



# **Our Resilient Glasgow A City Strategy**

March 2016

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## Letter from Council Leader, Frank McAveety

Glasgow is a city which learns from its past and builds on its strengths. Our people are the backbone of our city and have always shown a willingness to adapt, change and reinvent during our long and rich history.

As leader of the city, I am proud to present Glasgow's first resilience strategy. This document shows us how we can adapt and grow no matter what challenges the future holds.

Glasgow has weathered so much change throughout our history from the industrial revolution and the decline of our traditional industries to the recent economic downturn. However we have always shown a flexibility and strength of character which has allowed us to capitalise on new opportunities for growth.

Glasgow is already a resilient city but it is in our nature to want to do more. That's what this strategy is all about.

It is a distinct feature of the Glaswegian spirit that we always look first at tackling inequalities and ensuring that our least well off communities are at the heart of all our thinking. I want our city to be a fairer, more just place where resilience grows from strong communities.

This strategy has been informed by an intensive and innovative process of community engagement. Our resilience conversation has linked to more than 3,500 local residents across all age groups and communities to ensure that this strategy draws on a diverse range of voices. I want our people and the institutions which serve them to continue the conversation.

Glaswegians love to debate and dispute and that is the foundation of a strong city democracy. We are also a friendly, neighbourly and tolerant people and these features too are the very basis of our resilient city. That's why we can face an uncertain future with confidence.

**Councillor Frank McAveety**

**Leader of Glasgow City Council**

## Letter from Glasgow Chief Resilience Officer, Alastair Brown

Glasgow was proudly named as one of the first members of 100 Resilient Cities (100RC) – pioneered by The Rockefeller Foundation - in December 2013. Our membership of the network represents a major step towards creating a strategic, multi-disciplinary approach to proactively manage the shocks and stresses the city may face.

This strategy is a roadmap towards greater resilience. It focuses on the continued transformation of Glasgow. Our ambition is for fair economic growth and a stronger city. We have become aware from our citywide discussions that resilience emerges from a range of inputs. This Strategy has a key role itself in helping to connect those inputs and to ensure our city considers resilience as an explicit and intended product of our work.

Whilst the strategy vision is directed to the long-term future, the actions detailed in it have an initial two year timeframe for delivery. Thereafter, this action plan will be subject to a refresh ensuring that a clear focus on action is maintained and a continuing dialogue with residents is created.

Our Resilient Glasgow Strategy has been shaped through engagement with the people of Glasgow including residents, businesses, voluntary organisations and public sector partners.

As Chief Resilience Officer, I will continue to work with city partners and communities to develop strong collaborative capacity to push forward the delivery and implementation of this Strategy.

I give special thanks to all of our partners for their hard work and dedication in making this Strategy possible. My gratitude extends to team at 100 Resilient Cities (100RC) for their energy and commitment and the 100RC Strategy Partner Arup for their instrumental guidance and support.

Above all, my thanks go out to you, the people of Glasgow for sharing your aspirations and ideas for a stronger and more resilient future. Your confidence and enthusiasm has been an inspiration to me throughout this process.

**Alastair Brown**

**Chief Resilience Officer**

## Letter from 100RC President, Michael Berkowitz

100 Resilient cities is honoured to partner with the great city of Glasgow in their effort to pioneer solutions and develop an actionable roadmap to resilience building. Embedding resilience in the fabric of a city's planning and policymaking can create a thriving city in good times and bad, and yield dividends that will make a city stronger for years to come.

First and foremost, this would not have happened without the vision and passion of Council Leader Frank McAveety. Alastair Brown, the Chief Resilience Officer, and his extraordinary support team of Duncan Booker, Julie Robertson, and Frankie Barrett have gone above and beyond the call of duty to produce this visionary document. A highly engaged steering committee, the members of five diligent working groups, and Arup were instrumental in guiding and informing this process.

Glasgow's rich history, architecture, and culture is a testament to its resilience. The city has met many of the challenges of transitioning from an industrial to post-industrial city with innovation and creativity. During their resilience strategy process, the "Glasgow Game" showcased an extraordinarily robust and diverse approach to engaging stakeholders around a variety of future scenarios that are relevant for Glasgow. This is crucial. Today's challenges may not be the same tomorrow. Building lasting urban resilience requires recognizing the interplay of a city's strengths, weaknesses, shocks, and stresses. It is about bolstering the foundation of a city so that it can respond to new, unforeseen events. It is also about making decisions under circumstances where institutional and individual financial resources are limited.

100 Resilient Cities is committed to working with Glasgow in the coming years. We bring with us a powerful cadre of public, private, and academic sector partners – the "100RC Platform" – that are also committed to this partnership. Unlocking this support and signalling a growing marketplace that is interested in working with cities that incorporate resilience thinking into their planning process is a key tenet of the 100RC philosophy. We are excited to work with Glasgow at the forefront of a new global movement to build urban resilience. And cities and nations near and far are taking note of these ground breaking achievements!

**Michael Berkowitz**

**100RC President**

## 1. Introduction

## 1.1 What is city resilience?

100 Resilient Cities describe resilience as being the **capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience**. Resilience is about building a **stronger and more adaptable future** for all Glaswegians.

Our understanding of city resilience is informed by the City Resilience Framework, which highlights the key indicators that any resilient city should aim to fulfil. This tool, designed by Arup with support from the Rockefeller Foundation, is a framework through which Glasgow will continue to assess the connections between our resilience challenges, review areas of weakness, and recognise opportunities to build on our many strengths.



The city resilience agenda addresses:

- The acute **shocks** that any city can suddenly find itself facing, which are usually addressed through the emergency planning process.
- Longer-term chronic **stresses** and strains, which are experienced day to day over periods of years and decades.

We integrate both types of challenge through this strategy, building on Glasgow's existing strong approach to emergency planning and response within a broader agenda of resilience to daily city stresses.

Further, we recognise the following qualities as being an integral part of Glasgow's story. We will continue to integrate these qualities into our day to day business so that we not only maintain essential functions in the face of acute shocks and chronic stresses, but also grow and thrive through them.

Glasgow will continue to be

- **Reflective.** We learn and grow from our past experiences, recognising uncertainty and change.
- **Robust.** Our city is well conceived and constructed. Our physical assets are well managed.
- **Efficient.** The systems in Glasgow are efficient and can handle anticipated levels of demand and distribution.
- **Flexible.** Glasgow can change and develop, responding dynamically to shifting conditions.
- **Resourceful.** We achieve our goals by exploring new processes and methods, drawing on our built and natural assets and the expertise of our people.
- **Inclusive.** Glasgow is a city that welcomes all people, advocates for social justice, and ensures equal opportunities for people and places to thrive.
- **Integrated.** We strive to meet common goals through coordinated efforts across all sectors.

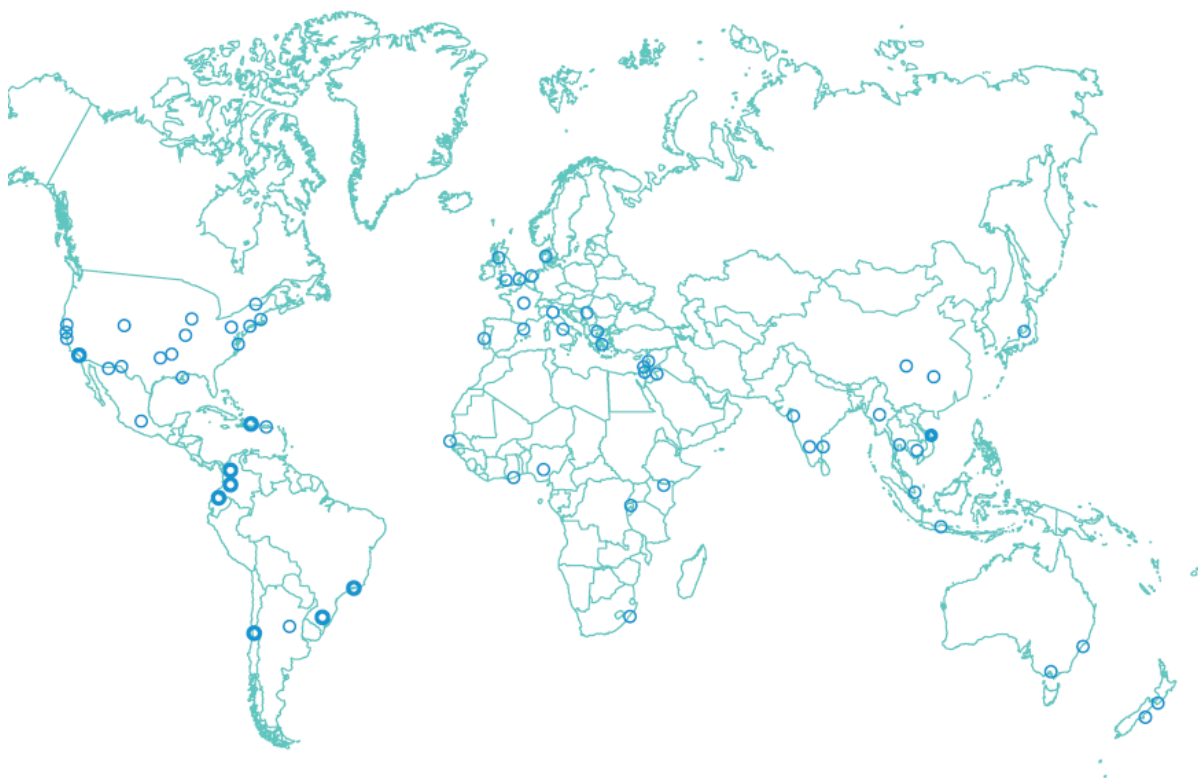


## 1.2 What is 100 Resilient Cities (100RC)?

The Rockefeller Foundation marked its centenary in 2013 by inviting bids from cities around the world to be part of a network of 100 Resilient Cities. Glasgow submitted an application for membership of the network in October 2013.

Cities were asked to present a clear and compelling description of how they are approaching and planning for long-term resilience. Glasgow chose to focus the application on climate change resilience. This especially relates to increased rainfall and flooding, which are predicted local outcomes of global warming for the city-region. The existing work of the Climate Ready Clyde was central to our application.

Glasgow was amongst 400 cities whose bids were assessed by a panel of internationally respected judges. They included former presidents Bill Clinton and Olosegun Obasanjo of Nigeria. The bid was successful and Glasgow's status in the first tranche of 32 cities was announced in December 2013. Since then, another 35 cities have joined the network, with the final tranche of 33 cities to join in 2016.



This award has allowed Glasgow to appoint a Chief Resilience Officer, Alastair Brown, to lead the development of a resilience agenda for our city. It has provided benefits from engaging with peer cities from around the world. It has provided additional resource including the services of Arup as a Strategy Partner to assist Glasgow in developing this Resilience Strategy and access to further support from a number of global service providers – Platform Partners – who can help us with implementing our resilience actions.



## 1.3 Our Resilience Strategy

This Resilience Strategy is the main output of our work with 100RC to date, and the starting point for a holistic programme of resilience action. Development of the Strategy has been led by Glasgow City Council and partners, however, it belongs to the City of Glasgow and we hope that you will all play a part in moving us collectively towards a more resilient future.

This Strategy has emerged from an extensive programme of work including research and analysis of the actions already underway throughout the city that contribute to resilience. This has been considered alongside in-depth consultation with Glaswegians and advice provided by expert stakeholders through regular Steering Group and Working Group meetings. This approach has given us the opportunity to identify where there may be gaps in our existing approach and opportunities to build on the great work we are already doing.

Our membership of a global network of cities has given us the opportunity to think about our future and how we can plan ahead with a global approach. Whilst adaptation to climate change remains a principal focus of Glasgow's approach, this peer network allows us to share experience about the challenges of planning for a variety of chronic stresses and acute shocks in urban life. As a result, the scope of our Resilience Strategy has broadened. The future is always uncertain, but there are things we can do now and actions we can set in motion which can help us to be more resilient in the face of the challenges which that future will undoubtedly bring. This Strategy commits us to addressing challenges proactively, starting today.

Our Resilient Glasgow Strategy is structured around four 'strategic pillars' and fifteen 'goals', which set out the long-term trajectory for Glasgow's resilience. Within this, we have identified forty-nine actions that will be implemented during the next two years. After this time, our action plan will be reviewed and refreshed.

This timeline illustrates the key milestones in our journey with 100 Resilient Cities.



## 2. Glasgow, a city of resilience and transformation

Glasgow has an extraordinarily rich history characterised by unshakeable strength and continuous reinvention in the face of shocks and stresses. We can learn the lessons of our city's past to teach us how we can make a better future.

Glasgow is an incredibly old site of human settlement. The remains of canoes from Stone Age times have been found, for example, by the banks of the Clyde. In one of our main parks an Iron Age camp has been excavated. And in the churchyard of Govan Old there is evidence of Christian burials dating back to the 5th Century, indicating that it is one of the very earliest places of Christian worship in Scotland.

The city is known globally as one of the great powerhouses of the Industrial Revolution. In 2015 we commemorated the 250th anniversary of James Watt conceiving of the separate condenser to the steam engine as he walked on Glasgow Green. This was perhaps the single most significant act in powering the Industrial Revolution. The ripples from Glasgow's transformation lapped the shores of the whole world: Glasgow made history on a grand scale. By the late 19<sup>th</sup> century Glasgow was an industrial powerhouse known as the Second City of the British Empire. It built a quarter of all locomotives in use anywhere in the world and a similar proportion of global shipping. Many of the city's architectural masterpieces, such as the City Chambers on George Square, date back to this period of economic prestige.

Yet it is in the last two centuries that Glasgow has seen more change than in all its long previous history. It was one of the first cities in the world to experience the profound shocks of modernity as the Industrial Revolution led to its rapid expansion and a swelling population. Life expectancy for Glaswegians in the 1850s was just over 25 years.

The city entered the 20th century as one of the most densely populated in Europe, with a population peaking at 1.1 million. 200,000 of its citizens served in the First World War, with many thousands being killed or returning to Glasgow with physical and psychological injuries.

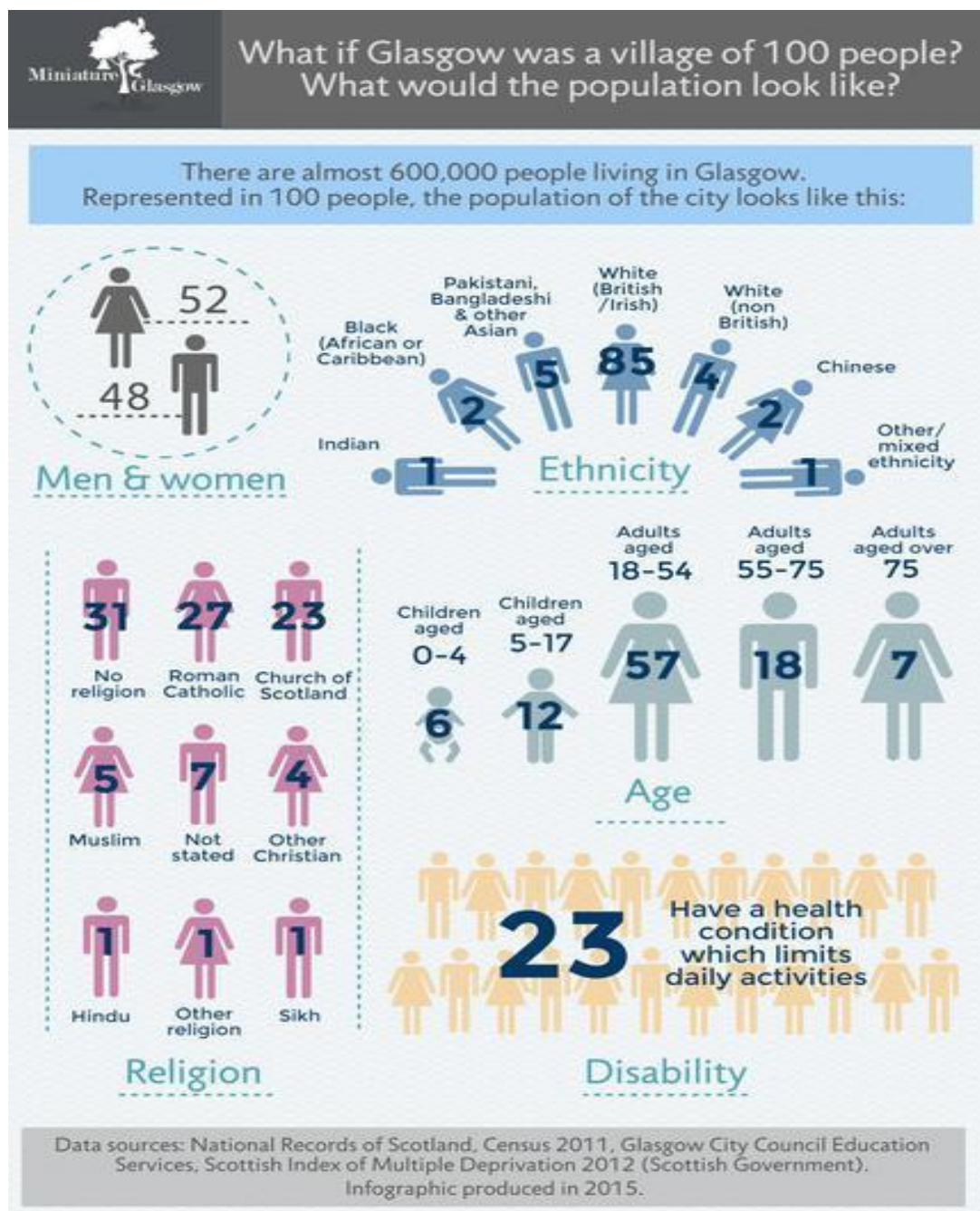
The city played a major role in the Second World War too. However, Glasgow experienced the twin shocks of very rapid de-industrialisation and population loss in the years that followed. Traditional industries were lost and unemployment rose.

By the late 1940s and early 1950s, many families moved out of the crowded city to live in nearby new towns. Those who were left were often housed in groups of high rise flats that quickly lost their initial attraction and became associated with urban blight and crime. The city's population dramatically reduced to half its previous level by the 1990s.

As a result, Glasgow's people have experienced chronic levels of stress which have produced profound disparities in income, health and opportunity. The most recent profile of our population's wellbeing shows the extent of the impact of the chronic stresses. Glasgow continues to have the poorest life expectancy in Scotland for both men and women, rich and poor. These are some of the issues to which our resilience strategy is very much directed.

For some cities, a narrative of managed economic decline would have ensued from such stress. Not for Glasgow. The city took steps to diversify its economy and build a more attractive place for families. At the centre of this approach were the city's world class museums and galleries, together with one of the most vibrant artistic and cultural sectors anywhere in Europe. Glasgow has highlighted its architectural assets, promoted its sporting credentials, and drawn on its strong further and higher education sector. Above all, the city has always regarded its communities as its most important asset and in 2013 adopted a new brand to reflect this: *People Make Glasgow*.

The city's economy has developed and changed, from a carbon-intensive manufacturing base in the 19<sup>th</sup> century to a modern city focused on a low-carbon future. Population loss has been halted and the city's population is now expected to grow by 15% by 2037. This is in no small part due to Glasgow being an attractive place in which people choose to make their lives. As a result, Glasgow is the most ethnically diverse city in Scotland.



The city was tested once again in the recession brought about by the financial collapses of 2007/08, which it has weathered with significantly lower losses in production and economic activity than in previous downturns.

In 2015, the city was the proud host of the Commonwealth Games and, along with other major events that year, Glasgow was seen on television by one third of the entire world population.

During our conversations with Glaswegians on what makes Glasgow a resilient city we found that they like to talk of their 'bounceback-ability' factor – an ability to cope and even thrive through hard times. Our history of resilience and transformation is testament to that. This is why *People Make Glasgow Resilient*.

### Glasgow is a resilient City with:



### Some of our resilience challenges include



As the biggest city in Scotland, Glasgow is the economic engine and main commercial hub not only for the region but the country as a whole. With almost half of population of the entire country entire living within an hour of the city, the resilience of our institutions, economy, people and infrastructure is not only of local importance. Our resilience plays a crucial role regionally as well as nationally.

## **Resilience in action: Addressing shocks through integrated emergency response in Glasgow**

Long before Glasgow started working with 100RC, we have had a successful Resilience Unit within the City Council which coordinates city-wide emergency planning and response. Glasgow prides itself on having strong partnerships and mechanisms for responding to emergency incidents - including fire, flooding, explosions, travel accidents, chemical spills and dangerous buildings. This formal emergency management is supported by a strong sense of grassroots resilience, which is being strengthened through community resilience planning.

The events of one particular Friday night in November 2013 severely tested resilience in Glasgow. Ten people were killed when a Police Scotland helicopter crashed into a crowded city centre bar, a tragedy that created an overwhelming sense of shock and loss.

Our emergency services played the critical role of responding to the immediate shock, as well as supporting the long-term recovery of those affected by the incident. This demonstrated the trust Glaswegians have for emergency services and the importance of integrated planning for this type of emergency.

The people of Glasgow demonstrated remarkable levels of resilience. Glasgow's Lord Provost Sadie Docherty commented that "the ordinary people of Glasgow showed admirable courage and compassion. Their first instinct when tragedy struck was to run towards danger to help those in peril". In the months and years that have followed the event, Glaswegians have come together to pay their collective respects to those who have lost loved ones and to mark the city's sense of a shared tragedy. A public appeal fund raised almost £500,000 in support of those affected by the tragedy.



### 3. Our Resilience Strategy

#### 3.1 Our Resilient Glasgow Vision

*Glasgow is a **thriving, inclusive and resilient** city. We celebrate **innovation, production and culture**. Our city is a **fair society**, where all Glaswegians enjoy the best possible health and well-being, and have the opportunities to flourish.*

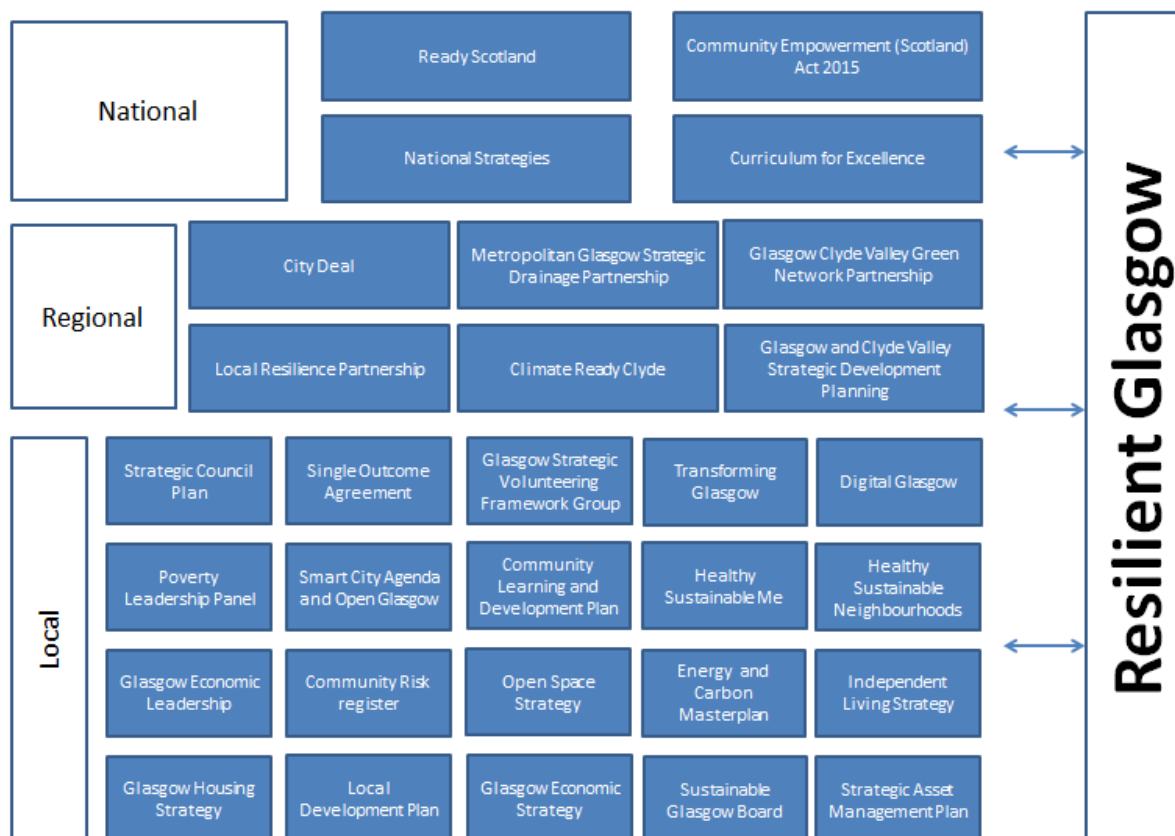
#### 3.2 Strategic Context

This strategy brings together aspects of Glasgow City Council's Strategic Plan, the Glasogw Glasgow Community Planning Partnership's Single Outcome Agreement, the Poverty Leadership Panel's strategy to tackle poverty, and Glasgow's proposed City Development Plan. By aligning our strategic pillars to this policy context, we ensure the Resilience Strategy is integrated into an existing framework and adds value to the city. The following diagram visualises the relationship between Glasgow's strategic objectives and our four pillars of resilience.



The objectives of a broad range of city wide strategies, initiatives and actions are crucial for the development of our urban resilience. Our strategic pillars and indeed the city vision, have been designed to pull existing initiatives together so that these work together in a whole-systems approach.

The image below shows some of the partnerships and strategies that have been recognised as playing a crucial role on our journey to greater resilience. These were identified by our city partners during early preliminary resilience assessment activity. It is by no means an exhaustive list.



By working with our city partners, we will take a whole-systems approach that embeds long-term resilience thinking into existing national, regional and local strategies and initiatives. This will reinforce structural connections and delivery mechanisms between this strategy and the initiatives being delivered elsewhere in the city, meaning that our overall approach to resilience building activity is strengthened. This will also help us to monitor and track the delivery of this strategy.

This is an agile strategy. The actions contained within this document are short-term and have been developed as iterative interventions that will help us to connect existing strategies and initiatives through the application of a resilience lens.

These actions will be refreshed again in 2018 to ensure the strategy remains current in a city that is constantly transforming. All of our goals and actions are summarised in the Strategy Action Plan. Some feature goals and actions are explained in full here in this strategy





### 3.3 Assessment of Resilience Activity

Glasgow's strategic context is sophisticated and well developed. Partners are generally agreed that the city has a good reputation and state of preparedness for dealing with sudden shocks, managed through the city's long-standing Resilience Unit and our emergency services. The city maintains a risk register for its key assets and regularly engages in emergency planning exercises. Attention has therefore focused on the chronic stresses over long time periods to which the city and its people have been subject – in particular those relating to poverty and inequality - and how best to address these over the coming decades. Once we started this conversation and talked more with our partners about resilience it became clear that these are the issues which are regarded locally as really significant challenges and have naturally emerged as the foundation of our strategy.

By further considering how potential shocks and stresses could impact on our city, we have been identifying how our existing capacity can be strengthened.

The examples below highlight just some of the work that is already effecting change for people, places, institutions and the economy across the city. In preparing this Resilience Strategy, we identified opportunities to build on what we're already doing and set out a strategic direction to address our challenges in the longer term. We evaluated these opportunities in terms of the resilience benefits they would bring for Glaswegians in addition to the feasibility of implementation. This has allowed us to reach the pillars, goals and actions outlined in this strategy.

<i>Challenge</i>	<i>Existing action</i>
Approximately 60% of our residents live within 500m of derelict land. This is double the national average. Glasgow has more vacant sites than the rest of Scotland put together. 	The Stalled Spaces project focuses on the temporary use of vacant land, under-utilised open space and sites earmarked for development. Since 2011 the project has brought over 22 hectares of land into temporary uses, including green gyms, active play, pop-up sculptures, outdoor education and growing spaces.
The Roma community from Central, Southern and Eastern Europe have been immigrating to Glasgow since 2004. There are now around 3500 Roma living in the city, particularly in the Govanhill area. 	Driven by the severe poverty and social exclusion faced by this community, and with funding support from the EU, a Local Action Plan was developed setting out over 50 recommendations in the fields of health, housing, education and employment to improve the lives of Roma in Glasgow. Glasgow is now a leader in Roma inclusion policy at a Scottish and EU level.

### 3.4 Listening to Glaswegians

A key aspect of Glasgow's resilience work has been engagement with a wide range of both institutional stakeholders and residents. This has taken place in order to determine what they regard as the city's resilience priorities and to build ownership and commitment towards a strategy that addresses them. Workshops have been held and provided with facilitation by Glasgow's Strategy Partner Arup. A Steering Group, chaired by the city's Chief Resilience Officer, has also been established to consider in further detail the materials generated by these workshops.

We engaged in a wide-ranging Resilient Glasgow Conversation with local people in the summer of 2015. Activity was promoted through social media and tailored communications designed to reach out to specific groups of people. Collaboration took place with public health researchers, council officers, change practitioners, artists and professional facilitators in order to foster high levels of participation and active dialogue in the city's resilience conversation.

The engagement process consisted of the following:

- **Face-to-face conversations** - These took place through the use of interactive techniques which included street games, participative art and public installations. The Resilient Glasgow team visited fifteen locations over twenty-five days, speaking with over 1,500 people. People expressed their views by drawing and writing messages on blackboards and telling their stories to officers from the Resilient Glasgow team. Over 500 responses were received.
- **Targeted workshops** - Twelve workshops were held with nine stakeholder groups, including the Glasgow Disability Alliance; West of Scotland Racial Equality Council; Interfaith Glasgow; Glasgow Homelessness Network and the City Mission. Workshops were facilitated using an exercise called 'The Glasgow Game', which uses role play to explore the complexities of resilience through different future scenarios. Over 300 participants attended.
- **On-line survey** - Over 100 members of the public responded to a detailed online survey about the draft themes of Glasgow's initial resilience plans. The survey was designed to interrogate the themes and to generate opportunities for new thinking which could be incorporated into the next phase of work.
- **Children and young people** - More than 1,200 children and young people took part in an art competition designed to explore the qualities and attributes needed for a more resilient future. Young Glaswegians proved to be highly positive and enthusiastic about the future of their city.

A variety of views were expressed across such diverse groups of Glaswegian. There were, however, some recurring themes. For instance, people value and want to see their local environment nurtured and protected. Concerns were raised over weather related challenges, linking to the climate change adaptation agenda. Opportunities for more healthy and active lifestyles also played a significant part in people's thinking. There was a clear appreciation throughout of the role that stronger communities can play, with people across all groups saying that a more resilient future is one in which people help and care for vulnerable neighbours.

*"Get to know yourself. We ARE survivors."* – GCVS participant at a Glasgow Game workshop

*"We need to know who is most at risk if services are impaired and have emergency plans that can be acted on quickly. We need to be well prepared!"* – participant at West of Scotland Regional Equality Council Glasgow Game workshop

*"The more gardens you make, the more people will join in and meet new people."* – face to face engagement asking the public 'What will make Glasgow stronger?'

*"We should place a strong emphasis on healthy eating, outdoor recreation in schools; offer free opportunities for adults to learn to cook health food"* – Interfaith Scotland participant at a Glasgow Game Workshop

## 4. Glasgow's Strategic Pillars, Goals and Actions

At the foundation of this strategy is a commitment to embedding resilience thinking into existing realms of work that support the delivery of our vision. This will mean that the policies and plans that have informed the development of this strategy will become delivery vehicles that strengthen our approach.

The diagnostic work undertaken during the development of our Resilience Strategy has led to four strategic pillars, which provide the long-term overarching framework through which we will deliver our vision for a Resilient Glasgow. Each pillar is defined by a number of goals.

We will

### 1. Empower Glaswegians

*Goals:*

- A. Improve equitable access to quality local services that foster wellbeing.
- B. Empower community leaders through cooperation between city partners and the third sector.
- C. Use existing assets to create healthy, safe and inclusive spaces for the community to network, helping to mitigate social isolation.
- D. Influence the Scottish Government agenda on social and community resilience.

### 2. Unlock Place-Based Solutions

*Goals:*

- A. Create an integrated resilience exemplar in the north of the city.
- B. Tackle the local impacts of global climate change.
- C. Unlock the community, environmental and economic potential of derelict and vacant sites in Glasgow.

### 3. Innovate to Support Fair Economic Growth

*Goals:*

- A. Support new urban solutions, business development and new technology ideas.
- B. Through a 'New Approach to Enterprise' support new and existing businesses to grow.
- C. Initiate a post-industrial city sub-group with our 100RC partners to share and learn from best practice.
- D. Tackle poverty, including in-work poverty and in-work-progression, preventing and mitigating the impacts of poverty for and with Glaswegians.
- E. Continue to increase the skill levels of Glasgow's working age population.

### 4. Foster Civic Participation

*Goals:*

- A. Build capacity among citizens and decision-makers, enabling them to apply resilience thinking to their daily work and lives.
- B. Identify the opportunities for resilience building associated with devolution of powers to and from the City Council.

## 4.1 Strategic Pillar 1: Empowering Glaswegians

*Empower citizens and communities to strengthen their personal and collective resilience and work to mitigate systematic barriers that undermine it.*

“Educated and engaged communities are an untapped asset for building resilience”  
Participant from the GCVS ‘Resilient Glasgow’ Glasgow Game

Glasgow is a diverse city. It is also a city of inequality. We want to create a fairer, more equal society that is resilient to a range of potential futures.

The education of all Glaswegians is central to the development of a resilient city. Learning and development empowers the growth of more resilient people, individually and collectively. This includes community learning support and interventions as well as the education of our children and young people.

The existing education system is geared towards the delivery of an inclusive and holistic curriculum that maintains a breadth in the range of subject areas covered, whilst also building solid foundations for later specialisation. The principles of personalisation, choice, challenge and progression are vital to the development of flexible and capable global citizens.

The link between poverty and deprivation and educational attainment is well known. We will support our education partners to continue building successful and resilient schools that serve the needs of our more deprived communities and work to reduce child poverty and its impact on attainment.

It is also our belief that a fairer Glasgow is a city where partners work in collaboration to strengthen the entire city. Our aspiration is to have open and transparent relationships between communities and the institutions that serve them. Autonomous and resourceful communities are crucial for a more resilient city and we want to empower all Glaswegians to be able to shape the future of their neighbourhoods.

We will promote the delivery of innovative initiatives that engage communities with the coordination of decisions affect their future. The ability for community groups to participate in conversations about how budgets are allocated and resources managed is one that requires us to re-examine existing ways of working. Through the Glasgow Community Planning Partnership, and in line with our aspiration to facilitate the growth of cooperative businesses and social enterprises, we are reflecting on the relationships we must develop in order to build skills and confidence within our communities. The Community Empowerment Act (Scotland) 2015 provides further opportunities for community groups to influence how spaces and assets are programmed for public use. We will examine the potential as well as the legislative implications for devolving power for communities to utilise and grow their existing sources of resilience.

This strategic pillar also recognises that Glaswegians are our greatest asset when dealing with a challenge. The social support provided is unpaid and voluntary, relying on the good will of our neighbours and friends. We believe the investment and commitment from individuals through formal and informal volunteering is a good mark of urban resilience in Glasgow. With this in mind, we will support the delivery of initiatives that help us to broaden our volunteering capacity across the entire city.

### **Goal 1.A. Improve equitable access to quality local services that foster wellbeing.**

These include public services such as health and social care, schools, museums, leisure centres and libraries, as well as facilities that provide healthy food, banks and affordable financial services. This also considers the situation of transport nodes for connecting with other parts of the city.

The availability of accessible high quality services can differ greatly between neighbourhoods. The barriers to access are complex and are not limited to availability. We will equality proof services including disabilities, transport, perceived territorial divides, differing levels of education, cultural differences and social inequality.

### **Resilience Value**

Glasgow will be a city where all citizens have access to high quality services that foster wellbeing.

This will increase the flexibility and adaptability of our local communities and strengthen their ability deal with new and existing challenges. It will also promote engaged communities and ensure the continuity of critical services.

#### **Actions under this goal:**

- 1.A.1 Map the availability of important local services in communities throughout the city.
- 1.A.2 Undertake a gap analysis of important local services in communities, taking into account physical, cultural and territorial barriers to access.
- 1.A.3 Facilitate the further implementation and scaling up of Open Glasgow's Community Mapping tool, increasing digital skills and levels of community empowerment - with particular focus on groups subjected to inequalities.
- 1.A.4 Facilitate data sharing between public sector agencies and the third sector to drive interventions that fill service gaps, assist inter-agency coordination, and enhance integrated planning.
- 1.A.5 Develop an integrated resilience plan for critical services with respect to long-term stress

### **Featured Action 1.A.2. Undertake a gap analysis of important local services in communities, taking into account physical, cultural and territorial barriers to access.**

*Description:* We will work with businesses and local community groups to map the availability of important local services and identify where there may be service gaps. Using Geographical Information Systems (GIS) we will work with communities to analyse this data against a selection of social indicators to determine whether services are being appropriately delivered. This information will be made available to our partners, social enterprises and start-ups to assist the development of new solutions that target these gaps

*Timescale:* Short-term - 2018.

*Action owner and delivery partners:* Glasgow City Council, GCPH, Third Sector Forum, GCVS

*What this means to me:* Better and more accessible services provided close to your home or within your community.

### **Featured Action 1.A.5. Develop an integrated resilience plan for critical services in the face of long-term stress.**

*Description:* Business continuity plans are designed to ensure services are able to operate and recover quickly when they are affected by shocks - such as flooding - and stresses - such as increasing demand for services. These plans are typically prepared by individual organisations, with only limited consultation and coordination between service providers whose operations affect others. To ensure improved integration across critical organisations and reduced risk of cascading failures from one service to another which could affect people and businesses, we will identify the national, regional and local functions that are most critical and convene a cross-sector working group to stress test the existing business continuity plans and take steps to integrate them, with the objective to ensure that critical services remain functional and accessible, regardless of future circumstances.

*Timescale:* Medium-term (2017-18).

*Action owner and delivery partners:* Glasgow City Council, with NHS Greater Glasgow and Clyde, emergency responders, utilities, energy suppliers, transport providers, private banks, housing associations, HMRC

*Target:* 100% coordinated risk mitigation and recovery across critical agencies.

*What this means to me:* You will have better access to important services during periods of severe weather or other unusual events, with minimised disruption.

### **Goal 1.B. Empower community leaders through cooperation between city partners and the third sector.**

We recognise that the challenges facing the third sector are greater than ever. Decreasing budgets and growing financial pressures are making it increasingly difficult for voluntary organisations and social enterprises to secure funding. The resulting ways of working are reactive, with work programmes often responding to availability of funding.

Playing a crucial role in improving the health and wellbeing of many of our Glaswegians, our third sector partners are critical delivery agents in the development of local communities. Their own organisational resilience is paramount for a stronger future. We will work with the Glasgow Community Planning Partnership, the Third Sector Forum and Glasgow Council for the Voluntary Sector to strengthen organisational resilience and strengthen effective relationships and communication channels that are aligned to a shared vision through the Single Outcome Agreement.

Our third sector partners have the skills, knowledge and commitment to help us unlock innovative responses to new and existing challenges. We will work with our third sector partners to identify what information is needed to develop local capacity whilst at the same time understanding where there are collaborative opportunities for exploring new experimental and integrative approaches to developing greater urban resilience. Our aim is for communities that are equipped to make the important decisions about what affects them most.

We understand that strong empowered community leaders are essential to creating a resilient city. We will seek to bolster community empowerment to ensure that a clear and consistent communications method is used between Glasgow City Council, our public sector partners, the third sector and community groups. This clear line of communication will allow information exchange both ways and enable more defined long term planning and skills development.



## Resilience Value

Glasgow will be a city with strong collaborative capacity for capitalising on opportunities to connect new and existing models that support societal resilience. By strengthening our shared vision through shared leadership, we will foster stronger community pride, better support vulnerable people and improve access to well-paid and rewarding employment. This will help us to address the social and material dimensions of poverty and deprivation with a long-term reduction in health and economic inequalities and improved integrated governance.

### Actions under this goal:

- 1.B.1 Develop an understanding of what makes a strong community leader using information from case studies and university-led research. Use this information to develop briefings for third sector support to Glasgow's community leaders and community development workers.
- 1.B.2 Commission a study to understand how leadership can be nurtured through early years care and teaching. Use this information to develop briefings for care providers and schools. This work will explore management styles appropriate to early years nurture approaches.
- 1.B.3 Embed the broader resilience agenda as part of the objectives for the forthcoming Strategic Volunteering Group 2016-2019.

**Featured Action 1.B.1. Develop an understanding of what makes a strong community leader using information from case studies and university-led research. Use this information to develop briefings for third sector support to Glasgow's community leaders and community development workers.**

*Description:* Local people are experts on what is needed to make their neighbourhoods thrive. We want to understand how to engage with people at a neighbourhood level to build on positive assets, address inequality and increase opportunity. There are a number of high impact initiatives in Glasgow that focus on developing community resilience at a local level. We want to understand how these pockets of excellent practice can be extended beyond the current reach for the benefit of all communities. We will analyse case studies and university-led research to develop our knowledge in this area. Where we learn from this best practice, we will roll this out to develop grassroots leaders who are empowered to make important decisions that benefit local communities. We will develop briefings for third sector support to Glasgow's community leaders and development workers.

*Timescale:* Short-term (2016-17).

*Action owner and delivery partners:* Glasgow Community Planning Partnership, The Third Sector, Universities, Glasgow City Council.

*Target:* Literature review to be developed and published

*"What this means to me"* Improved support for community groups and grassroots leaders, helping to stimulate social cohesion, improve community participation and develop a more transparent relationship with local government.

**Growing the resilience of our children through inclusive play.**

Baltic Street Adventure Playground is an exciting and inclusive project based in Dalmarnock in the East End of Glasgow. Set up in 2013 by the art and architecture collective Assemble, a previously dilapidated and unsafe space was transformed into a dynamic and accessible supervised Adventure Playground. The project responds to a number of local challenges, not only around vacant land and lack of play space, but also the accessibility of affordable child care. Active recreation

What makes Baltic Street Adventure playground particularly special is the way in which it has been developed. Independently run, children have been involved in every step of the way, from development of the site to appointment of play workers. The direction of the project is influenced by the choices and preferences of the children themselves. Dedicated play workers facilitate the personal development of all children, supporting them to pursue their own activities from make-believe play to resourceful construction projects.

### **Featured Action 1.B.3. Embed the broader resilience agenda as part of the objectives for the forthcoming Strategic Volunteering Group 2016-2019.**

Robust volunteering networks leverage social capital and enhance community cohesion, both qualities required for societal resilience.

We will apply a resilience lens to the strategic volunteering charter to help define how the resilience drivers can be better connected to deliver a more impactful approach. The strategic volunteering charter will outline the framework by which the city will enhance and support volunteers over the coming years. Particular areas of focus will feature around individuals in poverty, those affected by early years' childcare challenges and young people who require support on their path towards full and fulfilling employment jobs where pay and conditions can sustain us and our families and enable us to build and live our lives. Increasing these levels of 'work and worth' will support activities that provide intergenerational, communication and confidence building skills and other essential skills to support paid employment. The social skills earned in this way are widely recognised and the social cohesion that they generate across communities and cities must be fully defined to demonstrate the importance of volunteering work.

The charter will specifically outline work of the strategic volunteering framework group, and align with the "Case for Change" national document.

We need to enhance and support existing multi-agency forums to enrich and develop volunteering networks in the city. This will include encouraging city stakeholders and in particular employers to allow their staff time to volunteer. This will also seek to address challenges and obstacles to volunteering, ensuring work with communities to enhance existing activity.

*Timescale:* Short-term - 2016

*Action owner and delivery partners:* Glaswegians, Volunteer Glasgow, Glasgow City Council.

*Target:* A new Glasgow Volunteering Charter.

*What this means to me:* You will see increased opportunities for volunteering in your community.

### **Learning from Bristol: Putting people at the heart of city resilience**

Bristol has put communities at the centre of their resilient building efforts with 100RC,

reflecting the city's long-standing commitment to sustainability and community participation. The 'Make Sunday Special' campaign is one fun and creative way for residents to connect with each other and their city, facilitating the development of social capital and community capacity. This campaign has been held on an annual basis, bringing arts and cultural events to some of Bristol's neighbourhoods and the city centre, with the aim to inspire families and individuals to interact with their neighbours and participate in new and fun events and activities.

The 'Community Places of Safety' is another innovative community-focused scheme that ensures residents have somewhere to go for temporary shelter in the case of an emergency. Venues for short-term evacuation are identified on the basis of disabled access, 24-hour availability, and appropriate toilet, heating and refreshment facilities. Places of safety can be identified from a map on the Bristol government website, and also display a logo at their entrance. Places of safety are opened for up to four hours and managed by Council staff, after which alternative accommodation will be found if it is still unsafe to return home.

*Lessons learned for Glasgow:*

- We can promote Glasgow's arts and cultural sector while stimulating community engagement, helping to address social isolation and promote a flourishing economic sector simultaneously.
- We can leverage our existing spaces in the city to provide safe and neutral community places for refuge during an emergency.

**Goal 1.C. Use existing assets to create healthy, safe and inclusive spaces for the community to network, helping to mitigate social isolation.**

**Actions under this goal:**

- 1.C.1 Review levels of control over existing public assets and patterns of use to determine spaces that could be programmed for community use.
- 1.C.2 Explore the implications of the Community Empowerment Act (Scotland) 2015 potential to transfer control of public assets to communities.
- 1.C.3 Work with partners to ensure that community spaces are utilised in a way that benefits all community groups.

**Goal 1.D. Influence the Scottish Government agenda on social and community resilience.**

Expand with narrative. – helping national agenda, benefiting from City Deal, delivering for Scotland and UK

**Actions under this goal:**

- 1.D.1 Continue to engage Scottish Government with the Resilient Glasgow initiative and conversely attend Scottish Government meetings to collaborate and allow knowledge exchange

## 4.2 Strategic Pillar 2: Unlocking Place-Based Solutions

*Implement and support place-based solutions to improve personal, community and economic resilience.*

The City Development Plan (CDP) will, once adopted, play a central role in guiding the delivery of a place based approach to improving personal, community and economic resilience. The LDP has been informed by and aligns with the Strategic Plan objectives and promotes a policy framework that gives priority to achieving successful placemaking.

### Placemaking

Central to the implementation of place based solutions is the concept of placemaking. Placemaking, or successful placemaking, is underpinned by a design-led approach to designing new development that is co-ordinated through the planning process. All aspects of successful placemaking, beyond the contribution of new development, require a holistic approach that considers the area's context, and balances the range of interests and opportunities to create multiple interconnected benefits through a collaborative process. Placemaking involves understanding the elements that contribute to an area, considering **what is currently successful and what is failing**. Placemaking contributes towards the creation of **successful and resilient places**, based upon balancing the **relationship between the physical, social and economic characteristics of the area**.

A Resilient Glasgow is a city that has the potential to transform itself. A number of significant place-based priorities are helping us along this journey. These include the delivery of the £1.13 billion City Deal for Glasgow, the development of the Sighthill Transformation Regeneration Area (TRA), the Single Outcome Agreement's Thriving Places initiative as well as other Housing, City Centre and Canal Regenerations. Both programmes will deliver massive resilience dividends through the implementation of major infrastructure, innovation and labour market projects.

Our approach to improving the critical infrastructure of our city is underpinned by our ambition to be the most sustainable city in Europe. Through the implementation of place-based solutions, we seek to become more resilient to the changing environmental conditions that threaten to undermine our physical and social integrity. In particular, we want to achieve:

- A low carbon footprint and improved air quality
- Connected transport infrastructure for businesses and communities
- Accessible, affordable and green ways for communities to move about Glasgow
- An energy efficient future
- Investment and jobs within local communities
- Good access to physical and digital infrastructure

### A Changing Climate

One of our greatest environmental threats is human-induced climate change and the impact it will have on our city, including homes, businesses, infrastructure and communities. The local effects of climate change will include increased risk of flooding, new patterns of disease and more frequent occurrence of extreme weather events.

We will build on the success of exemplar partnerships that are already delivering programmes and will increase our capacity to cope with climate change. These include the Canal Partnership, the Metropolitan Glasgow Strategic Drainage Partnerships (MGSDP), Glasgow and Clyde Valley Green Network Partnership (GCVGN) and the Climate Ready Clyde initiative.

We focus our attention on bringing together businesses, communities, artists, technical experts and academic specialists in a joined up effort to build awareness and facilitate the development of an integrated climate change adaptation plan.

We recognise that informed, design above and below ground is essential for resilient development particularly as much of the ageing infrastructure/networks are underground. This will give us opportunities as well as challenges. Furthermore, this theme also addresses issues of public safety and security, by considering how the design of public spaces can deter crime and anti-social behaviour, and how emergency services and the community sector can help to manage public safety risks in an integrated way.

The implementation of the new CDP is crucial for the continued development of societal and economic resilience in Glasgow. Our new plan will provide a concise framework for the delivery of sustainable, vibrant and distinctive places that are well-designed, safe, healthy and inclusive, contributing towards improving health and wellbeing as well as encouraging future investment

To help us deliver on this strategic pillar, we will focus our immediate attention towards the development of resilience in the north of the city. We will develop an approach to resilience building that then inform similar work with communities in other parts of Glasgow.

### **Goal 2.A. Create an integrated resilience exemplar in the north of the city.**

The north of Glasgow has been selected as a 'test-bed' for an integrated resilience planning approach due to its 'priority area' status in the proposed CDP.

The communities in the north of Glasgow are incredibly resilient in the face of a number of disproportionate stresses that are closely related to the post-industrial legacy of the area. These issues have been compounded by patterns of investment, lack of active travel and public transport networks to neighbouring areas, and low availability of local employment opportunities. The resulting stresses are associated with poverty and deprivation with high proportions of young people not in education or employment and significant issues surrounding addictions and mental health.

The high concentration of vacant and derelict land in the north of Glasgow has also become a physical and social barrier to connectivity. It can often result in an environment that does not inspire pride in place and demotivates Glaswegians from taking advantage of active transport networks. There is also a perception that public transport availability is limited and does not always serve the needs of communities.

On the other hand, the future of the north of Glasgow is an exciting one, with a number of innovative initiatives currently being delivered. Amongst these include the ambitious Sighthill TRA and the Thriving Places initiative, both of which will increase opportunities local people and improve quality of life. The area is also home to extensive areas of green space and the Forth and Clyde Canal, as well as having significant potential for the deployment of new

smart solutions to urban challenges including district heating schemes and intelligent technology.

We will work with the communities in the north of Glasgow to connect and build on these initiatives and opportunities. By trialling a resilience planning approach in the north, we can transfer experiences to other areas of the city, ensuring the delivery of a greater resilience dividend for all Glaswegians.

## Resilience Value

The community, environmental and economic potential of derelict and vacant sites in Glasgow will be unlocked. By using 3D modelling to map vacant and derelict land we will be able to de-risk development by identifying new opportunities above and below ground. This will promote development opportunities associated with sites in order to attract developers and promote economic regeneration, compact city development and appropriate services.

### Actions under this goal:

- 2.A.1 Develop spatial supplementary guidance for North of Glasgow, integrating resilience drivers.
- 2.A.2 Develop the Urban Living Partnership bid jointly with Glasgow University, integrating resilience as the central approach. Dependant on a successful bid, the project will run from 2016 to 2018.
- 2.A.3 As part of the E COST Sub Urban Action develop UK's first statutory Supplementary Guidance for subsurface planning. Integrating above and beneath the ground data, mapping, guidance & policy.
- 2.A.4 Use of the Resilient Europe URBACT III project to focus on Possilpark. Working with city partners connecting existing activity at neighbourhood level and exploring resilient institutions, place and people with local community groups to develop an integrated local action plan.
- 2.A.5 Delivery of Glasgow's Open Space strategy and development of local contexts that provide scoping and background information for six Strategic Development frameworks.
- 2.A.6 Identify a process whereby resilience can be built into the CDP Action Programme.

### Featured Action 2.A.1. Develop spatial supplementary guidance for North of Glasgow, integrating resilience drivers.

We will develop spatial supplementary guidance that integrates the drivers and qualities of resilience. This will help us ensure that we consider the long-term integrity of our city as business as usual. We recognise that one unit of planning will reduce response actions by between four and seven units of expenditure. Our approach will reduce future requirements to address physical vulnerabilities through costly retrospective action.

This action will increase stakeholder visibility of what is happening in the north of Glasgow, enabling the coordination of impactful decision.

*Timescale:* Short-term (2016-18)



*Action owner and delivery partner:* Glasgow City Council, Glasgow housing associations, Scottish Canals, Glasgow Community Planning Partnership, Glasgow Clyde Valley Green Network Partnership, Community Groups

*“What this means to me”:* New developments in your area will be assessed through a set of policies that try to make the development more flexible to accommodate environmental and social change where they are needed and beneficial.

#### **Creating a more robust, inclusive and integrated city through integrated planning.**

In 2007 Glasgow won its bid to host the 2014 Commonwealth Games, and began 7 years of planning for the ‘Best Games Ever’. Underpinning the Glasgow 2014 Commonwealth Games was our ambition to create a more flourishing, active, connected and sustainable Scotland. The Games were an opportunity to bring vitality into areas of the city that had suffered most during an extended period of deindustrialisation and population decline – in particular the East End of the city.

The multi-agency partner Clyde Gateway was established to manage the regeneration efforts in the East End. Partnering agencies consulted intensively with local communities to build on community strengths and maximise social benefits. These regeneration efforts included new roads infrastructure, refurbished existing venues and the new Emirates Arena and Sir Chris Hoy Velodrome. One of the biggest success stories is the Athletes Village.

Construction work on the Athletes’ village began in June 2011. During the Games, the village provided accommodation and facilities for 6,500 competitors and officials. Following the Games, the properties were retrofit to transform the village to offer 700 affordable new homes, including 400 homes for social rent and a new 120 bed care home for the elderly.

The development is one of the most significant new urban housing developments in the UK and was constructed to the highest (BREEAM Excellent) environmental standards. Now an exemplar ‘eco-village’, residents benefit from living in flood resilient properties, energy efficient properties, a Combined Heat and Power Energy Centre which provides hot water to all properties, sustainable and accessible green space and improved transportation links to the area.

#### **Featured Action 2.A.4. Resilient Possilpark. Use of the Resilient Europe URBACT III project to focus on Possilpark. Working with city partners connecting existing activity at neighbourhood level and exploring resilient institutions, place and people with local community groups to develop an integrated local action plan.**

Through the ERDF URBACT III Resilient Europe project, we will work with local agencies and communities in the Possilpark neighbourhood of Glasgow to develop an integrated local action plan for building resilience. We will build on the Thriving Places initiative with a particular focus on the environmental, social and economic challenges being faced by the local community. We will develop an approach that can then be rolled out to other communities and neighbourhoods in Glasgow.



This activity will help us to develop increased collaborative capacity between communities and institution. We will want to empower communities through the development of a greater understand of local resilience pressures and opportunities.

*Delivery Partners:* Glasgow City Council, Glasgow Community Planning Partnership, Glasgow Centre for Population Health (GCPH)

*Timescale:* Short term – 2018

*What this means to me:* There will be opportunities to get involved in the planning and delivery of local initiatives that make your neighbourhood look and feel better.

### **Learning from Medellin: Uniting communities through strategic infrastructure interventions.**

In the 1990s, at the height of Columbia's drug wars, Medellín was one of the most violent cities in the world. Over the last decade, the city has invested in a range of innovative solutions to its social challenges. These include the urban Gondola system and hillside escalator that have made it possible for sharply divided communities to connect with each other and the rest of the city. The commute between some of the city's most desperately poor communities and the wealthier city centre once took up to four hours. Now it takes less than 60 minutes. Additionally, institutions have been placed in the stations and parks that surround them.

Whilst the challenges of Medellin are not being compared to those in Glasgow, we recognise that there is learning that we can take from this story.

*Lessons learned for Glasgow:*

- Our physical infrastructure can be planned to facilitate social cohesion, reduce isolation and promote community resilience. These impacts should be considered through any strategic infrastructure intervention.

### **Goal 2.B. Tackle the local impacts of global climate change.**

We are acutely aware of Glasgow's exposure to future climate change, particularly the impacts of increased rainfall and flooding. Partners across the city are already taking action to understand and address these risks, but there is more we can do to ensure our built and natural environments are prepared for the future, and our people and communities are safe from harm.

### **Resilience Value**

Glasgow will be more resilient in the face of climate change risks. We will foster long-term and integrated planning that empowers communities and promotes local leadership. We will take advantage of climate change threat as an opportunity to enhance our natural and manmade assets, improving quality of life for all Glaswegians. We will seek opportunities to invest in integrated infrastructure projects that increase social justice whilst providing local communities with new skills and employment opportunities.

**Actions under this goal:**

- 2.B.1 Learn from other cities in the 100RC global network about urban interventions to increase the amenity value of water management solutions.
- 2.B.2 Prepare guidance on climate ready design and promote adoption by developers, planners and designers, particularly focusing on building retrofit to ensure long-term fitness for function.

**Featured Action 2.B.1. Learn from other cities in the 100RC global network about urban interventions to increase the amenity value of water management solutions.**

*Description:* Sustainable water management solutions – such as open channels, ponds and rain gardens for storing and treating surface water - can offer practical benefits for reducing flood risk locally and further downstream whilst providing a level of water treatment. They also provide as social, economic and environmental advantages for communities and people. If managed well, they can be an aesthetic and amenity feature for communities and can improve local property values compared with a heavily engineered drainage solution. This green infrastructure is a shift from the drainage infrastructure of the past, which aimed to remove water quickly to drains and sewers below ground. There is therefore a cultural shift to be achieved to ensure that developers and citizens in Glasgow recognise the value of green infrastructure solutions and are able to maximise the amenity value of new green and blue spaces in the city. To find ways for Glasgow's communities to get the most out of the water management solutions we are being implemented throughout the city, Glasgow will engage with the wider network of 100RC cities to gather best practice guidance and learning from successful existing projects around the world.

*Timescale:* Short-term – by end of 2016.

*Action owner and delivery partners:* Glasgow City Council, with Scottish Environmental Protection Agency (SEPA) and Metropolitan Glasgow Strategic Drainage Partnership (MGSDP).

*“What this means to me”* Improved green and open spaces for recreation, which also help to reduce the risk of flood damage to your homes.

**Learning from Rotterdam: Managing urban water risks for amenity value**

Our fellow post-industrial city of Rotterdam has an inspirational story of transformation from one of the most severely bombed cities of the Second World War, to one of the most innovative cities of the future.

The Dutch city is surrounded by water on four sides, with the majority of its land mass sitting below sea level. For centuries, Rotterdam has used dykes, barriers and canals to protect against the challenges associated with flood risk. Today, climate change is a growing concern, in particular the threat of heavier and more unpredictable rainfall.

The Bethemplein water plaza is an innovative resilience solution to the threat of flooding whilst making water storage visible and enjoyable for local communities. The plaza provides additional water storage in a densely built up area. 90% of the time, this sunken plaza serves as a playground and recreation area. In times of heavy rainfall, excess surface water is purified and diverted to the plaza, creating a dynamic urban pond that

stores water until the system has enough capacity again.

*Lessons learned for Glasgow:*

- We can mitigate our flood risks working within the natural water cycle, while simultaneously creating new recreational spaces for our communities and achieving urban regeneration objectives.

**Featured Action 2.B.2. Prepare guidance on climate ready design and promote adoption by developers, planners and designers, particularly focusing on building retrofit to ensure long-term fitness for function.**

*Description:* As the local climate changes over time, Glasgow's buildings and infrastructure will need to withstand shifting conditions including changes in temperature and rainfall, and more extreme weather. As many of the city's existing buildings will still be standing in 30 years and more, they must be able to adapt to climate trends and future impacts. A climate ready design guidance scheme will help designers and developers to design new buildings and infrastructure to respond to anticipated future conditions, and to retrofit existing buildings to cope with these changes too. The guidance will particularly take into account the heritage buildings that we have throughout Glasgow, which are an important part of our local identity and an attraction to visitors, but which present particular challenges for future proofing.

*Timescale:* Long-term (2018-19)

*Action owner and delivery partners:* Glasgow City Council with SEPA, MGSDP, Adaptation Scotland.

*Target:* Climate ready design guidance to be applied to all new developments and substantial retrofits underway in Glasgow by 2020.

*"What this means to me"* Your homes, schools, hospitals and workplaces will be better prepared to withstand changing temperatures, severe storms and floods.

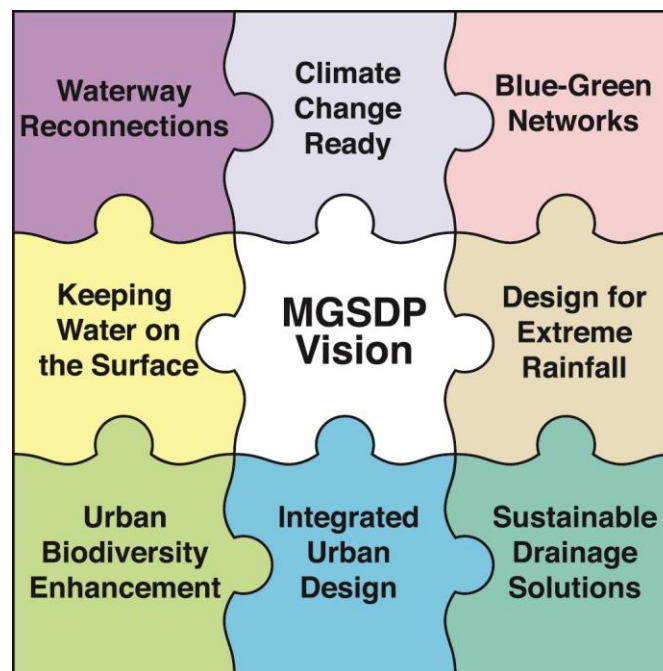
**Upgrading our drainage infrastructure to accommodate severe rainfall events**

The Metropolitan Glasgow Strategic Drainage Partnership (MGSDP - [www.mgsdp.org](http://www.mgsdp.org)) is collaborative partnership between local authorities, the Scottish Environment Protection Agency, Scottish Water, Scottish Enterprise, Clyde Gateway and Scottish Canals. The Vision is to transform how the city region thinks about and manages rainfall to end uncontrolled flooding and improve water quality. The partnership seeks to upgrade and modernise the Glasgow area's drainage and sewerage network, reducing flooding and improving the quality of our river water. The initiative plays an important role in contributing to economic development whilst improving our natural environment and integrating investment planning.

Since 2002, the MGSDP has developed efficient and robust systems that have helped to:

- Significantly reduce the risk and impacts of flooding to over 7,000 properties
- Protect hundreds of homes and businesses through various flood prevention schemes
- Invest over £150million to reduce the risk and impacts of sewer flooding and improve water quality
- Improve and protect the natural environment of the region

The MGSDP partners will continue to make significant investment in the coming years to continue to deliver the Vision through the MGSDP Guiding Principles.



**Goal 2.C.** Address the disconnect between North Glasgow and the rest of the city by developing improved transport links.

**Actions under this goal:**

2.C.1 Initiate a conversation between Glasgow City Council and service providers to develop and shared understanding of challenges and opportunities

### 4.3 Strategic Pillar 3: Innovating for Fair Economic Growth

*Innovate to support fair economic growth that creates well-paid, accessible and meaningful opportunities for both businesses and Glaswegians.*

Glasgow is one of the world's most economically resilient cities. We have enormous capacity to adapt and grow. This is made possible by the people, businesses and organisations that are committed to addressing our vulnerabilities.

*"Glasgow has weathered a massive economic transition and we must make sure we are prepared for future challenges" Participant from the West of Scotland Regional Equalities Council at the 'Resilient Glasgow' Glasgow Game*

The recession has been one of the most significant stresses to have challenged the economy of our city. It has had a real impact on the city, testing the resilience of our people, businesses and organisations. Despite facing one of the most serious economic recessions of all time, we successfully hosted the 'Best Games Ever', the Commonwealth Games 2014. Confronting one of the most significant stresses to have challenged our resilience, we embraced an opportunity that would deliver a real economic impact for the city and catalyse positive change for the lives of Glaswegians.

A resilient Glasgow confronts adversity to be a city of prosperity that provides a high quality of life for all. Our future city is a centre of innovation, production and culture. It is also a city that offers Glaswegians a good quality of life. We will support the development of economic interventions that enhance the strength of our communities.

Through the Single Outcome Agreement, which maps out our shared priorities for partners in the city, we will work with our community planning partners to continue maintain a key focus that addresses youth unemployment. We will work with economic development structures and our educational systems to ensure that our children and young people are sufficiently developed in a way that prepares them with the skills required by our communities and businesses. We will support businesses to take advantage of and grow from the assets, skills and enthusiasm of our young people.

At the same time, we will support the delivery of digital skills to not only consume services but to be the producers of new goods and services, harnessing the potential of digital technologies to drive growth, stimulate innovation and improve productivity

Glasgow is the economic centre for Scotland and we want to compete with other cities in Scotland and the wider UK. We have a strong and well-developed service based economy and we want to further diversify our economic model. We will do this by attracting and retaining a diversity of successful business that will secure long-term economic resilience. At the same time we will develop the economic resilience of individual new businesses, supporting them through the entire business cycle from start-up through to growth and maturity.

### **Goal 3.A. Support new urban solutions, business development and new technology ideas.**

A resilient economy is one that builds upon the skills, assets, history and ambitions found in the city and its people. We will facilitate the development of creative and innovative new urban solutions that add value to the physical, social and economic fabric of Glasgow.

We will work with start-ups, educational institutions, creative organisations and our local businesses to develop skills and capacity across all sectors of the city in a way that support sustainable development and increases urban resilience.

#### **Resilience Value**

We believe the personal resilience of Glaswegians is inextricably linked to availability of meaningful and fulfilling employment. By supporting initiatives that increase the economic growth of Glasgow we will support livelihoods and employment, increase the sense of worth within communities. By fostering economic prosperity, we will unlock barriers that prevent Glaswegians from finding employment that is personally and socially rewarding.

#### **Actions under this goal:**

- 3.A.1 Identify and make available spatial data sets needed to help identify and enable integrated resilience actions, including data sets that are currently 'closed'.
- 3.A.2 Facilitate a city wide conversation to better understand the way in which risk deter/drives investment and how resilience informs the way in which investors and insurance companies are making decisions.
- 3.A.3 Hold a hackathon/Challenge Lab to support the development of innovative urban resilience solutions, business development and new technologies.
- 3.A.4 Maximise the role of educational institutions in generating ideas to spur new economic growth.
- 3.A.5 Develop a working process with our city partners and educational institutions to develop a suite of climate resilient design project proposals. This will increase collaborative capacity, ensuring that we are in the best position to bid for emerging project funding.

#### **Featured Action 3.A.1. Identify and make available data sets needed to enable resilience actions, including data sets that are currently 'closed'.**

*Description:* Open data is an enabler for greater resilience. It accelerates innovation between community groups, partners and entrepreneurs. This action will allow for the coordination of well informed decisions that can facilitate economic growth in a way that delivers social and environmental benefits. Building on the success of the Future City Glasgow initiative, we will bring together communities and businesses with partners who are currently working on the development of smart, digital interventions. Through increased collaborative capacity, we seek to navigate the challenges associated with the opening of data sets within the city.

*Timescale:* Short Term - 2017

*Action owner and delivery partners:* Glasgow City Council with University of Glasgow, University of Strathclyde, Glasgow Community Planning Partnership, Glasgow Economic Leadership, Challenge Lab.

*"What this means to me"* There will be more opportunities for rewarding work and leisure in your city.



**Featured Action 3.A.3. Hold a hackathon/Challenge Lab to support the development of innovative urban resilience solutions, business development and new technologies.**

*Description:* Over the next two years, Glasgow will hold five challenges for entrepreneurs and start-ups, which will equate to 100 days in total. We want to build on our reputation as a centre of creativity and innovation, allowing skills and capacity to emerge from Glaswegians to define the shape of our future economic activity. We will also host a series of youth hackathons that supporting the development of our young people and identify new smart solutions that we can use to address specific resilience challenges.

*Timescale:* Short-term (2016-17).

*Action owner and delivery partners:* Challenge Lab with Glasgow colleges, University of Glasgow, University of Strathclyde, Glasgow City Council, Scottish Enterprise, Glasgow Economic Leadership, SCDI, Jobs and Business Glasgow.

*“What this means to me”* There will be more opportunities for young people, and greater potential to attract and retain young entrepreneurs in Glasgow.

**Goal 3.B. Through a ‘New Approach to Enterprise’ support new and existing businesses to grow.**

**Actions under this goal:**

- 3.B.1 Ensure that the new Economic Strategy contains a strong focus on the delivery of 'a more flexible and responsive city resource'. This should be centred around a strong business base that is adaptable to changing economic conditions and political administration priorities.
- 3.B.2 Identify how data analytics can be better used to drive efficiency and inform policy interventions. Use this evidence to develop a more focussed approach to deployment of support and resources.
- 3.B.3 Identify support interventions for inclusion in the new Economic Strategy,. These will focus on the development of resilient and sustainable business practices. We will support SMEs across the business lifecycle, from start-up through growth to maturity.

**Goal 3.C. Initiate a post-industrial city sub-group with our 100RC partners to share and learn from best practice.**

Whilst Glasgow has a remarkable story to share, we have a lot to learn from other cities. We want to explore how other cities are addressing the legacy of post-industrialisation to transform into thriving and vibrant places

We will work with the cities of Bristol, Boulder, Durban, Huangshi, Melbourne, Pittsburgh, Rotterdam and Vejle to share best practice and develop new innovative approaches to local challenges.

**Resilience Value**

Glasgow will share lessons and experience that can be used to develop resilience amongst partner cities. We will develop an understanding that will inform our approach to the chronic stresses that are associated with a post-industrial legacy. We will develop new ways for stimulating entrepreneurial activity, approaches to developing circular economy activity and



different strategies for people centred design. This goal will increase resilience across all of the dimensions of the City Resilience Framework.

**Actions under this goal:**

- 3.C.1 Initiate sub-group with 100RC, inviting relevant post-industrial cities to participate.
- 3.C.2 Glasgow to chair first meeting of post-industrial sub-group. Exploration of topics including: Macro-economic transition; Business continuity planning and emergency response; and Effective models of childcare, elderly care and employment.

**Featured Action 3.C.1. Initiate sub-group with 100RC, inviting relevant post-industrial cities to participate.**

*Description:* We will initiate a sub-group with 100RC, inviting relevant post-industrial cities to participate. Glasgow will chair initial meetings. Topics for exploration include local economic pressures, business continuity planning, unemployment and crime and vandalism. Glasgow will chair the first meeting of the post-industrial city sub-group.

*Timescale:* Short-term (2016).

*Action owner and delivery partner:* Glasgow City Council, 100RC, academic partners.

*“What this means to me”* City services will be improved and new economic pathways developed using best practices learned from other cities.

**Integrated and resourceful leadership for robust economic development**

The Glasgow Economic Leadership (GEL) was established in 2011 to provide independent leadership and direction to economic development activity in Glasgow and to champion the implementation of the recommendations made by the Glasgow Economic Commission. The Group, chaired by Professor Sir Jim McDonald, acts as a senior advisory body to the City Council but also to national bodies like Scottish Enterprise and Skills Development Scotland, which have investments to make in the growth of the city of Glasgow.

Glasgow is more resilient when we work in partnership and the Glasgow Economic Leadership is the triple helix of the private sector, academic institutions and the public sector working together to lead the city's economic development.

Key aims of the board are to promote: the growth of the Glasgow economy; investment in Glasgow and its infrastructure; and growth, investment and jobs in Glasgow's key sectors.

**Goal 3.D. Tackle poverty, including in-work poverty and in-work-progression, preventing and mitigating the impacts of poverty for and with Glaswegians.**

**Actions under this goal:**

- 3.D.1 Complete a gap analysis of the aspects of 'Work and Worth' not currently being addressed by Poverty Leadership Panel.
- 3.D.2 Explore opportunities for changes to care models to mitigate impacts based on learning around poverty and access to employment.
- 3.D.3 Explore opportunities for changes to care models to mitigate impacts based on learning around poverty and access to employment.
- 3.D.4 Embed objectives of socio-economic resilience throughout the forthcoming

**Goal 3.E.** Continue to increase the skill levels of Glasgow's working age population.

**Actions under this goal:**

- 3.E.1 Identify opportunities for providing employment support to SMEs that assist with business growth and increases the prosperity of the Glasgow City economy.
- 3.E.2 Work with the education system and local industry to identify where there are new training and learning opportunities for our young people, focusing on developing the skills required for a more resilient economy, now and in the future.
- 3.E.3 Deliver a graduate element of the forthcoming Economic Strategy focussing upon supporting individuals with qualifications in those sectors where there are skills shortages

## 4.4 Strategic Pillar 4: Fostering Civic Participation

*Promote civic participation, trust and a resilience culture between Glaswegians and the institutions that serve them.*

We are proud of our trusted institutions and will build upon them to ensure a fair and equitable approach towards all Glaswegians. We will encourage and support a resilient vision at the heart of every public facing institution to ensure we are strong for the future.

Glasgow's success is reliant on the systems and institutions that deliver services. To ensure the city runs smoothly, it is essential that Glaswegians receive the support and services they need and that these services are targeted appropriately. These critical services and systems are delivered by a broad range of public institutions – including Glasgow City Council, the NHS, Scottish and UK government departments and agencies, Further and Higher education institutions, as well as the third sector, and the commercial sector. The approach, objectives, responsibilities and scope of operation of these organisations do not always reflect the boundaries and priorities of Glasgow – but may be set by wider agendas. These organisations are challenged on a daily basis by shifting macroeconomic trends or economic pressures.

There is no getting away from the fact that these are difficult times for Glasgow. Through the Transforming Glasgow programme, we are reshaping the way services are delivered to better meet the needs of Glaswegians. The focus is on developing more resilient service delivery mechanisms that are fit for purpose, agile and responsive in the context of financial challenges, legislative changes and city priorities.

A collaborative approach is essential to improve the targeting and quality of services – with an improved understanding of gaps and the critical linkages and dependencies between different organisations and services. A relevant example is the current review of social and health care to deliver a more joined up and efficient service.

### **Goal 4.A. Build capacity among citizens and decision-makers, enabling them to apply resilience thinking to their daily work and lives.**

As people are our most important asset, our goal is to enable those living in Glasgow to fulfil their potential and access to opportunities to live healthy and prosperous lives. This our golden thread that ties together all of our strategic initiatives, more localised schemes and the development of individual resilient people.

We understand that knowledge and data are essential elements required for this goal achieved. Not only does this include the education of all Glaswegians so that they fully understand the challenges we are facing, it also involves ensuring the right tools and information are available, visual and accessible to all.

Our partners have incredible capacity and knowledge in this area. We will break down silos between individual projects, bringing stakeholders together to ensure the development collaborative and effective new approaches.

### **Resilience Value**

Glaswegians will understand the challenges the city is facing and have the information they need in order to make smart and informed decisions now, and to plan for long-term challenges.

<b>Actions under this goal:</b>
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- 4.A.1 Develop a resilience lens toolkit to strengthen institutional risk and resilience plans. This will be applied to business as usual working processes.
- 4.A.2 Hold a Healthier Futures Forum about the implications of the resilience strategy for health and wellbeing in Glasgow.
- 4.A.3 Produce a resilience animation targeted at raising awareness among citizens.
- 4.A.4 Pilot a city resilience dashboard.
- 4.A.5 Explore and develop the concept of mature resilience via the Smart Mature Resilient (SMR) Cities EU Horizon 2020 project. This will enable the development of a European based toolkit to support a mature resilient city approach. The exploration will also consider a resilience standard and information portal for city stakeholders to share information.
- 4.A.6 Create opportunities for young resilience ambassadors to develop leadership skills, share learning and champion creative new resilience ideas.
- 4.A.7 Create a process that facilitates an educational resilience conversation between our young Glaswegians and their peers in other 100RC cities.
- 4.A.8 Support the development of an employee toolkit focused on developing individual and organisational resilience within the Glasgow Family.
- 4.A.9 Develop an effective mechanism for knowledge transfer and sharing of best practices between agencies.
- 4.A.10 Enhance resilience skills and understanding in critical service providers.

#### **Featured Action 4.A.4. Pilot a city Resilience Dashboard.**

*Description:* We will develop a digital online dashboard that illustrates and connects resilience initiatives that are taking place across Glasgow. This dashboard will link into our Open Glasgow platform and will build on the principles of making data open, transparent and visually usable. The dashboard will be used to collate data, showcase success, share learning and monitor progress. We will include a north Glasgow page that is tailored to the actions contained in this strategy.

This action will increase the capacity to make coordinated decisions that are in line with the Single Outcome Agreement and the Transforming Glasgow Programme, both of which are focused on partnership working to deliver better outcomes for the people of Glasgow. An essential principle for this action is a smarter use of assets.

*Timescale:* Short-term (2016-2017)

*Action owner and delivery partners:* Glasgow City Council, Glasgow Community Planning Partnership, Scottish Canals, GCVGNP, GCPH, SNIFFER, Greenspace Scotland.

*Target:* Working Groups will be established. As well as the implementation of a digital dashboard, we will disseminate learning through the development of GIS/data guidance and demonstrations. This will be articulated through an awareness building programme that will facilitate the use of data to inform policy development and joined-up decision making.

*“What this means to me”* Leaders in your community will have the information they need to be able to make important local decisions.

#### **Making effective use of city data through our Future Cities programme**

Through the Future City Glasgow programme, Glasgow has been exploring ways to harness the power of data and technology to make our city a better place to live, work and play. From the state-of the-art city operations centre to the creation of an innovative city

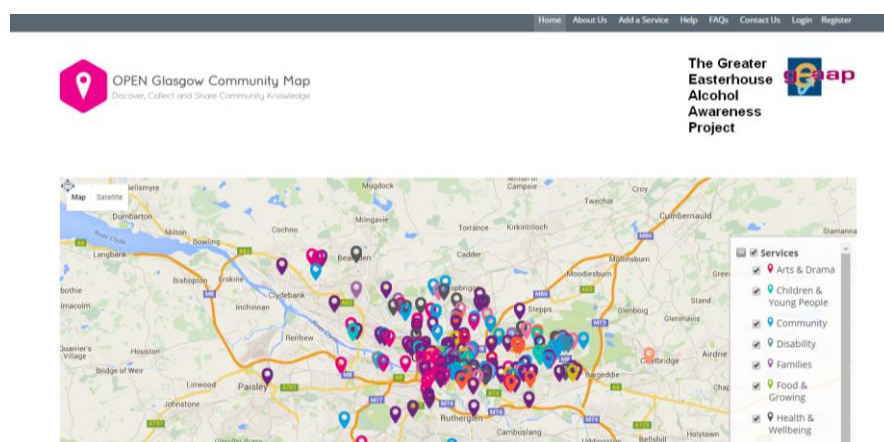
data hub, Glasgow has been developing a series of initiatives to showcase the exiting potential offered by smart city technology.

One example that put people at the very heart of the future city was the Easterhouse Addictions community mapping initiative with the Greater Easterhouse Alcohol Awareness Project (GEAPP). GEAPP is a local charity whose aim is to reduce the harm associated with the use of alcohol. A key goal for GEAPP is to help the community that it serves to discover what's on and what is available within the local area; not just alcohol recovery services, but anything that can keep people in recovery active in ways that provide an alternative to the addictive behaviour.

Working with local communities with support from social enterprise Pidgin Perfect, and in collaboration with the Glasgow Community Planning Partnership and NHS Greater Glasgow and Clyde, a series of community mapping workshops were facilitated to map local assets and services available to people in recovery. A digitised the map was then developed, creating an online tool that allowed GEAPP and volunteers to maintain a local directory of services and assets.

When people are in recovery it can be difficult for them to navigate the services that are available. If people cannot find the services they need they can disengage from the recovery process altogether, withdrawing from the community and back into addictive behaviours. Now, with the mapping tool, those in recovery can see what is going on in their area, making it easier for them to get the access to the services they need.

By integrating data through local maps, this project brought together local stories with factual data in a way that enhances existing service delivery mechanisms. The resilience dividend is the creation and trust and empathy between agencies and communities.



**Featured Action 4.A.5. Explore and develop the concept of mature resilience via the Smart Mature Resilient (SMR) Cities EU Horizon 2020 project. This will enable the development of a European based toolkit to support a mature resilient city approach. The exploration will also consider a resilience standard and information portal for city stakeholders to share information.**

*Description:* We understand the importance of clear and concise information sharing. We understand the importance of continuous learning and that we need to document our journey for others to learn. In order to ensure a consistent and agreed approach to embed resilience through all organisations and structures.

The city - through participation with the Smart Mature Resilient (SMR) Cities European Horizon 2020 project - will contribute towards the development of a resilience toolkit that provides resource and opportunities to develop and map city resilience. We will pilot and ensure the City Resilience Framework is integrated and aligned with the development of the toolkit. We understand the importance of information transfer and reducing silo thinking across city stakeholders. The development of an information exchange portal will work within suitable boundaries to create an easily accessible, easily navigated portal of city information relevant to city resilience.

*Timescale:* Short-term (2016-17).

*Action owner and delivery partners:* 100RC cities – Vejle, Rome, Bristol – with Riga, Kristenssaand, University of Strathclyde, European academic partners.

*Target:* A resilience toolkit with guideline practices, standards and a communications portal

*“What this means to me”* Any public facing institution will be fair and equitable, and mindful of the needs of the future.

**Featured Action 4.A.7. Create a process that facilitates an educational resilience conversation between our young Glaswegians and their peers in other 100RC cities.**

*Description:* We will commence this project by working with young people from our schools and colleges. Our aim is to embed a deeper understanding of resilience through our education system. By doing so we will look to increasing young people’s awareness of the challenges facing Glasgow and the wider world. We believe that this greater understanding amongst young people is essential for developing our ability to respond to future shocks and stresses. To drive this knowledge and increase a sense of global citizenship among our young people, Glasgow will engage with 100RC and other cities in the 100RC network to create a schools cultural exchange programme that allows young Glaswegians to learn about the different resilience challenges we face.

*Timescale:* Short-term (2016-17).

*Action owner and delivery partners:* Glasgow City Council, Glasgow Centre for Population Health, 100RC network, John Muir Trust, Thriving Places, Open Glasgow, University of Strathclyde, Digital Glasgow, SMR Project, Education Scotland.

*Target:* By 2018, a cultural exchange programme underway between at least one school or youth organisation in Glasgow and peers in another 100RC city.

*“What this means for me”* Your children will have greater opportunities to connect with young people in cities around the world, developing their own skills as global citizens and resilience leaders of the future.

**Goal 4.B. Identify the opportunities for resilience building associated with devolution of powers to and from the City Council.**

**Actions under this goal:**

4.B.1 Reach out to other cities in the 100RC network to understand how different legislative and political powers are being used to deliver resilience outcomes.

**5. Delivering the Strategy**



The actions contained within this strategy will be delivered over an initial two year period from 2016 to 2018. After this time, the actions will be refreshed.

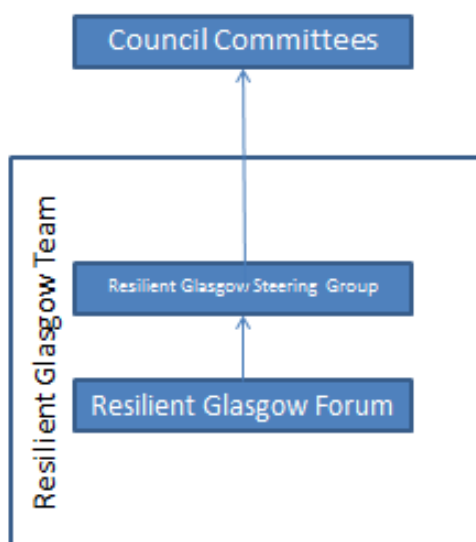
The Resilient Glasgow Strategy will be delivered through existing organisations, structural connections and delivery mechanisms by applying resilience as an explicit and intended consequence of strategies, initiatives and actions. New delivery structures and working groups will be only established where appropriate.

Strategy delivery will be coordinated by Glasgow City Council under the remit of the Chief Resilience Officer (CRO). This will be embedded in existing organisational structures.

This strategy requires a strong spirit of collaboration, drawing on a full range of expertise. The Resilient Glasgow Steering Group will be refreshed to increase involvement from city partners and ensure strategic direction is provided. This will include additional involvement from the private sector, the Glasgow Glasgow Community Planning Partnership and the Transforming Glasgow programme.

The remit of the Resilient Glasgow Steering Group is to provide directional support, guidance and influence on our journey to greater resilience. The Steering Group will act as a senior strategic body that will function as a multi-agency city partnership, bringing together our public sector partners, businesses, academics and voluntary organisations. The Steering Group will exist for the entire strategy implementation period.

The Resilient Glasgow Steering Group will report formally to various Council Committees and other bodies as deemed appropriate.



Supporting the Resilient Glasgow Steering Group will be the Resilient Glasgow Forum. The Resilient Glasgow Forum will consist of representatives from across the city partners including the Council Family. Forum members will have special interest, experience and knowledge in city resilience. The remit of the Resilient Glasgow Forum will be to:

- evaluate the progress of the short-term Resilient Glasgow Action Plan
- knit together related or cross cutting initiatives
- identify new conversations that should be had with citywide stakeholders
- promote the application of a resilience lens to citywide activity
- consider the development of local and national influences
- identify new opportunities that should be pursued and integrated into our action plan
- disseminate learning at a citywide level.

This strategy will be implemented with continued support and guidance from 100RC who will also provide additional resources through a selection of Platform Partners. Platform Partners are a variety of creative and influential global organisations committed to supporting the development of urban resilience.

Platform Partners will provide us with technical skills and expertise that will lend itself to support the delivery of some of the actions contained within our strategy.

**We will** proactively work with our city partners to be bid-ready for new funding opportunities that will enhance our resilience building efforts. We will develop a mechanism for developing high-performing project collaborations.

**We will** create new opportunities for young resilience ambassadors to develop leadership skills, share learning and champion creative new resilience ideas.

## 6. Monitoring Progress

To ensure we deliver on our Resilient Glasgow strategy, we are developing a **Monitoring and Evaluating Framework**. This will allow us to monitor progress through data sets available from our city partners. This in turn will allow partners to appreciate the role their targets play in developing city resilience. In developing the Framework, we are taking account of:

- Our particular resilience challenges and the goals/actions outlined in the strategy.
- The data that is routinely collected by partners in the NHS, Scottish Government, Glasgow City Council and elsewhere to promote a resilience culture across services and organisations in the city.
- Communication, learning and accountability. The indicators must be accessible and used reflectively by city partners and citizens to identify areas of progress or continuing challenge. For this reason, we are open to adding new indicators as the strategy develops and unfolds.
- Accessibility of indicators. These will be made available on the Understanding Glasgow website, already a popular resource in the city with a wide range of resources ([understandingglasgow.com](http://understandingglasgow.com))

Examples of our indicators include:

Indicator	Source/ Detail	Reportin g cycle	Why it's included and how it can be used
Percentage of those with 'low' and 'high' resilience	NHS Health and Wellbeing Survey. Individual level measures aggregating six measures: feels in control of decisions; does not feel isolated; valued as community member; influence on decisions; feels people look out for each other; volunteering.	3 years	Indicates change in social network and relational component of resilience. Relevant to people, place and civic engagement aspects of resilience strategy. Maintains an inequalities focus through ability to compare most deprived 15% with rest of city.
Employment rates	Annual Population Survey. Can be displayed as a headline rate (working age population) and also by ethnic group, by gender and by disability to indicate equality of employment.	Yearly	Glasgow's relative difference in employment (compared to UK cities) is a key vulnerability. Indicates one dimension of economic buoyancy. Displaying data for diversity groups moves beyond vulnerability understanding to one of opportunity across a diversity of groups- a resilience factor.
Business survival rate	Office of National Statistics: Survival rate of business in Glasgow and Clyde valley		Illustration of economic adaptability and diversity of the economy
Male and Female Healthy Life Expectancy (HLE)	Census ScotPHO	Part of 10 year census but HLE updated every 5 years	Poor health is one of Glasgow's key vulnerabilities as are inequalities in health between deprived and less deprived areas. This will not only allow comparison across deprived and non-deprived neighbourhoods but monitoring of gender trends.
Vacant and derelict land / greenspace access and	Scottish Vacant and Derelict Land Survey/ Urban Audit Percentage of people with 500 m of VDL		Access to safe and neutral space for association, building social capital and feeling ownership of community assets

quality			is a key aspect of the strategy's goal to empower citizens to build their personal and collective resilience
Child care access	NHS Health and Wellbeing Survey/ Perceived quality of childcare provision by deprivation and socio-economic measures	3 years	Access to childcare is key interdependency between the economy and people/communities dimensions of the strategy-acting as a barrier or facilitator to economic opportunity. For indication of success we would look for a narrowing gap between deprivation quintiles on those rating Excellent/Good.

Resilience Strategy **Monitoring and Evaluation Reports** will be fed through our core partnership groups for information and discussion on relevant issues as they arise. These core partnership groups include but are not restricted to the:

- Glasgow Community Planning Partnership
- City Deal Board
- Poverty Leadership Panel
- Extended Corporate Management Team
- Local Resilience Partnership
- Glasgow Economic Leadership
- Scottish Government
- Resilient Glasgow Steering Group
- Sustainable Glasgow Board.

Based on our outcomes, with ongoing dialogue with these core partnership groups, we will produce an **Annual Resilience Statement** which will articulate and include:

- our yearly performance, with information on progress of the goals and actions
- a narrative of our journey to greater resilience
- emerging considerations that should be integrated into resilience practices
- new collaborations or funding opportunities that could support the strategy implementation.

Our Annual Resilience Statement will be reported to Glasgow City Council's Executive Committee before being published for dissemination to our partners and the wider Glasgow public.

Measurement of our progress against the Monitoring and Evaluation Framework will form the basis for our Resilient Glasgow Strategy refresh in 2018.

## Appendix 1: Summary of Resilient Glasgow Goals and Actions

Strategic Pillar		Goal		Action		Timescale for completion of action		Action owners and key delivery partners	Target/outcome (2016-2018)
						Term	Year		
1	Empowering Glaswegians	A	Improve equitable access to quality local services that foster wellbeing.	1A1	Map the availability of important local services in communities throughout the city.	Short-term	2017	Glasgow City Council	Development of a digital open map
				1A2	Undertake a gap analysis of important local services in communities, taking into account physical, cultural and territorial barriers to access.	Short-term	2018	GCPH Third Sector Forum	Local service gap analysis
				1A3	Facilitate the further implementation and scaling up of Open Glasgow's Community Mapping tool, increasing digital skills and levels of community empowerment - with particular focus on groups subjected to inequalities.	Short-term	2017	GCVS	Two community mapping exercises to take place per year.
				1A4	Facilitate data sharing between public sector agencies and the third sector to drive interventions that fill service gaps, assist inter-agency coordination, and enhance integrated planning.	Medium-term	2018		Identified data to be made available through existing open platforms

				1A5	Develop an integrated resilience plan for critical services with respect to long-term stress	Medium-term	2017	<b>Glasgow City Council</b>  <b>Utility and service providers including: Scottish Water, Scottish Power, SPT, Transport Scotland.</b>  <b>Private sector organisations</b>	<b>Complete a stress test exercise to drive development of integrated resilience plans for critical services.</b>
		B	Empower community leaders through clear, instructive communications between city partners and the third sector.	1B1	Develop an understanding of what makes a strong community leader using information from case studies and university-led research. Use this information to develop briefings for third sector support to Glasgow's community leaders and community development workers.	Short-term	2017	<b>Glasgow City Council</b>  <b>Glasgow Community Planning Partnership</b>  <b>Third Sector Forum</b>	Literature review
				1B2	Commission a study to understand how leadership can be nurtured through early years care and teaching. Use this information to develop briefings for care providers and schools. This work will explore management styles appropriate to early years nurture approaches.	Short-term	2017	<b>GCPH</b>  <b>Volunteer Glasgow</b>	
				1B3	Embed the broader resilience agenda as part of the objectives for the forthcoming Strategic Volunteering Group 2016-2019	Short-term	2016	<b>Glasgow City Council</b>  <b>Glasgow's Strategic Volunteering Framework Group</b>	<b>Publication of the Glasgow Volunteering Charter</b>



							<b>Volunteer Glasgow</b>	
	C	Use existing assets to create healthy, safe and inclusive spaces for the community to network, helping to mitigate social isolation	1C1	Review levels of control over existing public assets and patterns of use to determine spaces that could be programmed for community use.	Short-term	2018	<b>Glasgow City Council</b>  <b>Third Sector Forum</b>	<b>A list of public assets available for community use</b>
			1C2	Explore the implications of the Community Empowerment Act (Scotland) 2015 potential to transfer control of public assets to communities.	Short-term	2016	<b>Glasgow Community Planning Partnership</b>  <b>Local Communities</b>	<b>Study into the impact and potential of the Community Empowerment Act through a resilience lens.</b>
			1C3	Work with partners to ensure that community spaces are utilised in a way that benefits all community groups.	Medium-term	2018		<b>Programmed delivery of identified assets</b>
	D	Influence the Scottish Government agenda on social and community resilience, helping to expand community resilience to a broader social resilience agenda	1D1	Continue to engage Scottish Government with the Resilient Glasgow initiative and conversely attend Scottish Government meetings to collaborate and allow knowledge exchange	Short-term	2016	<b>Glasgow City Council</b>  <b>Scottish Government</b>  <b>GCPH</b>  <b>SNIFFER</b>  <b>Greenspace Scotland</b>  <b>Local Communities</b>  <b>Glasgow</b>	<b>Continued collaboration between National and local delivery of Resilience</b>

								Community Planning Partnership	
2	Unlocking Place-Based Solutions	A	Create an integrated resilience exemplar in the north of the city, beginning with the Sighthill Transformational Regeneration Area (TRA) and linking to the Possilpark/Ruchill Thriving Places initiative.	2A1	Develop spatial supplementary guidance for North of Glasgow, integrating resilience drivers.	Short-term	2018	<b>Glasgow City Council</b> <b>Glasgow Housing Associations</b> <b>Scottish Canals</b> <b>City Masterplan</b> <b>Community Groups</b> <b>Glasgow Community Planning Partnership</b> <b>GCVGNP</b>	<b>North Strategic Development Framework</b>

				2A2	Develop the Urban Living Partnership bid jointly with Glasgow University, integrating resilience as the central approach. Dependant on a successful bid, the project will run from 2016 to 2018.	Short-term	2018	<b>University of Glasgow</b>  <b>University of Strathclyde</b>  <b>Heriot-Watt University</b>  <b>Glasgow School of Art</b>  <b>NERC BGS</b>  <b>Scottish Government</b>  <b>RTPI</b>  <b>Wheatley Group</b>  <b>Glasgow City Council</b>	<b>An integrated baseline diagnostic and modelling of those factors that most impede on the creation of resilient places for sustainable urban living. Identification of opportunities and possible intervention points.</b>
				2A3	As part of the E COST Sub Urban Action develop UK's first statutory Supplementary Guidance for subsurface planning. Integrating above and beneath the ground data, mapping. guidance & policy	Short-term	2016	<b>Glasgow City Council</b>	<b>3D above and below ground mapping at City and Site scale.</b>  <b>Supplementary Guidance</b>

			2A4	Use of the Resilient Europe URBACT III project to focus on Possilpark. Working with city partners connecting existing activity at neighbourhood level and exploring resilient institutions, place and people with local community groups to develop an integrated local action plan.	Medium-term	2018	<b>Glasgow City Council</b>  <b>Glasgow Community Planning Partnership</b>  <b>GCPH</b>	<b>An integrated local action plan.</b>
			2A5	Delivery of Glasgow's Open Space strategy and development of local contexts that provide scoping and background information for six Strategic Development frameworks.	Long-term	2016	<b>Glasgow City Council</b>	<b>Development of the Open Space Strategy.</b>
			2A6	Identify a process whereby resilience can be built into the City Development Plan (CDP) Action Programme.	Medium-term	2018	<b>Glasgow City Council</b>  <b>Scottish Government</b>  <b>Critical service providers, investors and developers</b>	<b>A process and toolkit for assessing the resilience of activity.</b>
	B	Tackle the local impacts of global climate change.	2B1	Learn from other cities in the 100RC global network about urban interventions to increase the amenity value of water management solutions	Short-term	2018	<b>Glasgow City Council</b>  <b>MGSDP</b>	<b>Structured conversation initiated with support from 100RC</b>

				2B2	Prepare guidance on climate ready design and promote adoption by developers, planners and designers, particularly focusing on building retrofit to ensure long-term fitness for function.	Short-term	2018	<b>Glasgow City Council</b> <b>SNIFFER</b> <b>Climate Exchange</b> <b>University of Glasgow</b> <b>University of Strathclyde</b> <b>Glasgow Caledonian University</b>	<b>Climate Ready Design guidance</b>
		C	Address the isconnect between North Glasgow and the rest of the city by developing improved transport links.	2C1	Initiate a conversation between Glasgow City Council and service providers to develop and shared understanding of challenges and opportunities	Aspirational	2021+	<b>Glasgow City Council</b> <b>SPT</b> <b>First Bus</b>	<b>Conversation to form part of the North Strategic Development Framework (2A1)</b>
<b>3</b>	Innovating for Fair Economic Growth	A	Support the development of innovative ideas that will contribute to new urban solutions, business development and new technology ideas.	3A1	Identify and make available spatial data sets needed to help identify and enable integrated resilience actions, including data sets that are currently 'closed'.	Short-term	2017	<b>Glasgow City Council</b> <b>Business Gateway</b> <b>Scottish Enterprise</b> <b>Glasgow Economic</b>	<b>Multi-disciplinary working group established to navigate the challenges towards opening data sets and drive this to be done.</b>

				3A2	<p>Facilitate a city wide conversation to better understand the way in which risk deter/drives investment and how resilience informs the way in which investors and insurance companies are making decisions.</p> <p>Provide an annual resilience statement based on metrics established to provide investor confidence and a reporting mechanism for activity.</p>	Medium-term	2017	<b>Leadership</b>  <b>SCDI</b>  <b>GlasgowSEN</b>  <b>Challenge Lab</b>	<b>Conversation initiated post strategy release.</b>  <b>European Entrepreneurial Region Action Plan to engage businesses in consultation on economic resilience.</b>
				3A3	<p>Hold a hackathon/Challenge Lab to support the development of innovative urban resilience solutions, business development and new technologies.</p>	Short-term	2018		<b>Five challenges across two years. (Equating to five hundred days' worth of challenge in total)</b>
				3A4	<p>Roll out a programme of foundation apprenticeships for young people in Glasgow.</p> <p>Work with our educational institutions and industry to implement an apprenticeship mechanism that is specifically targeted to addressing the potential skills gap within the financial service sector.</p>	Medium-term	2020		<b>Apprenticeship programme will generate new ideas that will spur new economic growth.</b>  <b>Initial focus on ideas that develop resilience of the financial service sector.</b>



				3A5	Develop a working process with our city partners and educational institutions to develop a suite of climate resilient design project proposals. This will increase collaborative capacity, ensuring that we are in the best position to bid for emerging project funding.	Medium-term	2020	<b>Glasgow City Council</b> <b>SNIFFER</b> <b>Climate Exchange</b> <b>University of Glasgow</b> <b>University of Strathclyde</b> <b>Glasgow Caledonian University</b>	Development of an agreed working process to become bid ready.
		B	Through a 'New Approach to Enterprise' we will support new and existing businesses to grow.	3B1	Ensure that the new Economic Strategy contains a strong focus on the delivery of 'a more flexible and responsive city resource'. This should be centred around a strong business base that is adaptable to changing economic conditions and political administration priorities.	Long-term	2021+	<b>Glasgow City Council</b> <b>Business Gateway</b> <b>Glasgow Chamber of Commerce</b>	Economic Strategy for Glasgow
				3B2	Identify how data analytics can be better used to drive efficiency and inform policy interventions. Use this evidence to develop a more focussed approach to deployment of support and resources.	Medium-term	2020	<b>Scottish Enterprise</b> <b>Glasgow Economic</b>	

				3B3	Identify support interventions for inclusion in the new Economic Strategy,. These will focus on the development of resilient and sustainable business practices. We will support SMEs across the business lifecycle, from start-up through growth to maturity.	Short-term	2018	<b>Leadership</b> <b>SCDI</b> <b>GlasgowSEN</b> <b>Challenge Lab</b>	
		C	Initiate a post-industrial city sub-group with our 100RC partners to share and learn from best practice and experiences of economic transformation from those cities with similar post industrial profile.	3C1	Initiate sub-group with 100RC, inviting relevant post-industrial cities to participate.	Short-term	2016	<b>Glasgow City Council</b>	<b>Two post-industrial sub-group meetings per year</b>
				3C2	Glasgow to chair first meeting of post-industrial sub-group. Exploration of topics including <ul style="list-style-type: none"><li>- Macro-economic transition,</li><li>- Business continuity planning and emergency response,</li><li>- Effective models of childcare, elderly care and employment.</li></ul>	Short-term	2016	<b>100RC network</b> <b>Glasgow Economic Leadership</b>	
		D	Tackle poverty, including in-work poverty and in-work-progression, preventing and mitigating the impacts of poverty for and with Glaswegians.	3D1	Complete a gap analysis of the aspects of 'Work and Worth' not currently being addressed by Poverty Leadership Panel.	Short-term	2017	<b>Glasgow City Council</b> <b>Poverty Leadership Panel</b>	<b>A gap analysis study of work and worth</b>
				3D2	Facilitate discussions with economic partners to ensure social resilience is an explicit and intended outcome of new economic interventions.	Short-term	2016	<b>SCDI</b> <b>GlasgowSEN</b> <b>Business</b>	<b>A focused conversation between relevant economic stakeholders</b>

				3D3	Explore opportunities for changes to care models to mitigate impacts based on learning around poverty and access to employment.	Short-term	2016	<b>Gateway</b>  <b>Glasgow Chamber of Commerce</b>  <b>Glasgow Economic Leadership</b>  <b>Further and Higher Education Institutions</b>  <b>Glasgow Community Planning Partnership</b>	Care Model opportunity report
				3D4	Embed objectives of socio-economic resilience throughout the forthcoming Economic Strategy.	Short-term	2016		New Economic Strategy for Glasgow
		E	Continue to increase the skill levels of Glasgow's working age population using the Glasgow Guarantee and other initiatives.	3E1	Identify opportunities for providing employment support to SMEs that assist with business growth and increases the prosperity of the Glasgow City economy.	Short-term	2018		“In work progression” project to seek ways to address in work poverty by improving business process, driven by City Deal.
				3E2	Work with the education system and local industry to identify where there are new training and learning opportunities for our young people, focusing on developing the skills required for a more resilient economy, now and in the future.	Short-term	2018		Implementation of the “Glasgow Guarantee”. A political priority providing guaranteed support in training, apprenticeships or work for young people.
				3E3	Deliver a graduate element of the forthcoming Economic Strategy focussing upon supporting individuals with qualifications in those sectors where there are skills shortages.	Short-term	2016		European Entrepreneurial Region- Action Plan

									Conversation with Glasgow Chamber of Commerce to better understand and address local business issues.
4	Fostering civic participation	A	Build capacity among citizens and decision-makers, enabling them to apply resilience thinking to their daily work and lives.	4A1	Develop a resilience lens toolkit to strengthen institutional risk and resilience plans. This will be applied to business as usual working processes.	Short-term	2016	Glasgow City Council GCPH	Resilience lens toolkit to be developed and accessible to city partners
				4A2	Hold a Healthier Futures Forum about the implications of the resilience strategy for health and wellbeing in Glasgow.	Short-term	2016	100RC partners Volunteer Glasgow	City-wide event open to public and city partners
				4A3	Produce a resilience animation targeted at raising awareness among citizens.	Short-term	2016	NHSGGC	Publication of a resilience animation
				4A4	Pilot a City Resilience Dashboard, connecting resilience initiatives, collating data, showcasing success, monitoring progress and sharing learning. This data would be used to inform policy development and joined up decision-making.  This will include a North Glasgow focus space bringing projects together through a 'resilience lens'.	Short-term	2016	University of Strathclyde SMR Project  Education Scotland  Third Sector Forum  John Muir Trust  Kelvin College	Dashboard working group established with GIS/data guidance.  City resilience Dashboard available.

				4A5	Explore and develop the concept of mature resilience via the Smart Mature Resilient (SMR) Cities EU Horizon 2020 project. This will enable the development of a European based toolkit to support a mature resilient city approach. The exploration will also consider a resilience standard and information portal for city stakeholders to share information.	Medium-term	2018	<b>Scottish Canals</b>  <b>North Glasgow Homes</b>	<b>Resilience toolkit with guideline practices, standards and a communications portal.</b>
				4A6	With an initial focus on North Glasgow work with educational institutions, in partnership with the John Muir Trust, to explore people and place based resilience issues. This approach will be scaled up and applied to other communities.  Create opportunities for young resilience ambassadors to develop leadership skills, share learning and champion creative new resilience ideas.	Short-term	2017		<b>Development of a schools engagement programme on resilience.</b>
				4A7	Facilitate an educational resilience exchange between our young Glaswegians and their peers in fellow 100RC cities, inspiring a stronger sense of global citizenship and awareness of shared resilience challenges.	Short-term	2016		<b>Develop an exchange framework in consultation with 100RC</b>
				4A8	Support the development of an employee toolkit focused on developing individual and organisational resilience across	Short-term	2016		<b>An individual and organisational training toolkit</b>

				the Glasgow family.				for all Glasgow Council Family employees
			4A9	Develop an effective process for knowledge transfer and sharing of best practice approaches between public body agencies.	Medium-term	2021		Development of a knowledge transfer framework between public body agencies.
			4A10	Enhance the resilience skills and understanding in critical service providers through the delivery of operational and skills programmes based on scenario planning exercises.	Short-term	2018	<b>Glasgow City Council</b>  <b>Utilities</b>  <b>Transport providers</b>  <b>Housing Associations</b>  <b>Communications</b>  <b>Banks</b>  <b>HMRC</b>  <b>Police Scotland</b>  <b>Scottish Fire and Rescue</b>  <b>NHSGGC</b>  <b>Scottish Ambulance</b>	Preparation of resilience training content for roll out



		B	Identify the challenges and opportunities for resilience building associated with devolution of powers to and from the City Council	4B1	Reach out to other cities in the 100RC network to understand how powers are being used to deliver resilience outcomes. Map this knowledge across to the powers that Glasgow holds or could delegate to citizens and others.		2017	<b>Glasgow City Council</b>  <b>GCPH</b>  <b>Third Sector Forum</b>  <b>GCVS</b>	<b>Host 100RC Conference to develop understanding of city powers in relation to resilience</b>
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## Appendix 2: Acknowledgements

Our Resilient Glasgow Strategy was achieved through collaborative insights and efforts from the people of Glasgow. We would like to thank each person who participated in our public consultation activities.

We would particularly like to thank the following organisations and groups for their dedicated contributions to date, and continued commitment as we move forwards into strategy implementation.

### **Resilient Glasgow Team**

Alastair Brown (Chief Resilience Officer)  
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100 Resilient Cities – Cristiana Fragola, Scott Rosenstein  
Arup – Alan Richmond, Paula Kirk, Joanna Corrigan, Laura Frost, Harriet O'Brien

### **Delivery Partners**

Glasgow Community Planning Partnership	Scottish Water
Glasgow Centre for Population Health	Scottish Environmental Protection Agency
Glasgow City Council Family	Strathclyde Partnership for Transport
NHS Greater Glasgow and Clyde	Third Sector Forum
Police Scotland	University of Glasgow
Scottish Fire and Rescue	University of Strathclyde
Scottish Government	Wheatley Group
Scottish Power Energy Networks	

### **With guidance from**

Adaptation Scotland	Community Council Discussion Forum
British Geological Survey	Roma Net Project
Joseph Rowntree Foundation	Education Scotland
BT	Scottish Ambulance
Lambhill Stables	First Bus Scotland
Climate Ready Clyde	Scottish Canals
Local Resilience Partnership	Glasgow and Clyde Valley Green Network
Clyde Gateway	Partnership
Metropolitan Glasgow Strategic Drainage	Scottish Council for Development and
Partnership	Industry
North Glasgow Housing Association	Glasgow Chamber of Commerce
PASCAL International Observatory	Glasgow Clyde College
Clydeplan	Scottish Enterprise
Poverty Leadership Panel	Glasgow Council for the Voluntary Sector

Scottish Natural Heritage  
Glasgow Disability Alliance  
Scottish Renewables  
Glasgow Economic Leadership  
SNIFFER  
Glasgow Homelessness Network  
Sustainable Glasgow Board  
Glasgow School of Art

The Wise Group  
Glasgow Urban Design Panel  
Transport Scotland  
Greenspace Scotland  
Volunteer Glasgow  
Interfaith Glasgow  
West of Scotland Regional Equalities  
Council