RESILIENT MELBOURNE

Preliminary Resilience Assessment

Identifying the Focus Areas for Melbourne's
Resilience Strategy (June 2015)

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100 RESILIENT CITIES

CITY OF MELBOURNE

Resilient Melbourne: Preliminary Resilience Assessment: Identifying the Focus Areas for Melbourne's Resilience Strategy is published by the City of Melbourne. It has been prepared in consultation with representatives of 31 metropolitan councils.

This document reports on Phase I of the Resilient Melbourne project, which is part of the 100 Resilient Cities initiative, funded by the Rockefeller Foundation.

Endorsed by Melbourne City Council 9th June 2015

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Executive summary

Resilient Melbourne's Preliminary Resilience Assessment reports on Phase I of the Resilient Melbourne project, which is part of the Rockefeller Foundation's 100 Resilient Cities initiative (100RC). Although the City of Melbourne is the sponsor of Resilient Melbourne and the publisher of this report, the project has involved collaboration across 31 of Melbourne's local government areas and will continue to work with them going forward.

100 Resilient Cities

100RC aims to help cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. Melbourne was selected from 372 applicants around the world to be among the first wave of 33 cities to join the 100RC network.

100RC defines urban resilience as 'the capacity of individuals, communities, businesses and systems in a city to survive, adapt and grow, no matter what chronic stresses and acute shocks they experience'. 'Chronic stresses' weaken the fabric of a city on a day-to-day or cyclical basis – examples include high unemployment, an overtaxed or inefficient public transportation system, endemic violence, and chronic food and water shortages. 'Acute shocks' are the sudden, sharp events that threaten a city, such as earthquakes, floods, disease outbreaks and terrorist attacks.

Melbourne's resilience

Melbourne is home to some 4.3 million people and spans nearly 10,000 km^2. It is growing rapidly, with a population of about 7.7 million people projected for 2051.

Although consistently rated as one of the world's most liveable cities, Melbourne remains vulnerable to a range of chronic stresses that weaken the fabric of communities, including unemployment, growing social deprivation, domestic violence and diminishing housing affordability. It is also vulnerable to acute shock events such as heatwaves, bushfires and flooding, all of which are expected to worsen and become more frequent as a result of climate change. Increasing globalisation, diversity and social inequality may also increase the risk of other shock events such as influenza pandemics or civil unrest.

In a city administered by 32 local governments, these shocks and stresses cannot be dealt with comprehensively by a single agency, or by each local council acting independently. The Resilient Melbourne project offers a collaborative approach.

Purpose of this Preliminary Resilience Assessment

This document reports on the cumulative efforts from Phase I of the development of a collaborative strategy to improve Melbourne's resilience:

- **It describes work done so far** to gather information and to understand Melbourne's major resilience challenges, approaches and opportunities.

- **It recommends five focus areas** for deeper analysis and broader engagement. We have chosen these focus areas after talking with leaders in the government, academic, business, infrastructure, emergency management, environment, community and health sectors. They were refined with the support of senior council executives and mayors across Melbourne.

- **It describes the next steps** to complete a Resilient Melbourne Strategy, so that by early 2016 we can be actively improving the resilience of Melbourne and its diverse communities.

The following five focus areas are proposed for Phase II. These have been informed by existing resilience networks and representatives of Melbourne's local government:
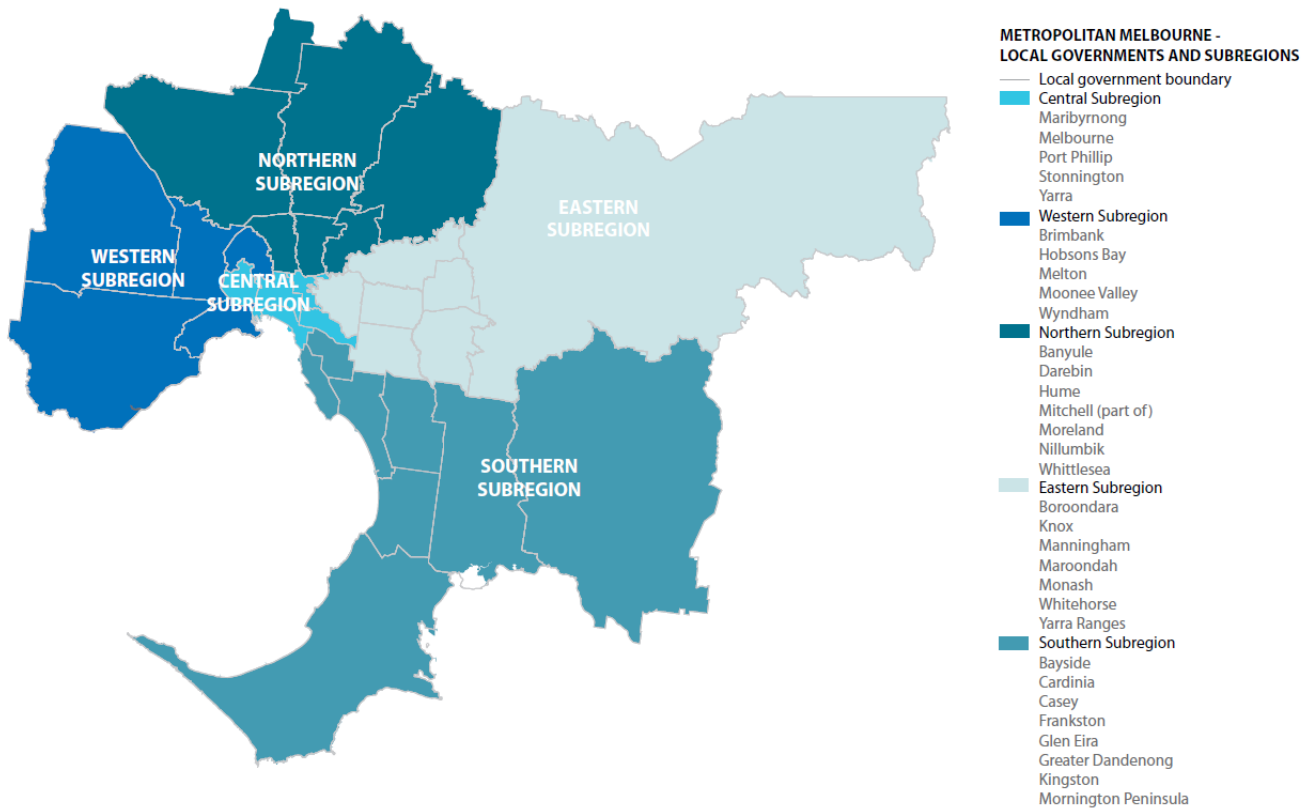
- Focus Area 1: a stronger society – how can we support individuals and communities to take more responsibility for their own and each other's health, wellbeing and safety?

- Focus Area 2: a better-connected society – how do we create and sustain places where our buildings, infrastructure and activities promote social cohesion, equality and health?

- Focus Area 3: a competitive metropolis – how do we create diverse local employment opportunities that support an agile workforce, prepared for the jobs of the future?

- Focus Area 4: a healthier environment – how do we preserve and strengthen our natural assets and ecosystems alongside a growing population?

- Focus Area 5: integrated plans and actions – how can existing and emerging policies and practices help make Melbourne more resilient?

Next steps

In completing Phase I of the Resilient Melbourne project, this Preliminary Resilience Assessment will go to Melbourne City Council, seeking its endorsement. In going to Council, this document will be on public record.

Phase II will involve setting up five Working Groups, comprising representatives of metropolitan municipalities and a range of multi-disciplinary participants, to consider the focus areas in detail, through in-depth analysis, broad engagement and developing targeted plans. These targeted plans will form the Resilient Melbourne Strategy. In Phase III we will implement the Resilience Strategy, as appropriate for councils, communities and organisations individually and collectively across Melbourne.

Figure 1: Melbourne – local governments and subregions

METROPOLITAN MELBOURNE - LOCAL GOVERNMENTS AND SUBREGIONS

— Local government boundary

Central Subregion
Maribyrnong
Melbourne
Port Phillip
Stonnington
Yarra

Western Subregion
Brimbank
Hobsons Bay
Melton
Moonee Valley
Wyndham

Northern Subregion
Banyule
Darebin
Hume
Mitchell (part of)
Moreland
Nillumbik
Whittlesea

Eastern Subregion
Boroondara
Knox
Manningham
Maroondah
Monash
Whitehorse
Yarra Ranges

Southern Subregion
Bayside
Cardinia
Casey
Frankston
Glen Eira
Greater Dandenong
Kingston
Mornington Peninsula

Resilient Melbourne adopts *Plan Melbourne's* division of Melbourne into five subregions, as shown in Figure 1. We consider 'Melbourne' as the entire metropolitan region, which is administered by 32 local government authorities, as listed above. This area spans nearly 10,000 km^2 and is home to some 4.3 million people.

Sometimes this document refers to inner, middle and outer areas, as this is another way that the city's municipalities are often grouped.

1. Context

1.1 Purpose

This document marks the end of the first stage (Phase I) of the development of a collaborative strategy to improve Melbourne's resilience:

- **It describes work done so far** to gather information and to understand Melbourne's major resilience challenges, approaches and opportunities.

- **It recommends five focus areas** for deeper analysis and broader engagement. We have chosen these focus areas after talking with leaders in the government, academic, business, infrastructure, emergency management, environment, community and health sectors. They were refined with the support of senior council executives and mayors across Melbourne.

- **It describes the next steps** to complete a Resilient Melbourne Strategy, so that by early 2016 we can be actively improving the resilience of Melbourne and its diverse communities.

1.2 Melbourne's resilience challenges

Melbourne is home to approximately 4.3 million people and spans nearly 10,000 km^2. It is growing rapidly, with a population of about 7.7 million people projected for 2051.

We are a creative and proudly diverse city, and a truly international one – our population originates from more than 200 countries, and international students increasingly form a significant part of our multicultural population.

Although Melbourne is consistently rated as one of the world's most liveable cities, we remain vulnerable to a range of chronic stresses that weaken the fabric of communities, including unemployment, growing social deprivation, domestic violence and diminishing housing affordability. We are also vulnerable to acute shock events such as heatwaves, bushfires and flooding, all of which are expected to worsen and become more frequent as a result of climate change. Increasing globalisation, diversity and social inequality may also increase the risk of other shock events such as influenza pandemics or civil unrest. (For a definition of *shocks* and *stresses*, see page 8.)

> **Melbourne snapshot**
>
> Melbourne is a rapidly growing city, home to 4.3 million people across 32 local government areas.
>
> Some 36 per cent of Melburnians were born overseas, and 32 per cent speak a language other than English.
>
> Growing industries include healthcare and social assistance, and professional services, while manufacturing is declining.
>
> Melbourne is becoming warmer, drier and more prone to extreme weather events.
>
> We are home to eight major universities and a wealth of research organisations.

Despite these challenges, Australians are known for their strong coping and survival skills in the face of catastrophic events, such as fires and floods, and major crises and historical changes, such as wars and immigration. Our experience in dealing with shocks and stresses is a strong foundation on which we can further build Melbourne's resilience. However, in a city administered by 32 local governments, these shocks and stresses cannot be dealt with comprehensively by a single agency, or by each local council acting independently.

1.3 100 Resilient Cities and the Resilient Melbourne Strategy

100 Resilient Cities (100RC) was pioneered by the Rockefeller Foundation and aims to help cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century.

Melbourne was selected from 372 applicant cities around the world to be among the first wave of 33 cities to join the 100RC network. We were chosen because we were judged to be a leader in addressing many resilience issues, and a city that would be willing to test and adopt further innovations.

We were also selected because we face a range of natural hazards, including extreme heat, bushfires, floods, coastal inundation and health risks caused by rising temperatures. There are threats to our aquatic biodiversity, water quality and availability, food security and transport networks. At the same time, we have a rapidly expanding and increasingly diverse population, faced with rising inequality in ever more competitive regional and global economies.

Melbourne's governance arrangements present impediments to coordinating Melbourne-wide responses. Improving the resilience of Melbourne brings valuable opportunities for local councils to collaborate on matters that do not stop at municipal boundaries.

Chronic stresses and acute shocks rarely happen in isolation. By considering shocks and stresses in the same strategy, a city can respond better to adverse events and be more effective in delivering core functions and services, in both good times and bad. In addition, by addressing the shocks associated with potential hazards, cities can earn a 'resilience dividend': other financial and social benefits derived from investing in actions that increase resilience.

100RC definitions

Urban resilience
This is the capacity of individuals, communities, businesses, institutions and systems in a city to survive, adapt and grow, no matter what chronic stresses and acute shocks they experience.

Chronic stresses
These weaken the fabric of a city on a day-to-day or cyclical basis. Examples include high unemployment, an overtaxed or inefficient public transportation system, endemic violence, and chronic food and water shortages.

Acute shocks
These are the sudden, sharp events that threaten a city. Examples include earthquakes, floods, disease outbreaks and terrorist attacks.

The 100RC definition of resilience is reflected in the City Resilience Framework, shown in Figure 2.

The City Resilience Framework defines four dimensions of resilient cities. These correlate well with Victoria's current risk framework for emergency response, relief and recovery:

1.   health and wellbeing of individuals (people)

2.   economy and society (organisation)

3.   infrastructure and environment (place)

4.   leadership and strategy (knowledge).

Within the four dimensions are 12 drivers: the fundamental attributes of a resilient city. More detail is provided in Appendix A.

Figure 2: the City Resilience Framework

1.4 A truly Melbourne-wide approach

A resilient community is one that works together to understand, prepare for and cope with the hazards and risks that it faces. This is the collective responsibility of all sectors of society: national, state and local governments; businesses; non-government organisations and individuals. If we all work together with a united focus and a shared sense of responsibility to improve resilience, we will achieve far more than the individual efforts of any one sector.

Although there are numerous strategies and plans to address many of Melbourne's shocks and stresses, there is no single agency responsible for the entire metropolitan area. Many resilience-related services are managed by the Victorian Government but are delivered locally by municipal councils. 100RC's funding for a Chief Resilience Officer and a Resilient Melbourne Strategy is an opportunity for Melbourne as a whole to improve the long-term viability, safety and wellbeing of our interconnected communities and municipalities, and to be more effective and efficient through improved coordination and integration.

Although the City of Melbourne hosts the Chief Resilience Officer, the Resilience Melbourne Strategy will be developed by, and will benefit, all of Melbourne. This will need Melbourne's 32 local government authorities, various Victorian and Australian government agencies, industry and the community sector to work together to achieve tangible benefits for the resilience of communities – from Hobsons Bay to Hume, Melton to Mornington Peninsula Shire, Wyndham to Whittlesea.

By leading the way and demonstrating new ways of collaborating across Melbourne's 32 councils, we can reinforce our reputation as an international city that is willing and able to innovate.

Equally, the process of developing the Resilient Melbourne Strategy gives us a rare opportunity to take a new look at collective resilience-building actions that will benefit us at both the Melbourne-wide and local levels. We can achieve great things by acting collectively on matters that local governments must currently deal with individually or, at best, regionally.

2. Identifying focus areas

This section describes the significant work done so far to gather information and to better understand Melbourne's major resilience challenges, approaches and opportunities.

100RC requires every city in the 100RC network to use a common framework for developing its Resilience Strategy, as shown in

Figure 3 below. Within that framework, the Resilient Melbourne Strategy will be unique and relevant to our city.

The process involves:

- **Phase I** – selecting a small number of focus areas that could profoundly influence the city's resilience in coming decades (the cornerstone of this document).

- **Phase II** – considering the focus areas in detail, through in-depth analysis, broad engagement and developing targeted plans. These targeted plans will form our Resilience Strategy.

- **Phase III** – implementing the Resilience Strategy, as appropriate for councils, communities and organisations individually and collectively across Melbourne.

Figure 3: 100RC Resilience Strategy process
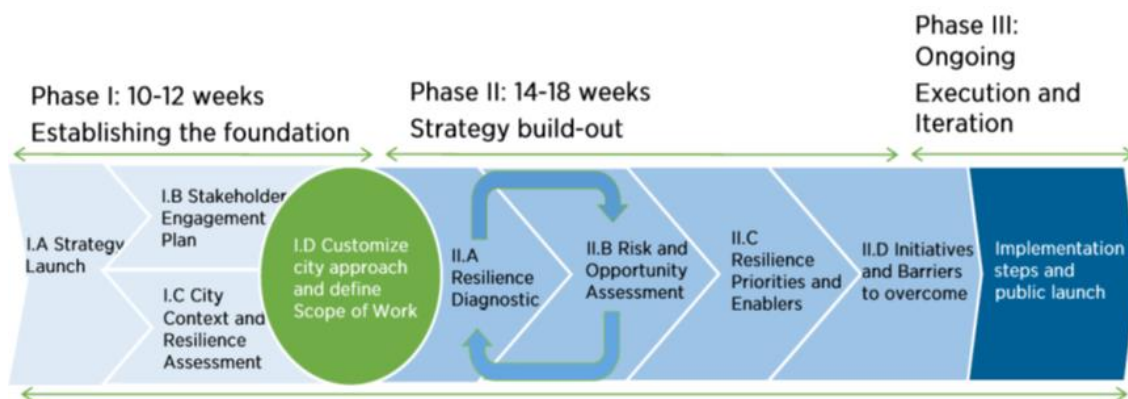
This Preliminary Resilience Assessment is the culmination of significant work in Phase I to gather information and to understand more deeply Melbourne's major resilience challenges, approaches and opportunities. The main result of the Preliminary Resilience Assessment is five focus areas. In Phase II, Working Groups will analyse these more deeply and discuss them more broadly.

Figure 4 highlights the activities conducted in Phase I. These are described further in this section.

Figure 4: Phase I activities undertaken

2.1 Resilient Melbourne Steering Committee

A steering committee was established at the start of Phase I to provide strategic advice to the Chief Resilience Officer on developing and implementing the Resilient Melbourne Strategy. Bringing together representatives of the Victorian Government, local government and the City of Melbourne, committee members represent agencies that currently have a role in urban resilience across Melbourne. They are listed in Appendix B, together with the committee's terms of reference.

The Resilient Melbourne Steering Committee guides the development of the project, reviews and provides advice on key documents, and has participated in stakeholder engagement activities to achieve a thorough and effective Preliminary Resilience Assessment and initial high-level resilience thinking for Melbourne.

2.2 Desktop research

The Resilience Project Team has undertaken wide-ranging desktop research to better understand the many resilience efforts already under way in Melbourne municipalities; the city's governance arrangements; and the demographic, economic and environmental context of Melbourne. This research was conducted using a combination of tools provided by 100RC and tailored investigations reflecting Melbourne's specific circumstances. The findings delivered a sound factual basis to support discussions about building a more resilient Melbourne. Key elements of the background research have been incorporated into this report.

2.3 Targeted interviews and regional meetings

The Resilience Project Team met with a range of representatives from the Victorian Government, local government, businesses and other sectors. Again, these targeted interviews helped to inform the Chief Resilience Officer and the Resilience Project Team's thinking, as well as being useful for stakeholder roundtable meetings. These meetings and discussions remain critical to building stakeholder involvement with, and support for, this project.

2.4 Stakeholder roundtable meetings

In preparation for two meetings with Melbourne local government leaders, four stakeholder roundtable meetings were held, first with CEO's and then with Mayors and CEO's (described in section 2.8). These involved representatives of the academic, business, infrastructure, environment, community and health sectors.

Participants were asked what they believe to be the most important factors that determine Melbourne's current and future ability to prepare for, avoid and withstand various shocks and stresses. A factor could be an asset, system, practice or procedure that affects Melbourne's resilience.

A separate meeting on emergency management was held with the State Risk and Resilience Subcommittee.

A total of 217 factors were recorded from the roundtable discussions.

Participants were asked to rate Melbourne's current and expected future performance in each factor, on a three-point scale: 'Area of strength', 'Doing well, but can improve' or 'Need to do better'. Following the sessions, the factors were grouped against the 'dimensions' and 'drivers' of resilience according to the City Resilience Framework perceptions tool, as shown in Figure 5 below.

Figure 5: stakeholder perceptions mapped against the City Resilience Framework 'drivers' of resilience
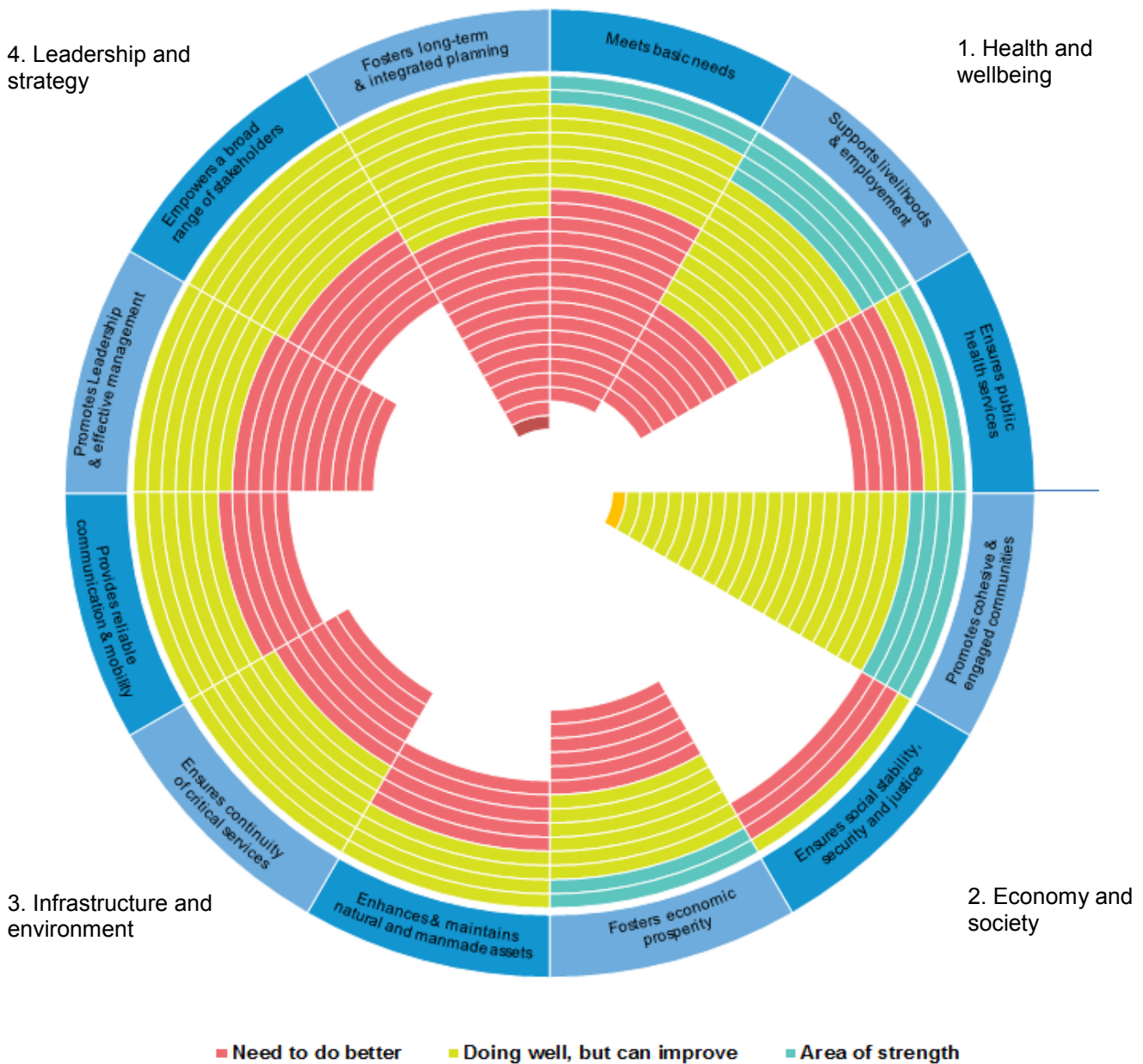
The stakeholder roundtable meetings and the results of the 100RC perceptions tool provided valuable data on which to base a preliminary list of potential focus areas (see Appendix C). Those consulted viewed 'long-term and integrated planning' and 'cohesive and engaged communities' as the most important factors supporting resilience in Melbourne. Although some stakeholders saw 'cohesive and engaged communities' and 'supporting livelihoods and employment' as strengths in Melbourne, overall they noted significant potential for improvement.

Factors commonly identified as being most relevant to Melbourne's resilience are listed in Table 1:

Table 1: ten most common factors affecting Melbourne's resilience:

1. Evidence-based, longer-term political decision-making
2. Well-defined and understood accountabilities across government, industry and communities
3. Well-planned and managed growth and demographic change
4. Active citizenry and social capital
5. Cohesive and connected communities on a local scale, that recognise and draw on the knowledge and expertise of culturally and linguistically diverse communities
6. Reliable energy supply and essential services
7. Affordable and diverse housing
8. A society that is adaptable and open to innovation, built on education and skills training fit for our globally oriented future
9. Density and distribution of jobs – people able to live near where they work
10. Preparedness for shock events such as heatwaves and floods

2.5 Understanding Melbourne's key stresses and shocks

Chronic stresses

All Victorian councils are required to produce a Municipal Public Health and Wellbeing Plan every four years. Since 2010, under the *Climate Change Act 2010* these plans must consider the potential effects of climate change on human health. These plans take stock of the current and emerging issues relevant to maintaining healthy and resilient communities, the majority of which fit the 100RC definition of 'stresses'. At the state level the Victorian Government prepared, as required by the *Public Health and Wellbeing Act 2008*, the *Victorian Health and Wellbeing Plan 2011–2015*. This served as the key resource for identifying Melbourne's chronic stresses during Phase I.

Even though stresses and shocks are presented in Tables 2 and 3 as separate lists, chronic stresses, shocks and the cycles they can create are all interconnected. For example, extreme weather events have been found to cause depression in affected communities, which can in turn contribute to alcohol abuse and family violence.

Table 2: major current and future stresses for Melbourne

Alcohol and drug abuse	Alcohol-related and drug-related harms are increasing. Across Victoria, heavy drinking among young adults is rising significantly – from approximately 25 per cent of young adults in 2002 to over 40 per cent in 2009.
Climate change	Over the coming decades, Melburnians can expect lower average rainfall and higher temperatures, which will result in less runoff and lower drinking water yields, while drier soil conditions will damage underground services such as pipelines for water, sewage and stormwater. More frequent extreme events such as heatwaves, floods and bushfires will also disproportionately affect vulnerable community members such as older, poor and homeless people.
Development pressures on ecosystem services	In response to the growing population, rezoning and infill development are resulting in higher population densities in inner and middle Melbourne, while extensive new residential and industrial developments in outer areas continue Melbourne's urban sprawl. This is placing pressure on ecosystem services such as fresh air and a clean and plentiful drinking water supply.
Family violence	Across Victoria, there was an 8 per cent increase in reports of family violence between 2012–13 and 2013–14. Although rates are even higher in country areas, domestic violence is a major problem in Melbourne.
Higher rates of chronic illnesses	Although some health risk factors (such as the rate of people smoking) have decreased, others, such as obesity, have increased. Rates of heart disease, cancer, osteoporosis, stroke, diabetes and depression are all predicted to rise.
Increased incidence of age-related diseases and disability	Our population is ageing, and as life expectancies increase, so too does the likelihood of individuals experiencing age-related diseases and disability.
Increasing pressure on healthcare services	The above stresses are all placing increasing strain on Melbourne's health services. This will be exacerbated as our population continues to grow.
Increasing social inequality	Residents of inner and middle Melbourne generally enjoy higher levels of urban amenity, including greater access to public transportation, essential services, and employment in and near the city centre. Residents of outer Melbourne are more likely to rely on cars for transport to work, school and services, which can be more expensive and can diminish individual health and community cohesiveness.

Lower rates of community participation	The demands of modern life and the increasing numbers of new arrivals are changing the way in which Melburnians participate in their communities. For example, over recent years there has been a drop in the percentage of Melburnians who belong to a sporting or recreational club. Councils also report lower levels of volunteerism, which increases their costs and diminishes their ability to deliver services.
Radicalisation and terrorism	Terror attack has emerged over the past decade as a significant risk for cities and their communities. Melbourne is home to many international and national major events that may add to this perceived risk.
Unemployment, particularly among young people	Factors such as a stalling global economy and a decline in Melbourne's manufacturing industry have worsened unemployment. Melbourne's unemployment rate increased from 4.9 per cent in December 2010 to 6.5 per cent in December 2014. Melbourne's current rate of youth unemployment (persons aged 15–24) is 14.2 per cent.

Acute shocks

In 2014 the Victorian Government published *Emergency Risks in Victoria: Report of the 2012–13 State Emergency Risk Assessment* (SERA). Produced as part of the National Strategy for Disaster Resilience, SERA provides information about a range of important emergency-related risks, and compares their relative severity.

The risks identified in SERA are comparable to the 100RC definition of a 'shock'. For this reason SERA was used as the principal source to identify the main shocks to be considered in the Resilient Melbourne Strategy, although taking into account the fact that the resilience strategy will apply at a metropolitan, rather than state-wide, level.

It should be noted that the metropolitan and state-wide efforts to build resilience are complementary and integrated.

Table 3: shocks of greatest relevance to Melbourne, now and in the future

Bushfire	Although not a high risk for inner-metropolitan municipalities, bushfires remain a significant danger for outer-metropolitan municipalities such as Yarra Ranges, Whittlesea, Nillumbik and Mornington Peninsula Shire. Major growth areas such as Melton, Wyndham and Hume are also vulnerable to grassfire.
Flood (riverine, stormwater and coastal)	A risk across most of Melbourne, particularly in bayside municipalities and along Melbourne's major rivers and creeks.

Transport infrastructure emergency	Melbourne's road, tram and train networks rely on a range of physical, electromechanical and electronic infrastructure elements to maintain safe and effective operations. Damage caused by failure of or within the transport system infrastructure could impair the operations of those networks, as well as causing death and injury.
Heatwave	A risk across Melbourne, although other areas of Victoria (such as the Mallee district) are at even greater risk.
Electricity supply disruption	Melbourne relies heavily on electricity transmission and generation infrastructure located outside the metropolitan region.
Influenza pandemic	A risk to all of Melbourne, but might cause the greatest problems in inner-metropolitan municipalities, where large numbers of people who live all over Melbourne come to work.
Hazardous materials incident	A risk across Melbourne, although immediate effects are more likely in heavily industrialised municipalities, such as Brimbank.
Marine pollution	A risk mostly in bayside municipalities and for those industries reliant on a healthy bay environment, with possible repercussions for other metropolitan municipalities.
Cyber attack	An emerging risk, with the potential to affect all of Melbourne, particularly the business sector.

2.6 Understanding Melbourne's critical infrastructure

The Chief Resilience Officer has liaised with Victorian Government agencies to understand how the state determines which infrastructure is critical relevant to Melbourne's resilience, and how it then assesses risks and puts in place appropriate strategies and actions to mitigate those risks.

The Victorian Government's *Roadmap for Victorian Critical Infrastructure Resilience* informed the development of its *Critical Infrastructure Resilience Interim Strategy*. That strategy identifies priorities and sets out new management arrangements for critical infrastructure resilience in Victoria. It is part of Victoria's broader emergency management reform plans. Issues and structures associated with both of these documents are currently being reviewed at federal and state levels, with results to be released following June 2015. Phase II of the Resilient Melbourne project will take account of any relevant changes at that time.

The two Victoria-wide documents, above, generally consider emergency management and critical infrastructure as part of an 'all hazards' approach. This recognises that hazards and critical infrastructure are necessarily complex and highly interdependent, both physically and through a host of information and communications technologies. These documents also acknowledge the changing and complex risk environment of the 21st century – this has, in turn, informed our approach.

The Resilient Melbourne project links directly to the Victorian Government through the Steering Committee, which includes representatives of Emergency Management Victoria and the Department of Premier and Cabinet (which is concerned with broader resilience management across Victoria).

2.7 Understanding existing efforts to build resilience

Across Melbourne, councils, government agencies, community groups and individuals are already undertaking a range of actions that contribute to the resilience of our city. These actions take the form of plans, strategies, engagement tools, programs, projects, initiatives, legislation and informal practices. While many do not specifically state 'resilience' as their aim, each plays a role in Melbourne's current ability to survive and thrive in the face of shocks and stresses.

Further activities by councils to support resilience include:
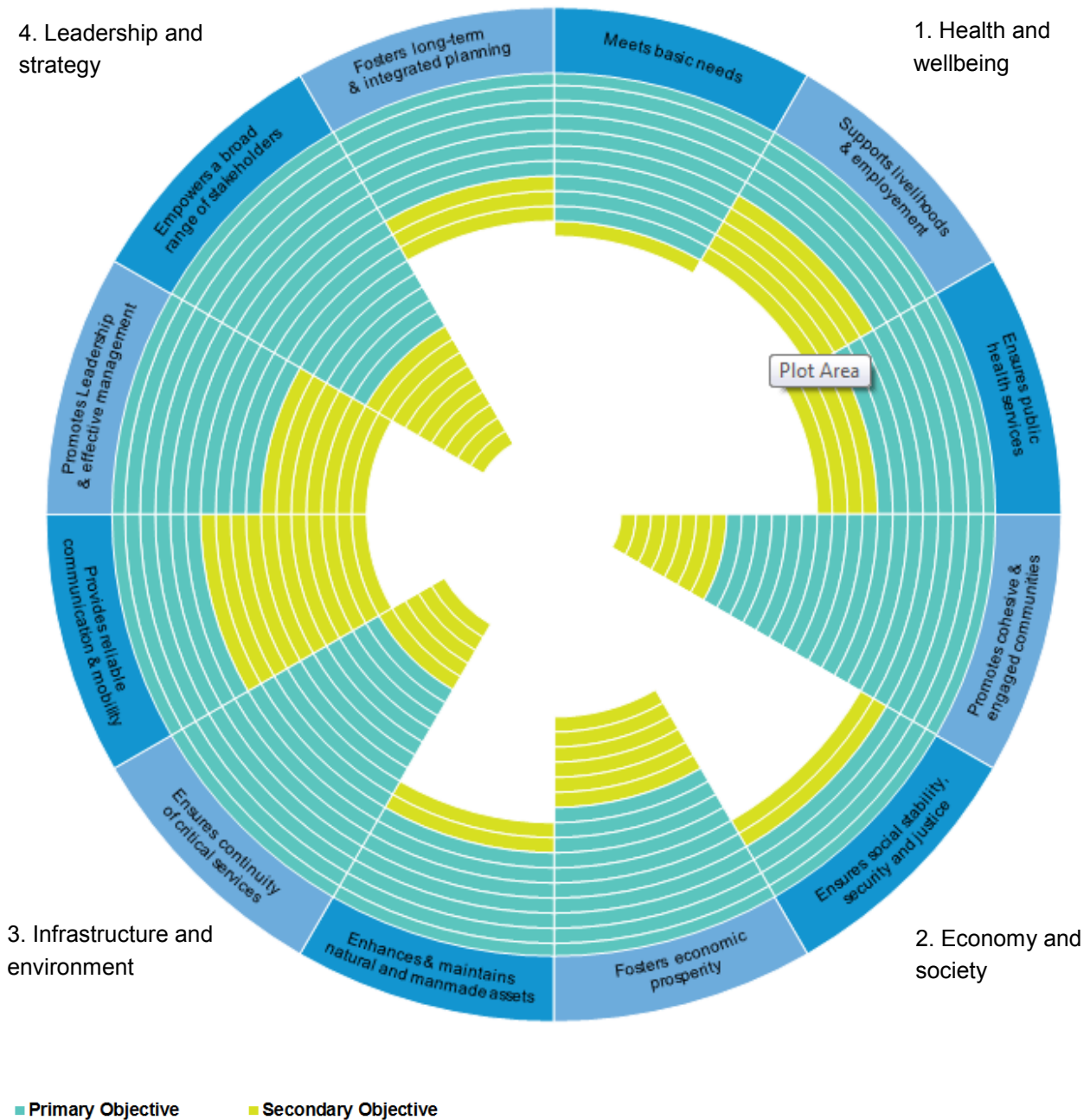
- a broad range of community development activities

- climate mitigation and adaptation

- water-sensitive urban design

- fostering local businesses

- addressing local infrastructure needs.

Through desktop research and discussions with a broad range of stakeholders, the Resilience Project Team produced an inventory of existing actions contributing to Melbourne's resilience. These were grouped according to the 'drivers' of resilience, as shown in Figure 6 below.

This inventory of 84 actions is not an exhaustive list, but it does provide important information for Phase II and will help ensure that we build on existing structures and efforts, and avoid duplication, in keeping with the guiding principles of the Resilient Melbourne Strategy as illustrated in section 3.1.

A very important benefit of this project is the opportunity to better understand and learn from the leading approaches already being taken in our city, and to apply them more broadly so that they can benefit even more individuals and communities across Melbourne.

Figure 6: existing resilience-building actions mapped against the City Resilience Framework 'drivers' of resilience

4. Leadership and strategy

1. Health and wellbeing

3. Infrastructure and environment

2. Economy and society

■ Primary Objective   ■ Secondary Objective

2.8 Meeting of chief executive officers of metropolitan councils

Desktop research and the consultation described in sections 2.1 - 2.4 enabled a list of potential focus areas to be created (see Appendix C), which was presented to the metropolitan chief executive officers (CEOs) for consideration at a meeting on 12 March 2015. CEOs or their delegates from 25 metropolitan councils were in attendance.

At the meeting, CEOs were asked to consider gaps in the list and discuss how potential focus areas could be grouped to form a manageable number that could deliver greatest benefit to Melbourne and its communities.

2.9 Meeting of mayors and chief executive officers of metropolitan councils

The feedback from the meeting of chief executive officers led to the formulation of five proposed focus areas, which were distributed to mayors and chief executive officers of metropolitan councils before a meeting on 8 April 2015.

The meeting was attended by representatives of 27 metropolitan councils. Participants discussed the focus areas at tables, each of which was hosted by a Resilient Melbourne Steering Committee member. There was strong agreement that the focus areas were appropriate overall, pending some minor refinements, which are reflected in Section 3 of this document.

Councils were also given an opportunity to identify specific focus areas to which they would like to actively contribute in Phase II, either as a leader or member of a Working Group. Section 3 outlines the focus areas, including those councils wishing to participate in Working Groups.

In total 29 of the 32 councils were engaged through this process.

3. Five focus areas

In Phase II of Melbourne's Resilience Strategy, participants will analyse more deeply and discuss more broadly the five focus areas. This will help ensure that we choose the right practical projects for implementation in Phase III – projects that bring tangible benefits to communities, with effects felt today and by future generations. This section describes the proposed focus areas, including why each has been selected.

3.1 Cross-cutting approach

The 100RC process recommends that focus areas address specific shocks or stresses (for example, extreme heat, homelessness) or, alternatively, that they address a cross-cutting issue relevant to a range of shocks, stresses and challenges facing a city. The five focus areas chosen for Melbourne take the latter approach, looking at issues that can be addressed by local government and that can have profound benefits across a wide range of possible shocks and stresses.

For example, most of the focus areas have the potential to reduce the effects of extreme heat, even though there is no focus area specifically targeting the problem of extreme heat. Fostering increased personal responsibility for health and wellbeing (Focus Area 1), developing places that support social cohesion (Focus Area 2) and strengthening natural assets and ecosystems (Focus Area 4) all have the potential to reduce the increased mortality and morbidity (deaths and illness), infrastructure maintenance and service disruptions caused by extreme heat. But the benefits will not be confined to an improved resilience to extreme heat – we can also expect improved resilience to bushfires and floods, lower rates of chronic illness, and improved access to public open spaces, to name just a few.

All the proposed focus areas are interdependent, meaning cross-collaboration will be crucial for success. For example, natural assets and ecosystems (Focus Area 4) and diverse local employment opportunities (Focus Area 3) are both important considerations in creating places that support social cohesion (Focus Area 2). Shocks or stresses of most relevance to a particular focus area have been listed against each.

3.2 Structure of this section

The focus areas are posed as questions, to reflect that we will still be in the enquiry stage (Phase II) of developing the strategy. This is consistent with the 100RC process. While the Resilient Melbourne Strategy will not move into a delivery phase (Phase III) until early 2016, opportunities to achieve 'quick wins' through early collaboration in Phase II will be pursued where possible.

For each of the five focus areas, this section outlines:

- potential research questions to be addressed in Phase II of the Resilient Melbourne Strategy, as identified by council leaders and broader stakeholders during Phase I consultation. These questions were largely identified by mayors and chief executive officers at two roundtable meetings, then were refined, linked and prioritised.

- related chronic stresses and acute shocks. All focus areas have the potential to benefit Melbourne's resilience to multiple stresses and shocks.

- examples of relevant existing programs and initiatives from across Melbourne. These are indicative examples only.

- indicative projects. These help illustrate what a potential future project *may* look like. All were referred to during at least one roundtable meeting. Some projects already exist and could be expanded upon. Others are ideas that may be worthy of future enquiry.

- metropolitan councils that will actively contribute to focus area Working Groups in Phase II.

The many interactions and guidance gathered for this project have led to the development of Guiding Principles that will frame all project activities.

The Guiding Principles are:

1. Build on existing structures

2. Avoid duplication

3. Deliver tangible outcomes for communities

Focus Area 1: a stronger society

How can we support individuals and communities to take more responsibility for their own and each other's health, wellbeing and safety?

Rationale

Participants at stakeholder roundtable meetings identified self-reliance and personal responsibility for health, wellbeing and safety as critical factors for the future resilience of Melbourne. The Australian Government's *National Strategy for Disaster Risk Reduction* has also identified this as fundamental to communities' welfare and resilience.

Too often, individuals and communities have been unprepared when faced with major shocks such as bushfires. This has put them at greater risk and has placed additional strain on the resources of government and community organisations. Strengthening communities enables individuals to better respond to, and recover from, shock events and to reduce the incidence and consequences of existing and future stresses. This in turn places less strain on the limited resources of government and community organisations. It also empowers communities and fosters social cohesion.

Rapid population growth and demographic and lifestyle changes are causing greater day-to-day demands on many healthcare and other services. For example, more than 22,000 Victorians are homeless or marginally housed and, of these people, about half are under 25 years of age. Increasingly sedentary lifestyles drive up rates of illnesses such as diabetes and obesity, and we are also witnessing increasing rates of mental illness (across Australia, the cost of mental illness has been estimated at $20 billion every year).

These demands on our healthcare and service systems are likely to be exacerbated by the projected increase in the frequency and severity of extreme climate events (such as heatwaves), which disproportionately harm vulnerable people: those who are older, socially disadvantaged, have physical and mental health problems, or live alone.

Agencies across Australia, from Australian Government to community organisations, are working to understand how to help people take responsibility for their own and each other's health, wellbeing and safety. Knowledge and awareness of community members is one piece of the puzzle – the Victorian Department of Health and Human Services, councils and various community organisations (such as the National Heart Foundation and Beyondblue) produce community awareness materials aimed at avoiding preventable illnesses. However, knowledge does not always translate into action. Another piece of the puzzle demands attention is what *drives* communities and individuals to be more prepared.

This focus area is designed to support and align with existing efforts, as well as being an opportunity to investigate new approaches and explore a Melbourne-wide effort, informed by international thinking and participation by essential local agencies.

Potential research questions for Phase II

1. How can we learn from existing local, national and international approaches to engage citizens and promote active citizenry? Could these approaches be expanded across Melbourne?

2. How can we best foster the next generation of community leaders?

3. What is the role of volunteering in developing healthy, safe and connected communities? How can we learn from, and build upon, Melbourne's existing culture of volunteerism?

4. What opportunities do social media offer for engaging with individuals and communities on health, wellbeing and safety?

5. How do we reverse the disempowerment of some communities, and deal with the prospect of more diverse and potentially fragmented communities in the future?

6. How do we improve communication with, and connectedness to, culturally and linguistically diverse groups?

7. How can we enable communities and individuals to understand and prevent the root causes of radicalisation?

> **Examples of projects suggested in roundtable meetings**
>
> - build programs based on the community leadership approach being taken by north-west metropolitan councils
>
> - include resilience information in community events and programs
>
> - include community resilience tools in online platforms such as ourcommunity.com.au

Stresses

- alcohol and drug abuse

- growing population and demographic change

- increasing social inequality

- increasing pressure on healthcare services

- lower rates of community participation

- increased incidence of age-related diseases and disability

- higher rates of chronic illnesses

- youth homelessness

Shocks

- pandemics

- extreme heat

- flooding

- extremist acts

Examples of existing programs and initiatives in Melbourne

- Municipal Health and Wellbeing Plans (all councils)

- Victorian Homelessness Action Plan 2011–2015 (Department of Health and Human Services)

- Pathways: Homelessness Strategy 2014–2017 (City of Melbourne)

- Melbourne For All People Strategy 2014–2017 (City of Melbourne)

- Staying Healthy in the Heat (Department of Health and Human Services)

- Cultivating Community (community organisation)

- Community gardens, festivals and events

- Casserole Club – home-cooked meals for people unable to cook for themselves

- Emergency Management Planning for Children and Young People (Department of Health and Human Services)

- Nillumbik Positive Ageing Strategy (Nillumbik Shire Council)

- Blueprint for an Active Australia (National Heart Foundation)

- Leading the Way: Councils Creating Healthier Communities (VicHealth)

- Walking Plan 2014–2017 (City of Melbourne)

- Western Areas Resilience Program (Melton and Wyndham City Councils).

Metropolitan councils participating in Phase II Working Group

- Hume

- Knox

- Manningham

- Maribyrnong

- Stonnington

- Yarra Ranges

Focus Area 2: a better-connected society

How do we create and sustain places where our buildings, infrastructure and activities promote social cohesion, equality and health?

Rationale

Community cohesion and a willingness to support our fellow city residents help to reduce the stresses that, if left unchecked, eventually erode the fabric and functioning of society. The built form of our cities and neighbourhoods can either support and promote, or work against, the types of community connections and interactions that Focus Area 1 seeks to encourage. Furthermore, infrastructure and connectedness profoundly influence social and economic outcomes. For example, travel times and traffic congestion have been closely linked to incidents and levels of domestic violence; businesses prefer to invest in locations that are dynamic and encourage connection and innovation.

Victoria's population grew by more than 475,000 people between 2007 and 2012; of these, 43 per cent were concentrated in six outer metropolitan municipalities: Casey, Cardinia, Hume, Melton, Whittlesea and Wyndham. These councils are among the fastest-growing areas of Australia. A 2012 parliamentary inquiry into liveability in outer-suburban Melbourne found that this rapid rate of growth 'has placed significant pressure on existing infrastructure and created strong demand for new infrastructure'.[1] Communities in these areas are noted as being at risk of lower access to employment, services and transport and they may become isolated and disconnected.

In inner Melbourne, the trend is towards increasing population density. The City of Melbourne's residential population grew by 152 per cent (100,240 people) in the 10 years to 2011, and is projected to reach 198,000 by 2030. In the middle-Melbourne municipalities, the trends vary. Although population densities and numbers are growing in metropolitan local government areas overall, some of the more established and affluent municipalities are attempting to maintain the existing character of suburbs by strictly limiting infill development and subdivision.

While the specific challenges will vary across our city, all areas of Melbourne will face increasing pressures as they try to develop and maintain cohesive, equitable and liveable communities. The under-provision of community amenities, and poor-quality high-rise developments in some areas are threatening the health and wellbeing of an ever-growing portion of Melbourne's population.

Focus Area 2 will explore ways to develop hard and soft infrastructure that encourages social cohesion, equality and health. Such infrastructure may include affordable and appropriate housing, efficient transport networks, walkable neighbourhoods, and accessible activities and community infrastructure (including healthcare, educational facilities and recreational spaces). This focus area will explore and make connections between two areas that are often perceived as mutually exclusive: hard infrastructure and what communities need, not just to function, but to flourish.

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[1] *Inquiry on Growing the Suburbs:* Infrastructure *and Business Development in Outer Suburban Melbourne*

Potential research questions for Phase II

1. How can we ensure that our urban development and infrastructure (such as public open space, transport, health and education facilities) have social cohesion, equality and health at their core?

2. How can we better integrate efforts across all levels of government and the community sector to tackle critical obstacles to affordable, accessible and social housing?

3. Which community groups are most at risk of becoming isolated or disconnected as Melbourne continues to grow?

4. What can be done to encourage long-term thinking and to depoliticise land-use planning, in order to achieve longer-term objectives and maximise community benefits across all of Melbourne?

> **Examples of projects suggested in roundtable meetings**
>
> - build on the 'shared society' – support increased car-pooling
>
> - provide easier access to free drinking water in public places
>
> - build a model new development designed on resilience principles
>
> - build a truly Melbourne-wide bicycle network

5. How can the property development sector play a more active role in ensuring future communities are cohesive, inclusive and healthy?

6. How can we strengthen and make better use of existing infrastructure (such as public libraries and private shopping areas) to promote connected and cohesive communities?

Stresses

- increasing social inequality, including housing affordability pressures

- unequal access to open space and recreational facilities

- growing population

- higher rates of chronic illnesses

- increasing diversity

- ageing and stressed infrastructure

- climate change

- social isolation

Shocks

- electricity supply disruption

- extreme heat

- civil unrest

- flooding

- infrastructure failure

Examples of existing programs and initiatives in Melbourne

- Plan Melbourne (Department of Environment, Land, Water and Planning)

- National State of the Assets Report (Australian Local Government Association)

- Leading the Way: Councils Creating Healthier Communities (VicHealth)

- Victorian Critical Infrastructure Resilience Strategy (Department of Premier and Cabinet)

- Built Environment Adaptation Framework (Australian Sustainable Built Environment Council)

- The Victorian Adaptation and Sustainability Partnership (VASP) – commitment between State Government and Victorian councils

- Inner Melbourne Action Plan (Melbourne, Stonnington, Yarra, Port Phillip and Maribyrnong councils)

- Smart Blocks (Strata Community Australia)

- Council Strategic Plans (all councils)

- Victorian Planning Schemes (Department of Environment, Land, Water and Planning)

- Walking Plan 2014–2017 (City of Melbourne)

- Walkability Case-study (Australian Urban Research Infrastructure Network)

- Transport Walkability Index for Metropolitan Melbourne (VicHealth and University of Melbourne)

- FireReady app (Country Fire Authority)

Metropolitan councils participating in Phase II Working Group

- Banyule

- Boroondara

- Darebin

- Kingston

- Melbourne

- Port Phillip

Focus Area 3: a competitive metropolis

How do we create diverse local employment opportunities that support an agile workforce, prepared for the jobs of the future?

Rationale

The overall economic performance of Melbourne significantly influences its resilience as a whole, as well as at community and individual levels. While Melbourne's strong, diverse, growing and globally interconnected economy leaves us relatively well placed to respond to difficult economic conditions, the future economy appears volatile and competitive. Melbourne competes in a rapidly changing global market where concerted global action (to address climate change for example) would directly affect our competitiveness. Improved understanding of risks from natural hazards is forcing risk-sharing, raising insurance costs and affecting traditional supply chains.

A significant decline in Melbourne's manufacturing sector has contributed to a notable increase in the unemployment rate, from 4.9 per cent in December 2010 to 6.5 per cent in December 2014. This increase has been felt disproportionately in the rapidly growing outer municipalities of Melton, Hume and Brimbank, as well as in the City of Greater Dandenong. This is coupled with significant increase in the percentage of jobs located in the central city (including Docklands), resulting in more people travelling long distances from outer municipalities to work.

Additionally, about 70 per cent of all Australians are employed in small and medium-sized enterprises. This is also broadly true of Melbourne, particularly in some middle and outer municipalities. While small and medium-sized enterprises provide significant employment, they are also the most vulnerable to shocks and stresses.

Having a job connects citizens to communities of interest and support. It also enables them to buy services such as insurance and provides income that they can use to bounce back from shock events. Opportunities for diverse and fulfilling employment also help to mitigate a range of chronic stresses, such as homelessness, poverty, mental illness and domestic violence.

The structure and governance of our city means that we tend to look at economic issues within specific municipalities or in regional groupings. The Resilient Melbourne Strategy presents a valuable opportunity to consider the employment needs and competitiveness of our city as a whole, to consider social needs alongside environmental and other hazards that could undermine local economies. Focus Area 3 will explore how we can foster an agile and diverse economy across Melbourne, so that we can thrive, not just survive, under constantly evolving global economic circumstances.

Potential research questions for Phase II

1. How can local government best contribute to diversifying the economy of Melbourne? Can we learn from local government success stories in this area, particularly in Victoria as well as internationally?

2. How can we best support business generally, and SMEs specifically, to become more resilient, including improving business continuity?

3. How should capital and financial services providers play a role in building and promoting resilience?

Examples of projects suggested in roundtable meetings

- work with the insurance sector to develop new products that help small to medium enterprises rebuild after an extreme event

- establish new innovation precincts around Melbourne's gateways and university hubs

30

4. How can we promote greater innovation and economic diversity by building collaborations with each other, academia, private sector and the community?

5. What are the costs and benefits of the increasing emphasis on the Central Business District (CBD) as a place of employment for Melbourne?

   o Should we be seeking to broaden the distribution of employment, so that more people live near to where they work?

   o How can local employment support a healthier environment in Focus Area 4?

Stresses

- unemployment

- youth unemployment

- ageing population

- over-reliance on specific industries

- disruptive business models and rapid economic change

- global regulations

Shocks

- pandemics

- extreme heat

- flood

- bushfires

Examples of existing programs and initiatives in Melbourne

- Lead West alliance involving Brimbank, Hobsons Bay, Maribyrnong, Melton and Wyndham councils

- Economic Development Strategies and Action Plans (many councils, such as Yarra and Monash)

- Industry Atlas for Victoria (Victorian Department of Economic Development, Jobs, Transport and Resources)

- Inquiry into Local Economic Development Initiatives in Victoria (Parliament of Victoria)

- Brooklyn Evolution Strategy (Brimbank City Council)

- Various response plans with implications for business continuity planning, including Municipal Emergency Management Plans (all councils), Victorian Heatwave Response Plan (Victorian Department of Health and Human Services) and Influenza Pandemic Action Plan (City of Melbourne).

Metropolitan councils participating in Phase II Working Group

- Brimbank

- Maroondah

- Moreland

- Hobsons Bay

- Wyndham

Focus Area 4: a healthier environment

How do we preserve and strengthen our natural assets and ecosystems alongside a growing population?

Rationale

Melbourne's unique natural environment is crucial to the liveability and resilience of our communities. It provides low-cost drinking water through our protected catchments, varied land uses and relatively clean air for a city of our size. It also provides low-cost protection from shock events such as heatwaves; CSIRO modelling has found that urban vegetation can potentially reduce excess heat-related mortality by between 60 and 100 per cent.

A recent tree canopy assessment showed that Melbourne local government authorities have some of the lowest urban tree canopy ratios in Australia (Jacobs, Mikhailovich & Delaney, 2014).

Many natural assets also have important social values, providing places for recreation and often serving as a source of pride and tourism income for local communities. Several studies have shown that residents living in areas with a higher percentage of public green space report greater life satisfaction.

Once a natural asset is lost, it is expensive, and in many cases impossible, to recreate it. Such losses increases our reliance on hard infrastructure (such as sea walls) to protect us against shocks, when these benefits originally came from natural systems (such as mangroves) at little or no cost. Worldwide, the United Nations Environment Programme's *Millennium Ecosystem Assessment* found that we can no longer take for granted the ability of the planet's ecosystems to sustain future generations.

Governments across Australia and the world are increasingly recognising the value of natural assets and systems in supporting healthy and resilient communities. For example, the City of Melbourne has developed an Urban Forest Strategy, while the Queensland Government has developed a framework for assessing the ecosystem services derived from the South Eastern Queensland Region, which provides information that can be incorporated into natural resource management, policy and planning.

In the context of increasing pressures on the natural environment and undeveloped land to accommodate a growing population, Focus Area 4 seeks to identify the most effective ways to preserve natural assets across Melbourne.

Potential research questions for Phase II

1. What can we learn and how can we build upon successful local, national and international approaches to using natural assets and ecosystems to drive urban resilience?

   o What role does biomimicry play in making our hard infrastructure 'greener'?

   o Can we enhance our natural assets to generate improvements in air and water quality for Melbournians?

2. How can we better quantify and communicate broadly the non-economic benefits provided by natural assets and ecosystems?

Examples of projects suggested in roundtable meetings

- develop and implement a Metropolitan Forest Strategy

- build on the Melbourne Flood Strategy (currently under development) to improve resilience more broadly

- work with the Association of Bayside Municipalities to support and incorporate the findings of its Climate Resilience Assessment (currently under development)

3. Are local commitments to a low carbon future better realised through working at metropolitan scale?

4. What are the immediate, mid- and long-term opportunities to derive greater societal benefit from natural assets and ecosystems around Melbourne?

5. How can we provide meaningful incentives for property developers to maintain more natural features and ecosystem services in new developments?

Stresses	**Shocks**
• growing population	• heatwave
• development pressures on ecosystem services	• flooding
• depletion of natural resources	• coastal storm surge
• climate change	• limited access to fresh food
• global oil price fluctuation and scarcity	
• marine pollution	
• food security	

Examples of existing programs and initiatives in Melbourne

- Urban Forest Strategy (City of Melbourne)
- Cool Roofs (City of Melbourne)
- Foreshore and Coastal Management Plans (bayside councils)
- Victorian Planning Scheme – Urban Growth Boundary and Green Wedges
- Victorian Climate Change Adaptation Plan
- Councils Alliance for Sustainable Built Environments
- Creating Liveable Open Space (Victorian Department of Environment, Land, Water and Planning)
- Build it Back Green (Green Cross)
- Cultivating Community (community organisation)
- Economic Assessment of the Urban Heat Island Effect (City of Melbourne)

Metropolitan councils participating in Phase II Working Group

- Frankston
- Melbourne
- Monash
- Mornington Peninsula Shire
- Nillumbik
- Yarra

Focus Area 5: integrated plans and actions

How can existing and emerging policies and practices help make Melbourne more resilient?

Rationale

The Australian, Victorian and local governments have been developing many policies that have major implications for the resilience of Melbourne. These cover a wide range of disciplines, such as health, land use planning and cyber security. Although the term 'resilience' is used more frequently than in the past, many policies potentially affecting Melbourne's resilience may not be specifically named or framed in these terms.

As with sustainability, resilience thinking looks at cities as interconnected systems. Focus Area 5 applies this philosophy to Melbourne's policies and practices (formal and informal) that may be contributing to – or inhibiting – our city's resilience. This is not a policy review, but will address a significant knowledge gap by giving government, business and communities a more complete picture of resilience-related policy, guidance and practices. This work will begin by concentrating on policies, strategies and projects that relate directly to Focus Areas 1–4. In time they may reflect a more complete understanding of urban resilience, as defined in the 100RC City Resilience Framework (Appendix A).

Potential research questions for Phase II

1. Which existing policies are improving Melbourne's resilience? What can we learn from the approaches taken in these policies?

2. Which existing policies and practices may be diminishing Melbourne's resilience?

3. How can existing policies, programs and decision-making processes be adapted to improve Melbourne's resilience?

4. How can we enable collaboration and share good practice?

5. What can we learn from other jurisdictions that are accessing, understanding and managing complex, interdependent policies?

6. What can we learn from other jurisdictions to help us integrate resilience principles into policy development and subsequent decision-making processes?

> **Examples of projects suggested in roundtable meetings**
>
> - develop an online compendium of resilience-building programs, initiatives and resources
>
> - identify opportunities to integrate resilience thinking into new policy
>
> - offer training to enhance local governments' ability to understand and address resilience issues

Relevant stresses and shocks

This is a cross-cutting focus area that is relevant to all shocks and stresses facing Melbourne.

Metropolitan councils participating in Phase II Working Group

- Bayside
- Cardinia

- Whittlesea
- Melton

4. Next steps

This section describes the next steps in developing a final Resilient Melbourne Strategy, so that by early 2016 we can be delivering tangible benefits that will improve the resilience of Melbourne and its diverse communities.

The Resilient Melbourne Strategy provides a unique opportunity to take a new look at collective resilience-building actions that will benefit the entire metropolis. In Phase II, a local government-led Working Group will develop each of the five focus areas. The Project Team and Steering Committee will continue to work with and oversee these five Working Groups – this will also help identify and exploit opportunities for synergy and collaboration.

Melbourne's councils have a long history of collaborating fruitfully on matters such as waste management, economic development and climate change. However, this has typically occurred within regional groupings such as Lead West and the Northern Alliance for Greenhouse Action. By contrast, each Resilient Melbourne Working Group will be made up of representatives from different regions of Melbourne. This way each group can take a truly city-wide approach that considers the different ways in which resilience issues play out across our metropolis, but still remain relevant at the local level.

The aggregation of the projects and plans identified by these working groups will form the Resilient Melbourne Strategy to be delivered by early 2016.

Appendix A: City Resilience Framework

100 RESILIENT CITIES

City Resilience Framework

- 4 Dimensions
- 12 Drivers
- 50 Indicators
- 7 Qualities
  - Reflective
  - Robust
  - Redundant
  - Flexible
  - Resourceful
  - Inclusive
  - Integrated
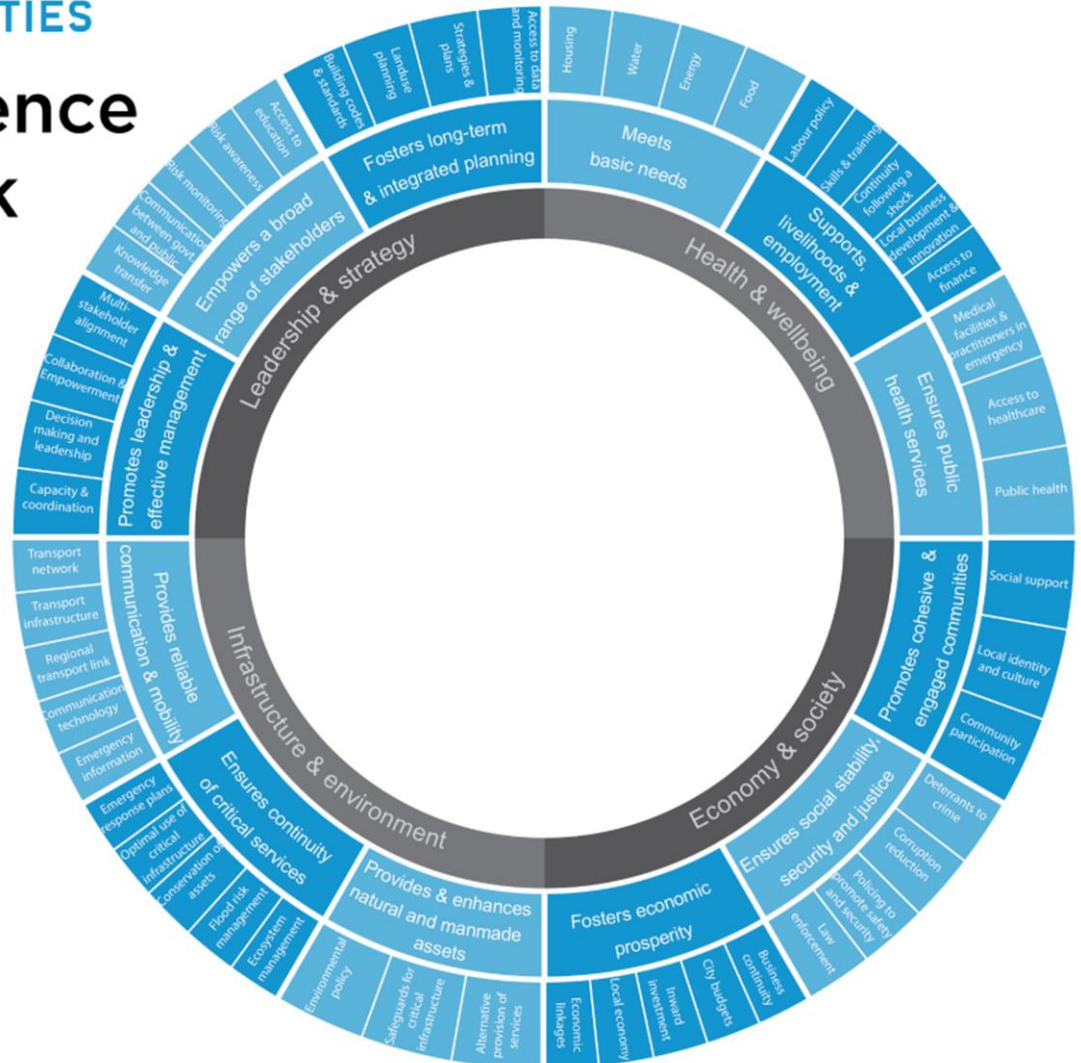
The 100RC City Resilience Framework is built on four essential dimensions of urban resilience: Health & Wellbeing, Economy & Society, Infrastructure & Environment, and Leadership & Strategy. Each dimension contains three "drivers," which reflect the actions cities can take to improve their resilience.

These 12 drivers form the core of the City Resilience Framework (CRF), and when taken together they represent a city's resilience to a wide range of shocks and stresses.

Health & Wellbeing
Everyone living and working in the city has access to what they need to survive and thrive.

Economy & Society
The social & financial systems that enable urban populations to live peacefully, and act collectively.

Leadership & Strategy

The processes that promote effective leadership, inclusive decision-making, empowered stakeholders, and integrated planning.

Infrastructure & Environment

The man-made and natural systems that provide critical services, protect, and connect urban assets enabling the flow of goods, services, and knowledge.

Appendix B: Resilient Melbourne Steering Committee

Terms of reference

The role

The Steering Committee ('the Committee') provides strategic advice to Melbourne's Chief Resilience Officer on the development and implementation of Melbourne's Resilience Strategy ('the Strategy'). Committee members will review and provide advice on key documents and project plans to develop and implement a thorough and effective Resilience Strategy for local governments of Metropolitan Melbourne.

The aim

Members of the Committee:

1. Advise the Chief Resilience Officer on the development of the Strategy, considering:

    1.1 technical and policy issues relevant to the development or implementation of the Strategy

    1.2 institutions, organisations and procedures into which resilience needs to be built

    1.3 key constituents and stakeholders and how best to engage across Melbourne, as well as at State and Federal levels

2. Assist in identification of resilience issues and gaps in Melbourne, which should be addressed in the Strategy

3. Act as a resilience champion within their own organisations and in their broader spheres of influence

4. Advise on the implementation of the Strategy.

The Strategy will be developed during 2015, as agreed with 100 Resilient Cities (100RC). The Strategy will outline the actions to be taken to enhance Melbourne resilience.

Issues that may be considered by the Committee include, but are not restricted to, Local Governments' roles in relation to critical industries and business continuity, emergency management, government policy, climate change impacts, health and critical infrastructure, broader social cohesion and connectivity.

Current membership

The Resilience Steering Committee was established to provide guidance to the Chief Resilience Officer. Its initial members provide visibility and leadership across Melbourne (Municipal Association of Victoria), the Victorian Government (Department of Premier and Cabinet; Emergency Management Victoria) and to Australian government (via the Department of Premier and Cabinet)

Current members of the Resilience Steering Committee are:

- Toby Kent (Chair), Chief Resilience Officer, City of Melbourne

- Craig Lapsley, Emergency Management Commissioner, Emergency Management Victoria

- Mark Duckworth, Chief Resilience Officer, Department of Premier and Cabinet, Victoria

- Geoff Lawler, Director City Planning and Infrastructure, City of Melbourne

- Rob Spence, Chief Executive Officer, Municipal Association of Victoria

- Linda Weatherson, Director Community Development, City of Melbourne

- Liz Johnstone, Associate Director – Sustainability, AECOM (observer).

Time commitment

- Committee members will be appointed for a two-year period.

- The first committee meeting will be held in December 2014.

- Meetings will be held every month until April 2015, from when meetings may be held bi-monthly, pending consideration and agreement of the Committee.

- The Committee will meet in person, supported by teleconference, as necessary.

- By exception, there may be a need for committee members to review issues or papers out-of-session.

Reporting

- The Chief Resilience Officer is an employee of the City of Melbourne and reports to the Director of City Planning and Infrastructure.

- The Chief Resilience Officer role is paid for by 100RC and hence the Chief Resilience Officer is also responsible to 100RC through 100RC's Relationship Manager.

- Having engaged with councils across Metropolitan Melbourne to: firstly, determine the proposed areas of focus for the strategy development; and to, subsequently, develop a Resilience strategy and implementation plan; the recommendations, informed by the Steering Committee, will be put to the City of Melbourne Council, acting as a proxy for the broader municipalities.

Appendix C: list of potential focus areas presented to CEOs

	Focus area for consideration	Dimension
1	Develop a **local government-led vision** for Melbourne's growth and liveability	Leadership and strategy
2	Explore a Melbourne-wide approach to **engaging citizens and promoting active citizenry**	
3	Work with key agencies to **engage vulnerable communities in mitigation and preparedness activities**	
4	Investigate a **local government-led prioritisation of resilience-building actions**, including infrastructure optimisation and investment	
5	Consider a **new risk framework** that supports understanding of, and preparedness for, shocks and stresses, including how they interact	
6	Investigate how to **incorporate resilience into existing policies and practices**	
7	Investigate a **new collaboration to tackle old social problems** that are taking on modern dimensions, for example, domestic violence, cyber bullying, alcoholism and drugs (particularly 'Ice')	Economy and society
8	Work with **business** generally, and small to medium enterprises specifically, to develop programs to help them **become more resilient**	
9	Explore what local government can do to help people prepare for **the jobs of the future** in ways that promote **local viability and economic prosperity**	
10	Work with **providers of capital and financial services** to investigate their roles in building and promoting resilience	
11	Assess Melbourne's exposure to **cybercrime** and develop an approach for local government to work with relevant agencies	
12	Support individuals and communities to take more **responsibility for their own health, wellbeing and safety**	Health and wellbeing
13	Review the **resilience of our health and hospital sectors**, bearing in mind interdependencies of infrastructure	
14	Explore ways to develop **infrastructure that has social cohesion, equality and health** at its core, bearing in mind the influences of geography and location	
15	Investigate the most appropriate ways to build upon years of work and discussions by local government to tackle critical issues concerning **affordable, accessible and social housing**	
16	Assess Melbourne's vulnerability to **food insecurity** and develop a program to improve food security for a growing population	
17	Investigate how we can grow Melbourne in ways that preserve and make better use of our **natural assets and ecosystems**	Infrastructure and environment
18	Investigate local government's role in developing more **diverse and reliable water and energy supplies**	
19	Consider developing a **model 'resilient precinct'** in an urban and suburban setting	
20	Analyse the social, built and environmental interdependencies that are vulnerable to **extreme heat** and consider metropolitan-wide actions	

Glossary

Chief Resilience Officer – the author of the city's Resilience Strategy.

Focus areas – important areas or issues to investigate during Phase II of the Resilience Strategy.

Preliminary Resilience Assessment – a document that establishes an initial, qualitative understanding of the city's strengths and weaknesses against the City Resilience Framework of drivers and sub-drivers.

Resilience – the capacity of individuals, communities, institutions, businesses and systems in a city to survive, adapt and grow, no matter what chronic stresses or acute shocks they encounter.

Resilience Project Team – comprises the Chief Resilience Officer, supported by staff from City of Melbourne and strategy partners, AECOM.

Resilience Steering Committee – a small group of decision-makers within and outside of Melbourne City Council responsible for overseeing delivery of the Resilience Strategy.

Resilience Strategy – a plan for building resilience in the city. The strategy articulates the city's resilience priorities and specific initiatives for immediate implementation as well as the city's longer-term path.

Resilience Working Group/s – a group or groups of individuals representing diverse, multi-dimensional stakeholder interests drawn from across the metropolitan councils, who will contribute their time, experience and expertise to deliver the Resilience Strategy in Phase II and III.

Resilience Working Team – a group providing subject matter input and advice to assist the development of Resilient Melbourne Strategy and its subsequent implementation of it comprising staff from City of Melbourne and relevant external agencies.

Risk – the severity and likelihood of a shock or stress occurring.

Risk assessment – a comprehensive assessment of the severity, likelihood and probability of a shock or stress occurring, and the corresponding effect of such events on the city's critical assets and ability to function.

Shocks (or acute shocks) – sudden, sharp events that threaten a city, such as earthquakes, floods, disease outbreaks and terrorist attacks.

Stakeholders – various individuals or groups within and outside of city government with the capacity or influence to build resilience.

Strategy – the overall collection of priorities, initiatives and action plans that the Chief Resilience Officer and stakeholders will identify and implement to build resilience in the city.

Stresses (or chronic stresses) – longer-term problems that weaken the fabric of a city on a day-to-day or cyclical basis. Examples include high unemployment, an overtaxed or inefficient public transportation system, endemic violence, and chronic food and water shortages.

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