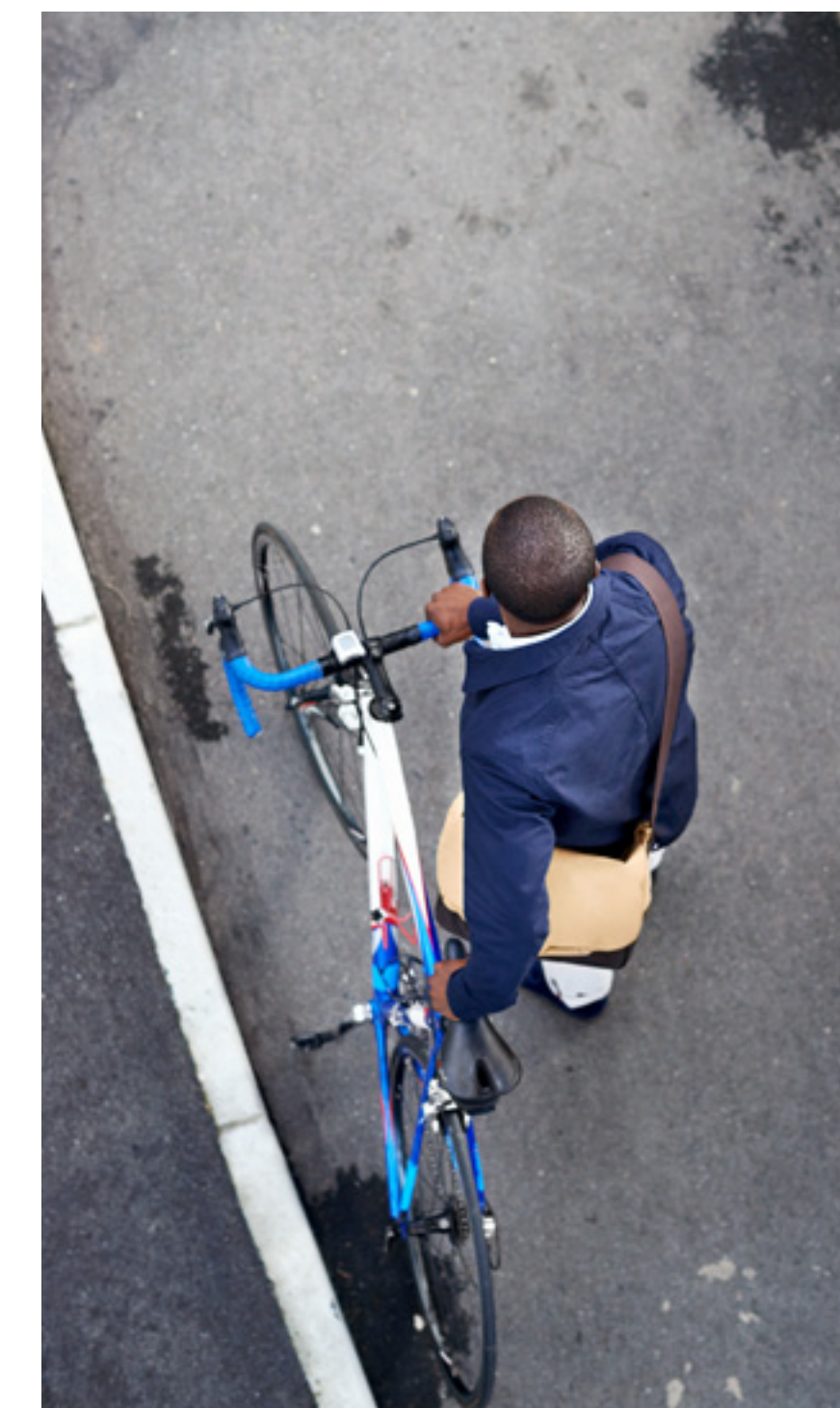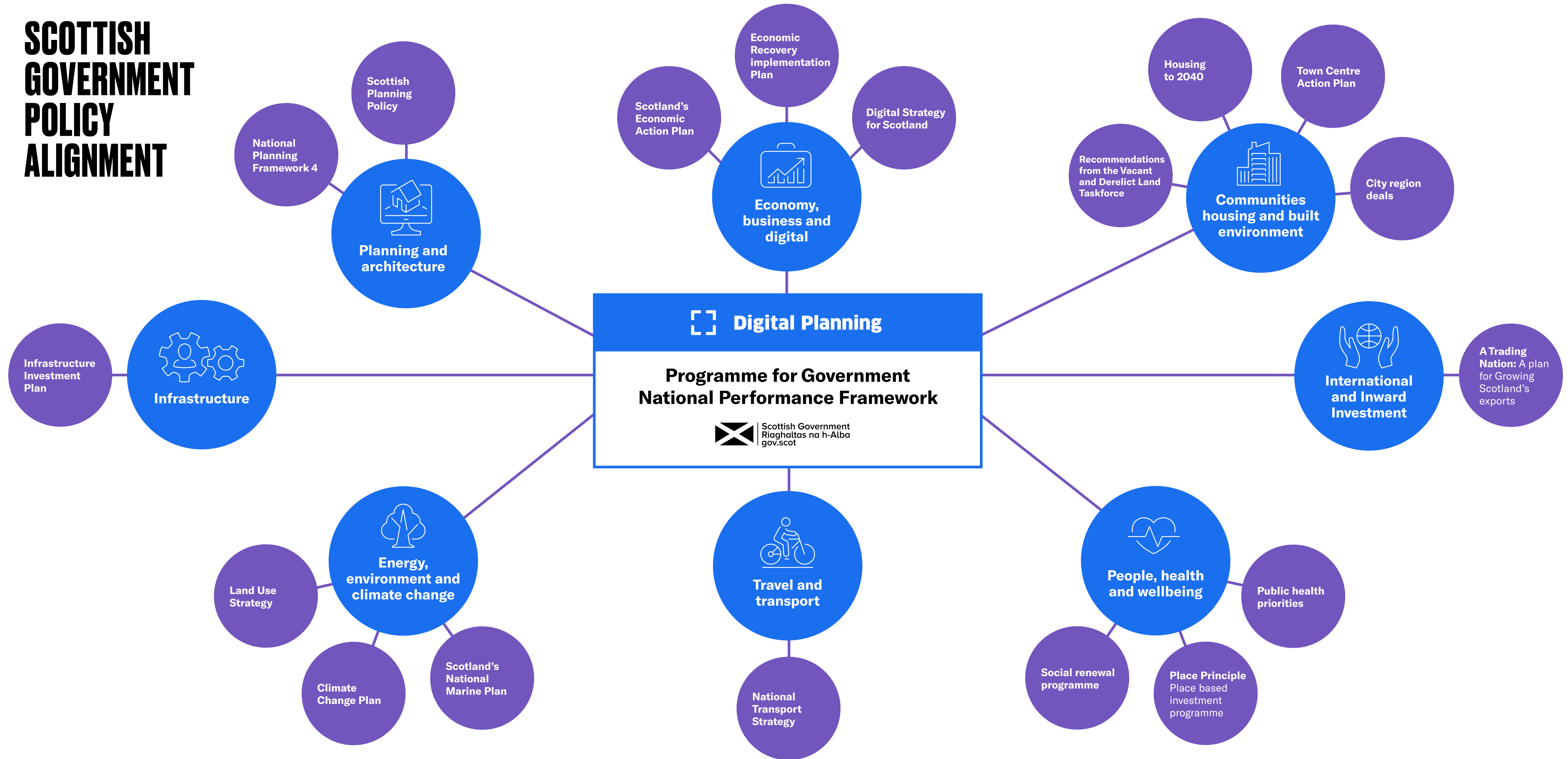
In order to deliver successful, joined-up, digital transformation we will remain closely aligned to the national strategy, ensuring greater coherence and supporting the ambition to build a Digital Scotland in which:

- the right support is given to the right people with more and more of us gaining the confidence to use and benefit from digital technology

- we capitalise on Digital's potential to sustain and invigorate rural and island communities

- we reinvent our public services to make them more personal, accountable, adaptable, efficient, sustainable and worthy of public trust

- we transform into true digital organisations with digital skills, cultures and operating models

- our Tech sector is an innovative one, successful internationally and involving enthusiastic partners in a network of digital and data talent

- green thinking is incorporated into all our digital solutions, so we can contribute to meet our statutory commitments to be a net zero society by 2045

- we are open, ethical and working with others to meet new moral, environmental, regulatory and security concerns

Our research commissioned by RTPI on policy impacts of digital planning identified a number of strategies and plans across Government this work could support. All of these important policy commitments require a great deal of detailed information and data that, when used collaboratively and effectively, will help shape priorities and the direction for the future development of Scotland.

SCOTTISH GOVERNMENT POLICY ALIGNMENT

Scottish Planning Policy

National Planning Framework 4

Planning and architecture

Economic Recovery implementation Plan

Scotland's Economic Action Plan

Digital Strategy for Scotland

Economy, business and digital

Housing to 2040

Town Centre Action Plan

Recommendations from the Vacant and Derelict Land Taskforce

City region deals

Communities housing and built environment

Infrastructure Investment Plan

Infrastructure

Digital Planning

Programme for Government National Performance Framework

Scottish Government
Riaghaltas na h-Alba
gov.scot

International and Inward Investment

A Trading Nation: A plan for Growing Scotland's exports

Land Use Strategy

Energy, environment and climate change

Climate Change Plan

Scotland's National Marine Plan

Travel and transport

National Transport Strategy

People, health and wellbeing

Public health priorities

Social renewal programme

Place Principle Place based investment programme

UNDERSTANDING HOW TO DIGITALLY TRANSFORM

User research is providing a solid, robust and reliable foundation for digital transformation, with a clear understanding of what people need from a digitally enabled planning system.

Learning from the experiences of different groups who interact with the current planning system is helping ensure a collaborative approach to understanding problems, different perspectives and discovering effective solutions.

This approach is in line with the Scottish Approach to Service Design (SAtSD) which aims to ensure "that the people of Scotland are supported and empowered to actively participate in the definition, design and Digital transformation will also enable us to further policy alignment (from policy making to live service improvement)." With this user-centred approach at the heart of the digital transformation of planning, user research will continue as the programme moves into delivery of new services, ensuring that the needs of users are at the centre of service design.

To inform this work we spoke to over 1000 participants in a series of workshops, interviews, design validation sessions and citizen surveys. Drawing participants from the broad spectrum of user groups across the planning system in Scotland. Over 850 citizens, nearly 150 planning authority staff across a mix of planning authorities and 70 professionals, including architects, consultees and developers have taken part in the user research.

1073 PARTICIPANTS

70 PROFESSIONALS
Including Architects, Consultees, Developers and more...

859 CITIZENS

144 STAFF
Across 34 planning authorities

Common themes identified from the user research and dialogue were:

Consistency
There are "34 ways to solve the same problem". The different approaches and different systems used by planning authorities and other parties can lead to inconsistency for users across the system. This highlighted opportunities in having a single seamless system serving all areas of planning.

Engagement and trust
Public engagement across planning is viewed as narrow and unrepresentative. Citizens sometimes feel planning decisions are a "done deal" and that their voices don't matter. There is an opportunity to democratise planning through increased transparency, trust and engagement in the planning process.

Knowledge of planning
There is a perceived lack of knowledge amongst individuals and communities in both planning and the impact of planning decisions on their lives and experiences. More widespread understanding of these could enhance civic capacity and the ability for many to meaningfully participate.

Communication
Effective communications, notifications and updates are seen as necessary factors in ensuring that the planning system as a service is efficient, responsive and easy to understand for users. Improving notifications and updates in particular could have multiple benefits in reducing confusion, frustration, and delays, and increasing satisfaction and efficiency, and could also lead to more effective and timely decision making.

Collaboration
Professional user groups highlighted opportunities to enhance collaboration, with the potential to identify and resolve potential issues early and improve community engagement.

Data and technology
Data is seen as a key asset in supporting effective monitoring and decision making, and the technology used across the planning system needs to be fit for purpose. Potential benefits were identified through taking advantage of the available advances and innovations in technology, data and integrated systems.

Knowledge, skills and resources
A high-quality service is dependent on users having knowledge of the planning system and the planners of tomorrow having the skills and resources to be able to make best use of data and technology. Filling current gaps in knowledge, skills and resources can positively influence decision making and the ability of staff to deliver the quality of service users expect.

Efficiency
A number of areas were identified where efficiency could be improved, often relating to technology issues or staff carrying out unnecessary admin tasks. There is an opportunity for targeted technology solutions to deliver a more efficient, integrated, single platform.

"To inform this work we spoke to over 1000 participants in a series of workshops, interviews, design validation sessions and citizen surveys."

To complement the user research, two phases of horizon scanning have been carried out, providing an understanding of innovative technologies and techniques already in use across other sectors and countries. We've used this to consider how these technology trends could be applied within the context of the planning system, informing and shaping a digitally enabled future system.

The first phase, led by Connected Places Catapult, was a broad look at the different technologies and how they could be used. The second phase, led by The Scottish Futures Trust, was a focussed, deep dive on technologies that could help address specific challenges discovered through our user research.
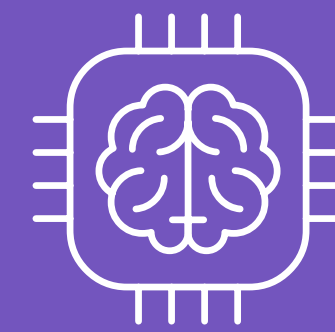
MACHINE LEARNING
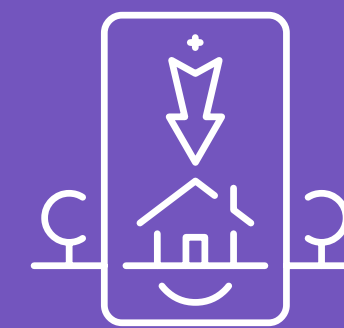
AUGMENTED REALITY

DISTRIBUTED LEDGERS

BIG DATA

DIGITAL 3D MAPS

IMAGE RECOGNITION

INTERNET OF THINGS

PREDICTIVE URBAN MODELS

Singapore
Case Study

Singapore is at the forefront of the Govtech agenda and rise of the Smart Nation, driving innovative ways of doing the work of government. Digital transformation of the planning system in Singapore began in 2013, forming part of a wider 'Smart Nation' programme to digitise all government services.

Focused on making the best use of data analytics and geospatial technology to develop greater insight in planning, the programme, led by the Urban Redevelopment Authority (URA), worked in conjunction with commercial partners to bring new digital technologies into the planning process.

A range of new planning tools were developed to integrate with existing government services:

ePlanner – a "geospatial urban analytics system" that pulls together information from various sources, enabling advanced spatial visualisation of data. The platform includes features such as site visit information, existing and planned groundwork in the region and options for public engagement.

URA SPACE – a centralised integrated map portal to deliver location-based services and information. It comprises a variety of mapping services and data to help visualise planning regulations and planning related data.
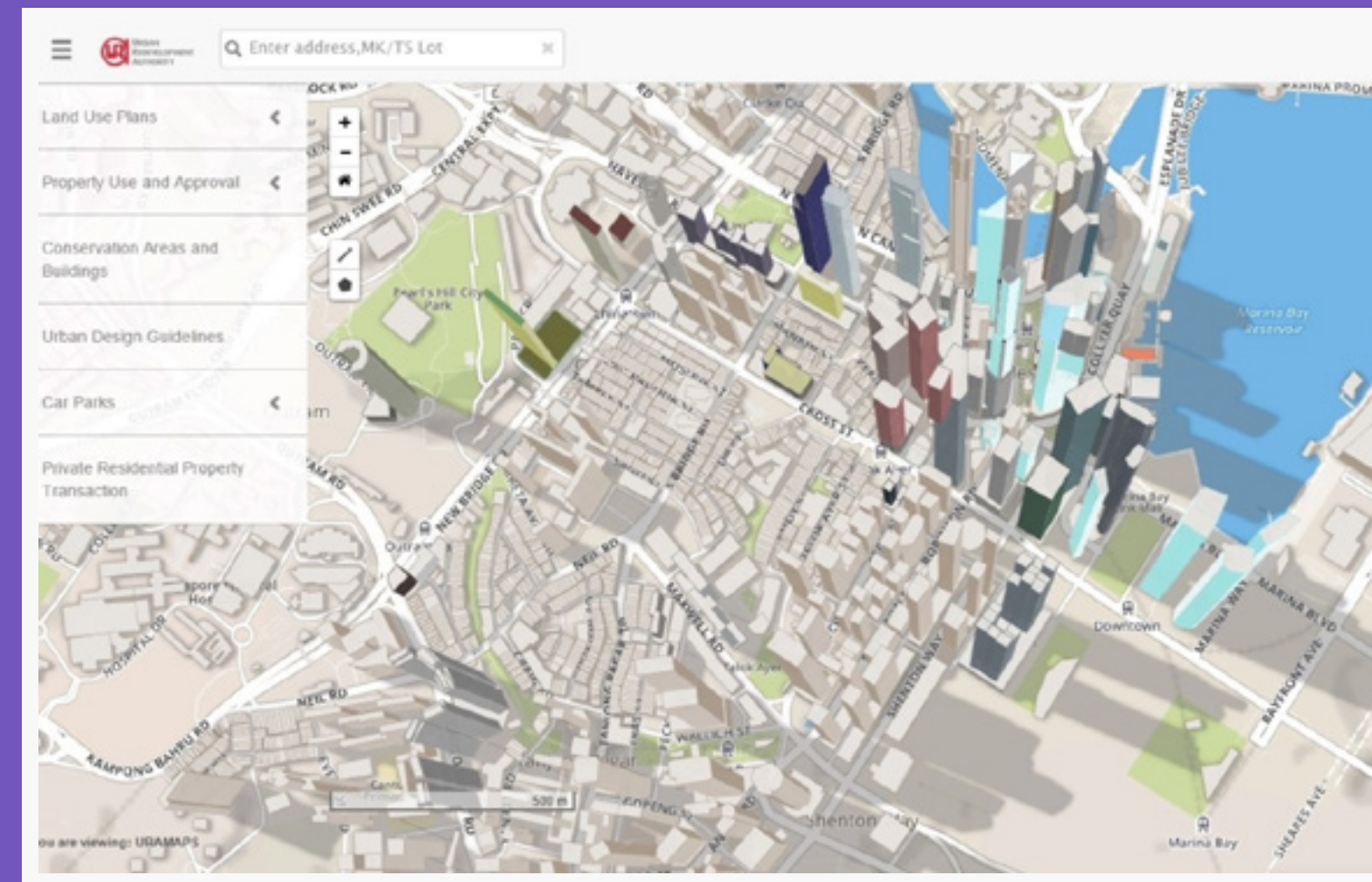
The platform makes it possible to explore map services with information such as Master Plan data, urban design guidelines, planning approvals, car parks (including availability) and property transaction data.

This integrated suite of planning services has created an end-to-end digital planning system, improving efficiency and decision-making, and leading to better outcomes that meet Singapore's long-term planning needs.

Planning, Municipal Corporation of Greater Mumbai
Case Study

The Municipal Corporation of Greater Mumbai (MCGM) is one of the largest local governments in the Asian continent and has primary responsibility for urban management in Mumbai.

The approach to digital transformation taken in Greater Mumbai, highlights the benefits of greater standardisation and the adoption of new technology capable of interpreting 'machine readable' policy.

Working with a dedicated PlanTech supplier, MCGM has implemented a CAD scrutiny engine and workflow management system to increase automation in the assessment of applications and enable more efficient processing.

The initial focus for MCGM was to ensure its planning and building control policy was produced in standardised and machine readable form. This first step highlights the foundational work that must take place in Scotland, as part of the digital transformation programme, and the collaboration that will be needed to adopt a similar approach.

Through greater automation, Mumbai is progressing towards a digital planning system and has seen a reduction in time taken for applications to be processed.

LESSONS LEARNED FROM COVID-19 RESPONSE

The COVID-19 pandemic has impacted every aspect of our lives since early 2020. Almost overnight our lives, our work and many of our services shifted online in a way that is simply unprecedented. In planning, as in most walks of life, the pandemic has driven the widespread rapid adoption of digital technology and new ways of working.

During this period, we have seen key aspects of the planning system continue to operate, including the submission and processing of planning and building applications, helped by previous investments made in technology and changed business practices. As we adapt to the new digital norm there have been examples of how this has driven positive change. For example, the greater use of digital public consultation events for planning have brought increased numbers of people, across a wider demography getting involved and having their say.

Even so, some of the positive opportunities also present challenges; in particular ensuring that in the drive towards digital solutions we find a way to meaningfully address digital exclusion and ensure everyone can participate in a way that suits them.

As the submission and processing of applications has continued, there have also been areas of challenge within the sector as many of us work remotely. Notably, in accepting and refunding payments to applicants, processing paper applications while working remotely, neighbour and site notifications and site visits, with many authorities thinking differently about how to carry out their functions.

The experience during 2020 has brought into sharp focus how we live and work, with an increasing recognition of the importance of technology. We have seen the planning sector adapt and act with resilience to keep the system operational.

Moving forward we need to build from this, ensuring a consistently high quality of digital service provision across the country.

The lessons learned during COVID-19, both from the eDevelopment service and working with local government partners, have been reflected in and used to refine our priorities for delivery. The full report on lessons learnt can be found here.

"2020 has brought into sharp focus how we live and work."

Aberdeenshire Local Development Plan Engagement
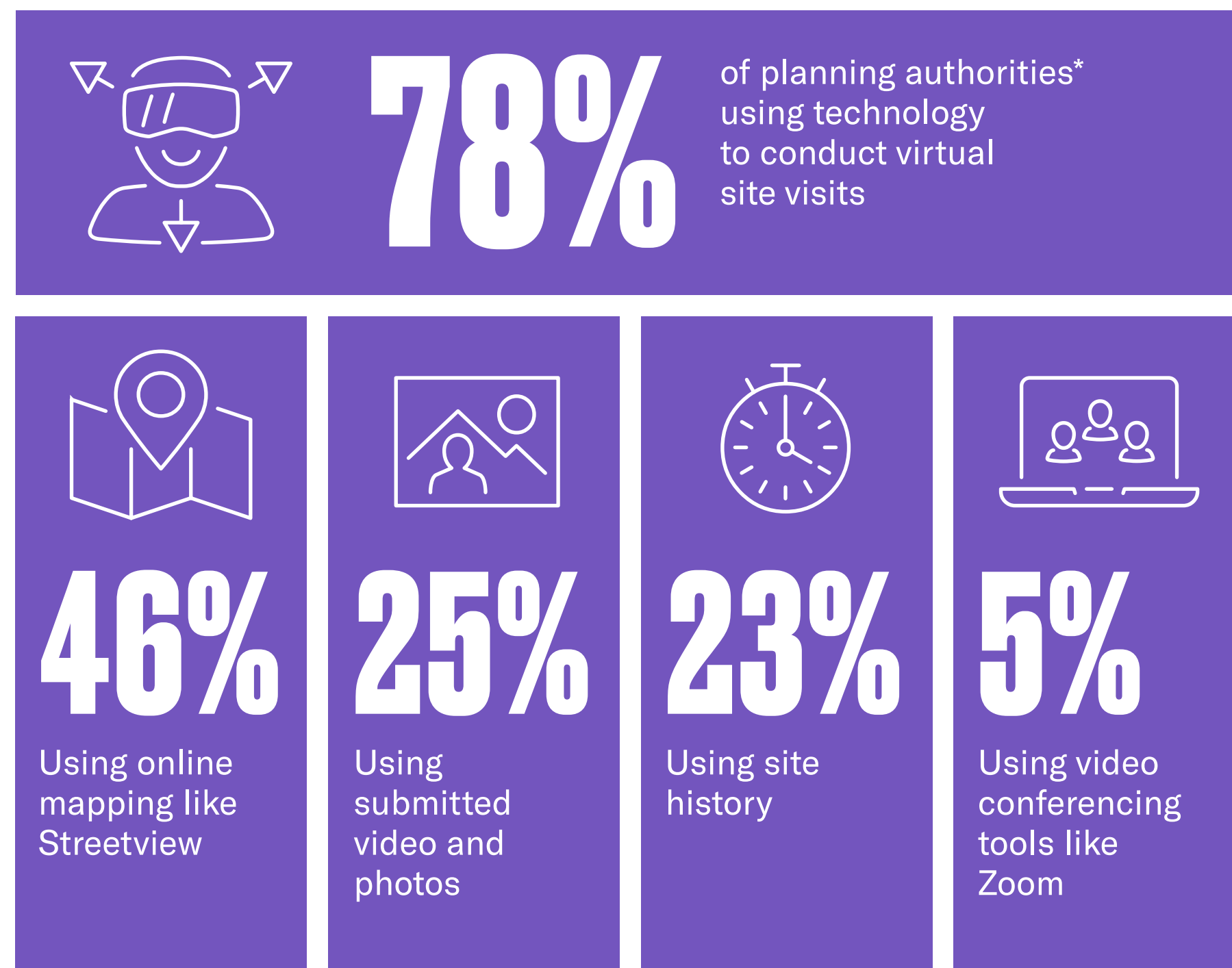Case Study

Greater public engagement and participation in planning has long been a goal of planning authorities, and we have seen how those involved in planning across Scotland have used digital technology to meet this challenge during the COVID-19 pandemic.

Aberdeenshire Council has used a mix of creative ways to inform and engage the public about its local development plan.

During the plan-making process, officers traditionally engage face-to-face with members of the public through drop-in events, usually held in public halls. However, given restrictions associated with COVID-19, it was not possible to hold these events. So instead, they offered the opportunity for statutory consultees and members of the public to continue to engage via a digital drop-in.

This approach was popular, providing a cost effective way of giving people a say in what is happening around them. Over 3000 individual visitors took part in the drop in, an increase from previous consultations, with 25-34 year olds most active.

78% of planning authorities* using technology to conduct virtual site visits

46% Using online mapping like Streetview

25% Using submitted video and photos

23% Using site history

5% Using video conferencing tools like Zoom

Thinking differently about site visits during the pandemic

*From a survey of 23 planning authorities.

"As digital transformation was opening the door to the future of planning – where effectiveness and efficiency will be experienced in equal measure – the COVID-19 crisis kicked it in!

Thankfully, the impact of the pandemic on service delivery was lessened, by keeping the hinges and handles intact, and preparing the system to be more robust and resilient for the next crisis.

The transformation programme is building in a new agility and operational flexibility that will enable the strategic purpose of Scotland's planning system, of supporting inclusive, sustainable growth, to shine like a beacon on a clear direction of travel."

An economic development professional

SHAPING DIGITAL TRANSFORMATION

Everything discovered through user research, stakeholder engagement, horizon scanning and experiences during the COVID-19 pandemic – together with lessons learned from our day to day operation of the eDevelopment service – has informed the priorities for delivery set out in this Strategy.

- Early work, in the form of user research, stakeholder engagement and horizon scanning, confirmed a baseline understanding of problems and opportunities. These identified key areas for transformation

- These were explored further in a series of design challenges and collaborative workshops with stakeholders explored potential design solutions and visual prototypes that illustrated what a future planning system could look like and how it could address the user needs and challenges identified in our research

- We embraced the use of prototyping to communicate and collaborate with stakeholders on the type of digitally enabled future planning system. We used these to iteratively refine and validate ideas around the type of solutions needed and therefore the delivery priorities

- Taking earlier learnings we produced a full set of priorities, centred on user needs – for example the ability to submit a valid planning application – and surveyed planners and planning stakeholders to help inform the relative importance of each

- These priorities form the basis for the Five Missions and deliverables set out within each mission. To help us get a head start on delivery, pathfinder projects were run with partner organisations (Scottish Futures Trust, the Improvement Service, British Geological Survey and the Local Government Digital Office) to gather information that will move key areas forward rapidly once the digital transformation programme launches

"This user centred approach will continue to be at the heart of what we do as we move into delivery, ensuring digital services that work for all, and a digital transformation journey that is able to evolve and grow along with technology, challenges and opportunities that the sector faces in the future."

SHAPING DIGITAL TRANSFORMATION – THE PROCESS

THE VISION

EDEVELOPMENT

USER RESEARCH

HORIZON SCANNING

INSIGHTS AND OPPORTUNITIES

DESIGN CHALLENGES AND PROTOTYPES

ITERATE

EXPERT REVIEW

MISSIONS AND PRIORITIES

COVID-19
Lessons learned

PATHFINDERS

SCOTLAND'S DIGITAL STRATEGY FOR PLANNING
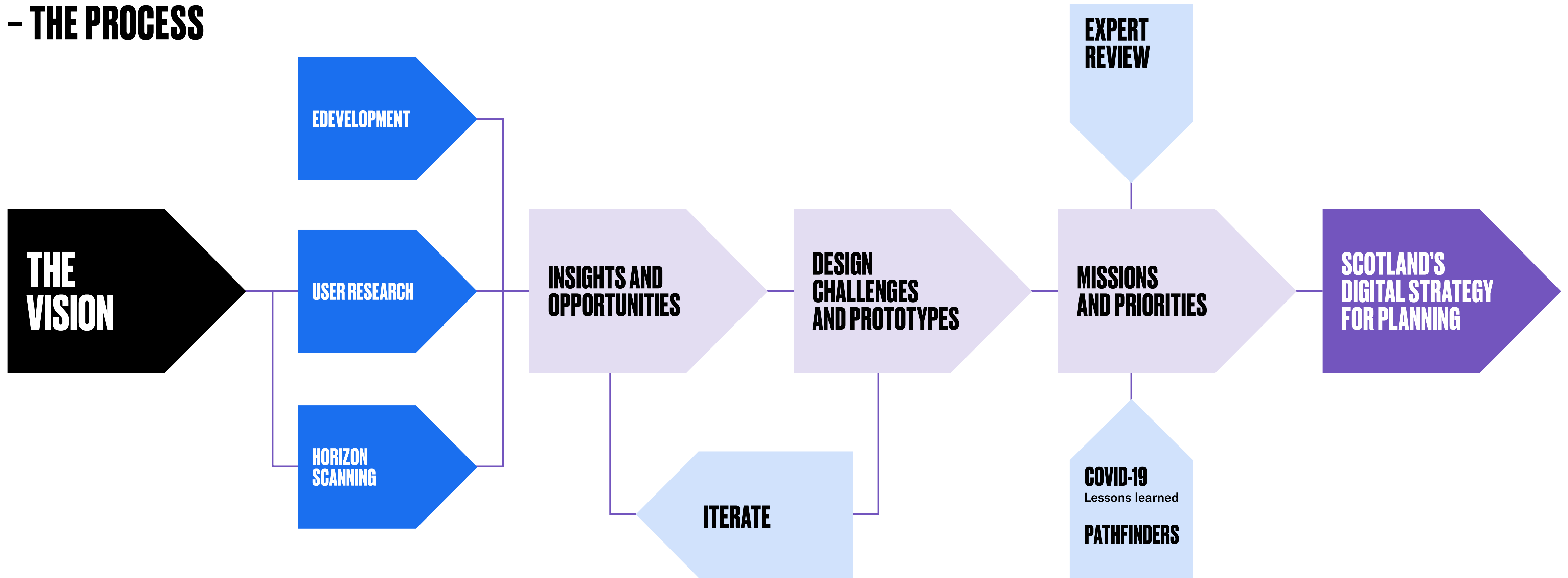
THE TRANSFORMATION

A DIGITALLY TRANSFORMED PLANNING SYSTEM

Digital will have a fundamental impact on Scotland's planning system. Through harnessing and realising the potential opportunities digital brings, we can radically improve how planning works for all, contributing to create a prosperous, green and fair country. The recovery from COVID-19 means the need for these high quality digital services are more crucial than ever.

We talk about an ambitious, future proofed planning system that uses digital and data to transform the service. But in practice it can be hard to visualise and relate to what that means, and how it could generate improvements. With the help of prototypes developed during the research and development of this Strategy we can communicate and explain the improvements outlined in this section. Through user research and stakeholder engagement we determined which elements of a digitally-enabled planning system would have the greatest transformative impact. The prototypes in this section practically demonstrate how these elements will be transformed and delivered.

"Harnessing digital opportunities can radically improve how planning works for all."

A planning system fit for the future, able to adapt to new technology and innovations as they become available. Using innovative 3rd party technologies which give planners the best solutions for the tasks in hand rather than being limited by legacy technology and ways of working. We want to move away from current systems to modular, open and flexible solutions that enable public sector planners to rapidly benefit from technology progress and innovations including augmented reality and 3D visualisations, AI and machine learning and digital twin technologies. Giving planners the tools and data they need to collaborate and improve decision-making.

Joined up, holistic and providing an end-to-end service for customers. By this we mean the experience a customer receives when using the planning system is seamless and joined up, regardless of where the underpinning data, policy and systems are derived. This will be developed through a suite of simple, intuitive and joined up digital services that present a consistent experience to the user, accessed through our Planning Scotland Gateway. Where development planning and development management are more integrated using digital tools. That allow planners a more intuitive way of seeing and taking account of development plan policies when assessing applications, and where decisions made through the application process can be relayed back into development plan policy in real time and used to track progress towards policy outcomes.

Planning Scotland Gateway

Scotland's single source of information and services on planning and place

Explore
Find out more about planning and what is happening in your area

- Applications >
- Sites >
- Inspiration >
- Plans >
- Investments >

Apply
Create, submit and track applications for planning permission

- Create >
- Pay >
- Track >
- Validate >
- Assess >

Engage
Have your say and get involved in creating plans for your area

- Your Place >
- Comment >

Create
Prepare and produce local, regional and national plans

- Local Plans >
- Regional Plans >
- National Plans >

Monitor and Forecast
See real time updates on how planning is

- Performance >
- Monitor LDP >
- Monitor NPF >
- Custom Reports >
- Trend Analysis >

[Prototype Navigator]

A SYSTEM THAT HAS DATA AT ITS HEART

Where we can find, access and use high quality, trusted data across the planning system and beyond. Data that supports local decision making and community activities whilst delivering a joined up national picture of what is happening where, for those working across boundaries. To see the alignment and relationships much more clearly between community, local authority, regional and national policies and outcomes by having the right data available in real time.

A system that takes a data driven approach to policy making and guidance. Where planning moves from being primarily document led to being led by rules, standards and data allowing greater consistency, clarity, efficiency and providing the building blocks to support future innovations. That uses data to reduce, and automate repetitive tasks releasing resource and focusing planners time on where their professional expertise adds most value. With sample survey evidence shows this could release up to 2 hours per day of a planner's time.

That uses data insights and analytics to learn from past experience of policy impacts and models future to support evidence based policy development and outcomes. That delivers real time data, and tracks delivery of key policies and impacts e.g. development plans based on interactive live data rather than fixed picture at a point in time. And that opens up data across all sectors to drive digital economy and data opportunities, driving innovation and supporting the PlaceTech innovation and incubator hub.

OPEN AND ACCESSIBLE TO ALL

Inclusive and empowering, helping everyone get involved. Providing new ways to get people involved in shaping their towns, cities and communities. Increase the numbers and broaden the demographics getting involved in planning by providing new digital tools for participating. These should integrate with the wider 'digital planning ecosystem', boosting civic engagement by using new intuitive digital tools for engagement citizens and communities, and in turn providing the information in a way which is meaningful and easily consumable by the planning body responsible for developing policies and making decisions. These tools should be accessible via mobile or smartphone devices and integrate with social media channels adopting the principle of 'going to where people are' to allow them to find information and participate in the simplest and most intuitive way.
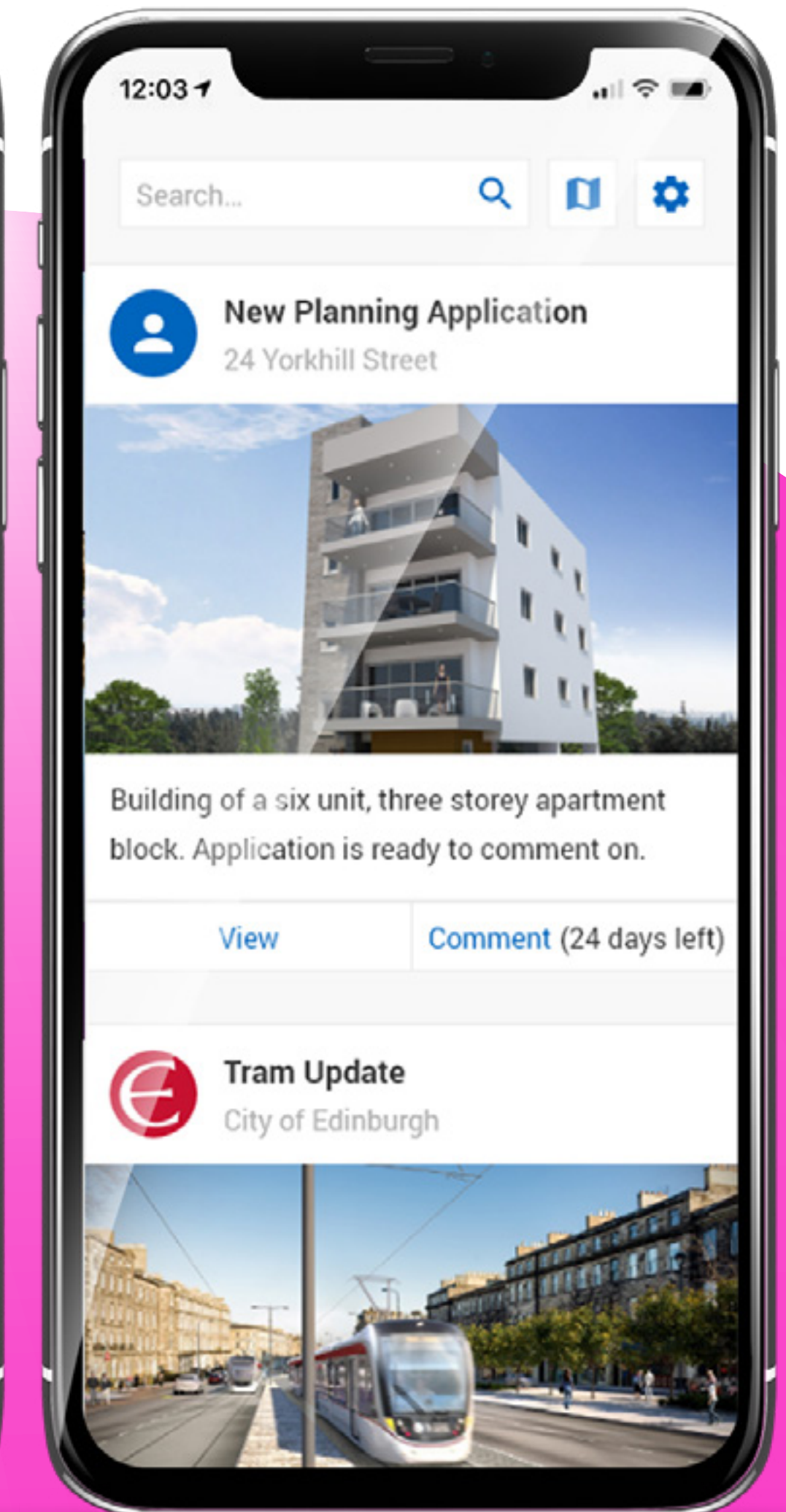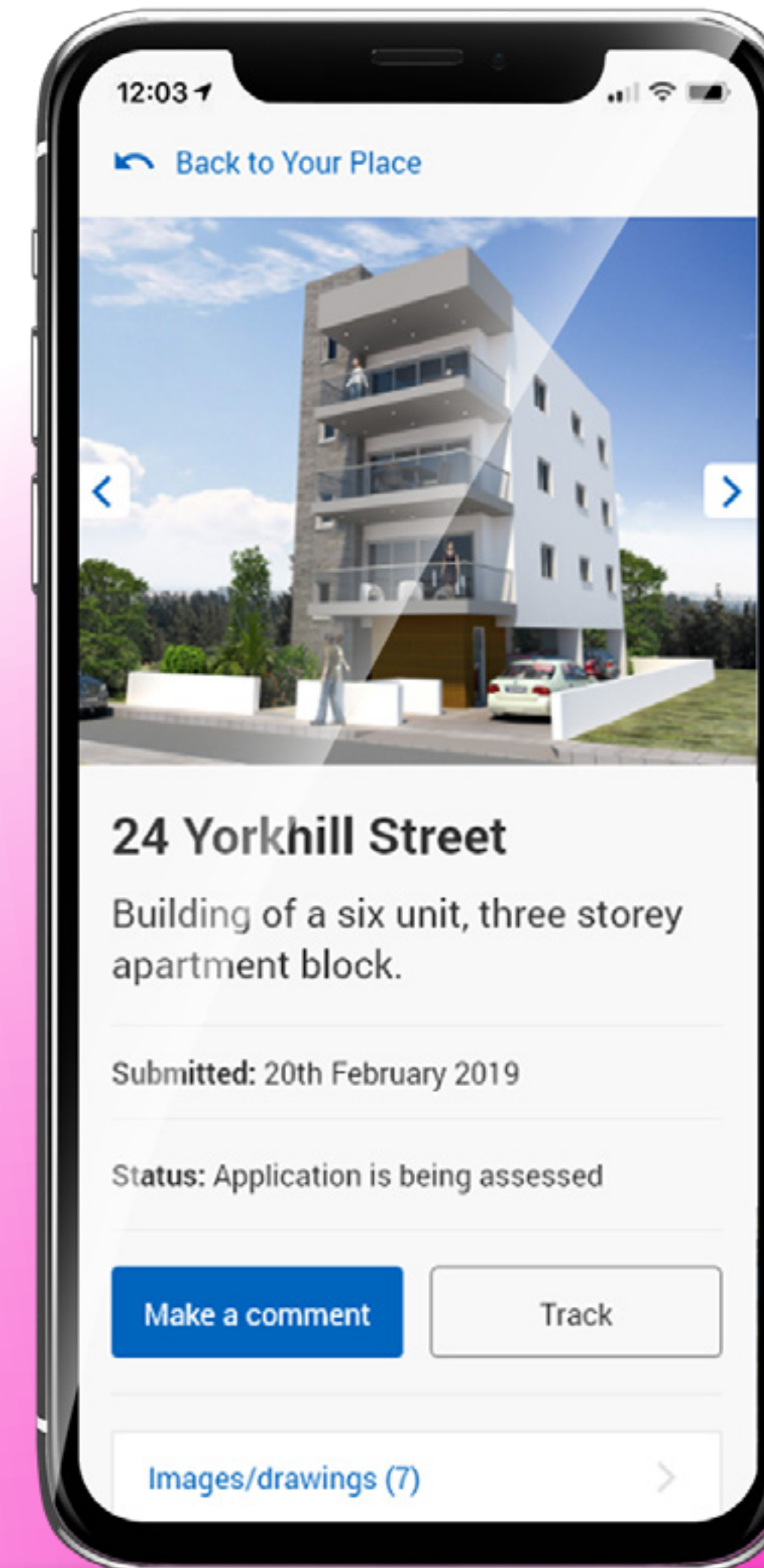
A STREAMLINED, EFFICIENT PLANNING APPLICATION PROCESS

The process of applying for planning permission should be clear, easy to understand and follow, and digitally enabled, giving applicants greater clarity throughout the process.

A smart planning application approach, that uses machine readable standardised forms will help streamline and provide consistency, forming the foundation for innovation. We believe that there's huge potential through use of smart data-driven guidance and policy, to give clear information to potential applicants at the very earliest point in the process based upon their location, and what they want to do. For example, helping applicants understand whether they need planning permission and whether they have submitted a valid (complete) application will improve the user experience, and reduce resource overhead at the planning authority. With the potential to get real time updates on what stage the planning application is at in the process in terms of the officer's consideration – removing the need to liaise directly with the case officer to get a status update.

Our planning authorities need solutions for managing and deciding cases that are future-proofed, streamlined and support improved communications and collaboration with business, consultees and applicants. Providing interactive and collaborative tools that support joined up working where we value and enable collaboration is a key principle of the improved application process. Bringing modern digital services to planning case management, and enabling technologies such as 3D visualisation and BIM to form a core part of the application process, will help communicate the proposed development and understanding of the impact.

We need a system that allows commenters to see and engage with planning applications independent of geographic boundaries. And that provide people simple digital ways of being notified of applications in a way they choose e.g. smartphone notification.

"Applying for planning permission should be clear, easy to understand and follow."

Information about planning and places should be easy to find and understand, being able to take into account local planning policies and rules, together with national legislation and policies. But in addition, information provided could and should be inspirational and ambitious – able to capture and reflect people's hopes and aspirations about their homes, communities and country. Our user research has told us that people want to see inspiring examples at the beginning of their planning journey and understand clear process steps for what they need to do set out in plain English. The 'find and explore' service proposed in this strategy will enable this.

Bringing together all information and services about planning in Scotland will, for the first time, provide users with a comprehensive view of all aspects of planning – from national and local plans to individual applications. We have the foundational platform of the eDevelopment.scot service to build upon. This partnership shared service between Scottish Government and all Scottish planning authorities now accounts for 95% of all planning applications made in Scotland and presents huge potential opportunity to develop a next generation Planning Scotland Gateway.

Improving validation
Prototype

One of the biggest frustrations for both applicants and planning authorities is the high proportion of invalid applications (over 50%). To show how a digital planning system might address this we have developed an illustrative prototype that combines data and local policies in real time to improve validation.

It starts with the simple question, "Do I need planning permission?", presenting a series of questions establishing the nature and purpose of the proposed new development. Datasets such as flood risk, listed buildings, greenspace and conservation areas are drawn in to help determine the requirement for planning permission and the documentation needed for a valid application.

A PLAN-LED SYSTEM

Spatial development plans set out the long-term vision for where development should and shouldn't happen in the places they cover. A digitally enabled system for development planning should enable these spatial development plans to play a key role in bringing all those involved in planning together to collaborate and prepare plans. Evidenced though our horizon scanning work, we believe there are much more effective and engaging ways of preparing and presenting plans. There is also scope for digital solutions to achieve integration – from national to local and community scales and across different interests, for example – by linking with infrastructure programmes and regional land use partnerships.
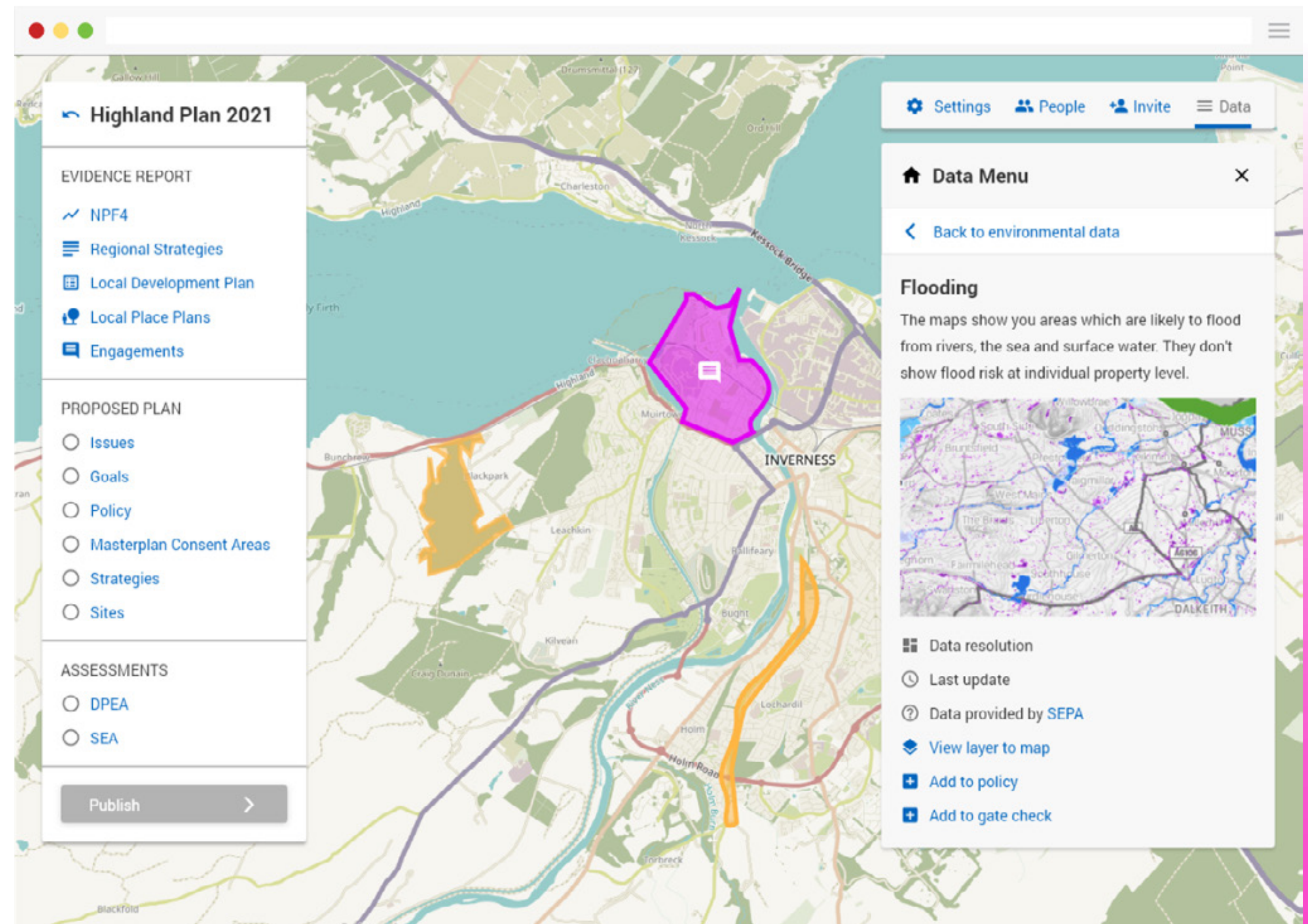
A future system should allow users to see the alignment and relationships much more clearly between community, local authority, regional and national policies, plans and outcomes by having the right data available in real time. With a standardised data led approach for spatial planning we ensure data can be integrated vertically (across geographical scales) and at the heart of engagement using digital tools. For the next National Planning Framework currently under preparation this involves adopting a digital led approach using data to prepare, present and engage on NPF4.

For Local Development Plans, prepared by planning authorities this means having the ability to find, access and make use of the right data when preparing them.

We know that significant time is spent sourcing data and a digital planning system will greatly reduce this. Up-to-date data will provide an accurate view of progress towards targets and policy outcomes, providing those involved in delivering development such as utility and infrastructure providers more clarity on capacity. Together with NPF4, local development plans will form the future statutory development plan and there would be great advantage in working towards a system where they are presented together, using a shared digital platform. This will allow people to see how national policies work together with local scale planning in their local neighbourhood.

For communities developing their Local Place Plans, this means ensuring that more people are able to contribute to the conversation about place, and to channel their views meaningfully to planning authorities. Through our CivTech® challenge we have already been working with The Future Fox start-up to develop the PlaceBuilder product which will publicly launch in March 2021. This digital engagement tool helps communities shape their communities and produce Local Place Plans, then provide the data and information to the planning authority in an easily consumable way that they can use as part of the LDP process.

"We know that significant time is spent sourcing data and a digital planning system will greatly reduce this."

FIVE MISSIONS

Introducing new technology alone into the planning system will not bring about the vision we have for transformation. A whole-system approach is required that combines advances in technology and data, with organisational and cultural change.
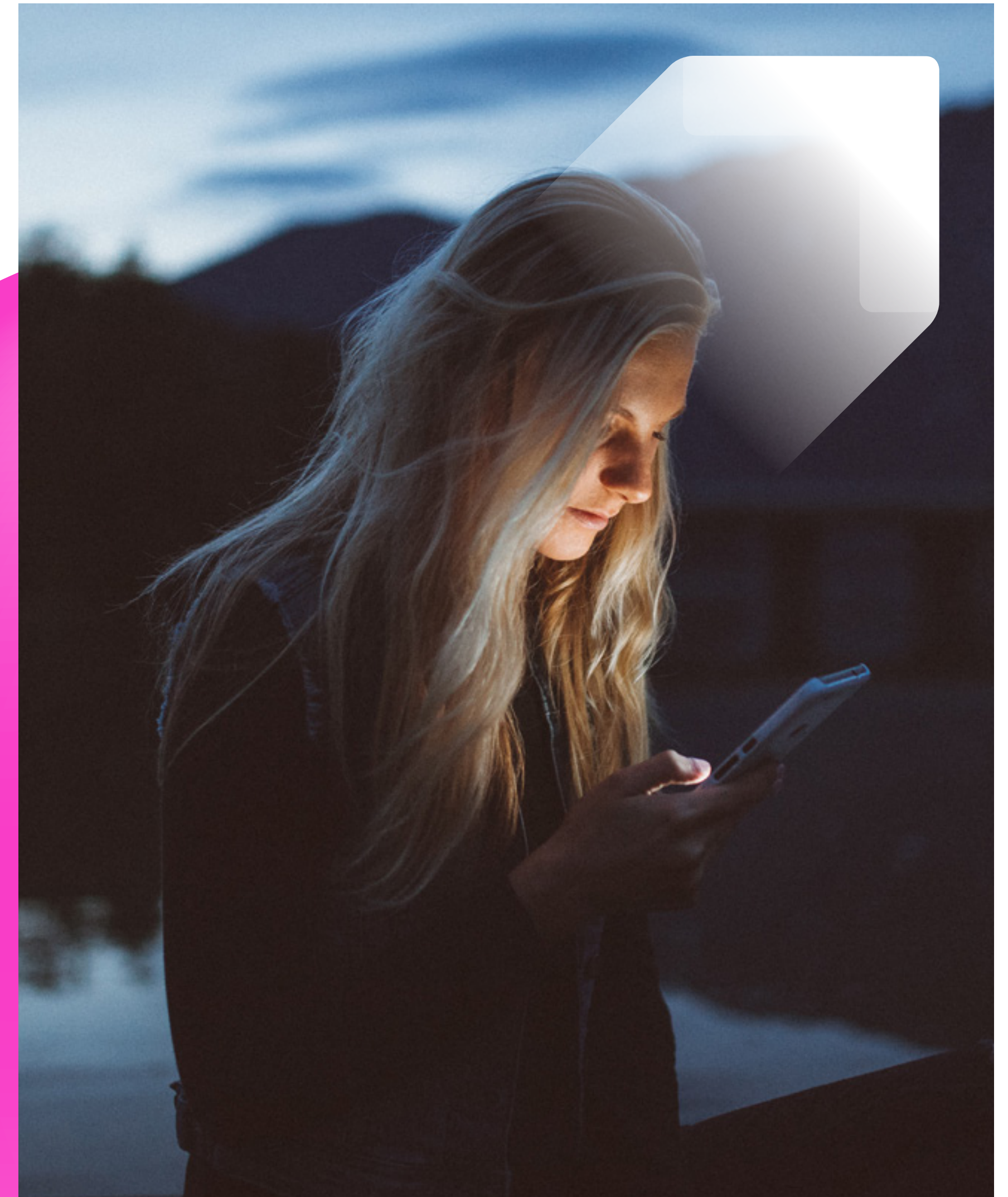
Our Five Missions are of equal importance and will be given equal weight when the transformation programme begins.

They reflect that whole-system view of transformation and provide the foundational building blocks for a future planning system.

Each mission sets out both 5 Year Goals that we aspire to, along with clear and focused actions over the next 18-24 months. These immediate actions blend delivering value early, for example by building on existing work or services, and starting work on the large, complex change pieces that will take longer to achieve.

MISSION 1 | **Data**
Unlock the value of planning data

MISSION 2 | **Digital Technologies**
Deliver an end-to-end digital planning experience

MISSION 3 | **Ways of working**
Create the conditions for digital to flourish

MISSION 4 | **People**
Use digital tools to drive collaboration and engagement

MISSION 5 | **Innovation**
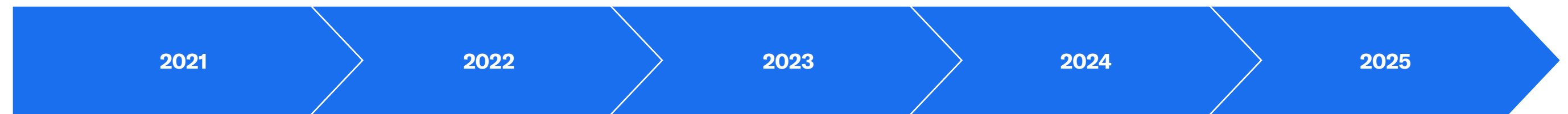Embed a culture of digital innovation

MISSION 1

UNLOCK THE VALUE OF PLANNING DATA

Our focus on understanding, improving and drawing insight from data signals the importance we place upon this aspect of digital transformation. Unlocking the value of data will be key to realising an open and smart planning system.

MISSION 1

5 YEAR GOALS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Develop a shared data resource for planning and place data, built upon a cloud hosted platform that allows easy access to high quality data across Scotland. This open access to data across the public, private and academic sectors helps drive innovation and the digital economy, as well as providing planners the right data they need to plan effectively and collaboratively.

Build a foundation of data that is robust, trusted and can be exchanged and used across geographic boundaries, vertically (across geographic scales), and which combines data from many policy areas (such as climate, people, work, place and infrastructure) that facilitates the place-based approach. Establish a sustainable long-term approach through standards and governance, developed in partnership.

Define and implement a data ecosystem approach with defined standards, data governance and operating model that provides a sustainable framework for data to be managed as an asset.

Embed a data-driven policy approach where development of policies considers data needs and opportunities at the earliest point, supporting planning policy by continuous monitoring of impact and iterative improvement.

Develop a **Realising Potential programme to explore data-driven innovations within planning** such as scenario modelling and simulation of future policy impacts.

MISSION 1

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Continue development of a **shared data platform for planning and place data**, built upon a robust cloud hosted technical infrastructure with governance, standards and defined operating model, that ensures data is managed as an asset. This supports automated data integration with planning partners, open access to data through interfaces (APIs), and provides the user with the right data at the right time.

We will begin work to **clean and open up priority data for place-based planning and create a shared data resource**. We will start developing data standards and clear protocols for use of data within the planning system to facilitate sharing and data that can be exchanged and used across geographic and policy areas. Initial focus will be on data needed for the 4th National Planning Framework across varied themes such as climate, people, work and place.

Continue joint working and collaboration across other policy areas to support analysis and decision making. We see this data resource developing into a key tool in supporting cross policy objectives including 20-minute neighbourhoods and localism, localism and the improvements to our strategic approach to infrastructure outlined in the Infrastructure Investment Plan, by providing the right data and tools.

Specific areas include exploratory work with Mission Clyde as a test bed, using data to support analysis and place-based decision making at a regional level and work to support implementation of the Infrastructure Commission recommendations and the Vacant and Derelict Land Report.

Continued over...

MISSION 1

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Continue a data discovery exercise that builds upon earlier work to understand the data landscape in planning and identify data required to support a future planning system. The discovery will finalise identification of core data sets used across the planning system and begin to work with partners to define data standards for those core data sets.

Take forward the methodology developed as part of the data pathfinder work for assessing and communicating how to use planning data.

Design, agree and implement a data governance and operating model with partners and planning authorities that ensures planning data is always high quality and standards compliant.

"Data is crucial to an evidence led local development plan. Digital planning will enable authorities to more consistently identify much needed data to inform their policy. The crucial point where this saves time, money and creates better places (where people thrive rather than cost money to help) is that it can lead to reduction in time spent at Local Development Plan (LDP) inquiries arguing what evidence to rely on and discussing objections."

A public sector planner

Data Pathfinder
Feature

Data is at the heart of the planning system, and the foundation upon which decisions are made and places change. Developing a clear and comprehensive understanding of data within the current planning system is crucial in building a solid and sustainable foundation for a future planning system.

Our Data Pathfinder undertaken during summer 2020 in partnership with the Improvement Service and British Geological Survey allowed us to baseline the current state (availability, quality and management) of planning data in Scotland, a landscape that is highly complex, with planners relying on many hundreds of datasets to forward plan and make decisions.

We explored over 2000 planning datasets, refining them to a core set of 30 that will provide a focus for action in our digital transformation programme, establishing consistent standards and governing arrangements for the management of these priority datasets.

The review also provided an emerging framework for effective use of data to support development planning.

NEXT STEPS
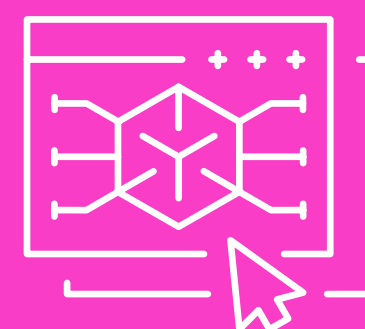
UNDERSTAND OUR DATA

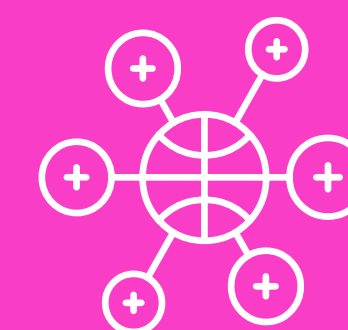**Begin work with data partners to refine core datasets**

WORK TO STANDARDS

Define and implement standards for core planning data

MANAGE DATA

Develop the right controls and governance

BUILD INSIGHT

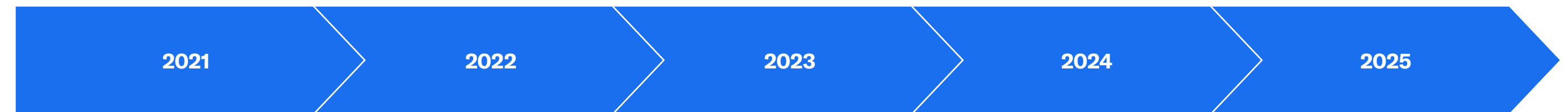**Strengthen methodologies to realise value from planning data**

MISSION 2

DELIVER AN END-TO-END DIGITAL PLANNING SERVICE EXPERIENCE

We will develop new digital services, platforms and tools that will deliver an end-to-end digital planning service experience, using next generation technologies. By focusing on the whole journey through planning, we will be able to develop the interoperability between systems to facilitate a truly digital planning system.

MISSION 2

5 YEAR GOALS

| 2021 | 2022 | 2023 | 2024 | 2025 |

A suite of new digital services for users that are simple, joined up and intuitive:

Smart Planning Application Service using data to simplify the planning application experience and remove time-consuming manual handling tasks in assessing applications.

Smart planning applications will:
- Simplify and speed up the application process
- Reduce invalid applications
- Improve the understanding of when planning permission is needed
- Improve workflow in processing and assessing applications
- Allow direct participation of statutory consultees in assessing applications

Find & Explore service providing users with a unified and enhanced interaction with planning data, e.g. track my application, find low-carbon applications near me.

The Find and Explore service will allow people to:
- Find and track application progress and search for relevant applications (e.g. low carbon)
- Find sites
- View local plans and policies
- View award winning/inspiring examples

Engage & Get Involved service introducing new digital tools and channels to interact with planning and introduce more diversity amongst those who contribute to shaping places

The Engage & Get Involved service will allow:
- People to comment on any application
- Enable greater community involvement
- Planners to more clearly understand feedback from communities
- Planning authorities to produce more engaging plans

**Track & Forecast** service using planning data to draw greater insight and enable continuous improvement.

The Track and Forecast service will:
- enable real-time monitoring of the planning system
- provide the data to show policy impact in a more timely manner
- provide the evidence for investment decisions and targeted interventions

Continued over...

MISSION 2

5 YEAR GOALS

| 2021 | 2022 | 2023 | 2024 | 2025 |
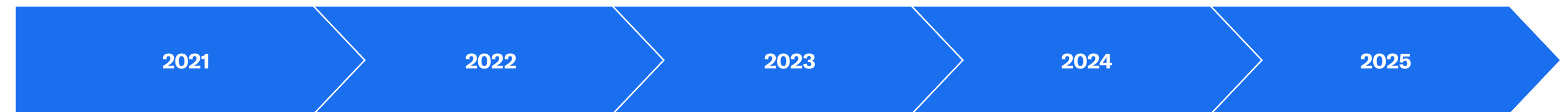
A new **Planning Scotland Gateway portal** bringing the services, tools and data together as a single point of entry to information and services. The Planning Scotland Gateway will become the home for the new digital services, data and tools used in a future planning service. It will surface these to users including citizens, investors, developers, communities, architects and planning agents or other public sector bodies. The gateway will be device independent with additional support being provided for the digitally excluded.

Develop a modular digital planning platform underpinned by **common standards, tools, platforms and next generation technologies including core capabilities** allowing planners to prepare and present spatial plans, manage their cases, collaborate effectively and track business KPIs.

Contribute to the broader digital commitment to a world class technology sector in Scotland by **driving growth in PlaceTech** and contributing to a joint **tech ecosystem and digital service hub** approach being adopted within the wider Scottish Government.

MISSION 2

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Make improvements to the **planning application process** based upon incremental changes to the eDevelopment application service, and informed by lessons learnt during lockdown in areas that planning authorities told us caused challenges for application processing.

Develop **new features within the current eDevelopment service** to improve payment, document submission and management, and notification as components that will help address issues within the current service and also form the basis of the future Digital Planning service, allowing users to benefit from service improvements at an earlier stage.

Begin work on **smart planning applications**, initially focussing on helping applicants understand 'Do I Need Planning Permission?' and improving pre-submission validation.

As part of smart planning applications, begin work with planning partners to formulate **consistent planning guidance** on applications.

Design and publicly trial a first version **Planning Scotland Gateway** portal as a single point of entry to all planning information and services across Scotland, with a consistent user experience. The gateway will be the home for the first version of the Smart Application Service and guidance.

Continued over...

MISSION 2

PRIORITY ACTIONS

2021 > 2022 > 2023 > 2024 > 2025

Procure a **cloud technology platform** for digital services, supporting integration with the wider public sector digital ecosystem.

Work with planning authorities to identify **early adopters** that will trial the first deliverables of the digital planning system (e.g. payments, cloud document management, notifications). Begin initial discovery work with partners on core platforms including case management and PlanMaker.

Develop user interface **design standards** which improve ease of use within the digital planning system.

Align with work on the Building Standards digital transformation programme and design a **shared approach for services**.

"The ability to easily cross reference and interpret data from a range of different sources on a geographical basis will make it easier and quicker to identify issues and promote potential solutions or derive policy objectives. It will also be much easier to monitor the effectiveness of planning solutions in terms of outcomes on the ground, including those relating to health and wellbeing."

An Executive Director in a Local Authority

Building on success – eDevelopment
Feature

Launched in 2016, <u>eDevelopment.scot</u> is the Scotland-wide planning and building standards portal, operating in partnership with all Scottish local and planning authorities. The portal builds upon the successful partnership working established in 2009 with the ePlanning portal.

Using eDevelopment.scot, anyone can submit applications for planning permission, building warrants and related forms such as completion certificates.

The success of eDevelopment.scot is clear with up to 95% of all applications for Planning Permission and around 70% of all Building Warrant applications made online through the service. It is estimated that the service has contributed up to £101.3 million in savings for applicants & £35.5 million for Scottish local authorities.

eDevelopment.scot has shown the progress that can be achieved through a truly collaborative approach and our digital strategy will build upon this, continuing to foster greater joint working with local authorities to realise benefits and improve the experience for those using the planning system.
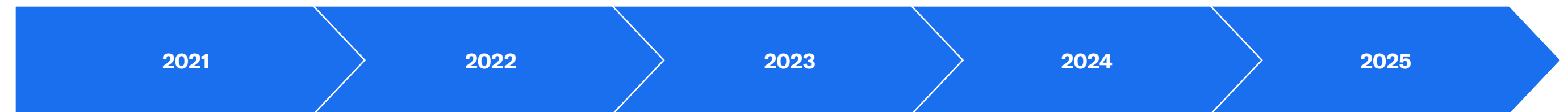
MISSION 3

CREATE THE CONDITIONS FOR DIGITAL TO FLOURISH

We will integrate digital fully into our processes and ways of working, support the development of high quality digital skills in planning and create the conditions for digital transformation to succeed.

MISSION 3

5 YEAR GOALS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Develop consistent and coordinated business processes to underpin delivery of digital services and create the foundation for innovation.

Develop a culture that supports **seamless integration of digital ways of working**, whilst empowering planners and valuing professional judgement and non-digital interactions.

Establish a **digital skills and capability programme** including digital leadership, digital skills for public sector planners and working with academia to ensure graduates have key digital skills on joining the profession.

Embed a change management framework that supports public sector bodies through this transformative change by using an early adopter model, and providing practical tools such as digital maturity, capability and readiness assessments.

Establish a Future Planners programme working with schools and young people using digital to promote planning as a profession and help address current succession challenges.

MISSION 3

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Develop and embed **agile practices** within the programme, establishing multi-disciplinary delivery teams with representation from local government and other delivery partners.

Define, establish and implement a **governance and change management model** that aligns and integrates with existing frameworks.

Work with planning partners to develop **consistent processes** to support early deliverables

Define and agree a **shared delivery model** across the Programme, with a wide range of delivery partners and begin work with early adopters.

Continued over...

MISSION 3

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Work with existing initiatives e.g. the Scottish Digital Skills Academy to design and begin to implement a **Digital Skills and Capability programme**.

Sponsor a **Future Planners fund** and appoint a lead partner to operate.

Use digital to **support development of key spatial planning legislation** over the coming 24 months (National Planning Framework, Local Development Plans and Local Place Plans). Working closely with policy colleagues to integrate digital principles and ways of working that will help create data-driven policy, contribute to an end to end digital planning system and deliver improved presentation and engagement of key policies.

"Myself and staff are fully committed to the digital plan, we just need consistency to make sure we can drive this forward, in particular in training of staff. COVID-19 has made us need to recognise the complexity of the situation of needing to be digitally aware."

A local authority Head of Service

"I'm reassured that the scope and vision for this is going in the right direction. I'm coming away excited. 3 parts excited, 1 part threatened, but that's good – change should feel like that."

Local Authority Planner

**Developing better ways of working –
Technology Landscape pathfinder**
Feature

We understand the complexities of delivering
the planning system, which relies upon effective
interactions with multiple public bodies; central and
local government, and key agencies such as SEPA
and Scottish Water, each with their own technologies
and plans to improve them.

Our Technology Landscape Pathfinder, undertaken during summer 2020 in
partnership with the Local Government Digital Office, focused on reviewing
the technologies currently employed in local authorities to deliver key aspects
of the planning system, looking at issues like case handling, payment, and the
technology used in developing spatial plans.

In reviewing these capabilities, we now have a clear sense of the areas with the
greatest potential for improvement and crucially where we should first focus
our efforts to deliver the biggest benefits. Our research highlighted the strong
potential for digital transformation in Development Planning, and the importance
of using technology and data to enhance the links between Development
Planning and Development management.
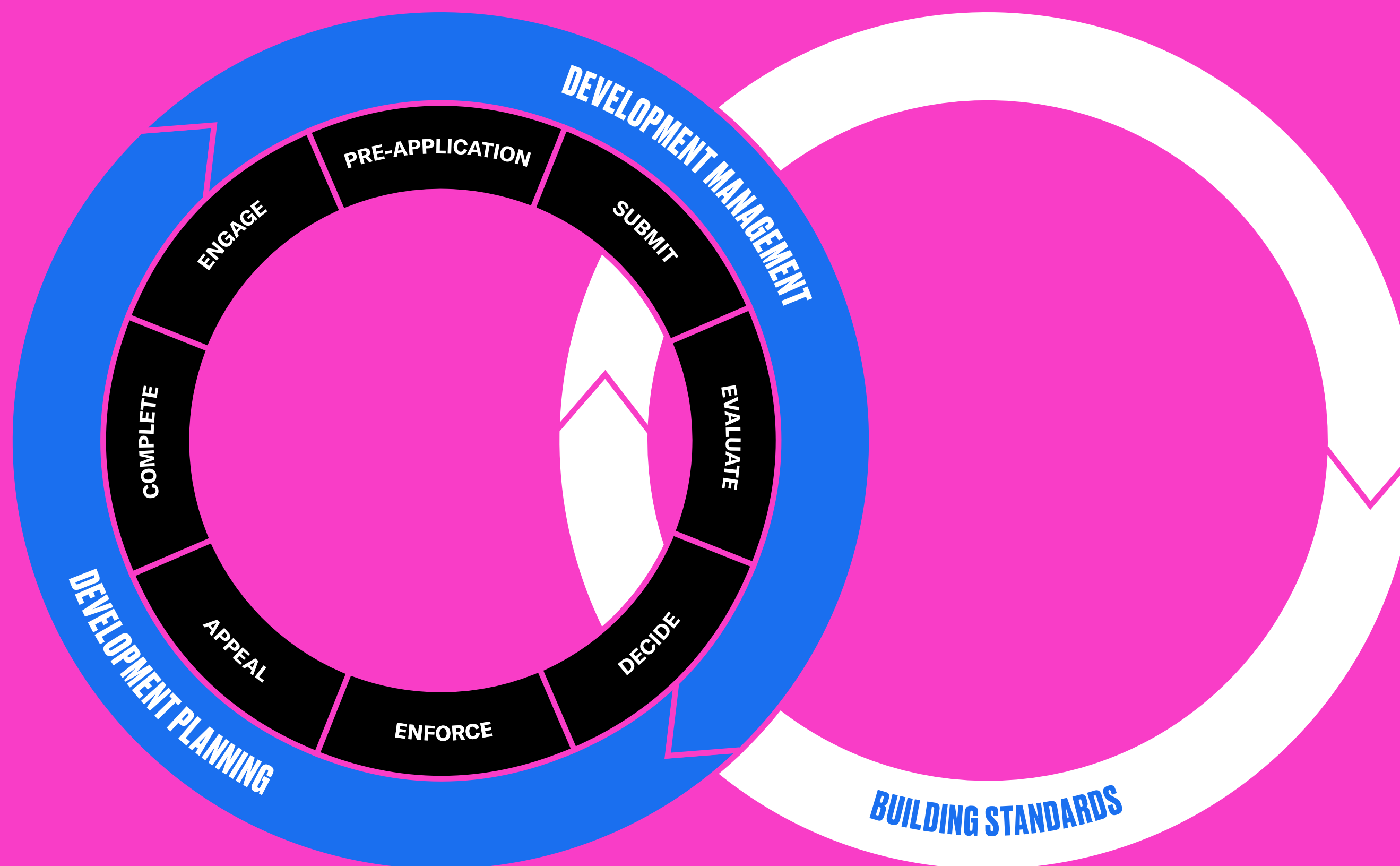
**Developing better ways of working –
Moving to agile**
Feature

We will design and develop new services in-line
with the <u>Digital Scotland Service Standard</u> and the
<u>Scottish Approach to Service Design</u>, and adopt agile
ways of working within the development teams that
we establish for the programme.

An important aspect of our approach to agile will be to put in place multi-
disciplinary teams with the right blend of skills including user research, service
design and technical delivery. We will ensure that these roles are aligned to the
DDaT (Digital, Data and Technology) profession, and that domain expertise is
retained within the public sector.

To further develop collaboration with local government, specific roles will be
offered to planning authorities, ensuring that the right expertise is brought in to
guide programme delivery and helping build agile capabilities in local government

There are numerous advantages to adopting an agile approach, with iterative
working improving collaboration with users of the planning system to ensure
digital services that are designed with people in mind.

Discover   Define   Develop   Deliver

**UNDERSTAND
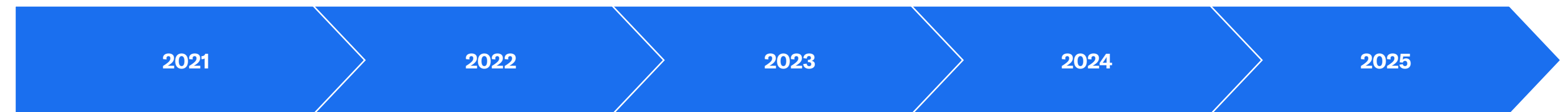THE PROBLEM**

**DESIGN
THE SOLUTION**
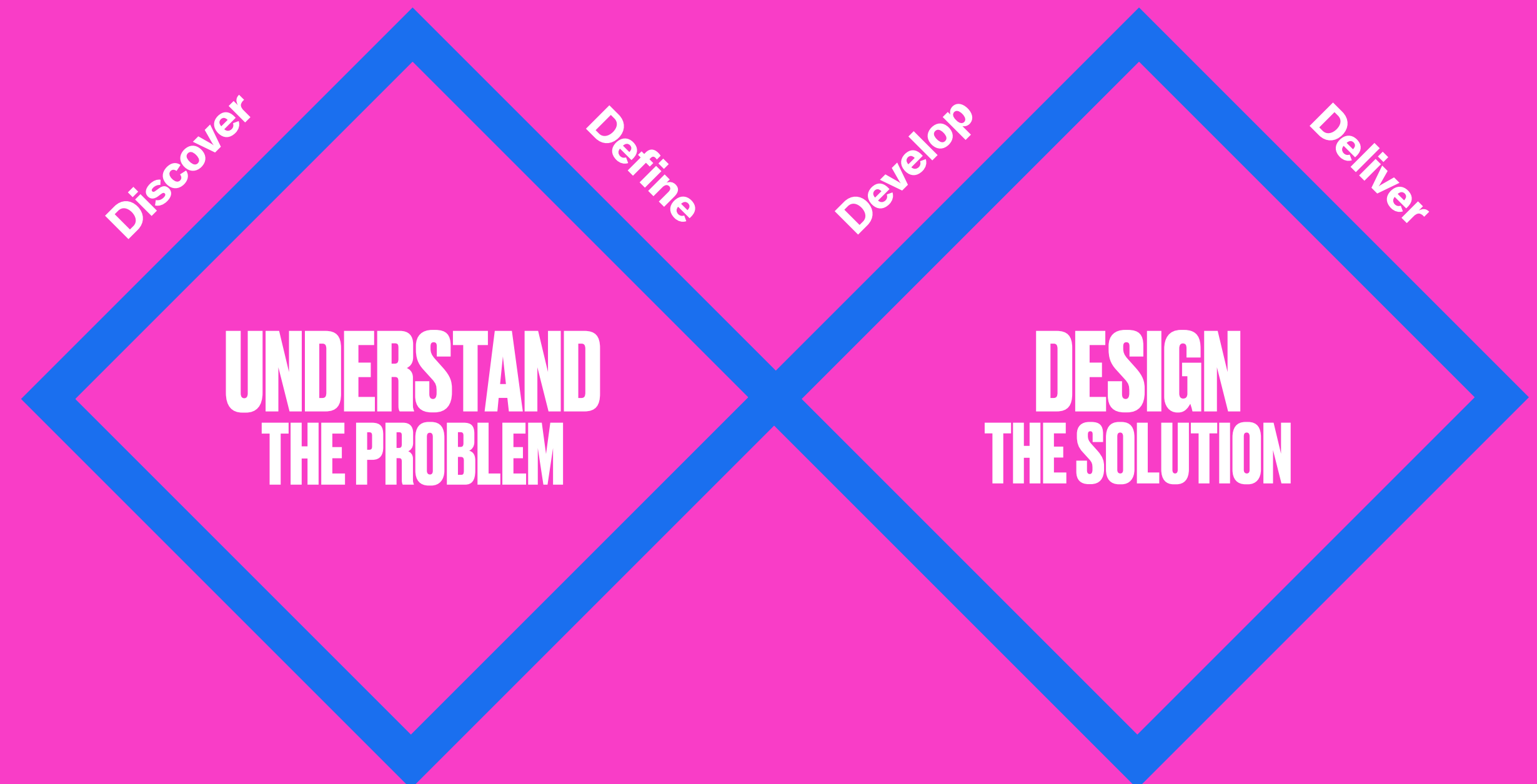
MISSION 4

USE DIGITAL TOOLS TO DRIVE COLLABORATION AND ENGAGEMENT

We will develop digital tools to support greater digital participation and inclusion in planning, using them to drive collaboration and engagement with people and their places.

MISSION 4

5 YEAR GOALS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Adopt digital engagement tools that will help democratise planning and get more people involved at national, regional, local authority and community levels.

Host a digital platform for development plans to seamlessly view and interrogate data from different geographical scales as you zoom in and out, from the National Planning Framework (NPF4) level right through to the community level Local Place Plans.

Launch the new PlaceBuilder tool we are developing through the CivTech® initiative to help communities get involved in shaping and re-imagining their communities. Continued development and improvement of this tool based on feedback.

Develop a digital places toolkit providing access to data and digital technology including mapping/ visualisation tools at a local level; mobile resources that support remote and rural locations.

Work with partners to enable **digital participation and inclusion** to ensure no one is left behind in a digitally transformed planning system and ensure that people have the skills, confidence and information literacy required to make the most of being online.

MISSION 4

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Build upon the existing **geospatial visualisation tools** to support the development of the National Planning Framework (NPF4) and Regional Spatial Strategies, and enable data-driven policy making.

Implement a range of **online interactive consultation and engagement tools** to encourage greater public engagement in development planning with the National Planning Framework, Regional Spatial Strategies, Local Development Plans and Local Place Plans.

Launch the **PlaceBuilder digital engagement tool**, as a CivTech initiative accelerator project to help communities get involved in shaping and re-imagining their communities; continue development and improvement of this tool based on feedback.

Develop an online central **register of Local Place Plans**, as part of the end to end planning system.

Launch a digitally enabled platform for the **National Planning Framework (NPF4)** by September 2021.

"The digital pathway for planning is vital. There is no other alternative."

Local authority Head of Service

PlaceBuilder
Feature

Through our CivTech innovation accelerator, the Scottish Government is supporting the development of PlaceBuilder, a cloud-enabled digital engagement platform that enables community participation in shaping local places.

Placebuilder is a user-friendly, flexible digital tool that builds trust in stakeholder consultation through positive, early-stage citizen participation, broadens engagement demographics and generates deep insight into community preferences with data-driven actionable solutions.

The platform makes it easy to run inclusive and impactful engagement on planning matters. Uniquely it helps move from discussing issues and problems to identifying deliverable solutions, providing planning authorities the results in a data format that can be easily considered.

Placebuilder is a key aspect of our commitment to better engagement and increasing civic participation in planning. It is currently being trialled with a number of Scottish local authorities and community bodies and will roll out publicly in 2021.
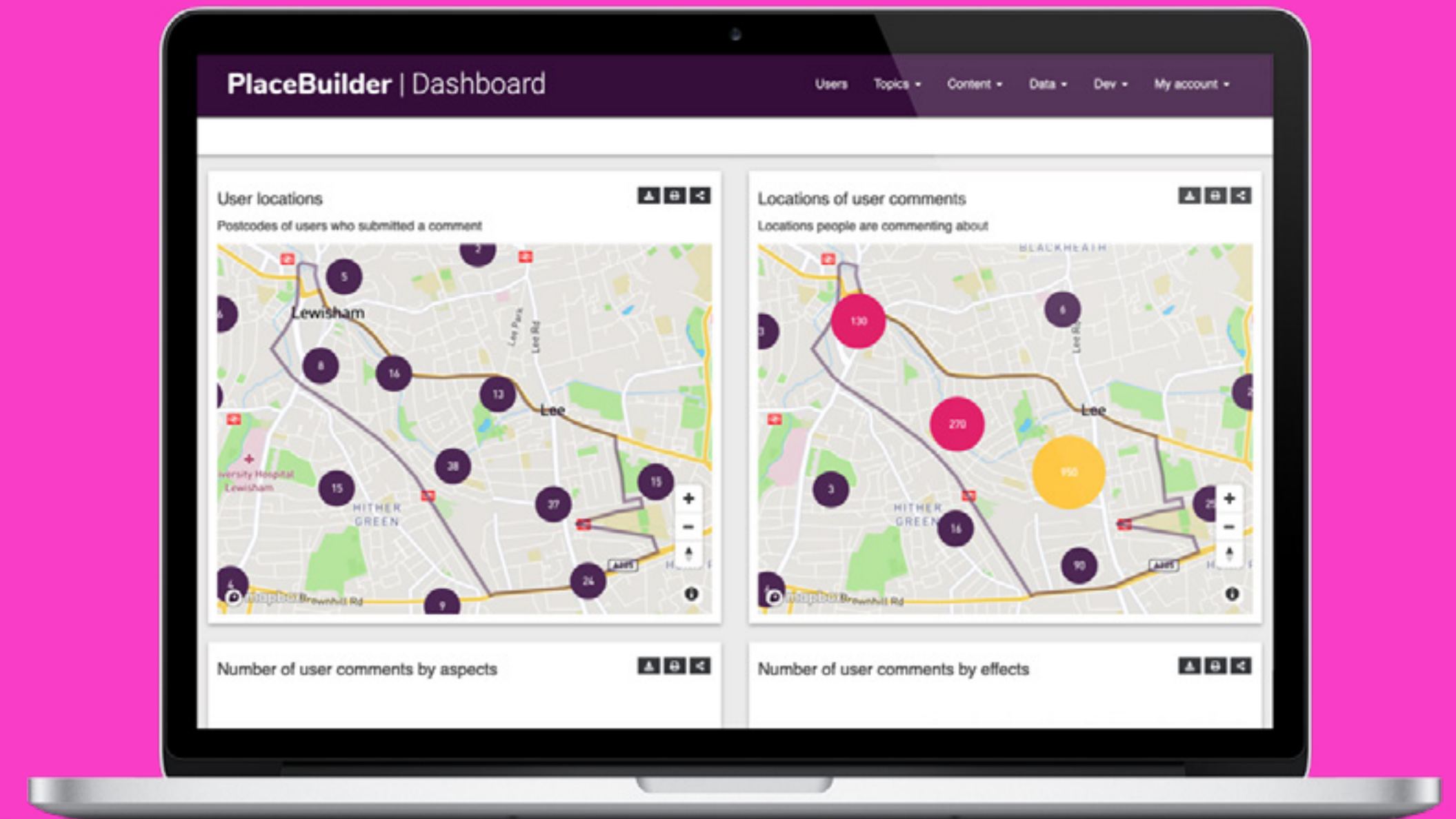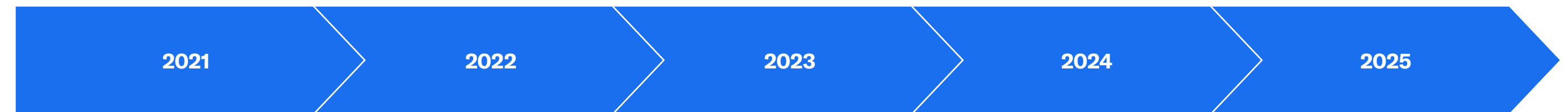
MISSION 5

EMBED A CULTURE OF DIGITAL INNOVATION

We will embed a culture of digital innovation in planning, securing a long-lasting legacy and allowing the sector to continuously improve and quickly respond to the emergence of new technology.
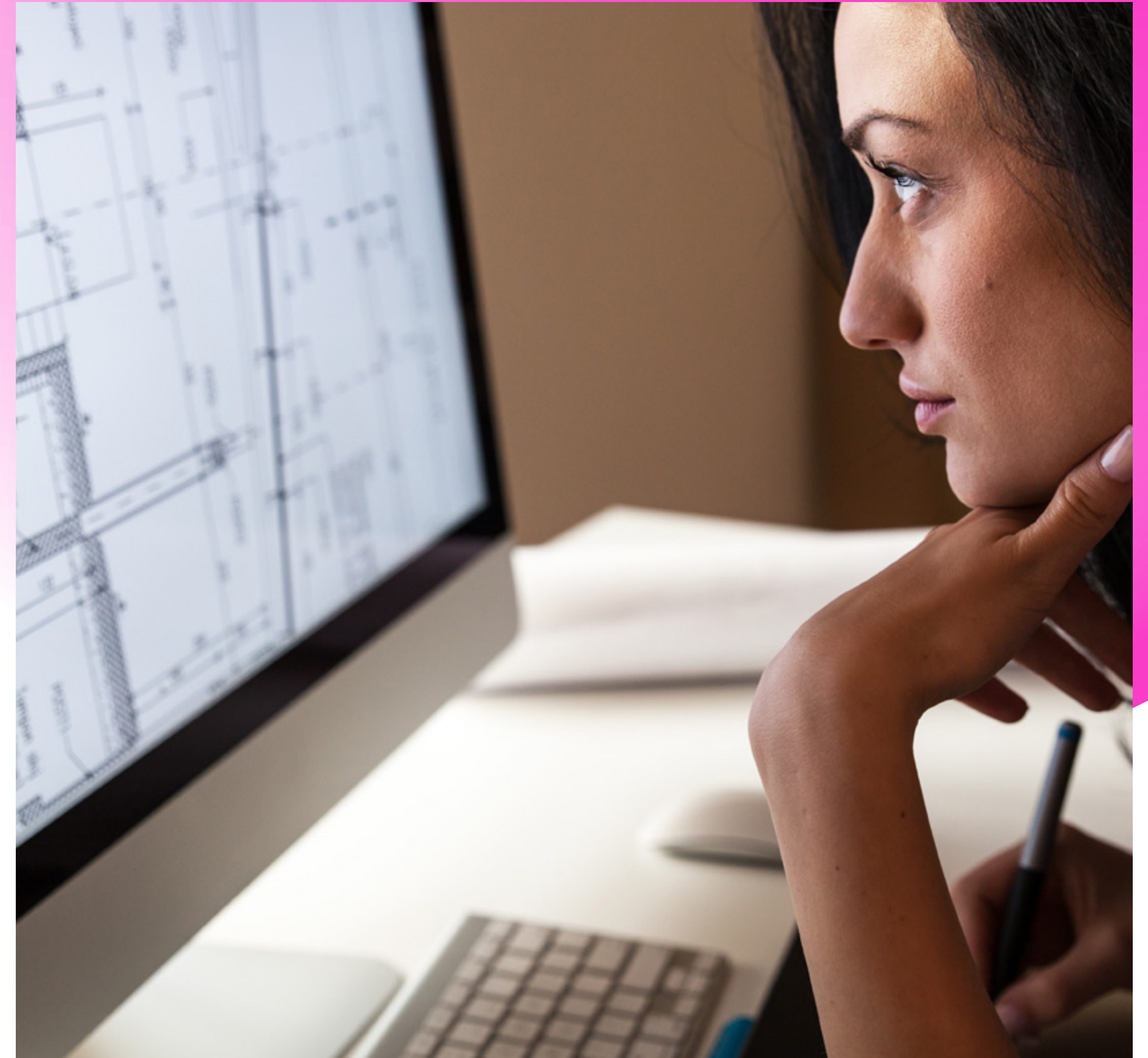
MISSION 5

5 YEAR GOALS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Establish the PlaceTech Innovation Lab to support green recovery and sustainable place-making; research, test and implement new technologies in planning realising potential and continuous improvement.

Continue to **sponsor public sector innovation challenges**.

Develop the culture, mindset and spirit of innovation needed to **drive continuous improvement and digital innovation** in the planning sector, including embracing new ways of working and not being afraid to try and fail.

Establish a **partnership across private, public and academic sectors** to explore emerging technologies as they emerge.

Establish an **innovation pipeline** to explore innovations not currently used widely in planning such as digital twin, machine learning, 3D visualisations and distributed ledger technology (DLT).

MISSION 5

PRIORITY ACTIONS

| 2021 | 2022 | 2023 | 2024 | 2025 |

Finalise a proposal for **creation of the PlaceTech Innovation Lab**, as an incubator and collaborative hub for organisations and private sector companies to access and use data and tools for digital placemaking to drive forward a digital innovation culture for sustainable places.

Establish a **partnership with the Scottish higher education sector** by embedding planning and innovation challenges within university courses, promoting links with the sector, and driving innovation and the digital economy.

Begin the innovation pipeline with the application of **3D visualisation** and **digital twin technology** in planning.

Continue to offer **innovation challenges** through existing business incubators and accelerators.

Promote participation in a **digital leadership course** to develop a culture and mind-set of digital innovation in planning.

**Developing a culture of innovation –
PlanTech Pathfinder**
Feature

The planning technology (PlanTech) marketplace continues to evolve and has seen significant investment in recent years to develop new and innovative solutions. We are keen to harness these innovations in the digital transformation of planning to improve delivery, facilitate better engagement with communities and strengthen inclusive economic growth.

To support the proposals in the strategy around opening up opportunities for the PlanTech market we ran our PlanTech Pathfinder with Scottish Futures Trust during summer 2020. The Pathfinder looked at a number of specific challenges found within planning including Visualisation of plans.

Our research pointed to a strong and growing PlanTech market that can enable planners to rapidly benefit from technology progress and innovations.

To harness these opportunities the research highlighted the importance of information exchange and use across different technologies.

Digital Transformation of the planning system will require a coordinated and collaborative approach at a local, regional and national levels, with interactions across multiple systems and technologies. The use of API technology will help to facilitate these interactions and to open up future opportunities for the PlanTech sector.

**Looking to the future –
PlaceTech Innovation Lab**
Feature

We are committed to ensuring that innovation in
planning continues to take place beyond the lifespan
of our 5 year programme.

To do this we will establish a PlaceTech Innovation Lab, to act as both a research
incubator and an accelerator of planning and place related technology.

We have seen similar models working well both in Scotland and internationally.
In Scotland, CivTech and Geovation have forged new links between the public
and private sector to solve technology challenges, improving public service
delivery, creating economic development opportunities and fostering an
entrepreneurial mindset within government.

BLOXHUB is another collaborative model we have looked at closely. Located in
Copenhagen, BLOXHUB is the Nordic Hub for sustainable urbanisation with a
membership base of around 350 companies, science institutions, organisations
and public bodies - all working with architecture, design, construction, tech or
other fields related to sustainable urbanisation.

We will continue to learn from these approaches as we develop the model for
the PlaceTech Innovation Lab. We will identify and understand the existing
innovation initiatives within Scotland to complement existing resources, centres
and activities.

THE DIGITAL TRANSFORMATION PROGRAMME

TECHNOLOGY APPROACH

It is not our intention to set out a detailed technical architecture for a digitally transformed planning system within this strategy. However, we have developed a high-level technical approach aimed at meeting the aspirations (vision, missions and principles) within the strategy.

As part of this we have looked in detail at the current service delivery patterns involved in both Development Planning and Development Management, analysing both the specific stages involved and the technologies currently used to support them.

We have also mapped the individual component parts of the planning system (capabilities). Doing this at an early stage has helped to validate the high-level approach and identify the technical deliverables that will form part of the programme.

The technology we implement for a future digital planning system needs to support, and interface with, a full range of capabilities, some of which are illustrated in this section. This integration will allow us to meet the ambitions for transformation and innovation that our strategy outlines. We recognise that this will often mean linking with existing technologies implemented by planning authorities.

"We have developed a high-level technical approach aimed at meeting the aspirations within the strategy."

WE WANT TECHNOLOGY AND DATA TO:

- Bring together Development Planning and Development Management so that developments consented by planners are informed by data and policies set out in forward plans. This means that the effectiveness of policies can be monitored in near-real-time

- Reduce the potential for vendor lock-in so that Scotland's planning technology and data is not bound into any particular provider's proprietary system

- Enable greater use of innovative technologies by allowing the integration of 3rd party solutions within our Interoperability and Standards Framework

- Enable flexible adoption for planning authorities making it easier to incrementally implement aspects of a new shared platform and realising greater benefits over time

- Deliver a consistent experience for users so that it supports simpler interactions with the planning system

- Provide all users of the planning system with the right data at the right time

- Make planning more accessible for citizens

- Continue to drive Scotland's Digital Economy

- Work with the existing local authority technology landscape

- Stimulate the private sector to use and build innovative solutions with the data available
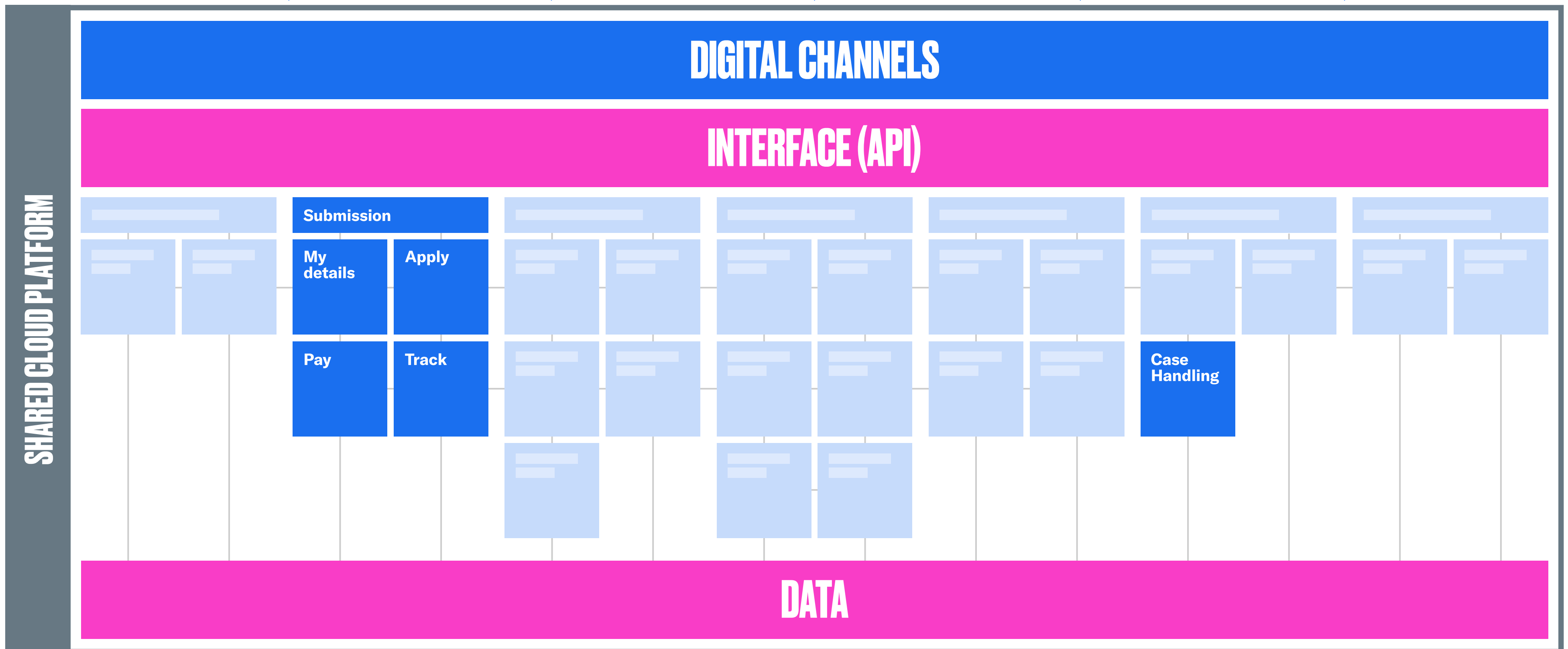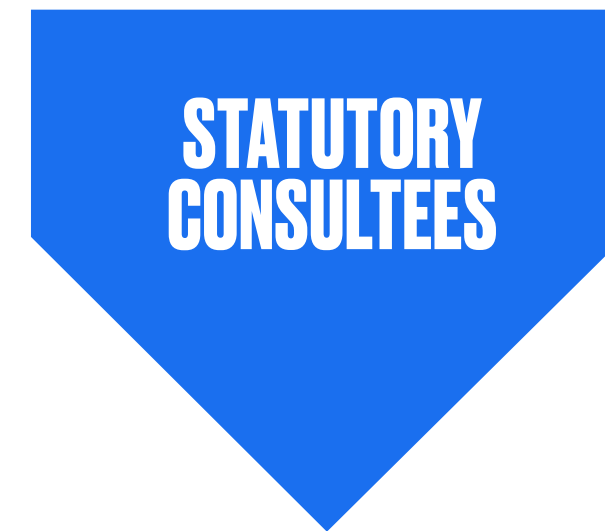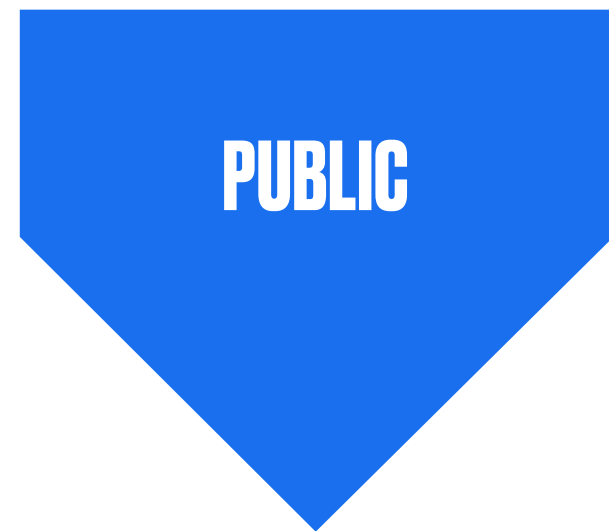
IN ORDER TO DO THAT WE NEED A TECHNICAL ARCHITECTURE THAT:

- Is cloud-based. Adopting a cloud-first architecture and a shared cloud platform will allow a digitally transformed planning system to benefit from the advanced security, high availability, scalability, and integration technologies that cloud vendors are constantly investing in

- Is modular. Implementing a loosely coupled architecture for planning will allow parts of the technology used in planning to be replaced with more advanced and innovative solutions as they become available. It will also facilitate opportunities for new suppliers to provide their solutions more easily, helping to stimulate the digital economy

- Is interoperable. To ensure that a modular approach works well, the interoperability of planning technology will be a key focus for us

- Is open. Adopting open standards and opening up planning data for re-use will allow planning to contribute to Scotland's Digital Economy

- Is able to reuse and contribute to the digital ecosystem and promotes the "reuse over buy over build" principle

- Is easily able to interface with existing planning authorities technology systems using APIs within the cloud platform. This will allow planning authorities to choose the extent to which they wish to adopt the shared technology we propose. With a transformation programme lasting several years, we acknowledge that not all planning authorities will be able (or want) to move quickly to a new technology platform and we have designed our approach to accommodate for this. We call this the 'hybrid approach'

- Is based on standards. Adopting and continuing to promote standards for design, interoperability and data will be key to our technology approach

TECHNOLOGY APPROACH

PUBLIC

APPLICANTS

PLANNING AUTHORITIES

STATUTORY CONSULTEES

3RD PARTIES

SHARED CLOUD PLATFORM

DIGITAL CHANNELS

INTERFACE (API)

Submission

My details

Apply

Pay

Track

Case Handling

DATA

A SHARED CLOUD PLATFORM FOR PLANNING

We propose to establish a shared cloud platform as the central component of a future planning system.

Moving to a cloud environment for planning will enable more rapid development of a future digital planning system. It will also simplify interactions with public agencies and 3rd parties who are part of the planning process such as Scottish Environmental Protection Agency and Scottish Water. We know from research that these interactions also have the potential to be transformed and to introduce much greater speed and efficiency.

We imagine an environment in which connections to existing systems continue to exist and this has formed a key consideration in our technology approach. We acknowledge that some capabilities required to deliver planning are shared amongst other services delivered by local authorities, and the proposed cloud platform will accommodate for these interactions with existing technologies and processes via APIs.

WE WILL ENSURE THAT DATA IS:

Actively managed and governed
Local data is valuable nationally, and national data is valuable locally. We will work with planning authorities and data partners to agree how data is managed and governed to ensure the value of the data can be realised at all levels and across all stakeholders.

Comprehensive
The Place Principle promotes a shared understanding of place and the need to take a more collaborative approach to a place's services and assets to achieve better outcomes for people and communities. This requires that data from across themes be brought together to form a comprehensive picture of a place.

Fit for purpose
We will work with data partners to ensure that the data they supply is suited to planning use cases.

Accessible in one place
We will work with data partners to ensure that all the data planners need to plan is available or signposted in one place

Standardised
Working with planning authorities and data partners, we will work to agree common standards for data so it can be joined up at local, regional, and national levels to facilitate measurement of outcomes against policy, as well as facilitate cross-border planning.

Up to date and high quality
Data quality and timeliness is key to engendering trust in the data. We will work with planning authorities and data partners to ensure that this is a priority for them and that feedback from data consumers about the data is transparent so it can be acted on.

Re-usable
High quality data produced by planners has great value to other sectors providing it is accessible for re-use beyond planning.

A FLEXIBLE AND BENEFICIAL APPROACH TO ADOPTION

We want to ensure that planning authorities can benefit from our approach to technology whether they implement only some of it, or go further and choose to move entirely to a shared cloud platform.

However, we believe the greatest benefits will be realised by those who take on more of the shared technology we develop collaboratively.

For example, moving to cloud based case handling will mean that planning authorities will benefit from full end-to-end processing of smart applications, reducing manual handling and allowing planning authorities time to focus on the real job of planning – making effective decisions that improve our places.

High

BENEFITS

Case Handling

My details

Apply

Pay

Track

High

LEVEL OF ADOPTION
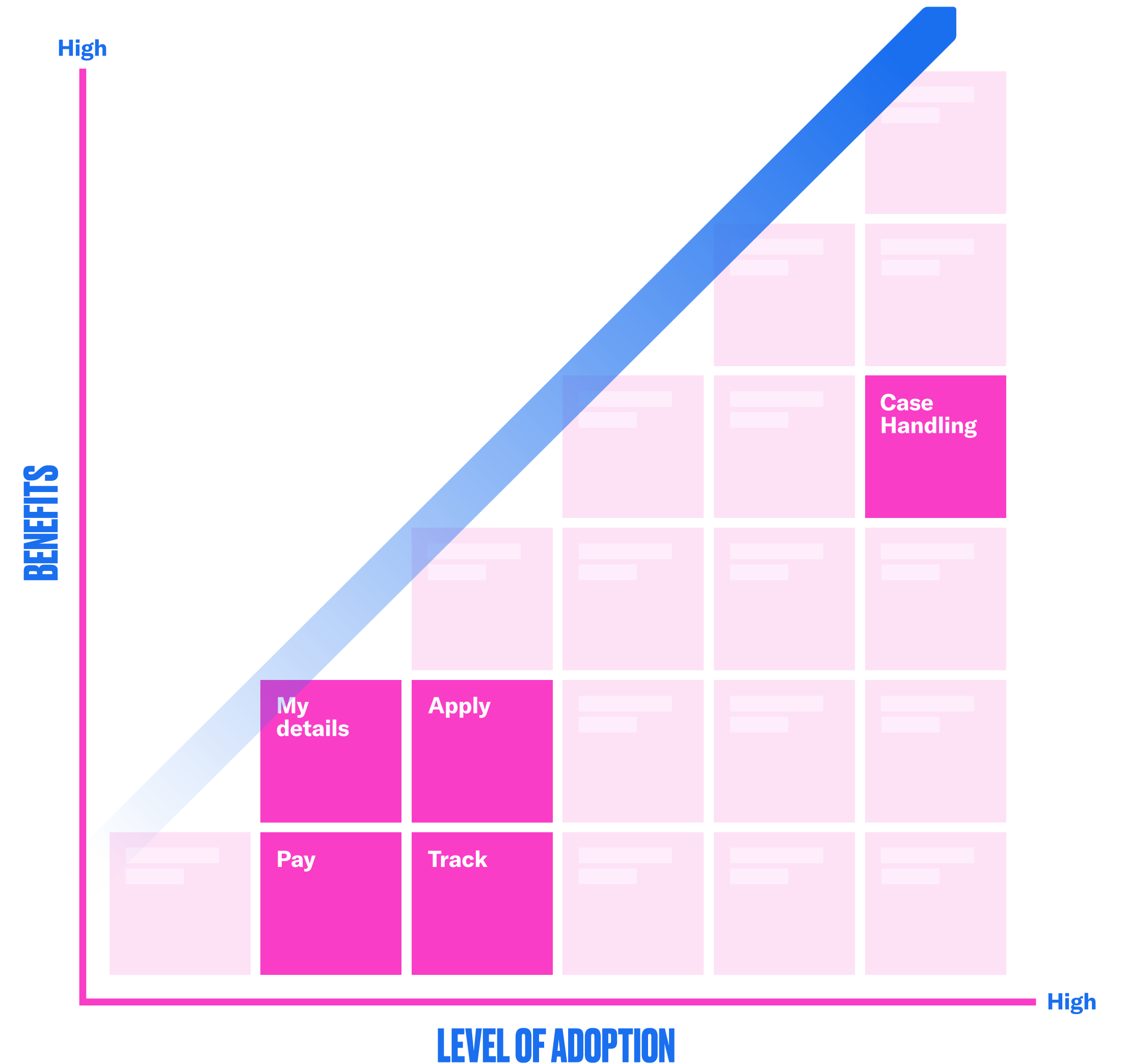
A STANDARDS FRAMEWORK

Having a loosely coupled architecture makes it even more important that the right standards are put in place to ensure new planning technologies can work together. It also makes it vitally important that we focus on creating a consistent experience for users of the planning system.

We propose to adopt clear standards for user experience (design), interoperability and data across all the technology implemented in a transformed planning system.

APPLY

Capability

Design standards

APIs

Data standards
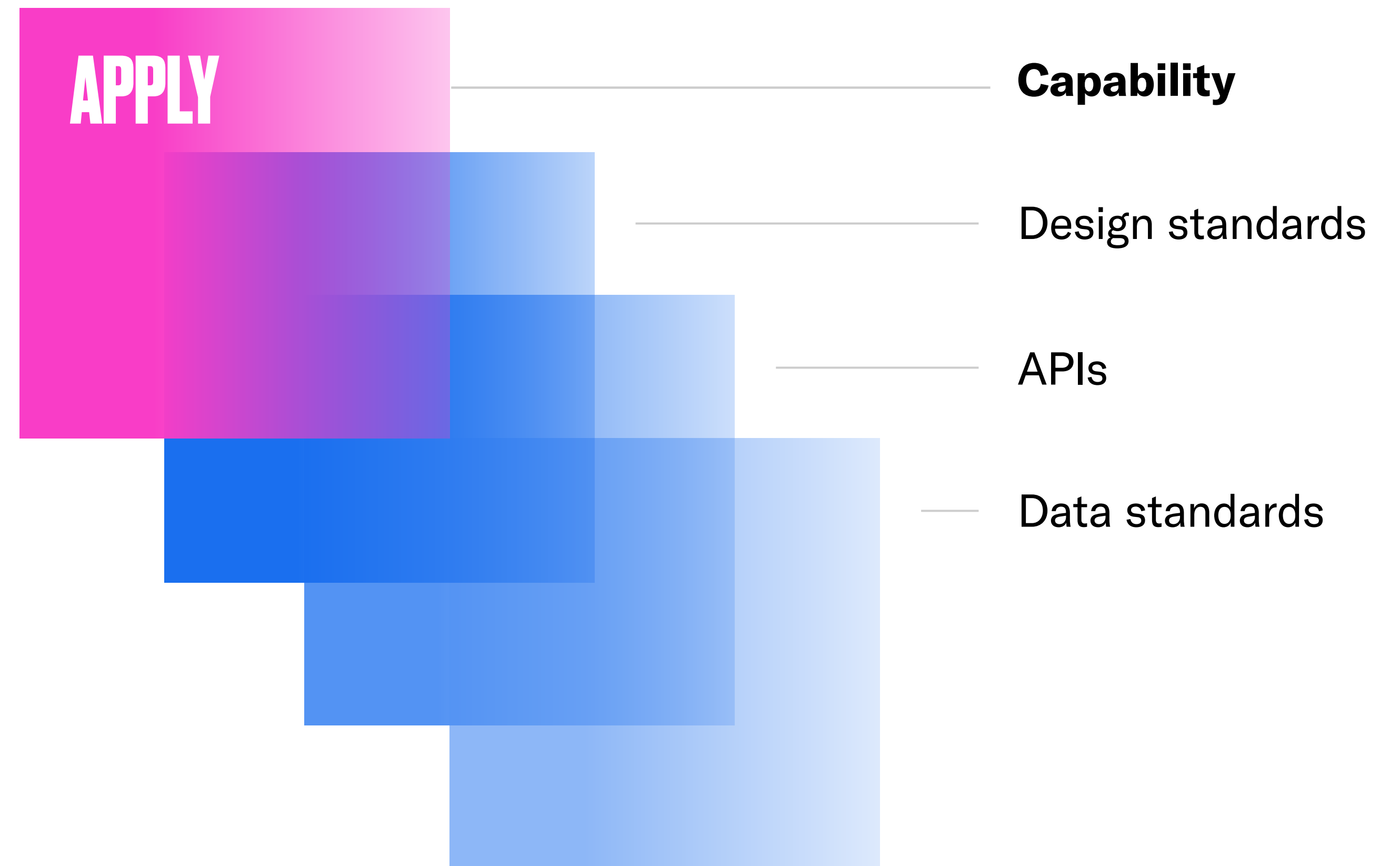
A MIGRATION PATH

We will work with early adopter authorities to develop a holistic approach that considers whether a 'big bang cutover' or a 'run in parallel' migration approach is best. The migration strategy will:

· Allow authorities to migrate when conditions are right for them

· Support the business through the change

· Take skills and training into account

· Ensure historic data is not lost

· Consider data cleansing and remediation

· Ensure in-flight planning applications are not impacted

· Not disrupt Planning's touchpoints with other business areas

· Support the incremental adoption of the new digital planning services

DELIVERING TRANSFORMATION

We will begin our 5 year digital transformation programme in spring 2021.

Scottish Government will start to identify delivery partners who will work with us to deliver the early priorities. As with all change, we recognise the need to invest in a change management programme of activity in addition to any technical changes and strengthen external communications.

Over the next few months Digital Planning will publish a flexible roadmap, beyond the initial 18-24 months, which can achieve the programme goals and have the ability to adapt to new innovation and changing priorities for the sector.

The planned approach to change management, governance, communications and partner engagement will be further developed, in line with recommendations from Gateway Zero which is planned for February 2021, before the programme begins.

The scope of the programme will be limited to Planning however it will recognise the wider linkages and ensure a cohesive, aligned approach across relevant programmes and policy areas including Building Standards.

Scottish Government will lead the programme which will work in the following way:

- Coordinate the full programme using a partnership approach, identifying and working with key delivery partners that have specific interests in the relevant specialist areas

- Adopt an agile approach to delivery, aligned with the Scottish Approach to Service Design, supported by robust governance arrangements

- Implement a flexible early adopter model to work with partners, taking into account local circumstances

- Maintain an open and transparent view of governance arrangements, framework for measuring success (including programme objectives) and achievement of goals

- Outline plan for moving into delivery phase from April 2021

- Ensure that provision for financial and other resources has been made for the programme and that plans for the work to be done through to the next stage are realistic, properly resourced with sufficient people of appropriate experience, and authorised

THE FOUR PILLARS OF OUR TRANSFORMATION APPROACH

DELIVERING THE VISION: THE PROGRAMME

PROGRAMME GOVERNANCE, MANAGEMENT AND DESIGN

- Direction and design of the programme
- Partnership delivery model
- Governance
- Decision Making
- Controls and Management
- Benefits monitoring and realization
- Delivery of priorities

CHANGE MANAGEMENT AND COMMUNICATIONS

- Readiness for change
- Change management strategy
- Impact analysis and reduction on all planning stakeholders
- Internal and external communications

TECHNICAL DELIVERY APPROACH

- Technical change architecture
- Specialist advice
- Oversight of the future technical operating model
- Technical assurance activities
- Alignment with external technical architecture

PROGRAMME/PORTFOLIO MANAGEMENT OFFICE

- Monitor, report and control cross programme activities
- Risk and Issue management
- Assurance activities
- Financial control
- Quality control

NEXT STEPS

| NOVEMBER 2020 | FEBRUARY 2021 | APRIL 2021 | | MARCH 2026 |

Strategy published (complete)

- Outline Strategic Business Case finalised
- Key governance decisions agreed
- Establish Governance Boards

Assurance: Gateway Zero

- Draft 18-24 month roadmap
- Outline 5 year delivery plan
- Programme preparation plan

Programme Launched

Delivery

Strategy Refresh

Delivery

FOLLOW US

There will be opportunities to get involved as we take this ambitious programme forward, and we want you to be a part of this. To keep up to date on the programme and have your say, follow us through the channels below.

https://www.transformingplanning.scot/digital-planning/

@DigiPlanningSG

linkedin.com/company/digital-planning-scottish-government

"With its ambitious vision and framework for delivery, this Strategy focusses our minds on building a digital planning system that is not just fit for 2020 or 2021, but a system that looks to the future, embracing new technologies and creating a foundation ready for changes that will come along in years to come, including those that right now would sound only aspirational.

This is a hugely exciting time to be involved in planning in Scotland, and we look forward to working with partners in transforming places together."

Liz Pringle
Head of Digital Planning
Scottish Government

GLOSSARY

Artificial Intelligence (AI)
The branch of computer science dealing with the simulation of intelligent behaviour in computers.

Application Programming Interface (API)
A defined method of sending instructions between one software platform and another.

Augmented Reality (AR)
Augmented reality is the real time integration of digital information with a user's environment.

Big Data
Big Data describes extremely large data sets that may be analysed computationally to reveal patterns, trends, and associations.

Building Information Model (BIM)
A 3D model-based process that gives architecture, engineering, and construction professionals the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure.

Capability
A capability is the ability to perform or achieve certain actions or outcomes. Capabilities can be technical or business focused. A capability within this strategy describes a component part of delivering a service e.g. making payment, being notified of that status of an application.

Cloud
Networked computing facilities providing remote data storage and processing services via the internet.

COSLA
The Convention of Scottish Local Authorities (COSLA) is the national association of Scottish councils and acts as an employers' association for its 32 member authorities.

Digital Ecosystem
An approach that promotes the creation and re-use of common digital assets, capabilities and services across the Scottish public sector, enabling a change in focus in public service from organisational silos to the needs of citizens and the capabilities required to fulfil those needs.

Digital twin technology
A digital twin is a digital replica of a living or non-living physical entity. Digital twin refers to a digital replica of potential and actual physical assets, processes, people, places, systems and devices that can be used for various purposes

Distributed ledger technology (DLT)
A database that is consensually shared and synchronized across multiple sites, institutions or geographies. There is no central administrator or centralized data storage.

Hybrid approach
The integration of new technology developed as part of the digital transformation programme with existing planning technology.

IIP
Infrastructure Investment Plan.

Image Recognition
A process to identify and detect an object or attribute in a digital video or image.

Internet of Things (IoT)
The network of physical objects – "things" – that are embedded with technology for the purpose of connecting and exchanging data with other devices and systems over the Internet.

LDP
A Local Development Plan sets out a local authority's policies and proposals for land use in their area.

Loosely-coupled architecture
Loosely coupled architecture is an architectural approach to interconnecting the components in a system or network so that those components depend on each other to the least extent practicable.

Machine Learning
Machine learning (ML) is the study of computer algorithms that improve automatically through experience.

Modular
Modular components are items that work together to form a single functioning item or system.

NPF4
The National Planning Framework 4 is a long-term spatial plan for Scotland that sets out where development and infrastructure is needed to support sustainable and inclusive growth.

Open Data
Data that anyone can access, use and share. Adopting clear data and interoperability standards will facilitate access and sharing.

PfG
Programme for Government.

PlanMaker
PlanMaker describes the collective set of technologies used in the creation of Local Development Plans.

PlanTech
Refers to specific technologies used to assist in planning. The PlanTech sector is relatively small but growing.

Platform
A platform in computing is the stage on which computer programs can run.

Predictive Urban Models
Functions and processes which generate predictions for urban spatial structure in terms of land use, population, employment and transportation, usually embodied in computer programs.

RSS
Regional Spatial Strategy.

RTPI
The Royal Town Planning Institute. RTPI champions the power of planning in creating prosperous places and vibrant communities.

SEPA
Scottish Environment Protection Agency.

Smart Applications
By smart applications, we mean applications that are based on data, not documents. A smart application will be both machine readable/ interpretable and able to use multiple sources of data to make and process the application.