

EXECUTIVE SUMMARY

Mixed-use development - Large-scale urban development comprising a combination of different uses, for example housing, places to work, community facilities and greenspace.

This report explores future delivery of mixed-use development in a changing world, focussing on development where there is need for public sector intervention. At this stage the report is ambitious, aimed at a wide audience, public and private, to stimulate discussion, consensus and ultimately action about the kind of place Scotland is trying to achieve. Across its two core sections it lays out a case for change built on evidence and outlines a framework for designing and delivering mixed-use development that will deliver a wide range of social and environmental benefits that contribute to a greener, fairer and healthier Scotland.

Part A: Context

This part explains how the new national policy context and the changing development context combine to create the need for a fresh approach to delivering mixed-use development.

Part B: A Fresh Approach
This part demonstrates how mixed-use development could be designed and delivered with a fresh approach.

The Scottish Government's key underlying strategy is geared towards addressing, and delivering on, the 'climate emergency'.

"The global climate emergency means that we need to reduce greenhouse gas emissions and adapt to the future impacts of climate change."

National Planning Framework 4, Page 3

To deliver on this goal will require businesses and organisations to change their operational processes and the way they create, organise and invest in property and places, including delivering and adapting the Place Principle in mixed-use development.

"As a country we will be judged on the outcomes we deliver, not the strategy we write. Words and intentions matter, but only actions deliver change."

Kate Forbes, Foreword to the National Strategy for Economic Transformation, Feb 2022

Traditionally mixed-use development has had benefits for many locations, particularly in the context of a public sector focus on market failure it is a useful tool for addressing the needs of difficult sites including brownfield sites and vacant and derelict land – of which Scotland has a considerable quantity. Mixed-use development will also become increasingly important as a tool to create the Scottish Government's 20 Minute Neighbourhood concept, which by its very nature requires a mix of uses within a compact area. However experience suggests that the market will not deliver the quantity and quality of mixed-use development required to implement government policy aspirations without public sector leadership.

The challenge then for the public sector in mixed-use development (including tackling Scotland's stubborn supply of vacant and derelict land) will be how it can adapt to meet the new ways of working (post-Covid) that will be required to deliver mixed-use, and in particular to lead collaboratively, invest and enable 'real' placemaking. Experience has shown us that too many 'opportunity' sites languish undeveloped for too long (without proactive public sector intervention) and even those sites which are developed too often fail to deliver their full potential, in terms of Scottish Government policy and outcomes.



Figure 1. Forthside, Stirling. One of the Application Case Studies looked at in Section 7

In design and delivery terms of 'Place making' and addressing our climate emergency, the NPF4 policy actively promotes an 'urbanism' approach to deal with our climate emergency. This means we need mixed-use places where our needs are met by goods and services being conveniently accessible to where we live.

The key challenge is whether urbanism principles can be applied at different scales? Most urban places are readily walkable but can urban edges, suburbs and villages, commercial and industrial places become mixed-use places that transform to fit the ecological agenda? It is these peri-urban locations where the greatest challenges lie.

To meet and respond to the climate emergency it is not just about building new urban typologies but how we adapt what we already have to deliver planning and development that recognises and tackles the challenges facing biodiversity and nature, embedding outcomes for nature into every sector of buiness and the economy. For Scotland to have a green well-being economy, the 'dormitory suburb' has to evolve to address societal, environmental and economic challenges.

Neither can we just narrow our focus to a neighbourhood scale as there will always be influences well beyond the project's red line boundary. Therefore, any proposal has to give due regard to urban and regional interactions. This is essentially called a 'whole systems approach' requiring spatial planning with a range of inputs to examine regional frameworks that bind together a range of environmental, economic and social activities.

Mixed-use developments are much more challenging to deliver than zonal based development, but if we want real mixed-use neighbourhoods it needs to reflect customer demands and preferences, a token shop under an apartment block will not change anything. Customer experience now requires places to include a range and variety of public service provision, hospitality and lifestyle services. The greater the activity the greater the challenge will be in minimising potential tensions between uses such as housing and bars. Such matters have to be carefully planned, mitigated through design and detailed stewardship including aspects such as opening hour regulations.

These are complex challenges with additional risks attached which rather explain why markets have a preference for single-use simplicity. Yet proposals for walkable productive neighbourhoods are being promoted and delivered all around the world, so why can they not be delivered here?

What is clear is that a Scottish green well-being economy is a worthwhile proposition which can be realised with everyone acting as co-investors and co-creators. Such a challenging objective will not be successful through policies but real collective action. That is acknowledged by the Scottish Government and co-operation is the only way to make it work.

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Throughout the research and development of the report conversations were had, meetings were held and discussions and opinions were exchanged. We would like to thank and acknowledge all the practitioners and organisations who have engaged with the team and contributed to the report, including members of the Key Agencies Group.

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INTRODUCTION

Scotland has a long and proud history of public sector investment in mixed-use developments. In recent decades national and local government and public agencies have worked together to lead delivery of many mixed-use developments which have delivered tangible benefits for local communities. Examples span the country from Clydebank Re-built, Glasgow's Merchant City and Clyde Gateway in the west, to Edinburgh's Craigmillar and Dundee Waterfront on the east coast. There are many more.

But there is now a need for development that is truely sustainable, based on the Place Principle.

"All those responsible for providing services and looking after assets in a place need to work and plan together, and with local communities, to improve the lives of people, support inclusive and sustainable economic growth and create more successful places."

National Planning Framework 4, page 154

Mixed-use development is a key part of delivering sustainable places. It has benefits for many locations. In the context of a public sector focus on market failure it is a useful tool for addressing the needs of difficult brownfield sites as well as vacant and derelict land – of which Scotland has a considerable quantity, much of which is simply not commercially viable to redevelop particularly when government policy aspirations are added into the mix. Mixed-use development will also become

increasingly important as a tool to create the Scottish Government's 20 Minute Neighbourhood concept, which by its very nature requires a mix of uses within a compact area. Experience suggests that the market will not deliver the quantity and quality of mixed-use development required to implement government policy aspirations without public sector assistance and leadership.

This report explores the delivery of mixed-use development in a changing world, focussing on development where there is need for public sector intervention. It lays out a case for change built on evidence and outlines a framework for delivering and designing mixed-use development that will contribute to a greener, fairer and healthier Scotland. Its purpose is to stimulate discussion, consensus and ultimately action about a practical way forward.

OUR CHANGING WORLD

The climate emergency and economic shocks such as COVID, geo-politics and Brexit continue to have significant economic impacts. In the National Strategy for Economic Transformation published in 2022, the Scottish Government is unequivocal about the need for leadership and actions to respond to these challenges. Key is the achievement of a net zero, nature positive Scotland, with a rebalanced planning system that has the principles of climate change and nature recovery at the core.

The winds of economic and technological change mean that the need for mixed-use development will continue, and are likely to evolve in ways that are difficult to predict.







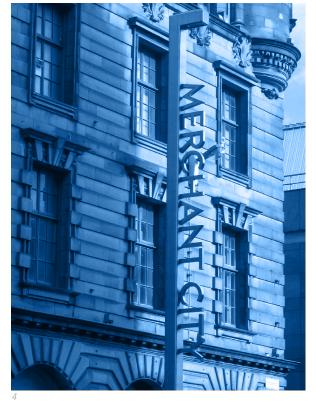




Figure 2. Clydebank Figure 3. Clyde Gateway Figure 4. Glasgow's Merchant City Figure 5. Craigmillar Figure 6. Dundee Waterfront

"In the next decade, we face a choice to either lead or to lag behind other successful economies all whilst we recover from Covid, deliver net zero, tackle structural inequalities and grow our economy. We choose to lead."

Kate Forbes MSP, Cabinet Secretary for Finance and the Economy, Foreword to National Strategy for Economic Transformation, 2022.

The question is: what action should that leadership take in the context of this report?

The Scottish Government's Advisory Group on Economic Recovery) (2020) highlighted the need "for the economic development landscape in Scotland to pivot to a renewed focus on place-based initiatives" (section 5.3), recommending that "The Scottish Government should support a renewed focus on place-based initiatives, working with Regional Economic Partnerships, City Deal teams and local authorities." (section 5.17).

This gives added impetus to the current policy-making focus on 'place':

"We face significant challenges, fiscal, demographic and socioeconomic and it's clear that more of the same won't do. We need to adopt a more common-sense approach that focuses on what is important: people and communities. To maximise the impact of our combined resources we must work better together."

Our Place website, Scottish Government, 2022

As explained in Section 2 of this report, the 'Place Principle' creates a framework for how the public sector should work collaboratively in this new context, and has become a common thread in national policy since it

was introduced in 2019. Examples include the current 5 year Scottish Infrastructure Investment Plan and Place Based Investment Programme, and National Planning Framework 4 for Scotland's future to 2045.

What is the ultimate aim of this collaborative place-based approach? The Scottish Government is quite clear: to improve outcomes for Scotland's people. Those outcomes are laid out in detail in the Scottish Government's National Performance Framework and more recently in the Programme for Government 2021-22. They can be captured in four simple headings:

- Climate action
- Equality and fairness
- Health and well-being
- Living well locally

The challenge for public sector intervention in mixed-use development is to show how it can adapt to meet the new ways of working described above, including tackling Scotland's stubborn supply of vacant and derelict land (see section 2.5 below for more information). Experience has shown us that too many 'opportunity' sites languish undeveloped for too long, as some of the examples in section 4 of this report demonstrate. Even those sites which are developed too often fail to deliver their full potential, in terms of Scottish Government outcomes, without proactive public sector intervention.

Experience suggests that the market will not deliver the quantity and quality of mixed-use development required to implement government policy aspirations without public sector leadership.

ABOUT THIS REPORT

Given this context, Scotland's public sector needs to decide: what should it do differently to lead collaborative mixed-use development, as part of a place-based approach to achieving net-zero, equality and fairness, health and well-being, and living well locally?

To begin to answer that question, new economic and policy developments should be the starting point. This report has been informed by extensive research, consulting widely and reading deeply, reviewing existing 'mixed-use' practice and developments, and applying the lessons learned. The final section of the report sees the application of this journey, of exploration and thinking, applied to current case studies to test and validate the conclusions as to how the public sector can support delivery of mixed-use development in Scotland which:

- Responds positively to the climate emergency and other external impacts.
- Applies the Place Principle.
- Delivers real and lasting benefits for the people of Scotland in line with the National Performance Framework.

The aim is to help the public sector move towards a new collaborative model of delivery for mixed-use development that aligns with the Place Principle and delivers the Scottish Government's primary outcomes of net zero carbon, equality and fairness, health and well-being, and living well locally.

The report is intended to stimulate discussion, leadership and action amongst:

- Scottish Government
- Scottish Futures Trust
- Scottish National Investment Bank
- Scottish Enterprise, HIE and SOSE
- Other public agencies, including the Key Agencies
- Local authorities, Community Planning Partners and community organisations
- Business, property development and investment partners

The report is structured as follows:

PART 1: CONTEXT

This part explains how the new national policy context and the changing development context combine to create the need for a fresh approach to delivering mixed-use development.

Sections 2 and 3 provide more information on current policy and economic contexts, fleshing out the picture already summarised in this report. Different approaches to mixed-use development are described in section 4, using a selection of recent Scottish experience and current best practice from the UK and internationally. Key messages are summarised in section 5.

PART 2: A FRESH APPROACH

This part demonstrates how mixed-use development could be designed and delivered with a fresh approach.

A framework of principles and guidance for delivering future mixed-use development is outlined in section 6, encompassing design, delivery, regulation and investment. Section 7 demonstrates how these principles could be applied to mixed-use development using case studies including Orchardton in Cumbernauld and Forthside in Stirling. Section 8 summarises the roles and actions needed by the public sector to implement the fresh approach. Section 9 concludes the report and outlines the next steps that are needed.

PART A: CONTEXT

2 POLICY CONTEXT:

This section summarises critical elements of the Scottish policy context that should influence how mixed-use development is designed and delivered in the future.

2.1 NATIONAL PERFORMANCE FRAMEWORK AND NATIONAL OUTCOMES

The Scottish Government's National Performance Framework was introduced in 2007. It identifies a clear purpose for government policy and investment: to create a more successful country with opportunities for all of Scotland to flourish through increased well-being, and sustainable and inclusive economic growth.

The Framework contains 11 outcomes, against which progress is measured. Those outcomes include economy, environment, health and many others (see Figure 6 below).

We are creative and our vibrant and diverse cultures are expressed and enhance our environment We value, enjoy, protect and enhance our environment We are a society which theats all our people with kindness, dignity and compassion, respects the rule of law, and acts in an open and transparent way We are well thriving and innovative businesses with quality jobs and fair work for everyone We have well educated, shilled and active We have well educated, shilled and innovative swith quality jobs and fair work for everyone We grow up loved, safe and respected so that we realise our full potential to society which to society everyone We grow up loved, safe and respected so that we realise our full potential to society everyone We grow up loved, safe and respected so that we realise our full potential to society everyone

Figure 7. National Performance Framework, Scottish Government. Source: https://nationalperformance.gov.scot



Figure 8. Scotland's Place and Well-being Outcomes, Scottish Government
Source: https://www.improvementservice.org.uk/ data/assets/pdf file/0020/30719/PWO-briefing-paper.pdf

More recently, the Improvement Service has produced Scotland's Place and Well-being Outcomes, which helpfully bring together the National Performance Framework, the Place Standard and Place Principle. There is more information on each of these in section 2.6 (below).

2.2 A FAIRER, GREENER SCOTLAND: PROGRAMME FOR GOVERNMENT 2021-22

The current scope of Scottish Government policy is summarised in the current Programme for Government 2021-22. The government's domestic policy agenda consists of the following:



Climate action/Net zero: including action to achieve Scotland's targets of 75% reduction in emissions by 2030 and a net-zero society by 2045.



Equality and fairness: including a fairer and more equal society, and creating opportunity.



Health and well-being: including more active lifestyle, supporting children and young people, and more investment in physical and mental health.



Living well locally: including revitalising local communities through development of 20-minute neighbourhoods, affordable housing and a new focus on 'place'.

Each of those contains implications for how future mixed-use development should be designed and delivered to contribute to government policy, which will be fleshed out in Part 2 of this report.

2.3 ECONOMY

Scotland's new National Strategy for Economic Transformation was published in March 2022. It sets out priorities for Scotland's economy, as well as the actions needed to maximise the opportunities of the next decade to achieve the Scottish Government's vision of a well-being economy.

The Strategy emphasises the need for action, public sector leadership and collaboration (see quote opposite page 13).

This message of delivery, leadership and collaboration resonate throughout this report. We will return to them at the end of the report. They reflect the Place Principle (see section 2.6 below)

The National Strategy for Economic Transformation also places great emphasis on entrepreneurship, innovation, green recovery and the creation of a well-being economy. Section 7 of this report illustrates how these important themes can be applied in mixed-use developments. "Throughout the development of this strategy, one message has been particularly clear. As a country we will be judged on the outcomes we deliver, not the strategy we write. Words and intentions matter, but only actions deliver change. The task of transforming our economy requires an equally radical transformation in the way we deliver results. Government will provide clear and decisive leadership, but it can't and shouldn't do everything. Ours must be a country in which the public, private and third sectors respect each other's strengths, draw on each other's talents and work together to create and sustain an economy that works for all."

Kate Forbes MSP, Cabinet Secretary for Finance and the Economy, Foreword to <u>National</u> Strategy for Economic Transformation, 2022

2.4 PLANNING

Planning is a critical element of delivering public policy outcomes, because it is the primary regulatory mechanism for managing mixed-use development.

The research report "Planning, Economy and Place", prepared by Ryden and published by the Scottish Government in 2019, notes planning's role in "enabling the development markets and leveraging investment; unlocking and adding value while balancing long run social, economic and environmental costs and benefits" (see page 23 of the report).

The Scottish planning system is currently being reformed as explained on the Scottish Government's website www.transformingplanning.scot. This includes the creation of a new National Planning Framework (NPF4) containing a spatial plan for Scotland to 2045. In contrast to previous National Planning Frameworks, NPF4 has increased status and is part of the statutory development plan, meaning that its policies

have a stronger role in day- to-day planning decision making. NPF4 also incorporates updated Scottish Planning Policy which contains detailed national policy on a number of planning topics.

NPF4 was approved by the Scottish Parliament in January 2023. It includes a national spatial strategy for Scotland 2045; identifies a number of 'national developments'; and contains a new national planning policy handbook. Within those 160 pages, there are a number of specific aspects that are particularly relevant to placemaking and mixed-use development:

- National developments involving mixeduse development, including Chapelcross power station near Annan, Clyde Mission from South Lanarkshire through Glasgow to Inverclyde, and Aberdeen, Dundee, Edinburgh and Stranraer waterfronts.
- National planning policies relating to the climate emergency, nature crisis, community wealth building and design quality (including the six placemaking qualities).

- Policy 9: Brownfield, vacant and derelict land and empty buildings, encourages the reuse of brownfield, vacant and derelict land and empty buildings, to help reduce the need for greenfield development.
- Policy 13: Sustainable transport, encourages developments that prioritise walking, wheeling, cycling and public transport for everyday travel.
- Policy 15: Local Living, encourages application of the Place Principle and the creation of connected and compact neighbourhoods.
- Policies 18: Infrastructure First, encourages an infrastructure-first approach to land use planning, which puts infrastructure considerations at the heart of placemaking.
- Policy 20: Blue + green infrastructure, protects and enchances blue and green infrastructure.
- Policy 21: Play, recreation and sport, encourages spaces and opportunities for play, recreation and sport..
- Policy 23: Health and safety, facilities development that improves health and wellbeing, amongst other things.
- Policy 26: Business and industry, encourages business and industry uses and alternative ways of working such as home working, live-work units and micro businesses.
- Policy 27: City, town, local and commercial centres, applies the Town Centre First approach to help centres adapt positively to long-term economic, environmental and societal changes, and by encouraging town centre living.

Taken together, those elements of NPF4 identify (a) nationally important locations where mixed-use development is proposed; and (b) how mixed-use development on those and other sites should be planned and designed.

2.5 VACANT AND DERELICT

Scotland has around 11,000 hectares of vacant and derelict urban land, a legacy of our industrial past. As the Vacant and Derelict Land Taskforce notes, it has remained static for years. Indeed, many vacant and derelict sites have been in their present condition for decades. Some do get developed, others appear elsewhere.

This matters for two reasons: because of the harm it causes, and because of the missed opportunities it represents. Vacant and derelict sites create unproductive gaps in our communities, to the detriment of the economy, health and well-being.

Research by the Scottish Land Commission

shows that almost a third of the Scottish population lives within 500 metres of a derelict site. In deprived communities that figure increases to 55%. These sites blight communities, harm well-being, and limit opportunities. Bringing abandoned and unloved urban places back into productive use could help tackle climate change, improve health and well-being, create more resilient communities and rebuild our economy in a way that helps everyone achieve their full potential.

National Planning Framework 4 clearly states the Scottish Government's intentions:

"We will use our land wisely including through a renewed focus on reusing vacant and derelict land to help limit the new land that we build on." (page 7)

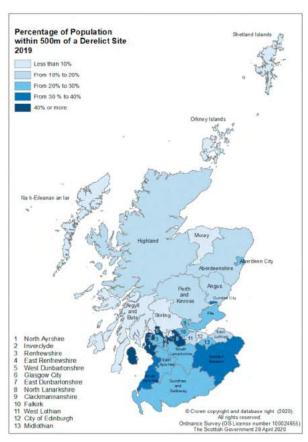


Figure 9. Percentage of Population within 500m of a Derelict Site 2019, Scottish Government.

Source: https://www.gov.scot/publications/scottish-vacant-derelict-land-survey-2019/pages/9/

NPF4 identifies a number of nationally significant sites where mixed-use development is proposed. Many sites around Scotland are not identified as national developments but are nonetheless of national and regional significance.

This commitment to tackling vacant and derelict land is reflected by the Scottish Government's current £50 million Vacant & Derelict Land Investment Programme, which supports place-based approaches to tackling persistent vacant and derelict land, delivering regeneration and sustainable inclusive growth as part of the green recovery.

Why is this important for mixed-use development?

For the simple reason that mixed-use development is normally the only viable way of bringing large-scale vacant and derelict sites back into permanent productive use. That is why it is proposed in NPF4 for so many nationally important sites.

But, as the examples in section 4 of this report demonstrate, achieving this successfully requires public sector leadership and collaboration - except in a very few isolated circumstances where either the market support high values, or the landowner or developer is able to subsidise development which would otherwise not be viable.

2.6 PLACE

Why is 'place' important in the context of this report? Because creating mixed-use developments is all about creating new places.

Over the last decade, 'place' has become a common concept in the lexicon of Scottish policy making. It is often used in two related but different ways: placemaking and placebased working.

Placemaking refers to the quality of physical places where we live, work and meet. NPF4 defines it as the process of creating good quality places that promote people's health, happiness and well-being. It is often used by planners, urban designers and architects when they refer to the design of streets and public spaces and how they interact with the buildings around them. It refers not only to the development itself, but to the development's relationships and integration with surrounding communities, and how it functions.

In recent years, the term 'placemaking' has also been used to refer to all of the qualities that make a good quality place, not just its physical design – as shown in the <u>Scottish</u> Place Standard.

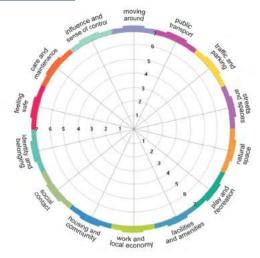


Figure 10. Place Standard Tool

For more information on placemaking and place-based approaches, the 2019 research report "Planning, Economy and Place" by Ryden for the Scottish Government contains a literature review (page 17 onwards).

Place-based working (or a <u>place-based approach</u>) is the Scottish Government's preferred means of collaborative working for local policy delivery and public sector investment. It describes how organisations can work together to consider all of the physical, social and economic elements of a place collectively. According to the Scottish Government's <u>Our Place</u> website launched in 2022, place-based working is about supporting and enhancing the potential of people, physical and natural assets in a place; and it can produce more than the sum of its parts by generating novel approaches, bringing in resources or tackling root causes.

The <u>Place Principle</u> is a specific term describing the overarching context for place-based working in Scotland, agreed by the Scottish Government and COSLA in 2019. The Scottish Government's Our Place website has more information.

Since the Place Principle was launched, it has become a common thread linking much government activity, for example:

- The current <u>Scottish Infrastructure</u> <u>Investment Plan 2021-22 to 2025-26</u>.
- The 5 year £325m <u>Place Based</u> Investment Programme unveiled in 2021.
- Scottish Futures Trust's <u>Place Guide</u> to implementing place-based working, published in late 2021.

The Improvement Service has recently produced Scotland's Place and Well-being Outcomes, which helpfully bring together some of the disparate messages around the National Performance Framework, the Place Standard and Place Principle. The Place and Well-being Outcomes are described as a consistent and comprehensive set of outcomes that every place needs to enable those who live, work and relax there to stay healthy and thrive; they highlight that, to reduce Scotland's inequalities, every sector needs to work together to deliver all of the outcomes in every place.

"Place is significant in our lives. It shapes who we are, frames what we have become, and nurtures our aspirations." "'Place' can be an elusive concept."

Figure 10. Crail coastal path

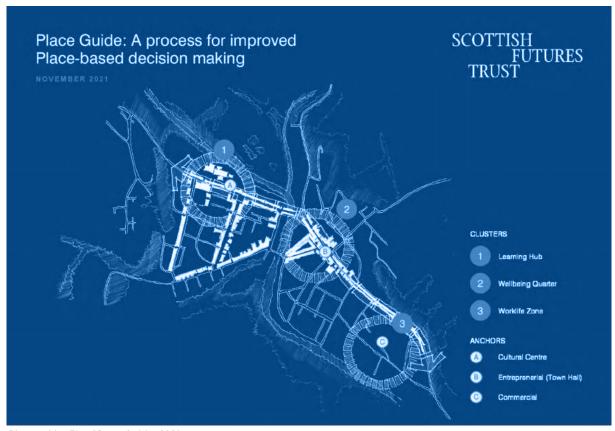


Figure 11. The Place Guide 2021 Source: $\underline{https://www.scottishfuturestrust.org.uk/storage/uploads/sft_placeguide.pdf}$

Scottish Futures Trust published The Place Guide in November 2021. Reflecting the Scottish Government's policy agendas, it is intended to be a 'step by step' guide for decision-makers in order to provide clarity on:

- Purpose why place-based approaches should guide the planning and development of investment in services and capital projects.
- Collective leadership how local voices and collaborations should influence decisions.
- Prioritisation how a 'place approach' can provide clarity about what needs to be done, how that is prioritised and who takes ownership.

Architecture and Design Scotland have produced a range of research, case studies and guidance documents to support placemaking and place-based approaches, such as Designing for a Changing Climate: Carbon Conscious Places (2020) and many others.

Any new approach to delivering mixeduse development must take a place-based approach as outlined above, and seek to deliver the outcomes suggested in the Place Standard, NPF4, and the place and well-being outcomes. That has important implications for how future mixed-use development should be designed and delivered.

3 ECONOMIC CONTEXT

This section identifies, considers and summarises the economic, investment and real estate factors that need to be considered in the delivery of mixed-use development, along with the role of the state in moving from policy to implementation. The information in this section is taken from the accompanying evidence-based background paper 'Property and Place Drivers for Green Well-being Economy.'

3.1 INTRODUCTION

The Scottish Government's key underlying strategy is geared towards addressing, and delivering on, the 'climate emergency' through 'a green well-being economy'. This will require businesses and organisations to change their operational processes and the way they create, organise and invest in property and places, including delivering the Place Principle in mixed-use development.

The Scottish Government is looking to create an economy that is rebalanced (inclusive and fair allowing opportunities for everyone without being prejudicial to the environment), including the encouragement of micro and smaller businesses that are innovative, agile and entrepreneurial in their response to the climate challenges.

The Economic strategy is being promoted through five programmes:

- An 'Entrepreneurial Nation' where significant emphasis is placed on Scotland becoming an 'entrepreneurial nation'.
- Widen Scotland's economic activity by participating in new market opportunities that create 'new well paid jobs' and contribute towards net zero targets.

- Greater productivity and innovation to be achieved from 'businesses, industries, regions, communities and public services', including the making and remaking of places and buildings.
- A well skilled and trained workforce which can respond to the proposed structural economic changes. A placed based approach to transformation requires the input of multi-disciplined skilled and experienced teams.
- A future economy which provides high levels of employment with good levels of pay as well as reducing 'structural poverty' and poor health outcomes. This focus on disadvantaged communities where often there are tracts of vacant and derelict urban land, requires a collaborative approach, and a public infrastructure investment commitment.



Figure 12. Growing spaces created on previously vacant land can contribute to a green well-being economy

3.2 THE ROLE OF THE SCOTTISH PUBLIC SECTOR TO DELIVER A GREEN WELL-BEING ECONOMY

The Scottish Government wishes to promote the 'Place Principle' as a key planning tool for moving towards a 'green well-being economy'. This will require an integrated policy approach that draws up policy proposals on development and investment contained in National Planning Framework 4, the National Strategy for Economic Transformation, the Transport Strategy (NTS/STPR2), energy strategy and other related matters.

Delivery of a Scottish 'green well-being economy', and zero carbon by 2045, needs to happen quickly. To achieve this requires more than policy to shape the way the economy, businesses and people are able to function. The key challenge is how to deliver policy into practice, requiring new ways of operating to be quickly understood and

executed. Such a radical change will require significant leadership and commitment, including the public sector needing to be involved beyond policy and strategies, to provide strong and clear motivational leadership, and to change cultural practices and act as a 'municipal entrepreneur'. Impactful state intervention which is not just about acting as the policy maker but as a 'champion promoter and participant', leader, and investor (value creator), needing a switch from facilitation to 'co-creation' (Professor Mazzucato).

3.3 A NATIONAL STRATEGY FOR ECONOMIC TRANSFORMATION TO CHANGE ECONOMIC PRACTICE

The Scottish Government's National Strategy for Economic Transformation https://www.gov.scot/news/Scotland's-national-strategy-for-economic-transformation/ published in March 2022 is for a period of ten years. This is a relatively short term

national strategy that could be vulnerable to significant external impacts and related risks. As such this should be seen only as the start of the transformational journey. Given the complexities and externalities in an economic system, strategies need to be constantly monitored and adjusted to deliver a zero carbon Scotland by 2045. The NPF4 plan period until 2045 is a sensible time frame to plan and invest in radical change.

To achieve a zero-carbon economy any strategy will need public investment directly or in partnership with private investors and action making stakeholders. Such action will require speculation and risk taking to induce confidence.

The National Strategy promotes Scotland as an 'Entrepreneurial Nation'. This will require fundamental change to the way our economy functions, including co-operation from the public sector, private investors, community participants, and involvement from the public sector as an investor as well as an enabler. This will be particularly important for small businesses as smaller operations inevitably find it challenging particularly in accessing markets and financial capital. Inevitably to stimulate that action a supportive state is needed and for the public sector to become an entrepreneur.

3.4 A COLLABORATING AND PARTNERING PUBLIC SECTOR

"The Scottish Government and the business community should take urgent action to develop a new collaborative partnership on the strategy for Scotland's economic recovery."

Towards a Robust, Resilient Wellbeing Economy for Scotland: Report of the Advisory Group (AGER) on Economic Recovery, (page 41) June 2020 In their report 'Towards a Robust, Resilient Well-being Economy for Scotland, https://www.gov.scot/publications/towards-robust-resilient-well-being-economy-Scotland-report-advisory-group-economic-recovery/
June 2020, the Advisory Group on Economic Recovery (AGER) suggests that there is a need for increased connectivity between government bodies and agencies to assist in knowledge, understanding and the promotion of opportunities, so that practice can inform policy rather than policy directing practice.

While government may support activity through investment in infrastructure, the AGER report interestingly suggests that the state may seek to hold stakes in businesses so it can provide greater supportive assistance between education and work.

The AGER also recommends greater levels of partnership working between private sector investment and the public sector, and the Scottish Government having a greater stakeholder interest in both large and small commercial activity.

The AGER report argues that to achieve a net carbon green economy the Scottish Government will have to have a greater stakeholder interest in both large and small Scottish commercial activity. The National Investment Bank is well placed to act as a key investor in 'place-based projects' and innovation.

The AGER report also suggests a "Team" Scotland" approach which would involve a "broad collaboration between policy officials, regulators, funders, higher and further education, innovation centres and the private and third sectors". The report makes it clear that the economy "can only thrive if there are successful and supportive relationships between business and government."The Advisory Group is effectively implying that a 'Triple Helix' model of innovation is required where public sector organisations, universities and commerce work together to stimulate a knowledge economy and deliver public benefit.

3.5 THE PUBLIC SECTOR AS THE 'PRIME MOVER'

Moving to a green well-being economy as quickly as possible requires the public sector to play the lead role of 'prime mover' and to promote and invest in a range of public interest benefits associated with a green well-being economy.

Public sector organisations need to adopt commercial entrepreneurial practices to encourage and enable wider investment participation. Development partners which are engaged at an early opportunity help inform and shape investment whilst delivery would be collaborative with private and community interest involvement, as is being undertaken in the Clyde Gateway URC regeneration project https://www.clydegateway.com/.

With public sector financial resources under increasing pressure, the raising of funds will be one of the largest challenges. Taking fundamental measures to save the planet will require funding which as the AGER points out, might include prudential borrowing, loan guarantees, bond issues etc.

The public sector, depending on political commitment, priorities and resource allocation, can undertake the role of prime mover by way of a number of options.

- Acting as the principal project champion

 this option maintains power in all crucial decision making and requires the public sector organisation to be first in and last
- 2. Initial Prime Mover Transferring before Project Action where the public sector organisation acts as an enabler by undertaking pre-contract activity such as land assembly, master planning and obtaining planning in principle.
- A Joint Venture with the Public Sector participating in some action making. This option is a blend of the above options.

A prime moving public sector organisation acting as principal client must have teams of well informed, competent and experienced people with the necessary abilities to lead and direct operations, to communicate and engage with a raft of interests namely those that live, work and invest in the neighbourhood. These skills have been eroded over recent years and will require a programme of re-education and training across wider groups.

3.6 THE ECONOMY AND RESILIENT WORKPLACES

To address the climate emergency and deliver a green well-being economy requires a far-reaching change in direction. This is a challenge when the economy has been impacted by external factors including Covid and Brexit, which present multiple challenges, risks and unknowns for investors. However it also creates an opportunity to get the economy rebooted and growing while adjusting the structural balance of sectors, participants, and locations.

In 2020 the AGER, considered how Scotland could economically recover from the Covid pandemic and how through economic recovery, a transition could be made to a net zero, 'greener well-being economy'. There is a need for changes in working practices that will have a material impact on the way people work, how they live and their accommodation requirements. All these factors can impact on property, place and the environment. In addition there is need to adopt an element of discretion, flexibility and adaptability in policy arrangements and the way the Use Classes Orders should be applied. In particular the AGER report highlighted inequalities in working practices and opportunities between high and lowincome earners.



Figure 13. Cycling on designated cycle routes in Clydebank, Glasgow

In line with a number of the NPF4 policies there also a need to change our work and customs and live and work in a more efficient and localised way. A greater local focus will help to reduce our consumption of natural resources and limit our carbon generating activity.

Before the Covid pandemic, businesses which were impacted by global and national externalities, were considering their commercial and retail space needs. Post Covid evidence, thus far, suggests that businesses will have to manage a 'hybrid' method of working with office workers in the office 2 to 3 days per week. This will not be the case for all with small companies less likely to operate hybrid working patterns than larger corporate entities. While hybrid workspaces and 'hot desking' may require less floor space accommodation, there is a growing employee demand for better quality accommodation that provides enhanced work environments, wellness benefits and a greater opportunity to interact with fellow workers.

The emphasis on the quality of workspace needs to also extend to home working. In the past 'Live Work' accommodation has been promoted as a solution but this has often been turned into additional residential space. Whatever the post-Covid working pattern will be it is expected that future office space is likely to be driven by quality rather than quantity.

NPF4 advocates 20-minute-high density neighbourhoods. Rather than working space within the home, within a neighbourhood there might be flexible accommodation such as a community business centre space or hot desk working spaces. Such a concept of hot desk working spaces may not be overly different to a student working in a University Library or people informally working in a coffee shop. Having spaces within the neighbourhood will provide a greater opportunity for social interaction which may improve networking as well as having some additional well-being dimension. Importantly this would allow residential accommodation to function as a 'home'. Such spaces may mitigate against digital and fuel poverty for those working from home on lower incomes and would reduce isolation and improve mental health and productivity.

Healthy sociable environments are not just something that is required in a home or neighbourhood, corporate organisations



Figure 14. Post-Covid hot desking could have multiple beneficial impacts over working from home

are expected to continue to demand high quality properties in prime locations to satisfy employee expectations. Home, neighbourhood or corporate, work spaces and places should be well-designed buildings that are in well-connected locations, flexible to meet economic, climate and demographic changes, and have access to meeting spaces, private suites served by top class technology and services.

According to Scottish Development International of the 364,000 private sector enterprises currently operating in Scotland, 99% are small or medium-sized enterprises providing 1.2m jobs. Along with self-employed workers 329,600 people (SG 2020), (the lowest proportion of self-employed in the UK at 12.4%), most do not need corporate style accommodation, are likely to be largely lower in covenant status [risk of meeting tenant obligations] and likely to be flexible in their accommodation requirements.

3.7 BROADER PERFORMANCE INDICATORS

The emphasis on the quality of work environments is becoming more established through broader assessments of the nation's performance. Increasingly, investors are recognising that the best places to invest are those that provide greater opportunities to be greener in their operations as well as having good levels of 'well-being' for their workforce.

Recognising this shift in emphasis, the United Nations has a 'Human Development Index – HDI - https://hdr.undp.org/en/ content/human-development-index-hdi. This index acknowledges that national performance measurements should not be purely measured by economic growth but by the capability of its people. The index incorporates three elements: (i) a long healthy life (ii) well educated (iii) a good standard of living measured by Gross National Income (GNI). The Office for Economic Cooperation and Development's (OECD) measurement of a country's economy known as the 'Better Life Index' https://www.oecdbetterlifeindex. org/#/11111111111 has a wider measurement that includes an assessment of housing, income, jobs, community,

education environment, civic engagement, health, life satisfaction, safety and work life balance

Such performance indicators are moving towards a whole systems measurement, an 'asset based approach', with many of the place making agenda attributes highlighting a broader assessment of what is required to enable people to live well.

3.8 INVESTMENT TO SUPPORT CHANGE

All stakeholders need to understand the differences between 'property development' and 'property investment'. It needs to be clear what is being delivered, how long will it take to be delivered and how will the asset be managed and maintained into perpetuity?

Development is essentially an 'in and out' activity with an exit taking place on completion of works and receipt of income. Investment, while often including the development element, is about a long-standing stake in the property. Good place making therefore needs good investment practice because it is the investor that invariably manages the place and not the developer. For this reason, it is the investor who needs to determine the quality of the proposal and its specification to reflect its future use and management.

For institutions to become involved in mixed-use developments, proposals need to be of sufficient scale or be part of a portfolio of projects located in prime locations to help with the complexities in organising and delivering mixed-use. Projects in secondary and tertiary locations are more challenging. As a consequence mixed-use projects in prime locations are likely to attract both long term investment capital and development finance, while in secondary locations public sector inducements or partnering are likely to be needed to reduce the level of investment risk.

To deliver good mixed-use places there needs to be the right balance of performers. Businesses and their workforces will continue to want to be in places that are well connected and close to each other.

Engagement with external parties and having access to amenities and services means operating within a relatively dense place. However while traditional trading practice will remain, there is the suggestion that with hybrid working and a demand for smaller space requirements, businesses do not necessarily have to be located within central business locations. Wherever the location, what is clear is that a major consideration will be access to amenities, parks, cafés and excellent transport connectors. Such requirements are consistent with the vision for well-connected mixed-use neighbourhoods.

4 MIXED-USE DEVELOPMENTS: Form + approach

In developing the guidance a review of a range of mixed-use/industrial and commercial development has been examined. In this section, we look at the developments and assess lessons that can be learned and translated into mixed-use development moving forward.

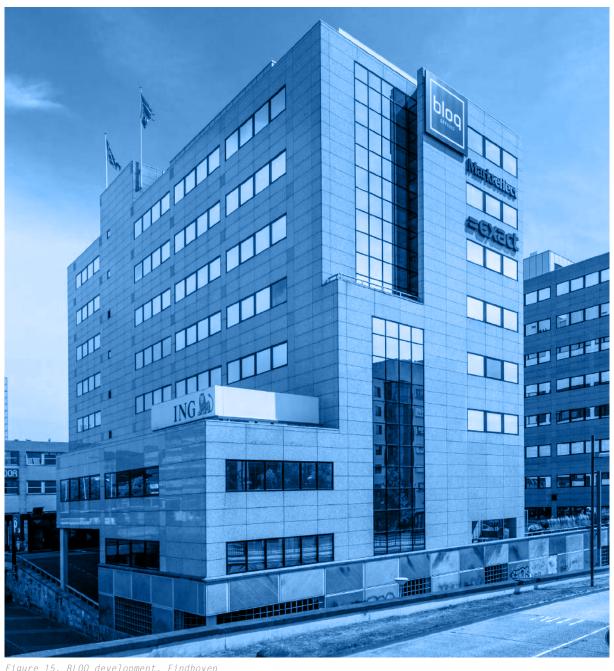


Figure 15. BLOQ development, Eindhoven

BLOQS - EINDHOVEN + ENFIELD

The BloQ concept is about offering workplaces on flexible, accessible facilities in central, visible locations. The facilities provide for businesses with different backgrounds, flexible rental options and flexible work settings and facilities for fabrication, production, meetings, short consultations and conference calls. The Enfield BloQ is the UK's first open-access factory for professional makers and maker businesses. Affordable workshop spaces and state-of-the-art equipment that would not normally be afforded by small businesses, providing opportunity to create a supportive community of fellow 'makers'.

The BloQ facilities at Eindhoven and Enfield are both adaptive re-use of existing buildings, (but can also be new-build), re-styled and renovated to provide flexible building form and format. The buildings address sustainability and climate resilience through quality construction methods, space for greenery and energy recycling. The BloQ at Enfield is heated through waste to energy from waste material from the timber machining workshops. Exterior spaces are green and pleasant, playful and well-lit (illuminated), creating a congenial environment future proofed and circular economy principles.

Key to the BloQ developments is their central location and accessibility. Eindhoven sits directly in the centre, accessible by private and public transport with rail and bus in a 3 minute walk. Private transport is provided next to, and under, the building with various parking and rental rates, daily, hourly etc. Both BloQs are also within walking distance of other amenities including higher education, areas of technology and social urban sites (hotels, libraries etc).

Key lessons



Adaptive re-use of existing land and buildings The BloQ buildings are both realised from existing assets, building and brownfield land. The Eindhoven offices were completely redesigned and renovated in 2020, including the entrances to a high standard, and the Enfield BloO from a 1960's vehicle testing warehouse. The buildings include sustainable and climate resilient measures including reed beds to filter rainwater and waste to energy facilities.



Flexible and affordable spaces that provide social and communal amenity The buildings are well designed with flexible, adaptive spaces that are not only flexible in scale and functionality but also in terms of funding and payment models. Fundamental to the BloQ is the provision and integration of social and public amenities including cafés, events spaces, education spaces, and even a tool shop and specialist equipment.



Making Places
The BloQ projects highlight
the importance of making
things at local and small
scale levels. This production
input to an economy is of
crucial importance in the
pursuit of a green well being
economy.

STRATHCLYDE BUSINESS PARK, BELLSHILL

Strathclyde Business Park (SBP) was established in 1990 as part of a larger industrial estate, located between Bellshill and Coatbridge, east of Glasgow. Originally 340,000 sq ft of development it has now grown to more than four times that level, providing 1.4 million sq ft of business and lifestyle space with around 6,500 working there. The business park provides a range of high-quality office accommodation (some of which incorporate green technologies and standards), on-site retail and leisure facilities. The business park has a high occupancy rate, virtually full.

The park is located well outside any major urban area primarily because of access to the A725, and the direct access this provides to both the M8 and M74. Its location in the middle of the Central Belt, with a surrounding motorway network, together with its amenities and facilities, enables it to target a wide range of occupiers and their workforces.

The roads effectively disconnect the business park from nearby residential areas, with limited public transport and active travel options available. While there are some paths provided, the distances involved, and the environment they pass through, make it unattractive and unsafe with likely only a very small proportion of the workforce accessing the site by foot or cycle.

"Facilitating growth has been key to the Park's success. Providing flexible accommodation with the ability to expand with our tenants as their businesses change, has proved invaluable to many of the companies who have located here." (William Hill, developer of SBP)

Key lessons



An attractive working environment The business park is set in an attractive landscape ground enabled by strict ratios of office space to landscaping that has been enforced to ensure that the surrounding environment does not become too built -up. Along with a good range of on-site amenities built up over the years, the landscape framework has been instrumental in creating a good working and living environment for workers and visitors.



Flexible development options The business park is virtually fully let with expansion looking likely to continue resulting from a number of factors including development strengths such as quick new build timescales (less than 15 months), flexible accommodation and design and build opportunities within the park, enabling occupiers to have purpose built, stand-alone office buildings on-site.



Poor connectivity The design of the business park is focused on private vehicle use, with few connections to surrounding residential areas (east and west), including an absence of formalised crossings over the main roads, and a predominance of car parking and roads makes it difficult for pedestrians and cyclists to move around as well as negating any meaningful civic or green spaces. Public transport is also very limited and Bellshill rail station is 2-3km away and difficult to get to.

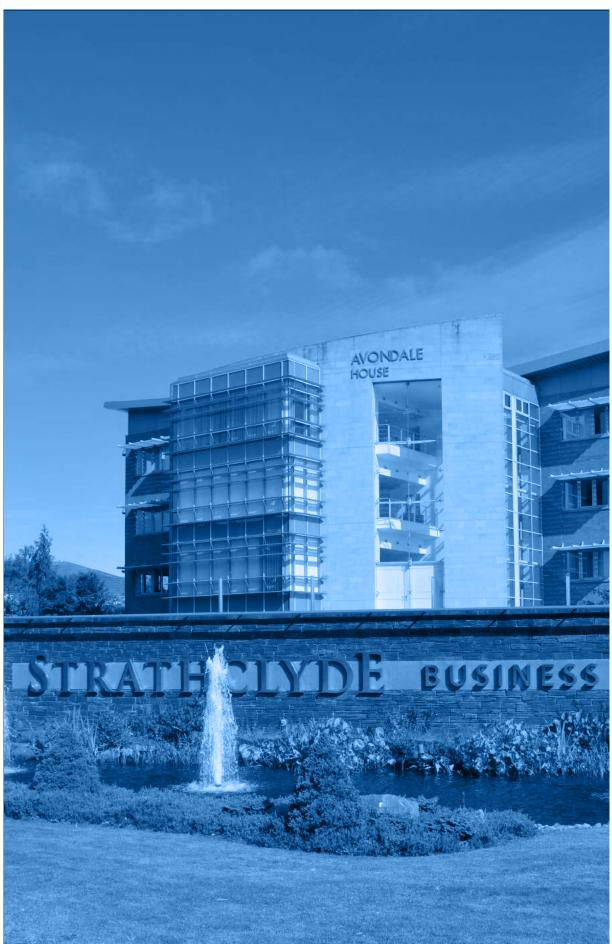


Figure 16. Strathclyde Business Park, Bellshill

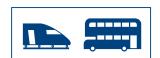
EDINBURGH PARK, THE GYLE

Edinburgh Park business park is located at the far western edge of Edinburgh city in the Gyle area (approximately 7km from the city centre), located just inside the A720 bypass. The Park was originally designed and built with easy road access to the city centre and out of the city, with public transport provision via buses. Public transport provision has subsequently been enhanced through rail and tram provision providing access not only to both Edinburgh and Glasgow city centres but also Edinburgh Airport. Rail stations lie at the southern and eastern edges of the site with the tram network running through the site.

The investor and promoter of the Edinburgh Business Park was a joint venture between the Miller Group and the City of Edinburgh Council through its arms' length company EDI. The site extended to some 56ha (138 acres) and had a design led approach underpinned by a strong architectural master plan by American architect, Richard Meier.

It is largely an office-based development although the park has attracted businesses from a range of different sectors, including finance, insurance, property, telecommunications, technology and property. The park has low availability of space with occupancy around 90% with new tenants and expansion of existing. It now has over 7,000 employees, with more than 20 blue-chip companies based there including HSBC Securities, AEGON, Intelligent Finance and JP Morgan.

Key lessons



Connected public transport The success of the Park has been suggested to be a combination of its quality larger office space, competitive pricing, and importantly improving transport accessibility, very much based on public transport provision. The transport links connections to a wide range of places and further facilities is another key factor, realising the park and context as a travel hub.



Design led joint venture
This is a project that was
born from a design led vision
by the commercial arm of
the Council and delivered
by way of a joint venture
between the public and
private sector. It illustrates
good practice in delivering
good place making through
a collaborative approach.



Landscape framework
A key component of the original site design was a strong landscape framework of public/open spaces, strong landscape structure, parkland and linear water features including Gogar Burn, Loch Ross, Loch Gordon and Loch Craigget.

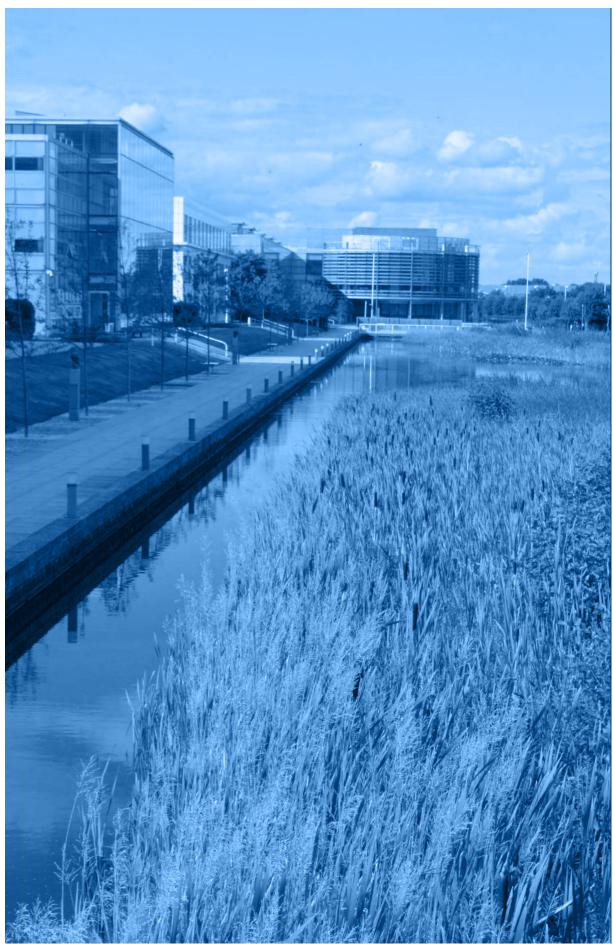


Figure 17. Edinburgh Park, The Gyle

BAVARIAN DEVELOPMENT MODELS

The Bavarian Ministry in the 1990s published its Development Models guide that highlighted its pursuit of good sustainable practice. The approach was to use demonstration models as an innovation approach to highlight what good quality can look like whilst reducing the speculative risk for developers who generally apply a more conservative traditional approach to development. The Development Model programme included 100 Bavarian municipalities and 132 projects. The budget of E100m in 1994 is equivalent to E177m in 2022.

In 1994 the Bavarian Ministry launched its 'Development Models' programme seeking to improve their urban planning and new innovative sustainable practice and to enable practical solutions to be applied to the planning concepts. The Ministry moved state ownership assets into large state enterprises and invested funds to urban development referred to as 'Development Models' programme. Three development principles were established; Ecological; Social; Low Cost.

Brownfield redevelopment of vacant sites ensured that greenfield land was not developed. Also existing infrastructure could be used. However, State needed to deal with dereliction, contaminants and other land impediments.

Key lessons



Experience and testing is crucial to delivery
The Bavarian Ministry recognised that prescribed planning policy alone doesn't work without the input of practical experience.

Clarity of guidance
It was identified that there
was a need to agree what is
a requirement and what is
guidance. Requirements are
binding rules and should be
applied with care to ensure
that investor interest is not
diminished to such an extent
that project marketability is
prejudiced.



Quality needs to be established at all levels A quality standard requirement needs to have enforceable power either through statutory regulations such as planning policy or alternatively through contractual agreement, with quality standards established at each grade level from master planning down to individual building specification. Phrases such as 'minimum standards' were deemed to be inappropriate as they largely become the standard with a lower bar.



Alternative development models should be considered Development models in Bavaria were implemented through 'supporting instruments' such as competitions, contractual agreements on quality standards and advice through appointed committees. The majority of projects were implemented through design competition, although experience showed that competitions alone do not guarantee quality standards particularly at the micro detail.



Figure 18. Bavarian Development Model - Landtags projek, Munich, Germany

IBA EMSCHER PARK

The International Building Exhibition Emscher Park, Region Emscher, West Germany, began in 1989 and was delivered over a ten-year period to 1999. The aim of the project was to address the industrial decline of the central Rhur area in Germany. The project involved 117 projects focused on the ecological, economic and cultural renewal of the former industrial region.

Delivery involved the establishment of new planning structures and a regional approach with landscape design and architecture combined to establish a regional identity and contribute to the restructuring of the region. Key was the establishment of a regional park structure, the Emscher Landschaftspark, that connected and shaped the place in the absence of the former industrial works, creating nature reserves, parks and landmarks from industrial wastelands. The IBA Emscher Park project established guidelines for a new approach to former industrial regions and sites.

State involvement - The IBA Emscher Park (initiated by the state of North Rhine-Westphalia) utilised state, federal and EU funds for financing, combining more than 40 existing funding programmes to finance and deliver the makeup of the individual projects of the whole project. The integrated understanding of the whole project, but then broken down and delivered at the individual level was a vital part of the success of Emscher.

https://www.internationale-bauausstellungen.de/en/history/1989-1999-iba-emscher-park-a-future-for-an-industrial-region/

Key lessons



Collaborative working Emscher Park is arguably one of the best examples of regeneration carried out in Europe during the post war period. A primary factor in its success was the collaborative working between various public sector organisations that all came together with a single mission of giving new life to a post-industrial area of mining and steel industries. 17 cities and more than 50+ municipalities collaborated to deliver a regeneration/ brownfield project the same scale as the Central Belt of Scotland.



Building on Place The project, located within the former industrial heartland of Germany, the Ruhr Valley, did not remove the industrial wasteland but worked and built on that heritage, celebrating its past, and creating a new landscape and place identity. The wholesale change of the industrial landscape and used space (brownfield) created spaces of an industrial nature and character that reversed the emblems of industrial decline into ones of regeneration for the landscape of the Ruhrgebeit.



Regeneration can be delivered at scale The Emscher Park project is located within the Ruhr Valley which is home to some 8.5 million people representing the third largest urban conurbation in Europe. The scale of the regeneration project is massive, over 800 square kilometers, equivalent to the Central Belt of Scotland, as one project. In fact the scale of the site assisted the delivery, seeing the whole jigsaw puzzle rather than hoping a few individual jigsaw pieces might somehow come together.



Figure 19. Landscape Park Duisburg-Nord, IBA Emscher Park

EDEN CAMPUS, GUARDBRIDGE, ST ANDREWS

Eden Campus lies 4 miles west of St Andrews and is an example of a transformative approach to vacant and derelict land. This project was cited by Ryden's review of funding sources for the re-use of Vacant & Derelict Land on behalf of the Scottish Land Commission. The project is also the innovation centre for the University of St Andrews, with a vision of being carbon net-zero by 2035 helping to shape and develop a sustainable future. In addition the project is an example of alternative and collaborative funding as part of the Tay Cities Deal.

The development site was originally a former paper mill (Curtis Fine Papers), but through the Tay Cities Deal and University funding is being transformed into a joint initiative between industry and academia. The campus includes a biomass energy centre and a solar PV project that heat the buildings on the site as well as a number in St Andrews. Partnering the renewable energy generators are a centre for energy storage and conversion, a centre for battery development and a fabrication and prototyping facility – a 'maker space'. There is an entrepreneurial centre aimed at start-ups and development has a long-term programme including providing a home to spin-out companies that will be at the forefront of science and technology producing sustainable pharmaceuticals, new fuel cells, synthetic proteins and new forms of batteries. Future plans also include an entrepreneurial hub in partnership with Fife Council and the Scottish Government.

The project received £26.5m through the Tay Cities Deal, and by the end of 2021 £70m had been spent on the transformation with £10m on the removal of asbestos alone. Another £100m was reported (The Courier, October 2021) potentially needed to complete the work.

Key lessons



Adopt a Triple Helix approach
This project is a good example of a 'Triple Helix' approach of collaboration between the public sector, commerce and academia. Such an approach is able, through a synergistic model, to draw together investment and expertise to achieve a beneficial marriage of interests and outcomes.



Think longer term The Eden Campus has been many years in development, the first project in 2016 (biomass plant), but it has a long-term target of net-zero by 2035. As identified in the Scottish Land Commission, Vacant + Derelict Land Taskforce recommendations, whether state or private grants and funds, there should be an aim to allocate appropriate funding over multiple years. This should include embedded flexibility as funding sources change.



Focus on fabric first in Brownfield and V+DL regeneration.
The Eden Campus has utilised the existing built fabric of the former paper mill, aligning with the Scottish Land Commissions report and the priority of the reuse of exiting buildings and not just the actual vacant and derelict land.



Figure 20. Walter-bower-house, St Andrews University, Eden Campus, Guardbridge, St Andrews.

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CASTLE BUSINESS PARK. STIRLING

Castle Business Park is located on the western edge of Stirling between the residential fringe of Raploch housing estate (and the River Forth) and M9 to the west. The business park is approximately 15ha, set in mature landscaped grounds immediately beneath Stirling Castle. The landscape in particular provides a strong framework screening the 11 office units and 1 restaurant/café (River House), whilst also tying the development with the rural setting to the west and providing a strong interface with the residential neighbourhood to the east.

The park, built from 1994, has been a key development in Stirling, providing employment and attracting inward investment into the city, and contributing to the economic regeneration of the city. The park was designed around motor vehicles, the car etc, with three edges bounded by roads (A84 and Drip Road). Access along and across the roads is difficult but there are additional less obvious routes connecting the Raploch housing to the eastern edge of the park and Forth Valley College to the north.

Access is also provided by an adjacent park and ride facility linking the business park to the station. Traffic generated by the park does impact on local traffic and access into and out of Stirling from the west. The park is land-locked by the roads with no further expansion within the park, although there are fields to the south and west as well as the potential for development on the northern edge of the River Forth.

Key lessons



Look beyond the red-line Whilst the park has a good network of paths and cycle routes, a strong landscape framework and sits within easy access of residential areas, schools and colleges, the park is very selfcontained with no significant integration or connection with the wider landscape. More could be made of the city edge location connecting to the rural countryside, west and south, or to the River Forth, north, and the lands beyond.



Hierarchy of Movement could be so much more. The existing access movement network to and within the park is relatively strong but the space is dominated by cars and roads with a focus on arrival by car. Walking and cycling whilst relatively safe are not welcoming (more backroutes). The inclusion of landscape structure, greenblue provision and Active Travel Networks to the existing road and movement network would create a safer and more attractive place.



Think longer term The Castle Business Park is now undergoing another phase of development known as Kildean which abuts a recent housing development and is close to the Forth Valley College. Hospitality services along with a petrol filling station are also included in this phase of development. With various services in Raploch, a 20 minute walk away, this business park, new housing and college could be defined as a mixed-use neighbourhood albeit built on green field land and at a relatively low density.



Figure 21. River House, Castle Business Park, Stirling.

EUROCENTRAL/MAXIM, AIRDRIE

Maxim Office Park is part of Eurocentral, one of the largest industrial parks in Scotland, located in North Lanarkshire, east of Glasgow (approximately 12 miles from the city centre) between the M8 to the north and Holytown to the south. Extensive suburban residential areas are in close proximity (realising a workforce catchment of over 1.5 million people) with Bellshill 4 miles west, Coatbridge 4 miles to the north and Motherwell 5 miles south. Other areas include Mossend, Chapelhall, Calderbank and Carnbroe. Eurocentral combines an office park, Maxim, with industrial facilities including warehouse and distribution centres, factories, call centres and a railfreight centre.

A prominent part of the development is the Maxim Office Park, a £330m office development that opened in March 2010 with 10 buildings (Grade A office accommodation) totalling over 756,000 sq ft (70,200 m2) and a capacity to employ between 7,000-8,000 people. Built in a single phase, Maxim is the UK's largest speculatively built office park. The entire park was completed in March 2010. As well as office accommodation there is a wide range of shops and leisure facilities, and a nursery.

The park is only accessed by road, although this does include bus services to local stations and residential areas. There is also a shuttle bus service. There are no dedicated Active Travel routes or connecting cycleways and pedestrian routes to local housing or retail areas. There is a central boulevard of landscape within the centre of Maxim including a landscaped community area including ponds and waterfalls. Otherwise landscape to the rest of the park is functional at best, peripheral to the building and car park areas on space that is left over from development.

Key lessons



Natural evolution and arowth Whilst Maxim offered a large volume of office space from the opening of the park it has suffered with low levels of occupation, with only around 100,000 sq ft of 750,000 sq ft let in the first seven years after opening. Successful business parks tend to grow organically, offering tenants the opportunity to grow by growing the parks as demand allows. Flexibility is a key ingredient for success, allowing parks to attract new tenants whilst retaining their existing tenants.



Transport has to be varied and connected Whilst there are very good road links and a bus service to the site transport is primarily limited to private vehicles with little public transport (limited bus, no rail etc) and no attractive and safe walking or cycling provision. Consequently the park is in essence separated from the surrounding residential community unless you own a car. The level of amenity within the site is also limited with only the central boulevard suitable for walking.



Location is key
One of the key factors in
Maxim's low growth and
occupancy has been its
location out with core
residential areas, separated
by roads and without public
transport options.



Figure 22. Eurocentral/Maxim, Airdrie

WESTHILL, ABERDEEN

Westhill is a town of approximately 12,000 people (2016) located approximately 10km west of Aberdeen on the A944. Planned as a new town during the 1960's the town is atypical of other towns in Aberdeenshire, with no historic core although a uniform and distinct townscape character. The town consists of residential in the northern sector and employment land in the south-east corner. The residential area contains the majority of the community facilities (secondary school, primary schools, medical centre, hotels and bars and restaurants), whilst the main retail and commercial facilities are located in the employment land. Westhill sits within a rural landscape and whilst the town has 32 'greenspace' locations, there is little landscape framework of structure. The employment area has landscape street structure but no identifiable civic or greenspaces.

Severance of the areas results from the A944 passing east-west through Westhill. The A944 provides the main access to the town, Westhill and the employment land. Public transport is provided by bus with provision into the town, and adjacent to the employment park, otherwise there is little public transport provision. The airport 7.2miles away and the train station 6.7 miles. There are a number of core paths in close proximity to the town but few encroach on the town, although a circular walking and cycling route is a community aspiration. The employment land (including Kingshill Commercial Park), contains the main retail facilities. The 2020 (March) Westhill Strategic Needs Assessment Summary of Findings (Aberdeenshire Council), identified that Westhill's employment was disproportionately balanced e.g. 28% of the employee count in 2% of the number of enterprises (oil & gas). In addition the report identified that a large proportion of local residents do not work locally in the town, travelling more than 5km to work, and local jobs serviced by those residents with lower incomes.

Key lessons



Build a more resilient employment base The assessment identified the need to ensure the town (and wider Aberdeenshire region) needed to be more resilient to external economic events and support and develop traditional industries. There was also a need to encourage innovation and diversification into new areas to make the town, and region, more attractive to visitors and investors, as well as current and prospective residents, particularly those with lower incomes.



Improve the connectivity of the town and wider context

The economic assessment identified the need to improve accessibility of the town, digital and physical, including an express bus route and reduced expense/cost. There was also a need to improve the connectivity between the town and the employment land, as identified by the community through the aspiration of a circular walking/cycling route.



Establish a traditional town centre and diversified retail offer.

There is the need to establish a more traditional town centre, including an increase in the diversity of the retail offer in the centre of town, as well as a dedicated or 'pop-up' arts space to address the town's lack of cultural offerings.



Figure 23. Westhill Business Park, Aberdeenshire

Recurring lessons learned from review of existing mixed-use/business parks are outlined below



Location is key

Successful mixed-use developments are well connected to existing infrastructure and markets.



Provide flexible and affordable spaces that provide social and communal amenity

Design adaptable spaces that are flexible in scale and functionality to maximise provision and integration of community amenities.



Look beyond the red-line

New mixed-use developments should seamlessly integrate with the wider context/landscape. A development may not be at a scale of a new neighbourhood but its inclusion could enable an existing place be transformed into a well functioning mixed-use neighbourhood.





Connected public transport

Reliable public transport should be integrated as part of a low carbon approach.



Provide active travel networks

Active travel networks which encourage walking, cycling and wheeling should be designed into every development.



Landscape framework

Enhancing the existing landscape should be a core principle with green infrastructure providing a framework of public/open spaces, improved biodiversity and opportunities for climate adaptation.



Collaborative working

 $\label{lem:collaborative} Collaborative working between public sector organisations is crucial to deliver successful mixed-use developments.$



Experience and testing is crucial to delivery

The input of practical experience can be a significant guiding factor.



Quality needs to be established at all levels

Statutory regulations such as planning policy or contractual agreements need to have enforceable powers to ensure quality standards.



Alternative development models should be considered

Design competitions can be used to test proposals.



Adaptive re-use of vacant and derelict land

Priority should be given to bringing vacant and derelict land back into productive use.



Building on Place

Adapt and retrofit existing buildings if they form part of the architectural vernacular. Can provide opportunities to celebrate heritage with innovative regeneration and acknowledge a sense of local identity.



Think longer term

 $Design \ for \ potential \ expansion \ with \ flexibility \ built \ in \ to \ developments.$



Build a more resilient employment base

Support and compliment existing industries and services while encouraging new methods of production to enable a local 'making' culture.



Figure 24. Collage of lessons learned from existing mixed-use/industrial/commercial developments

5 KEY MESSAGES

Having set out in sections 1-4 a planning and economic context and the lessons learned from a review of existing mixed-use and business/industrial developments, this section looks at some of the issues, opportunities and challenges involved in designing and delivering mixed-use developments. The section presents a broad overview of the key messages from the engagement and consultation process carried out with practitioners. In addition to placemaking and Place Principle the discussions touched on key national policy objectives such as net zero, climate change and nature recovery, health and well-being, equality and fairness, and living well locally. This is deepened by an in-depth desk-study, building on experience designing and delivering place-based guidance and projects, looking at mixed-use development in Scotland and abroad, as well as innovative developments such as BLOQ/BLOX.

5.1 INTRODUCTION

NPF4 policy seeks denser urban forms with a lower reliance on private transport, a reduction on climate impacts, a minimisation of carbon emissions, the regeneration of brownfield land and buildings (Vacant + Derelict Land (V+DL)), and developments which are based on 20-minute neighbourhood/placemaking principles. These aspirations are complicated to design, and even more complex to deliver.

The complexity of the situation was heard in many conversations with frustrations with the continued approval and development of the wrong kind of development in the wrong place. This has resulted in new carorientated, low-density developments on the edge of towns or greenfield sites which are inherently unsustainable - at variance with the 20 minute neighbourhood aspiration. This is a result of decision making at all levels, from strategic planning to the detailed development of sites. The power to regulate and determine the location of developments is shaped by political and planning choices and a determination to put policy into practice. That has not always been the case but NPF4 makes it clear that to live within a green well-being economy we need to plan the right types of places in the right locations.

The Scottish Government also wishes to see the adoption of circular economic principles as part of its climate emergency measures, and the delivery of positive effects for biodiversity in every sector of business and the economy. There is also a focus on brownfield regeneration of land and buildings. In property terms this means re-purposing and upgrading buildings by finding new uses and activity. To be workable this approach must be viable and economically sustainable.

Finally any good placemaking has to give priority to place stewardship and property management, along with the commitment of funds and resources to long-term property management and planned maintenance.

5.2 THE POWER OF THE CAR

NPF4 is seeking to make places greener by being less reliant on private transport and adopting more walkable neighbourhoods. In housing terms suburbs have always been seen as safe, comfortable, convenient places for many people enabling them to travel by car over increasingly greater distances to places of work and pleasure. Commercial and industrial developments, business parks of low-rise pavilions and 'sheds' [Class 4 &



Figure 25. Cycling lanes can provide an alternative to car convenience allowing people to shop locally

5], in suburban and edge of town locations have similarly been geared to private transportation with locations focussed on good accessibility to a road network. The typical uses, storage, logistical and distribution require larger sites and are often inappropriate in residential neighbourhoods both in terms of their scale, activity, and large-scale vehicle requirements. Few have any meaningful landscape provision, civic or public space, or notable quality of place for employees.

To deliver the NPF4 policy, this comfort, convenient and familiar lifestyle will require a profound change from a traditional low-density typology to one that has greater density, less dependency on private vehicles, a more reliable public transport network, and a greater diversity and intensity of uses, all of which are essential for the proper functioning of a mixed-use neighbourhood.

The challenge in delivering this change and realising a 'green well-being economy' is persuading people to change their established 'car convenience' behaviours, habits, and customs. People are culturally conditioned to drive to buy goods as it is convenient practice; they are not restricted by the amount of goods that they buy or limited by the amount they can carry; and one major shop each week is likely to be

preferable than multi-day shopping. The existing market model already provides some goods and services within suburban locations, but these are typically based on the accessible convenience of private vehicles, parking at the front of shops and supermarkets.

Modelling of a suburban typology suggests it is possible that people can walk 800m, 20-minute round-trip, to obtain daily provisions. However if walking to buy goods has any chance of working for people the whole experience must be easier and more pleasant to walk than driving, providing environmental and health benefits, but just as important is a chance to socially engage, chat or enjoy the place as a daily event rather than a chore. This behaviour is seen in denser well-connected places where neighbourhoods are walkable.

The traditional retail experience has also to change, making the shopping experience more engaging. Interestingly some high streets in lower valued locations have an active independent retailing offer, possibly because they have stronger community ties and behavioural habits providing an opportunity to socially engage, as well as possibly lower car ownership and a greater reliance on public transport. This suggests

that traditional retailing can still work where there is good customer/social experience, ease of access to its community and local hinterland, and an ability to directly engage with the retail vendor rather than a corporate operative. There is also a better chance of a mixed-use development working, with complimentary and new goods and service provision, within an existing community while in a new mixed-use development it will take time to build the customer base to maintain sustainable trade levels and to change the habit of going by car to other places.

In recent years large scale housing developments have attracted interest from retail and hospitality developers and operators, including dental practices and pharmacies) seeking patronage from local households, enabling many residents in the new housing estates to walk 800 metres to shop for provisions. However if connected by a good road network and poorly served by public transport means it is more likely that people will drive to the retail provision rather than walk. The strength of independent retailing in some high streets and the arrival of these opportunistic facilities shows a potential for a more mixed typology. However to succeed a mixed-use neighbourhood has to be designed around people, not cars, using the 'Place Principle' approach.

5.3 MIXED-USE NEIGHBOURHOODS AT DENSE OR SUBURBAN DENSITIES?

NPF4 suggests that across a 20-minute neighbourhood the majority of journeys would need to be by 'walking, wheeling or cycling' to obtain daily provisions. However the supply of daily provisions requires patronage to achieve economic and operational viability, a matter that analysis.

A mixed-use 20-minute neighbourhood would likely require a catchment of 5,000-7,000 people with healthcare services, doctors, dentists, etc, as well as a primary school, but not secondary. Employment activity that has operations beyond daily neighbourhood service provision are likely to be relatively small scale, such as technological, creative media, artistic based producers and professional / management services.

According to NPF4, a 20 minute walk could cover some 800 metres. A basic modelling exercise, based on an urban and suburban density with a population of 7,000 people highlights the amount of land take required. A neighbourhood with an urban density of 65 dwellings per net hectare would require around half the amount of land that a suburban density. At 65 dwellings per net hectare people could walk slightly less than the 800 metres suggested in the NPF4. The urban assumed density of 65 dwellings per hectare has been promoted by a range of organisations such as the Improvement Service, RTPI Scotland, City of Edinburgh Council and the Town and Country Planning Association.

Clearly different density assumptions will produce differing built typologies and will be influenced by location and site specific circumstances. As a broad rule of thumb an urban density of around 100 dwellings per hectare, for a 20 minute neighbourhood, is likely to be 3 to 4 storey tenemental flats. Suburban models of 65 dwellings per hectare could be around 2/3rds apartments and 1/3rd housing, while 35 dwellings is likely to deliver 2/3rds housing and 1/3rd apartments. Urban development would comprise of mixed-use blocks whereas a

Theoretical Model of a 20 minute neighbourhood	Metres Walked	Estimated Gross Hectares	Estimated Net Hectares	No. of Dwellings	Estimated Population
Urban Density @ 65 dph	500	79	55	3,574	7,147
Suburban Density @ 35 dph	800	201	101	3,519	7,037



Figure 26. Public transport provision

suburban development would likely have separate commercial premises to residential streets.

Of critical importance in all these scenarios is the convenient distance to the public transport node with density increasing substantially in and around the node. One would also expect people to walk significantly less distance to a public transport node / stop than for daily provisions.

5.4 THE IMPORTANCE OF INFRASTRUCTURE AND CONNECTIONS IN MIXED-USE DEVELOPMENTS

Access to efficient, good quality, reliable and affordable public transport is essential to delivering NPF4's 20-minute neighbourhood approach. People will also undertake greater daily social and economic activity both at their local neighbourhood level, and beyond their neighbourhoods. This is evidenced by a recent Centre for Cities report highlighting

a need for substantial investment in public transport in Scotland, which will be a challenge. https://www.centreforcities.org/story/mapping-the-30-minute-city/?mccid=496b869374&mc eid=b18390881e

The creation of a place making framework will necessitate a commitment to invest in a good quality sustainable transport infrastructure, but also energy and digital communication. And if places are to thrive this must also include long-term management and maintenance, stewardship.

Connectivity and infrastructure will be needed not just for traditional businesses, public services, health, education, affordable housing, etc, but for new evolving technologies, particularly creative media, artistic enterprises, innovative start-ups, as well as changing working practices such as hybrid working.

This applies to energy network provision including heat networks such as district heating which require planning, modelling, co-ordination, and investment at a neighbourhood scale, which is why in



Figure 27. Bringing vacant and derelict post-industrial spaces back into productive use

master planning neighbourhoods how they inter-connect is so important. This then becomes disaggregated to the finer grain of neighbourhood blocks. Such matters require significant funding, and that will require support from the public sector as well as energy companies and developer contributions.

5.5 NPF4's FOCUS ON BROWNFIFID DEVELOPMENT

The Scottish Government in their NPF4 policy state that they want to pro-actively focus new development towards the re-development of brownfield vacant and derelict land (and buildings) rather than building in green fields. This would utilise existing infrastructure and other facilities such as public transport provision, addressing NPF4's specific promotion of an 'Infrastructure First' policy.

The Scottish Land Commission has prepared a range of documents and guidance on transforming vacant and derelict land https://www.landcommission.gov.scot/our-work/housing-development/transforming-vacant-and-derelict-land

5.6 MIXED-USE DILEMMA

The majority of brownfield/vacant and derelict land (V+DL) is however likely to be located in areas often described as places of 'market failure' or places of low market demand and property value. Brownfield mixed-use developments that include a socially balanced housing tenure will often require some form of public subsidy in places of low market demand. This is required as viability is threatened by the risk of development expenditure being greater than the selling price of the product. Without such subsidy, projects will be risky, marginal and likely to significantly limit developer participation.

Traditionally, regeneration programmes are usually led and supported by the public sector. The public sector typically carries out a series of development investment functions, including land assembly, master planning, contamination, and other enabling infrastructure works. This is often key as brownfield urban land can often have fractured ownerships and other property interests such as servitude rights or other burdens, which means that site assembly can be complex and time consuming and often requires local authorities to use their compulsory purchase powers.

A challenge for mixed-use development is how residential, commercial and industrial neighbours can comfortably co-exist. Mixed-use is not simply a block of apartments with a shop on the ground floor. Buildings and places need to be designed and managed effectively to avoid and mitigate potential conflicts and tensions arising from neighbouring development and urban inconveniences.

Walkable, productive, 20-minute neighbourhoods require intermixed development forms and uses with residential development, commercial buildings and civic spaces realising logistical challenge (e.g combining distribution space, operating hours, access, loading and yard requirements etc). They will also need to have the right type of working environment to encourage workers to be happy and productive as well as designed and specified to be flexible and adaptable to cater for new and innovative businesses and start-ups.

In addition conjoined property interests require to be capable of separation to enable heritable interests to be well defined and obligations to be allocated. A key message must be that mixeduse developments are not just about development, but they need to consider all of the investment criteria and operator requirements and assess how they interact with neighbouring residential occupiers.

5.7 TYPES OF BUSINESS OPERATING IN MIXED-USE NEIGHBOURHOODS

The key to establishing new neighbourhoods is to be able to attract demand for a form of provision that pre-dates the private motor vehicle. This means persuading the public to choose to patronise their local goods and services. Development of mixed-use development outside urban places will be a challenge for investors, developers and the

public who will live and work there. However, with some flexible policy arrangements and a more collaborative approach, such a mixed-use approach is possible providing there is sufficient patronage and locational value.

Investment in mixed-use developments will be challenging particularly in places outside prime locations. Getting the right level of commercial elements to make a sustainable mixed-use development is often difficult. There are many examples of urban housing developments with vacant premises at ground floor level. Commercial premises outwith prime locations have relatively low value requiring some form of inducement, cross subsidy or grant backed community / social enterprise initiatives to stimulate interest.

Part ownership and the sharing of space might provide alternative options with the state entering into an investment proposition rather than a traditional grant subsidy. Thought should also be given to how subsidies could be structured in a different manner to allow occupiers to share in an investment stake with the public sector perhaps taking a share.

"Neighbourhood and local centres provide for a range of retail, business, entertainment and community uses for the people who live, work or visit the area. Your neighbourhood centre is where you find your local café, barber shop or dentist, a place for local communities to meet and take care of their daily needs."

New South Wales Government, https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Complying-Development-Reforms/Neighbourhood-Centres

5.8 MIXED-USE MASTER PLANS SHOULD BE MORE THAN AN INITIAL DESIGN

A 'Master Plan' should be more than a '2D' plan establishing a creative vision at the planning application stage. A mixed-use master plan needs to be an urban design / place making framework that defines uses, how the place functions and how people and activity inter-relates. The framework should set out principles and detail on development phasing, infrastructure, uses and stewardship protocols all of which should be formed into a place development handbook. The master plan should also be capable of flexible development and enhancement through emerging new ideas and mew requirements.

Detailed master plans and strategic urban design frameworks are essential place making tools not just in terms of how places might look but how they work and how they inter-relate and connect with their neighbouring places. As such mixeduse masterplans should not just focus on the red-line boundary of the project site but see the 20-minute neighbourhood as extending beyond to include the potential transformation of neighbouring community elements. No neighbourhood should be defined by precise boundaries but should recognise and link with other places, it's neighbours.

To be a robust and sustainable, a proposed master plan should be informed by rigorous market and technical research and underpinned by an economic development appraisal.

5.9 EXPERIMENTATION THROUGH EXHIBITIONS

In many parts of Europe, Germany, Scandinavia and the Netherlands, there are exemplar mixed-use neighbourhood developments with an active public sector participating in projects and a long-standing commitment to active travel. One of the factors influencing this is the exploration of built form modelling, not just theoretical but practically applied, through exhibitions. This active state approach provides a solid foundation to demonstrate how things can work and enables people to see for themselves how something less familiar might actually be a better way of living. Importantly, it represents an opportunity for collaboration with lots of people being involved in the process and providing an opportunity for the project to gain a coalition of support to bring about change, as well as act as a focus to channel effort, funds and provide a shop window to get the public involved.

The International Building Exhibition (IBA) programme is one example of this experimentation model https://www.internationale-bauausstellungen.de/en/iba-history/. The fundamental aspect of the IBA approach is a place-based approach with its focus on 'people and process', and communities substantially involved all by good management and strong leadership. There is no separate public funding for the IBA, with public budgets being allocated from a range of sources and blended with private investment.

The IBA model of themed multi-projects in various locations could act as an exemplar methodology for rolling out transformed neighbourhood development in Scotland with delivery principles that are focussed on key topical themes.

5.10 RETROFITTING

It is difficult to predict how markets will react to post pandemic activity. Some commentators suggest that demand for office space will be lower while others propose that greater focus will be given to better quality spaces in traditional prime locations. To achieve a green well-being economy, investment will not just be focused on creating new build 20 minute / mixed-use developments but will also need to create



Figure 28. Local markets can be a key aspect of 20 minute neighbourhoods

such neighbourhoods within our existing suburban places. We have around 2.5m dwellings in Scotland and build around 20 thousand dwellings per annum. If we want to have a zero emission impact looking at new build is merely scratching the surface (0.8% new build to total stock). There needs to be a focus on the big changes required which means a retro fit approach with any guidance as applicable to retrofit as to new build.

Many of district and neighbourhood centres were designed and built over 40 years ago. Councils and developers must look at their portfolios and think about the Scottish Government's climate target and place aspirations. What of the many industrial estates across Scotland, how sustainable are they, and what is the reality of making them 20-minute neighbourhoods? We need to take a broader view as ultimately these existing places will continue to be just like suburban estates. However, new sustainable placemaking measures such as the provision

of electric vehicle charging will make a contribution to a net zero places. We can't do everything and perhaps if we are to move to a green well-being economy with zero emissions we have to aim for the big things with investment targeted into areas where it will create maximum impact.

6 PRINCIPLES + GUIDANCE

Successful mixed-use development requires the implementation of four related elements to meet the Scottish Government outcomes reflected in the Place Principle, National Plan Framework 4 and the National Strategy for Economic Transformation.

This section of the report outlines the principles and guidance for each element. Section 7 then illustrates how they can be applied on the ground, using three case studies.

OUTCOMES

FIFMENTS

National/local planning policy Proactive tools Other mechanisms INVESTMENT 'Property development' (Property investment' Patient capital Low carbon Connected Placemaking DELIVERY Leadership Collaboration

Figure 29. INVESTING IN OUR PLACE - delivering the Place Principle in mixed-use developments

6.1 STATUTORY POWERS: PRINCIPLES

- Planning policy national, regional and local planning policies are the fundamental tool by which the state can encourage mixed-use developments to deliver the national policy outcomes described in section 2, and most recently laid out in NPF4. Powerful though planning policy is, it is not omnipotent. Our plan-led system means that there should always be an element of balance and flexibility in planning decision-making.
- Proactive tools to complement planning policy, the Scottish planning system offers a number of other proactive tools to encourage delivery: planning obligations, land assembly, Masterplan Consent Areas, Local Place Plans, design codes, development briefs and of course the expertise of local authority planning staff. Many of these are explained in more detail in NPF4 (page 114). Each of these tools represents another way in which the public sector can work with the development industry to deliver appropriately designed mixed-use development.
- Other mechanisms although planning policy and complementary mechanisms are perhaps the primary regulatory tools for delivering the government's desired outcomes through mixed-use development, there are others such as building warrants and fiscal measures.

NOTE: Whilst 'Placemaking' is used by all to refer to the qualities of a place, few in either the public or private sector have the knowledge or experience of what 'Placemaking' looks like or how it is to be delivered. The ten strategies as set out by the UN ('Planning, Economy and Place', page 19) is a starting place but what needs to be provided are exemplar projects similar to the IBA Exhibitions.

Exhibitions provide test beds for experimentation over a limited time period, act as a focus to channel effort and funds, and provide a shop window to get the public involved.

STATUTORY POWERS: GUIDANCE

STA_01

Apply placemaking thinking to all investment.



<u>'Placemaking'</u> ("creating good quality places that promote people's health, happiness and well-being" NPF4) is to underpin any new mixed-use development, its relationships and integration with surrounding communities.

STA 02

Apply the Place Principle to all investment.



'<u>Place Principle</u>' is to be the 'framework'/basis, how the public sector should work collaboratively to deliver any new development.

STA 03

Use the proactive tools that are available.



Proactive tools should be used by the public and private sector to deliver appropriately designed mixed-use development include: planning obligations, land assembly, Masterplan Consent Areas, Local Place Plans, design codes, development briefs and the expertise of local authority planning staff.

STA 04

Link regulation to National Performance Measurement.



National Performance Measurements and not just economic growth measurements (measured by Better Life Index, Regional Well-being, Human Development Index, etc) should inform policy priorities.

STA 05

Collaborate with other public bodies at all stages in the process.



Delivering mixed-use development will require greater collaboration between government bodies and agencies (as identified in the independent Economic Recovery (ER) report to assist in knowledge understanding and opportunities so that practice can inform policy rather than policy directing practice.

STA_06

Commit public sector resources.



State involvement and investment in 'place-based projects' (as identified in the ER report) will be required to deliver 'true' mixed-use development, with the state holding stakes in businesses, including innovative and entrepreneurial activity (similar to projects in Germany, Scandinavia and the Netherlands).

STA_07

Apply regulation flexibly.



Whilst clarity as to what development requires and where there is supporting commitment, mixed-use development needs flexibility, not prescriptive rules. Common sense discretion is required to treat proposals on their merits albeit prime consideration must be given to residential occupiers having a safe and enjoyable environment.

STA 08

Prioritise green infrastructure and nature-based solutions.



Green Infrastructure and climate resilient landscapes must be given greater influence in any planning and development assessment/approval process through nature-rich/nature-based solutions that create healthy and resilient communities and provide well-being and biodiversity benefits.

STA_09

Think longer term.



Planning approvals should secure long-term funding for the stewardship and management of any development.

6.2 INVESTMENT: PRINCIPLES

Public sector investment is an essential complement to leadership and collaboration, as demonstrated by the examples in section 4. Put simply, investing resources gives the state greater ability to deliver its policy outcomes. That is one of the reasons why investment by the state is such an important part of delivering mixed-use developments, as explained in section 6.4. Not only can public sector investment stimulate development which the market might not have otherwise have delivered, it can also shape the design and nature of developments, including blue and green infrastructure and nature-rich environments, to meet the national policy outcomes described in section 2.

The Scottish Government's 'Place Based Investment Programme' allocated an initial £325 million of capital over a 5 year period starting in 2021; it will be complemented by the new £50 million low carbon Vacant and Derelict Land Investment Programme this financial year; and the Ministerial Foreword to the current Infrastructure Investment Plan for Scotland recognises the role that infrastructure investment will have in transitioning to an inclusive, net zero carbon economy. The independent review of the planning system in 2016 recognised the need for planning to 'regain confidence' in the delivery of infrastructure, with the need for greater co- ordination and collaboration in infrastructure investment decisions. As a result, NPF4 (Policy 8, page 75) embeds an 'infrastructure first' principle into national policy.

INVESTMENT: GUIDANCE

INV 01

Apply public sector investment positively and flexibly.



Investment by the state is an important part of delivering mixed-use developments, as not only can public sector investment stimulate projects which the market might not have otherwise delivered, it can also shape the design and nature of developments to meet the national policy outcomes.

INV_02

Consider connectivity at every stage in the investment decision making process.



There is a requirement to commit investment to mixed-use infrastructure connectivity, from effective delivery on the ground through to establishing and maintaining successful environments, aggregated and distributed to create great places in the right locations.

INV 03

Support and stimulate employment opportunities.



Mixed-use development should be ambitious providing for small start-up, entrepreneurial businesses, as promoted in the National Strategy for Economic Transformation (NSET). However smaller businesses are often compromised in accessing market and financial capital and challenged to respond to change. Therefore the state must be supportive, stimulate action and become an entrepreneur.

INV 04

Identify a range of funding options.



Private development demand occurs where there is sufficient value to ensure economic viability. However, mixed-use development on vacant and derelict land could benefit from non traditional approaches such as community initiatives such as 'community shares and crowd sourced funding'. Community approaches have different motivations but will remain conditioned by having to achieve a sustainable viable proposition.

INV 05

Look for ways to fund projects in different ways in a bespoke fashion.



Mixed-use development/regeneration may require public subsidy, or an investment stake, to provide smaller independent businesses with affordable quality accommodation. Alternative options may include:

- low-cost flexible accommodation
- own rather than rent
- part ownership
- shared space
- Patient capital (directly by ownership/part ownership, or indirectly through some form of loan guarantee).

INV 06

Explore opportunities for synergistic benefits from partnerships.



Mixed-use requires partnership arrangements to consider and address investment criteria and operator requirements (potential conflicts and complexities) between commercial, retail and residential, including separate entry arrangements, access routes, acoustic barriers.

INV 07

Invest in people and team building.



Mixed-use is delivered by 'teams' of people with the right talents and experience. Build and manage a team within your organisation, and across other partner and stakeholders, to design, deliver and manage real mixed-use.

6.3 DESIGN: PRINCIPLES

Good design has been promoted by the Scottish Government for many years. The latest iteration of this is Scottish Government's NPF4 which reinforces successive generations of national and local policy and guidance about the need for good design.

Good design also adds value. This has been demonstrated through considerable research in recent decades, much of it referenced in the Place Value Wiki, RICS professional guidance on Placemaking and Value, and the RTPI's work on the value of planning.

What does 'good design' mean for mixed-use development? It can be captured in three headings:

- Low carbon The over-riding need to tackle the climate emergency (described in section 2) means that mixed-use development has to be planned, built and operated in ways which minimise carbon emissions. That applies across the board: for example, location of development, density and proximity to services and facilities (as captured in NPF4's 20 Minute Neighbourhood concept), patterns of land use, energy-efficient design and construction, right through to ongoing maintenance and stewardship.
- Connected This should cover all aspects of infrastructure: walking, cycling and roads, water and drainage, power, energy and digital. There is of course an overlap with low-carbon and climate, for many of these. Walking, cycling and roads deserve special mention because the way that they are designed will determine how well connected the development is both internally and with surrounding neighbourhoods, facilities and amenities. Again, the 20 Minute Neighbourhood concept for 'living well locally' should be taken as a guiding principle here.
- Placemaking NPF4 (Policy 14, page 59) promotes the six qualities of successful places in new development:
 - 1. Designed for lifelong health and well-being
 - 2. Safe and pleasant
 - 3. Well connected and easy to move round
 - 4. Distinctive
 - Sustainable
 - 6. Adaptable

Section 7 demonstrates how these design elements can be applied on the ground.

What could mixed-use development look like?

There needs to be a radical change from traditional typologies to one that incorporates the three design principles of low carbon, connected and placemakng. It could look like this.

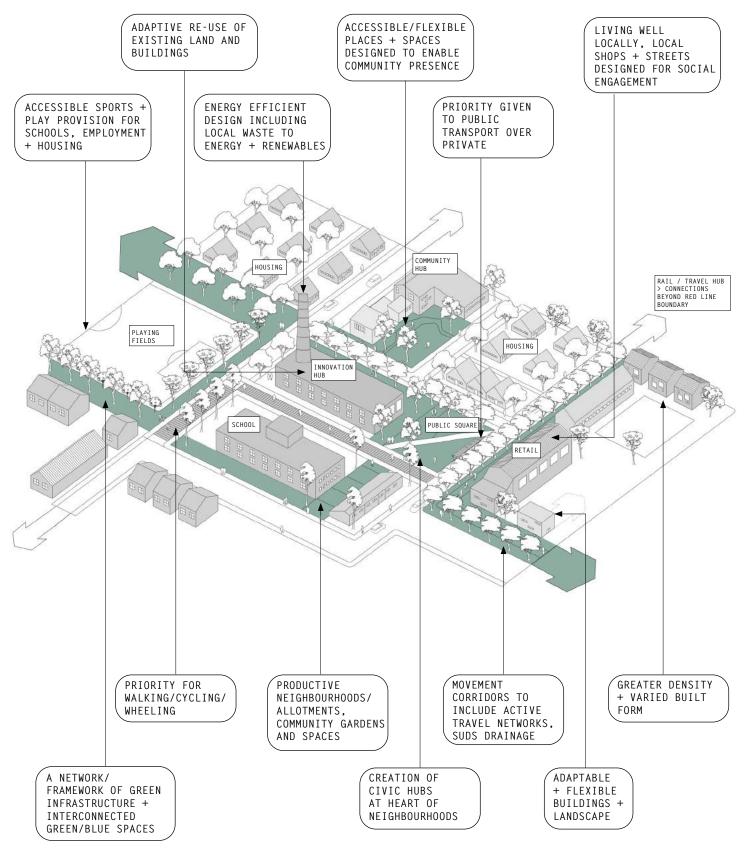


Figure 30. What a mixed-use development might look like

DESIGN: GUIDANCE

DES 01

Climate and Nature first.



Climate and nature must be fundamental to the design approach with water resilient, mixed-use development planned, built and operated in ways which minimise carbon emissions and deliver positive effects for habitat and biodiversity.

DES 02

Design for the RIGHT place.



Development must be located in the right, most appropriate, locations. If we keep building the wrong type of development in the wrong place, mixed-use and 20-Minute Neighbourhoods will never be delivered.

DES_03

Look beyond the red-line.



Mixed-use, 20-Minute neighbourhoods, should not focus on the 'red-line' boundary but look beyond, interlinking with existing places to include the potential transformation of neighbouring community elements.

DES 04

Apply placemaking thinking.



Placemaking – development proposals should contribute positively to local character, quality, functionality and sense of place, drawing on the six qualities of successful places outlined in Creating Places: A policy statement on Architecture and Design https://www.gov.scot/publications/creating-places-policy-statement-architecture-place-scotland/documents/

DES_05

Take an infrastructure first perspective.



In accordance with NPF4's 'Infrastructure First' policy, infrastructure is to be a primary structuring element, integrating new and existing development, for any new development, with sustainable/public transport given priority in all future development. This should include blue and green infrastructure and nature-rich settings.

DES 06

Build in public transport options.



Public transport/networks need to be accessible and convenient for all new mixed-use developments providing quality public transport connections between different transport modes, home, employment and education facilities. This will likely require a fresh approach to the existing situation, sitting down with all transport providers, and investment at central and local government level.

DES 07

Apply a hierarchy of movement.



'Infrastructure First' should not be just about vehicular traffic but the creation of a hierarchy of connected movement routes for humans and non-humans that build on existing infrastructure and include Active Travel Networks (ATN), Sustainable Drainage and green infrastructure.

DFS 08

Prioritise existing assets.



New development should prioritise existing infrastructure capacity, buildings and landscape, focusing development on existing hubs.

DES_09

Ensure connectivity and permeability.



Mixed-use development must be connected, both internally and with surrounding neighbourhoods, in all aspects of infrastructure: walking, cycling and roads, water and drainage, power, energy, digital, and landscape.

DES 10

Prioritise 20 Minute Neighbourhood Principles.



The 20-Minute Neighbourhood concept for 'living well locally' should be taken as a guiding principle for mixed-use developments with active travel, walking, cycling and wheeling for daily activities and provisions, given priority within road (movement) corridors.

DES_11

Focus on effective 20 Minute Neighbourhoods within and beyond the site boundary.



Based on a 20-minute neighbourhood concept, a catchment of 5,000-7,000 people would be required to sustainably support neighbourhood goods and services. To achieve this modelling suggests between 35 dwellings per hectare (800m) and 65dpha (500m) with the higher density requiring around half the land of the lower density.

DES 12

Seek higher density levels.



Density and built typologies will be influenced by location and site-specific circumstances. Different density assumptions will produce differing built typologies - Urban development will comprise of mixed-use blocks whereas suburban development is likely to have a separate commercial premises to residential streets.

DES_13

Prioritise development on viable brownfield and vacant & derelict land.



New development should concentrate on redevelopment of brownfield / Vacant and Derelict Land, utilising existing infrastructure and other facilities more efficiently as well as being less reliant on private transport.

DES_14

Establish a Green Infrastructure (GI) framework as a priority of any development.



A landscape framework should be designed and implemented as a first principle priority of any mixed-use development. The aim should be to build on, strengthen, link, and interact with existing GI elements to create a nature-rich network of healthy, sustainable and attractive environments, routes and spaces.

DES 15

Ensure locality matters.



Mixed-use development must be specific to place and local context. Place design should be informed, driven and underpinned by evidence, the site, and contextual, specifics and requirements rather than arbitrary standards.

Development should be distinctive and 'of place' in order to realise a local character for mixed-use neighbourhoods. This does not exclude innovative design.

DES_16

Assess motivations, preferences and behaviours.



Mixed-use needs to persuade the public to choose to patronise local goods and services through stronger community and behavioural habits where the acquiring of daily provisions is an opportunity to socially engage with familiar people. Streets and places should be designed to enable an active community presence.

DES 17

Quality is paramount.



Mixed-use development should provide high quality residential accommodation with associated healthy and sociable environments and well-designed flexible buildings that can accommodate generational change.

DES 18

Build in employment resilience.



Walking productive neighbourhoods should have employment space that is well designed and specified but flexible and affordable, with the right type of working environment to encourage workers to be happy and productive.

DES_19

Be innovative.



There is no guidance in respect of the form or allocation of commercial business space within mixed-use development, but what it should be is innovative (see Bloq/Blox), well-connected and provide excellent transport and movement routes.

DES 20

Focus on mixed-use living rather than zonal approaches.



Affordable hybrid/home working alternatives to 'Live-Work' accommodation should be incorporated in to mixed-use (20-minute-high density neighbourhoods) developments including 'flexible hot desk space' that provides flexible, social and economic benefits, greater opportunity for social interaction, improved networking, enhanced well-being, as well as avoiding digital and fuel poverty.

DES_21

Future proofing.



Place development should be future-proofed, flexible and adaptable in both space and built form to be able to adjust to economic and technological change. Retro-fitting existing development and future new development is key to climate resilience, long-term stewardship, and generational security. To achieve this buildings, landscapes and places should all be designed to be adaptable to economic and environmental change.

DES 22

Build-in long-term stewardship and planning.



Succession plans and long-term stewardship should be part of any development proposal, designed by a more user-driven design process – where potential users are consulted, engaged and involved directly in the maintenance of the development.

"Regrettably, cities seem to underestimate the urgency of adaptation strategies."

Jena Milosovicova, 'Urban design for the climate change', IFLA Journal #2 (2012)

6.4 DELIVERY: PRINCIPLES

- Leadership the importance of strong state leadership in placemaking is clear from the analysis of policy and best practice in Part A of this report. The basic point is that mixed-use developments will only achieve the quality and outcomes required if the public sector takes a leading role.
- Collaboration in today's complex world of resource constraints, cross-cutting policy
 outcomes and multiple organisations, collaboration is essential. It is at the very
 heart of the Place Principle (see section 2). As the Scottish Government's Our Place
 website states, "collaboration is key to successful placemaking". This is particularly
 so for mixed-use developments, where the scale of proposals involves multiple
 partners from the public, private and third sectors.
- Stewardship this is a reminder that successful delivery is not just about the initial capital investment required for a mixed-use development. Maintaining the quality of that 'place' in the long term is critical, not only in terms of care and maintenance of buildings and open spaces, but also in enabling local communities to have influence and in continuing to invest in improvements as the years go by. This need for stewardship is highlighted in the recently developed Place and Well-being Outcomes and Place Standard tool: Design Version.
- Infrastructure First Policy 18 of NPF4 encourages an 'infrastructure-first approach'
 to planning, to support the provision of the infrastructure, services and facilities that
 are necessary to create liveable and sustainable places. The intention is that the
 public sector, through Local Development Plans and delivery programmes, should
 align with relevant infrastructure plans and be informed by infrastructure capacity
 and requirements.

DELIVERY: GUIDANCE

DEL 01 Cha

Change the design and delivery model.



To deliver 'real' mixed-use developments based on 'Placemaking' principles, there needs to be change to the way development is designed and delivered. Central and local government needs to be part of a collaborative delivery team (including investment team) and foster successful and supportive relationships between business and the public sector – A 'Team Scotland' approach!

DEL 02

Plan for success.



Successful delivery includes the implementation of the principles noted above:

- Leadership
- Collaboration
- Stewardship
- Infrastructure first

DEL_03

Embed engagement within the delivery model.



Engagement should be fundamental to any collaborative process yielding the best chance of development success.

DEL_04 Apply joined up thinking.



'Real' mixed-use development will require 'joined-up' thinking and delivery (remove silo culture and working practices). Public and private actors, government agencies, companies and developers, and communities need to adopt a collaborative, place-based, approach to achieve net-zero, equality and fairness, health and well-being and living well locally.

DEL_05 Establish a 'Route Map'



First step to delivering mixed-use development is establishing a 'Route Map' – requiring discussion amongst public sector partners to agree a collaborative way forward, roles, responsibilities and translation of guidance on the ground.

DEL_06 A masterplan should deliver more.



A Masterplan should be developed providing a Place Development Handbook that sets out framework of design principles, development, phasing and long-term stewardship. The Place Development Handbook should be supported by research evidence that underpins the economic viability of the proposals.

DEL_07 Deliver as a team.



To deliver mixed-use development requires multi-disciplinary professional teams with significant skills and experience to deliver projects. This experience and skill set has been substantially lost in local authorities and as such will require partnership working between public and private.

DEL 08 Make addressing Vacant and Derelict Land a priority.



Vacant and derelict land and buildings should be brought back into productive use as a priority. This will typically require some form of public subsidy support (particularly in locations of market failure), public sector leadership, and collaborative delivery involving public/ private and third sector partnerships.

DEL 09 Put Green + Blue Infrastructure in first.



Green and Blue Infrastructure, and multi-functional urban nature-based solutions should be implemented as a first-step approach, not a last action.

DEL_10 Be adaptable to change.



Mixed-use development should be flexible and adaptable to economic and environmental changes. This should include the workforce makeup and patterns of delivery to accommodate any increase in demand for low cost flexible accommodation requirements.

DEL_11 Deliver collaboratively.



Planning, designing and delivering mixed-use developments that apply the Place Principle, the Place Standard and other best practice placemaking approaches will need to be realised in a cross-cutting, collaborative manner involving public, private and community sector players.

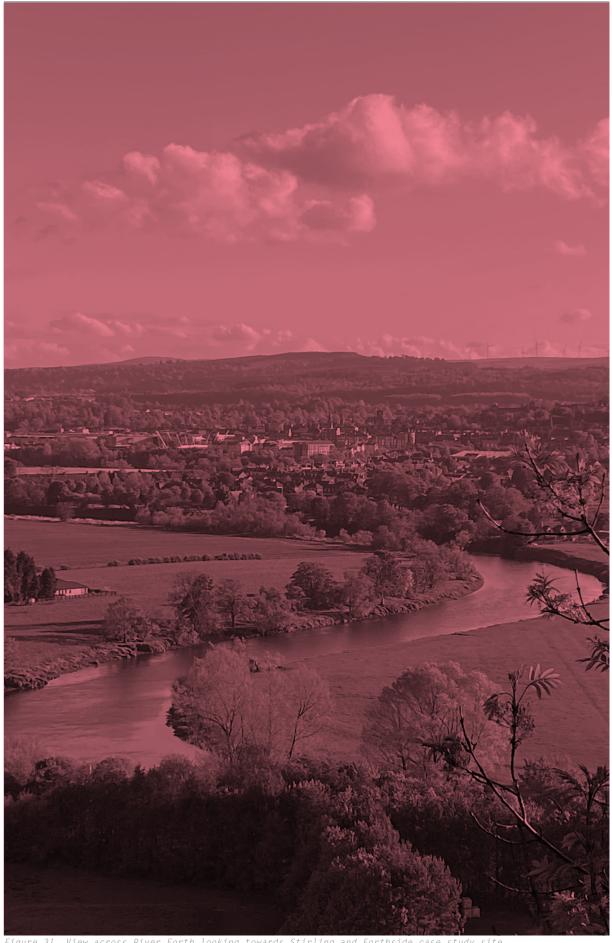


Figure 31. View across River Forth looking towards Stirling and Forthside case study site

7 APPLICATION-CASE STUDIES

Having identified and collated the principles and guidance to meet and deliver the Scottish Government's placemaking aspirations, this section looks at the application of the design guidance through worked examples of potential future developments. The guidance for Statutory Powers, Investment and Delivery should also be applied appropriately.

The case studies are:

- Forthside, Stirling edge-of-centre brownfield regeneration next phase of regeneration to move on from car-focussed development over last 20 years. The focus of the case study is centered on the regeneration of the brownfield MOD land, along with the connection to the Riverside housing area on the northern side of the River Forth, and integration of the Stirling River Park Masterplan. There is potential to rethink for more deliverable higher density mixed-uses linked to city centre to realise real city centre living with innovative and resilient employment.
- Orchardton, Cumbernauld serviced industrial sites created by the New Town Corporation with a significant undeveloped area. Within the LDP settlement boundary, adjacent to housing on the edge of town. The potential here is to rethink the industrial designation to deliver a truly sustainable and deliverable mixed-use, part of a 20 Minute Neighbourhood in this part of Cumbernauld, within a climate resilient landscape.

Forthside, Stirling

At the heart of the 'Placemaking' guidance is realising the 'right' type of development in the 'right' place. At Forthside, Stirling, the focus is centered on the regeneration of the brownfield MOD land and its connection and integration into the local and city context. To achieve this requires a number of key moves, moves that will only be achieved by using the integrative and collaborative approach outlined in the report. Treating the area as separate, piecemeal sites will not deliver these key moves, or 'Placemaking' principles and values that this report sets out to achieve. The key moves include:

- 1) better integration with the city centre, and local context (including connection to the Riverside housing area)
- 2) Regeneration of brownfield MOD
- 3) densification of the development area (based on permeable mixed-use block layout)
- 4) use and integration of existing assets including River Forth and riparian corridor (including Stirling River Park Masterplan).

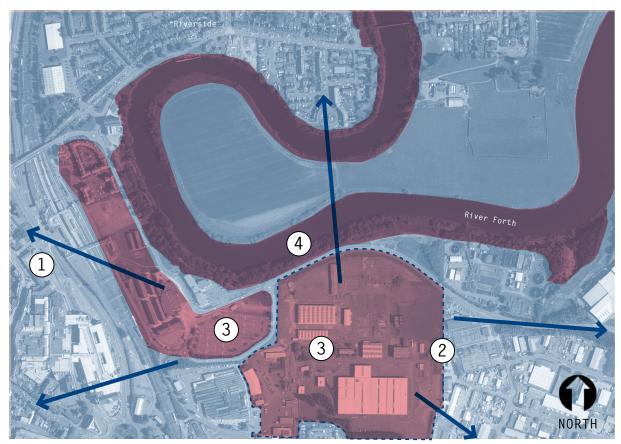


Figure 32. Forthside case study site - Key moves

Below, and page 72, set out an indicative development framework for the re-imagining of the Forthside area in Stirling, based on the Key Moves (figure 32, page 70) and the application of design guidance and principles as set out in Section 6.3 (pages 60-65).

Critical is the establishment of an integrated infrastructure network based on 20 minute neighbourhood principles, incorporating Active Travel (walking, cycling and wheeling) in existing and new routes. The network includes connections, not just to the existing city centre and surrounding residential and employment areas, but across and along the River Forth to the Riverside neighbourhood

and the proposed Stirling River Park Masterplan area.

The use and integration of existing assets is essential in the establishment of a Green / Blue Infrastructure (based on the River Forth riparian corridor), which will incorporate nature based solutions to provide a climate resilient landscape. The regeneration of brownfield land at the MOD site and around the Engine Shed will be characterised by higher density permeable missed-use blocks that will incorporate parking and servicing within the blocks. The re-use of existing buildings for innovative employments hubs will realise social making and productive spaces.

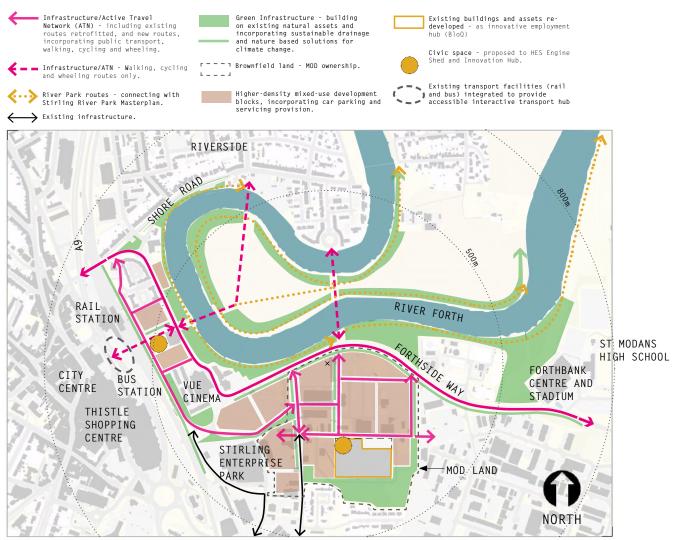


Figure 33. Forthside case study site - Mixed-use development framework

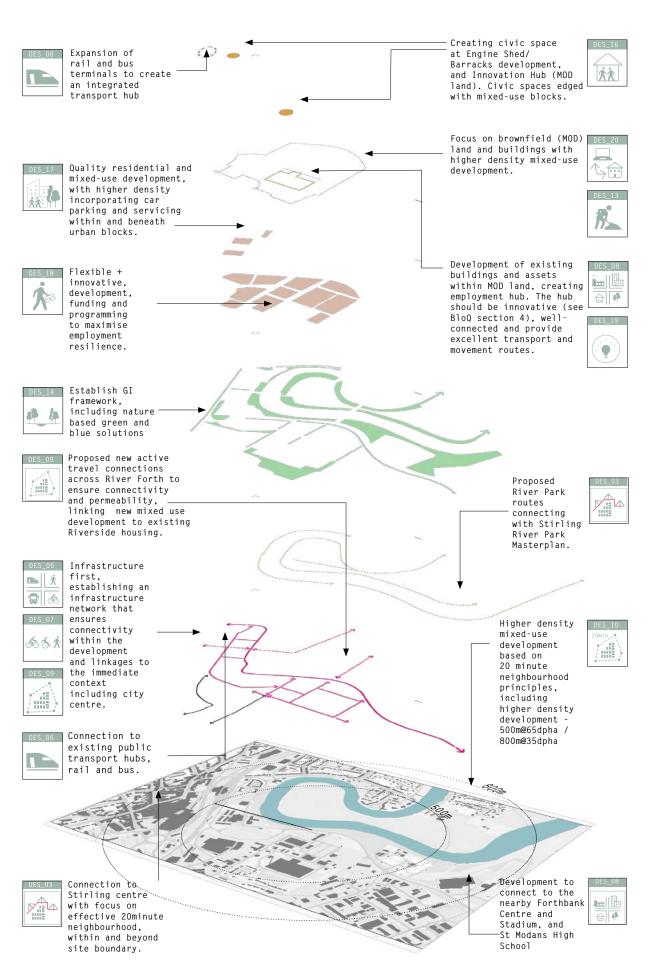


Figure 34. Forthside case study site - Axonometric identifying framework layers and guidance application.

Orchardton, Cumbernauld

The Orchardton, Cumbernauld, case study considers a new sustainable mixed-use development on land originally allocated for Economic Development (industrial/ business use); Serviced industrial sites created by the New Town Corporation with a significant undeveloped area. The site sits at the edge of existing residential, sandwiched against industrial development south and west.

There is the potential to refocus the industrial designation on 20 minute neighbourhood principles, offering a community and resilient employment anchor that will not just provide for the new development but provide a focus for the neighbouring residential areas of Blackwood and Westfield. The key moves include:

- 1) Regeneration of the Economic Development area with higher density mixed-use including community and employment anchors.
- 2) Integration of existing and new development into a 20minute neighbourhood including improved active travel connections to nearby shops, schools, leisure and employment
- 3) Development of Green/Blue Infrastructure, building on existing strong landscape assets to create a climate resilient landscape.



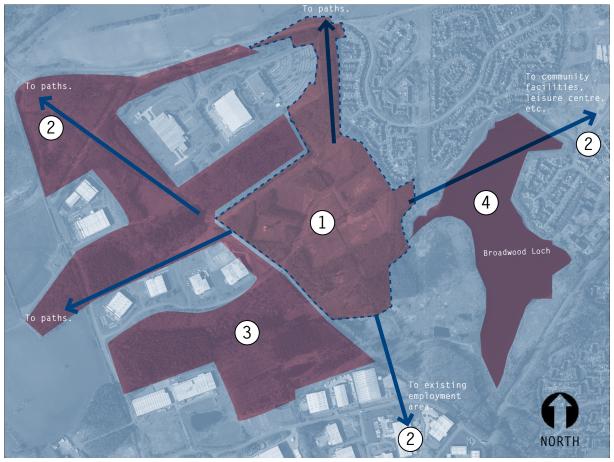


Figure 35. Orchardton case study site - Key moves

Below and opposite (page 75), is an indicative development framework for the re-imagining of Orchardton, based on the Key Moves (figure 35, page 73).

A fundamental driver is not seeing the development as another stand-alone development parcel, but very much inline with the 20 minute neighbourhood principles. An opportunity to connect to and integrate areas 'beyond the redline', Blackwood, Westfield etc through an extended path network and a community/activity focus identified at the eastern edge of the development affording opportunities for innovative employment options (startups etc), and the utilisation of existing assets including Broadwood Loch. The core

of the development will be higher density permeable blocks, connected and serviced by an integrated Active Travel Network (walking, cycling and wheeling) with real street profiles incorporating green and blue features, including street planting and sustainable drainage. The creation of a Green/Blue framework will be an aspect that will identify and characterise Orchardton. Building on and utilising the existing woodland and vegetation, water-trails and ponds that run throughout the site, the GI framework will alleviate drainage issues, introduce nature based solutions to address climate challenge and habitat loss, and enhance biodiversity. These would include reed beds, filtration strips, ponds, scrapes and habitat corridors that will link externally.

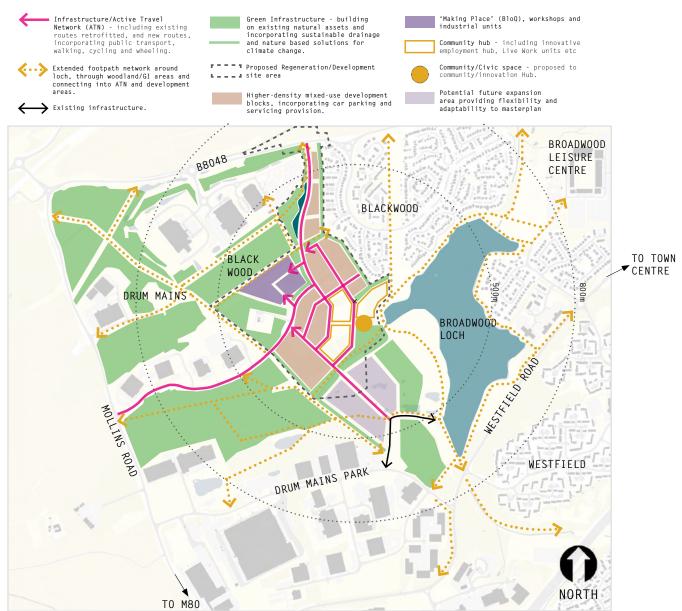


Figure 36. Orchardton Case study file - Mixed-use development framework

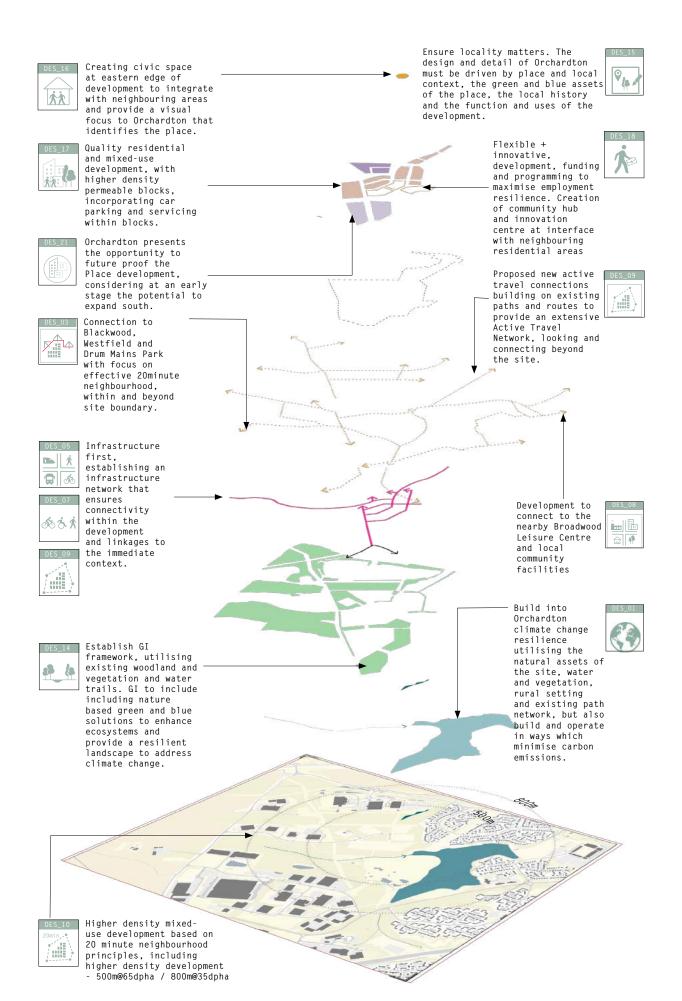


Figure 37. Orchardton case study site - Axonometric identifying framework layers and guidance application.

8 IMPLEMENTATION + "ROUTE MAP"

The delivery of successful mixed-use development is a priority for both the public and private sector in Scotland if we are, as a nation, to achieve the ambitious targets set by the Scottish Government to address climate change, reach net zero by 2045 and to deliver better places. This report has outlined both the challenges and opportunities that public sector developers, private sector developers, local/planning authorities and regulatory bodies need to meet and seize.

The key messages in terms of delivery are:

- 1. Develop a route map for mixed-use development The key to successful and sustainable mixed-use development is to work collaboratively between sectors and within sectors. Ploughing on with a proposal without discussion with others is unlikely to be successful and often leads to potentially conflicting and fixed views being established with consequential impacts on relationships and costs. It is the responsibility of the promoter of a development to lead engagement and it is everyone's responsibility to respond to that request for engagement whenever possible.
- 2. Plan for success. Successful delivery includes:
- Leadership Strong state leadership in placemaking is key, and mixed-use developments will only achieve the quality and outcomes required if the public sector takes a leading role.
- Collaboration Collaboration is at the heart of the Place Principle and successful Placemaking and is essential to delivering mixed-use development where the scale of proposals involves

- multiple partners from the public, private and third sectors.
- Stewardship Maintaining the quality of a 'place' in the long term is critical, not only in terms of care and maintenance of buildings and open spaces, but also in enabling local community to have influence and in continuing to invest in improvements

The guidance set out in section 6 identifies what 'Team Scotland' needs to do. Successful delivery will depend on collaboration, which requires making the most of their skills and resources, and respecting their various priorities. The following pages contain checklists for each stakeholder when they are collaborating on a particular development project; if each stakeholder ticks all the boxes, as a team you should be on your way to delivering successful and sustainable mixed-use developments.

Public Sector Developer: Checklist

Objective: To facilitate directly and indirectly the development of successful mixed-use developments that lead to sustainable public interest projects

Guidance		Box
STA_01	Apply placemaking thinking to all investment.	
STA_02	Apply the Place Principle to all investment.	
STA_03	Use the proactive tools that are available.	
STA_08	Prioritise green infrastructure and nature-based solutions.	
INV_01	Apply public sector investment positively and flexibly.	
 INV_02	Consider connectivity at every stage in the investment decision making process.	
 INV_03	Support and stimulate employment opportunities.	
 INV_04	Identify a range of funding options.	_ П
 INV_05	Look for ways to fund projects in different ways in a bespoke fashion.	
INV_06	Explore opportunities for synergistic benefits from partnerships.	_ П
INV_07	Invest in people and team building.	
DES_01	Climate first.	
DES_02	Design for the RIGHT place.	
DES_03	Look beyond the red-line.	
DES_04	Apply placemaking thinking.	
DES_05	Take an infrastructure first perspective.	
DES_06	Build in public transport options.	
DES_07	Apply a hierarchy of movement.	
DES_08	Prioritise existing assets.	
DES_09	Ensure connectivity and permeability.	
DES_10	Prioritise 20 Minute Neighbourhood Principles.	
DES_11	Focus on effective 20 Minute Neighbourhoods within and beyond the site boundary.	
DES_12	Seek higher density levels.	
DES_13	Prioritise development on viable brownfield and vacant & derelict land.	
DES_14	Establish a Green Infrastructure (GI) framework as a priority of any development.	
DES_15	Ensure locality matters.	
DES_16	Assess motivations, preferences and behaviours.	
DES_17	Quality is paramount.	
DES_18	Build in employment resilience.	
DES_19	Be innovative.	
DES_20	Focus on mixed-use living rather than zonal approaches.	
DES_21	Future proofing.	
DES_22	Build-in long-term stewardship and planning.	
DEL_01	Change the design and delivery model.	
DEL_02	Plan for success.	
DEL_03	Embed engagement within the delivery model.	
DEL_04	Apply joined up thinking.	
DEL_05	Establish a 'Route Map'	
DEL_06	A masterplan should deliver more.	
DEL_07	Deliver as a team.	
DEL_08	Make addressing Vacant and Derelict Land a priority.	
DEL_09	Put Green + Blue Infrastructure in first.	
DEL_10	Be adaptable to change.	
DEL_11	Deliver collaboratively.	

Private Sector Developer: Checklist

Objective: To create sustainable mixed-use developments that meet government requirements and a market level return on investment.

Guidance	Check	ROX
STA_01	Apply placemaking thinking to all investment.	
STA_02	Apply the Place Principle to all investment.	
STA_08	Prioritise green infrastructure and nature-based solutions	
STA_09	Think longer term.	
INV_02	Consider connectivity at every stage in the investment decision making process.	
INV_03	Support and stimulate employment opportunities.	
INV_04	Identify a range of funding options.	
INV_05	Look for ways to fund projects in different ways in a bespoke fashion.	
INV_06	Explore opportunities for synergistic benefits from partnerships.	
INV_07	Invest in people and team building.	
DES_01	Climate first.	
DES_02	Design for the RIGHT place.	
 DES_03	Look beyond the red-line.	
 DES_04	Apply placemaking thinking.	
 DES_05	Take an infrastructure first perspective.	
 DES_06	Build in public transport options.	
DES 07	Apply a hierarchy of movement.	
DES_08	Prioritise existing assets.	
 DES_09	Ensure connectivity and permeability.	
DES_10	Prioritise 20 Minute Neighbourhood Principles.	
DES_11	Focus on effective 20 Minute Neighbourhoods within and beyond the site boundary.	
 DES_12	Seek higher density levels.	
DES_13	Prioritise development on viable brownfield and vacant & derelict land.	
DES_14	Establish a Green Infrastructure (GI) framework as a priority of any development.	
DES_15	Ensure locality matters.	
DES_16	Assess motivations, preferences and behaviours.	
DES_17	Quality is paramount.	
DES_18	Build in employment resilience.	
DES_19	Be innovative.	
DES_20	Focus on mixed-use living rather than zonal approaches.	
DES_21	Future proofing.	
DES_22	Build-in long-term stewardship and planning.	
DEL_01	Change the design and delivery model.	
DEL_02	Plan for success.	
DEL_03	Embed engagement within the delivery model.	
DEL_04	Apply joined up thinking.	
DEL_05	Establish a 'Route Map'	
DEL_06	A masterplan should deliver more.	
DEL_07	Deliver as a team.	
DEL_08	Make addressing Vacant and Derelict Land a priority.	
DEL_09	Put Green + Blue Infrastructure in first.	
DEL_10	Be adaptable to change.	
DFI 11	Deliver collaboratively	

Local Authority: Checklist

Objective: To facilitate mixed-use developments that meet policy requirements in terms of 20 Minute Neighbourhoods and address the climate emergency.

Guidance Check Box

STA_01	Apply placemaking thinking to all investment.	
STA_02	Apply the Place Principle to all investment.	
STA_03	Use the proactive tools that are available.	
STA_04	Link regulation to National Performance Measurement.	
STA_05	Collaborate with other public bodies at all stages in the process	
STA_06	Commit public sector resources.	
STA_07	Apply regulation flexibly.	
STA_08	Prioritise green infrastructure and nature-based solutions.	
STA_09	Think longer term	
DES_01	Climate first.	
DES_02	Design for the RIGHT place.	
DES_03	Look beyond the red-line.	
DES_04	Apply placemaking thinking.	
DES_05	Take an infrastructure first perspective.	
DES_06	Build in public transport options.	
DES_07	Apply a hierarchy of movement.	
DES_08	Prioritise existing assets.	
DES_09	Ensure connectivity and permeability.	
DES_10	Prioritise 20 Minute Neighbourhood Principles.	
DES_11	Focus on effective 20 Minute Neighbourhoods within and beyond the site boundary.	
DES_12	Seek higher density levels.	
DES_13	Prioritise development on viable brownfield and vacant & derelict land.	
DES_14	Establish a Green Infrastructure (GI) framework as a priority of any development.	
DES_15	Ensure locality matters.	
DES_16	Assess motivations, preferences and behaviours.	
DES_17	Quality is paramount.	
DES_18	Build in employment resilience.	
DES_19	Be innovative.	
DES_20	Focus on mixed-use living rather than zonal approaches.	
DES_21	Future proofing.	
DES_22	Build-in long-term stewardship and planning.	
DEL_01	Change the design and delivery model.	
DEL_02	Plan for success.	
DEL_03	Embed engagement within the delivery model.	
DEL_04	Apply joined up thinking.	
DEL_05	Establish a 'Route Map'	
DEL_06	A masterplan should deliver more.	
DEL_07	Deliver as a team.	
DEL_08	Make addressing Vacant and Derelict Land a priority.	
DEL_09	Put Green + Blue Infrastructure in first.	
DEL_10	Be adaptable to change.	
DEL_11	Deliver collaboratively.	

Regulatory Bodies: Checklist

Objective: To facilitate mixed-use developments that meet policy requirements in terms of 20 Minute Neighbourhoods and address the climate emergency.

Guidanc	e Check	Box
STA_01	Apply placemaking thinking to all investment.	П
STA_02	Apply the Place Principle to all investment.	
STA_03	Use the proactive tools that are available.	
STA_04	Link regulation to National Performance Measurement.	
STA_05	Collaborate with other public bodies at all stages in the process	
STA_06	Commit public sector resources.	
STA_07	Apply regulation flexibly.	
STA_08	Prioritise green infrastructure and nature-based solutions.	
STA_09	Think longer term	
DES_01	Climate first.	
DES_02	Design for the RIGHT place.	
DES_03	Look beyond the red-line.	
DES_04	Apply placemaking thinking.	
DES_05	Take an infrastructure first perspective.	
DES_06	Build in public transport options.	
DES_07	Apply a hierarchy of movement.	
DES_08	Prioritise existing assets.	
DES_09	Ensure connectivity and permeability.	
DES_10	Prioritise 20 Minute Neighbourhood Principles.	
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DES_14	Establish a Green Infrastructure (GI) framework as a priority of any development.	
DES_15	Ensure locality matters.	
DES_16	Assess motivations, preferences and behaviours.	
DES_17	Quality is paramount.	
DES_18	Build in employment resilience.	
DES_19	Be innovative.	
DES_20	Focus on mixed-use living rather than zonal approaches.	
DES_21	Future proofing.	
DES_22	Build-in long-term stewardship and planning.	
DEL_01	Change the design and delivery model.	
DEL_02	Plan for success.	
DEL_03	Embed engagement within the delivery model.	
DEL_04	Apply joined up thinking.	
DEL_05	Establish a 'Route Map'	
DEL_06	A masterplan should deliver more.	
DEL_07	Deliver as a team.	
DEL_08	Make addressing Vacant and Derelict Land a priority.	
DEL_09	Put Green + Blue Infrastructure in first.	
DEL_10	Be adaptable to change.	
DEL_11	Deliver collaboratively.	

9 CONCLUSION AND NEXT STEPS

This report has explored the future design and delivery of mixed-use development in contemporary Scotland, focussing on situations where there is need for public sector intervention. Building on the context and evidence described in Part A, Part B lays out a fresh collaborative approach that will deliver the Scottish Government's ambitious place-based policy agenda, putting forward principles and guidance on the use of statutory powers, investment, design and delivery.

Two case studies, at Forthside in Stirling and Orchardton in Cumbernauld, demonstrate what added value could be achieved by deploying this fresh approach. The key point is that, by working collaboratively, thinking early and long-term, using all available levers including statutory powers and investment, it is possible to deliver quality of development and depth of outcomes which are on a par with best practice anywhere in Europe.

The purpose of this report is to stimulate discussion, consensus and ultimately action about a practical way forward to deliver that objective.

The key next step is for public sector partners to consider the content of this report and agree a collaborative way forward to implement the fresh approach that it describes, based on the roles for each player that are suggested in section 8. That should consider:

- What actions are required to implement that fresh approach, and who should do what.
- Who needs to be involved from beyond the public sector, including the development and investment sectors, professional bodies and the third sector.
- The resources that will be required: finance, capacity, skills and behaviours.
- A route map for marshalling those resources and organisations to implement the fresh approach.

It is within our grasp to deliver collaborative mixed-use development that compares with the best internationally, tackles the climate emergency, generates inclusive growth, and delivers real and lasting benefits for the people of Scotland.

Title Definition

20 minute neighbourhood A flexible approach to assessing our places against the concept of local living. A method of achieving connected and often compact neighbourhoods designed in such a way that people can meet the majority of their daily needs within a reasonable distance of their home preferably by sustainable and active travel methods. The principle can be adjusted to include varying geographical scales from cities and urban environments, to rural and island communities. Housing would be planned together with local infrastructure including schools, community centres, local shops and health and social care to significantly reduce the need to use unsustainable methods of travel, to prioritise quality of life, help tackle inequalities, increase levels of health and wellbeing and respond to the climate emergency. (from NPF4 Glossary)

biodiversity

The variability in living organisms and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems (UN Convention on Biological Diversity, 1992). (from NPF4 Glossary)

brownfield

Land which has previously been developed. The term may cover vacant or derelict land, land occupied by redundant or unused buildings and developed land within the settlement boundary where further intensification of use is considered acceptable. (from NPF4 Glossary)

circular economy

A circular economy is one that is designed to reduce the demand for raw material in products; to encourage reuse, repair and manufacture by designing products and materials to last as long as possible in line with the waste hierarchy.

collaboration

The process of different organisations working together, potentially extending across the public, private and third sectors.

community

A body of people. A community can be based on location (for example people who live or work in or use an area) common identity (for example a shared ethnicity, language, age) or common interest (for example the business community, amenity, sports, social or heritage groups). (from NPF4 Glossary)

community wealth building

A people-centred approach to local economic development. which redirects wealth back into the local economy, and places control and benefits into the hands of local people (from the Scottish Government website).

Title Definition

derelict land	Previously developed land which is un-remediated and/or which has a constraint caused by its previous use which hampers its redevelopment or naturalisation. (from NPF4 Glossary)
green infrastructure	Features or spaces within the natural and built environments that provide a range of ecosystem services. (from NPF4 Glossary)
green networks	Connected areas of green infrastructure and open space, that together form an integrated and multi-functional network. (from NPF4 Glossary)
greenspace	Space, other than agricultural land, which serves a recreational or an amenity function for the public, or provides aesthetic value to the public such as areas of— (a) grass, (b) trees, (c) other vegetation, (d) water. (from NPF4 Glossary)
inclusive growth	Economic growth that is distributed fairly across society and creates opportunities for all (from OECD website).
mixed-use development	Large-scale urban development comprising a combination of different uses, for example housing, places to work, community facilities and greenspace.
net zero (carbon)	Scotland has set a target to become 'Net Zero' by 2045. This means the amount of greenhouse gas emissions we put into the atmosphere and the amount we are able to take out will add up to zero.
NPF4	Scotland's fourth National Planning Framework (NPF4) was adopted by Scottish Ministers in February 2023 and is part of the statutory development plan. It contains a spatial strategy, national development and planning policies for Scotland to 2045.
outcomes	Things we want or need to achieve. For example, the Scottish Government's national outcomes describe the kind of Scotland we are trying to create.
place-based working	Place-based working, or a place-based approach, is about considering all of the physical, social and economic elements of a place collectively. It is about supporting and enhancing the potential of people, physical and natural assets in a place. Working in a place-based way can

Title Definition

identify key relationships and solve problems that can't be solved incrementally or by one person or organisation acting alone. It can produce more than the sum of its parts by generating novel approaches, bringing in resources or tackling root causes (from the Scottish Government's Our Place website).

placemaking Placemaking is the process of creating good quality places that promotes people's health, happiness and wellbeing. It concerns the environment in which we live; the people that inhabit these spaces; and the quality of life that comes from the interaction of people and their surroundings. Placemaking is a collaborative approach involving the design and development of places over time, with people and communities central to the process. (from NPF4 Glossary)

Place Principle

The overarching context for place-based working in Scotland, developed by the Scottish Government and COSLA. See the Scottish Government's Our Place website for more information.

Place Standard

A tool for assessing the quality of places, comprising 14 different indicators. More information at www. placestandard.scot

public sector

National and local government and public agencies including the Scottish Government; national agencies such as the Key Agencies, Scottish Futures Trust and Scottish National Investment Bank; enterprise agencies (Scottish Enterprise, HIE and SOSE); local authorities and Community Planning Partners

stewardship

The responsible long term planning and management of places, including care, maintenance and community influence and control (see Place and Well-being Outcomes)

Sustainable Travel Hierarchy

Promoting walking, cycling, public transport and bike, car and ride sharing in preference to single occupancy car use (from Transport Scotland).

vacant and derelict land

Previously developed land, without physical constraint, which the Planning Authority has indicated is currently available for redevelopment. (from NPF4 Glossary)

well-being economy

An economy that is inclusive and that promotes sustainability, prosperity and resilience, where businesses can thrive and innovate, and that supports all of our communities across Scotland to access opportunities that deliver local growth and well-being (from the Scottish *Government website)*

