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Resilient Melbourne
Implementing the Rockefeller Foundation
100 Resilient Cities Project in Melbourne

Martin Mulligan, Blythe McLennan &
Tarnya Kruger

RMIT
UNIVERSITY

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About the Authors

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Acknowledgements

Contents

Key Messages

- A study was undertaken of the way the Rockefeller Foundation 100 Resilient Cities (100RC) project had been implemented in Melbourne so far. It was designed to learn from the informed perspectives of key project stakeholders and resilience practitioners rather than to externally evaluate the Resilient Melbourne project ('the project').

- It found that the initiative taken by the City of Melbourne to bid for, and host, Melbourne's participation in the 100RC Challenge is widely seen as appropriate and timely.

- The 100RC approach, however, needed to be adapted to take into account the fragmented nature of urban governance in Melbourne. Patient work aimed at actively including as many as possible of metropolitan Melbourne's 32 Local Government Authorities (LGAs) has paid off with unprecedented levels of LGA collaboration being widely recognised.

- The 100RC focus on addressing both 'shocks' and accumulating 'stresses' is not well-known amongst Melbourne resilience practitioners beyond the project Steering Committee. Notwithstanding, this focus was well-aligned with practitioners' pre-existing concerns about a wide range of neglected vulnerabilities within the city. Participation in the 100RC Challenge has given greater legitimacy to the need to collaborate across metropolitan Melbourne to address these vulnerabilities. It has also raised the profile of 'resilience thinking' beyond the confines of emergency management policies and practice.

- The project is an important vehicle to cross-fertilise existing policies and practices which may otherwise operate with little reference to each other; e.g. physical and social planning; economic and community development; infrastructure and biodiversity.

- Overall, the outcomes of the project are eagerly anticipated by people working on the kinds of challenges that 100RC seeks to address. Expectations about what the project will deliver are high but also wide-ranging. This suggests that expectation management through deeper and wider communication will need to be a focus in the next phase.

- The project can create an enduring legacy if it helps to mainstream resilience goals across policies and practices, especially those directing the work of metropolitan LGAs. It must also demonstrate that existing small-scale projects, programs and ideas can work at metropolitan or regional scales as well as mobilise strong state government support.

- While the emphasis to date on engaging with senior levels of LGAs is widely supported, it also creates some recognised challenges. In future, more will need to be done to foster deeper LGA support for the project so that it informs the work of LGA officers and their cross-boundary networks. More will need to be done to build support and involvement within the private sector. Caution is also needed regarding the expectation that LGAs can enlist support for the project from community sector organisations within their boundaries given that key organisations—such as VCOSS and Volunteering Victoria—operate at a wider scale.

- There is broad support for continuing the position of Chief Resilience Officer but views vary about where this role should be hosted, and how oversight of Melbourne's Resilience Strategy should be institutionalised long-term.

Executive Summary

The city of New Orleans did not cope well with the devastation wrought by Hurricane Katrina in August 2005 and the New York-based Rockefeller Foundation was one of many agencies which tried to help the traumatised city recover; physically, socially and culturally. In a book published in 2014[2] , Rockefeller Foundation president Judith Rodin makes it clear that the New Orleans experience prompted the decision to mark the foundation's centenary by launching its $100 million 100 Resilient Cities project. Rodin's book also makes it clear that in this age of accelerating urbanisation, cities need to be better prepared for a plethora of potential, often predictable, shocks; ranging from natural disasters and climate change impacts to entrenched volatilities of a globalised economy. At the same time, the New Orleans experience makes it clear that accumulating 'stresses'—such as failing infrastructure or the growing gap between rich and poor—can turn into crises in their own right or weaken the capacity of the city to withstand shocks.

A strong bid, led by the City of Melbourne, saw Melbourne included in the first batch of 33 cities accepted into the 100RC network in 2014. The city was provided with funding to employ a Chief Resilience Officer for a period of two years and access to the services of organisations which had a track record of working with the Rockefeller Foundation. Participating cities are also provided with a manual—widely dubbed the 'playbook'—which aims to provide an implementation framework. Realising the challenges involved in adapting a framework developed in USA for implementation in a city with multiple local government authorities, the Melbourne project

team selected a Chief Resilience Officer, Toby Kent, with a strong track record as a motivator, negotiator and facilitator. In turn, Toby was encouraged to consult widely with potential stakeholders and project advisers. Several RMIT academics were involved in early consultations. While Melbourne's inclusion in the first batch of cities accepted into a high profile international project backed by a prestigious benefactor was widely welcomed, many observers felt the challenges facing the CRO and his Steering Committee were daunting. What could be done across all of metropolitan Melbourne in just two years to ensure that the Rockefeller Foundation investment left a lasting legacy? How successfully could the 100RC framework be adapted to suit the geographic, social, economic and political realities of Melbourne?

RMIT researchers decided to study the implementation process while the experiences were fresh in the minds of those involved. This decision was welcomed by Toby Kent and his Steering Committee. As the first anniversary of Toby's appointment approached, lengthy semi-structured interviews were conducted with members of the Steering Committee and with two local government CEOs who had been asked to each lead one of the five focus areas identified in the Preliminary Resilience Assessment. However, the researchers were keen to get beyond the project's 'inner circle' by interviewing a wider range of people who had attended Melbourne's 100RC workshops or consultations. Other people who had simply observed the project from a distance were asked about its potential.

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2 Judith Rodin, 2014, *The Resilience Dividend: Being Strong in a World Where Things Go Wrong*, Public Affairs/
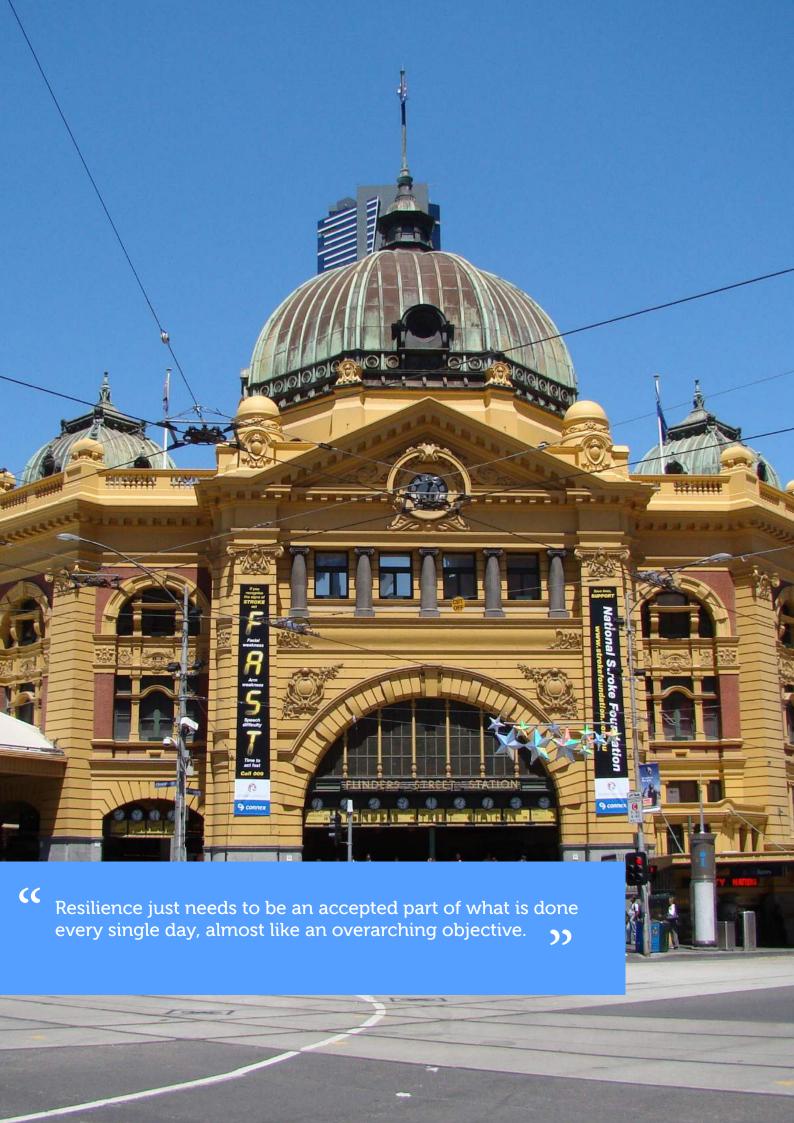
Perseus

By conducting research in the first year of project implementation the researchers were motivated by a desire to offer constructive, yet independent, feedback on how to make the best use of the Rockefeller Foundation 'investment'. Many questions were explored in the interviews they essentially boiled down to two key questions:

- How might the Rockefeller 100RC framework be adapted to work in Melbourne?
- What might be achieved in two years to ensure maximum return on investment?

While the researchers began with a degree of scepticism about what could be achieved across a complex city in a rather short period of time they were pleasantly surprised to find that local government 'buy-in' had exceeded expectations. The 100RC resilience framework had helped to focus attention on a wide range of neglected vulnerabilities accumulating within and across city communities. The framework had helped to generate border-crossing dialogues and it had demonstrated the potential, at least, for 'resilience thinking' to reframe ways of thinking about the complex, inter-related challenges facing a fast-growing city. For a city with a fragmented form of governance, the project was able to demonstrate that many projects and programs work best when they cross the rather artificial boundaries of LGAs, while the project also confirmed that LGAs provide a critical interface between government and community.

It is far too early to know if the Rockefeller-funded project will leave a clear and lasting legacy; however the implementation process exceeded expectations in terms of local government buy-in and the fostering of whole-of-city thinking. There can be little doubt that the project has shifted the thinking of those most closely involved in it and it has demonstrated the need to take resilience thinking beyond the constraints of emergency management into a wide range of other policy and practice arenas. It has suggested some ways to cut across layers of government in order to focus more resources on 'community resilience' and it has certainly underlined the need to ensure that whole-of-city governance is not lost within the operations of Australia's rather cumbersome three tiers of government.

Bold yet patient efforts to adapt the 100RC framework to work in the Melbourne context enabled the project to exceed initial expectations in its first year of implementation. There is much work to be done in order to build on this promising start and ensure that the project can continue to offer fresh ways to address complex urban challenges. However, the research team is pleased to be able to say that our research findings essentially commend the implementation approach taken in Melbourne. Hopefully our findings also provide some suggestions for how the long-term return on investment can be maximised.

> " Resilience just needs to be an accepted part of what is done every single day, almost like an overarching objective. "

1 Context

1.1 100 Resilient Cities

100 Resilient Cities (100RC) is an international initiative for building urban resilience based in New York and established and funded by a US-based private philanthropic foundation, the Rockefeller Foundation.[2]

In 2013, the Rockefeller Foundation committed $100 million to the '100 Resilient Cities Challenge', with the aim of enlisting 100 cities around the world to develop city-wide resilience strategies or plans (See Box 1 for key 100RC definitions). It accepted 33 cities in a first round in February 2013 and a further 35 in a second round in December 2014. The final third round of cities was announced on May 25, 2016.

Cities accepted into the challenge receive the following support[3]:

- Funding for a Chief Resilience Officer (CRO) for a minimum term of two years
- Technical support to develop city-wide resilience strategies
- Access to a platform of services to assist with strategy development and implementation, offered by a range of private, public and non-profit platform partners that have specialist skills in key areas
- Membership in the 100 Resilient Cities Network to share knowledge and practice internationally

Within each city, the CRO "reports directly to the city's chief executive, and acts as the city's point person for resilience building, helping to

Box 1: 100RC definitions

The 100 Resilient Cities initiative defines urban – or city – resilience as:

"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".

Chronic stresses are described as stresses that "weaken the fabric of a city on a day-to-day or cyclical basis", with examples being unemployment or chronic food and water shortages. Acute shocks are "the sudden, sharp events that threaten a city, including earthquakes, floods, disease outbreaks, and terrorist attacks".

(100 Resilient Cities. "City Resilience and the City Resilience Framework." New York: 100 Resilient Cities, 2015, p.2).

coordinate all of the city's resilience efforts".[4] CROs are described as "the centrepiece of 100RC's vision" for helping cities tackle two key problems for city resilience, which are that:

1. Cities are complex ecosystems, resistant to change and made up of a myriad group of systems and actors; and
2. Existing solutions aren't scaling or are not being shared more broadly. In other words, cities constantly find themselves reinventing the wheel."[5]

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2 http://www.100resilientcities.org/

3 Rockefeller Foundation, *100 Resilient Cities: Pioneered by the Rockefeller Foundation* (New York 2013).

4 Michael Berkowitz, "What a Chief Resilience Officer Does," 100 Resilient Cities, http://www.100resilientcities.org/blog/entry/what-is-a-chief-resilience-officer1#/-_/.

5 Ibid.

The 100RC initiative is underpinned by a City Resilience Framework developed for the Rockefeller Foundation with the aim of providing "a lens through which the complexity of cities and the numerous factors that contribute to a city's resilience can be understood".[6] The framework includes a City Resilience Index that comprises four categories or dimension of resilience, each with four drivers or goals that describe the outcomes, capacities or actions for improved resilience (see Figure 1).[7]

Under the 100RC Challenge, CROs lead a Resilience Strategy Process devised by the 100 Resilient Cities initiative (see Figure 2). The CRO is supported by a Resilience Steering Committee and draws on the City Resilience Framework outlined above to "diagnose and understand the City's resilience and its primary areas of strength and weakness".[8] The overall process is designed to be an "assessment and prioritization exercise for the city to trigger action, investment and support within city government and across diverse stakeholders".[9] It is broken down into a detailed set of possible activities across three broad phases (see Figure 3). Two key milestones are the completion of a preliminary resilience assessment at the end of Phase 1 and a resilience strategy at the end of Phase 2.

Figure 1: the City Resilience framework developed by ARUP for the Rockefeller Foundation

6 Jo da Silva and Braulio Morera, *City Resilience Framework*, December 2015 ed. (London: ARUP, 2015)., p.7

7 Ibid.; 100 Resilient Cities, "City Resilience and the City Resilience Framework," (New York: 100 Resilient Cities, 2015).

8 "100 Resilient Cities Strategy Process [Powerpoint Presentation]," (Surat, India: Resilient Surat, 2014).

9 Ibid.

Figure 2: The 100RC strategy process.[10]

1.2 'Resilient Melbourne

Melbourne was amongst the first round of cities accepted into the challenge in early 2013. The Melbourne application to be part of the 100RC initiative was made by the City of Melbourne with support of relevant state government agencies and the Municipal Association of Victoria (MAV). Melbourne's CRO is hosted by the City of Melbourne. However, the focus of the Resilience Strategy Process is the Greater Melbourne metropolitan area (hereafter 'the city'), which is administered by 32 local government authorities.

Melbourne's CRO, Toby Kent, was appointed in November 2014 to lead the Resilient Melbourne project and his role is funded by the 100RC initiative for a two-year period. A Steering Committee was established early in the process (Box 2 lists current members) and Phase 1 – 'establishing the foundation' – was completed in June 2015 with the release of a Preliminary Resilience Assessment (PRA) for Melbourne.[11]

The PRA identifies five focus areas for Melbourne's Resilience Strategy "informed by existing resilience networks and representatives of Melbourne's local government" (p.5):

1. A stronger society
2. A better-connected society
3. A competitive metropolis
4. A healthier environment
5. Integrated plans and actions

Box 2: Current Resilient Melbourne Steering Committee

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).

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10 Ibid., slide 6.

11 Resilient Melbourne, "Preliminary Resilience Assessment," (Melbourne: City of Melbourne, 2015).

The PRA recognises that Melbourne's distributed governance arrangements present "impediments to coordinating Melbourne-wide responses".[12] It describes the need for a Greater Melbourne resilience strategy thus:

"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."[13]

Notably, the CRO has been successful in signing up 29 of 32 local government authorities to support the Resilient Melbourne project.

Phase 2 of the Resilient Melbourne process has involved establishing working groups around each of the five focus areas to "consider the focus areas in detail, through in-depth analysis, broad engagement and developing targeted plans".[14] The working groups are each led by an LGA CEO and comprise local government and multidisciplinary participants. The plans produced by the working groups form the Resilient Melbourne Strategy.

The launch of the strategy on 1st June 2016 marks the end of Phase 2 – 'strategy build-out'—and the beginning of Phase 3 – 'ongoing execution and iteration'.

1.3 Forerunners to Resilient Melbourne

The involvement of Melbourne in the 100 Resilient Cities initiative has a number of important national, state and local government forerunners. Within Australia the concept of resilience has influenced policy in a range of areas for some time. However, resilience, particularly community resilience, has emerged as a central pillar underpinning a range of major policy shifts towards whole-of-government and whole-of-community approaches to risk management since 2009. In particular, it has strongly influenced reform in emergency/disaster management, critical infrastructure, and counter-terrorism.[15]

These same shifts are also reflected in state government policy and reform in each of these areas within Victoria.[16] In addition, the Victorian

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12 Ibid., p.8.

13 Ibid., p.10.

14 Ibid., p.5.

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15 Mark Duckworth, "The Idea of Resilience and Shared Responsibility in Australia," *in Strategies for Supporting Community Resilience: Multinational Experiences*, ed. Robert Bach (Stockholm: CRISMART, The Swedish Defence University, 2015). See also COAG, "National Strategy for Disaster Resilience: Building Our Nation's Resilience to Disasters," (Canberra, ACT: Council of Australian Governments, 2011); Commonwealth of Australia, "Counter-Terrorism White Paper: Securing Australia, Protecting Our Community," (Canberra: Department of the Prime Minister and Cabinet, 2010); Commonwealth Government, "Critical Infrastructure Resilience Strategy," (Canberra: Attorney-General's Office, 2015).

16 See for example Victorian Government, "Victorian Emergency Management Reform: White Paper," (Melbourne: Victorian Government, 2012); "Strategic Framework to Strengthen Victoria's Social Cohesion and the Resilience of Its Communities," (Melbourne: Department of Premier and Cabinet, 2015); "Critical Infrastructure Resilience Strategy," (Melbourne: Emergency Management Victoria, 2015).

state government launched a metropolitan planning strategy for Greater Melbourne – Plan Melbourne – in 2014 designed to guide Melbourne's development and growth to 2050.[17]

At the local government level, there are also numerous existing initiatives that reflect the goal of developing urban resilience in various ways, some of which are recognised in the Resilient Melbourne PRA.[18] Three key examples are:

- City of Melbourne's participation in the international C40 network that brings cities together to collaborate and share knowledge in the area of climate resilience.[19]
- Future Melbourne 2026 – a community collaboration project by the City of Melbourne to develop a long-term strategic plan for the central city.[20]

- Melbourne 2030 – planning for sustainable growth was released in October 2002 as a 30 year plan to manage urban growth and development across metropolitan Melbourne.[21]

17 "Plan Melbourne: Metropolitian Planning Strategy," (Melbourne: Victorian Government, 2014).

18 Resilient Melbourne, "Preliminary Resilience Assessment.", p.29

19 See http://www.c40.org/

20 See http://participate.melbourne.vic.gov.au/future

21 See http://www.dtpli.vic.gov.au/planning/plans-and-policies/planning-for-melbourne/melbournes-strategic-planning-history/melbourne-2030-planning-for-sustainable-growth

> "People just need a chance to practice working together doing something."

2 Approach

The success of the bid by the City of Melbourne to have metropolitan Melbourne included in the Rockefeller Foundation 100 Resilient Cities Challenge sparked considerable interest and intrigue among people involved in local government, urban planning, emergency management and academic research in Melbourne. How are the goals and processes of the 100RC framework being conceived and implemented in Melbourne? How would ideas about urban resilience that emanated from the USA work in an Australian context? How could a Chief Resilience Officer (CRO) based at the City of Melbourne work across the entire metropolitan region and what could that person accomplish in the two years of funding by the Rockefeller Foundation?

The RMIT research team sought to find out how the approach to urban and city resilience promoted by the New York-based Rockefeller Foundation was adapted for implementation in Melbourne while these experiences were still fresh in the minds of those involved. Around the time the project had reached its first anniversary we interviewed the CRO Toby Kent; members of his project Steering Committee; and a range of people who had attended workshops or information sessions in the early stages of project implementation. We went into each of these semi-structured interviews with around 20 starting questions for those actively involved in the project and 10 for those less involved (see Appendix for full list of questions used). However, they boiled down to two key research questions:

- How might the Rockefeller 100RC framework be adapted to work in Melbourne?
- What might be achieved in two years to ensure maximum return on investment?

Over a period from the end of September to early December 2015, we conducted a total of 23 interviews. Ten interviews—each lasting around 60 minutes—with people who were very actively involved in the implementation of the project and 13 interviews—each around 30 minutes—with people who had less or no involvement. We interviewed CRO Toby Kent twice, at the beginning and end of the interview period, and this enabled us to seek his responses to some of the comments and issues raised by others.

As well as interviewing all members of the project Steering Committee we were keen to hear how the project was perceived by people working at different levels in a range of local government authorities across the metropolitan area. We also sought the views of people working within other agencies and organisations on the kinds of challenges that 100RC seeks to address. Despite our best efforts we were not able to secure interviews with representatives of relevant private sector organisations — for example utility services such as energy, water, transport — or with a leader of the three LGAs (Casey, Glen Eira and Greater Dandenong) which had not formally endorsed the project up to the time of this research. We directly contacted a range of people working in different roles and locations across the metropolitan region. We also interviewed some people recommended by other interviewees.
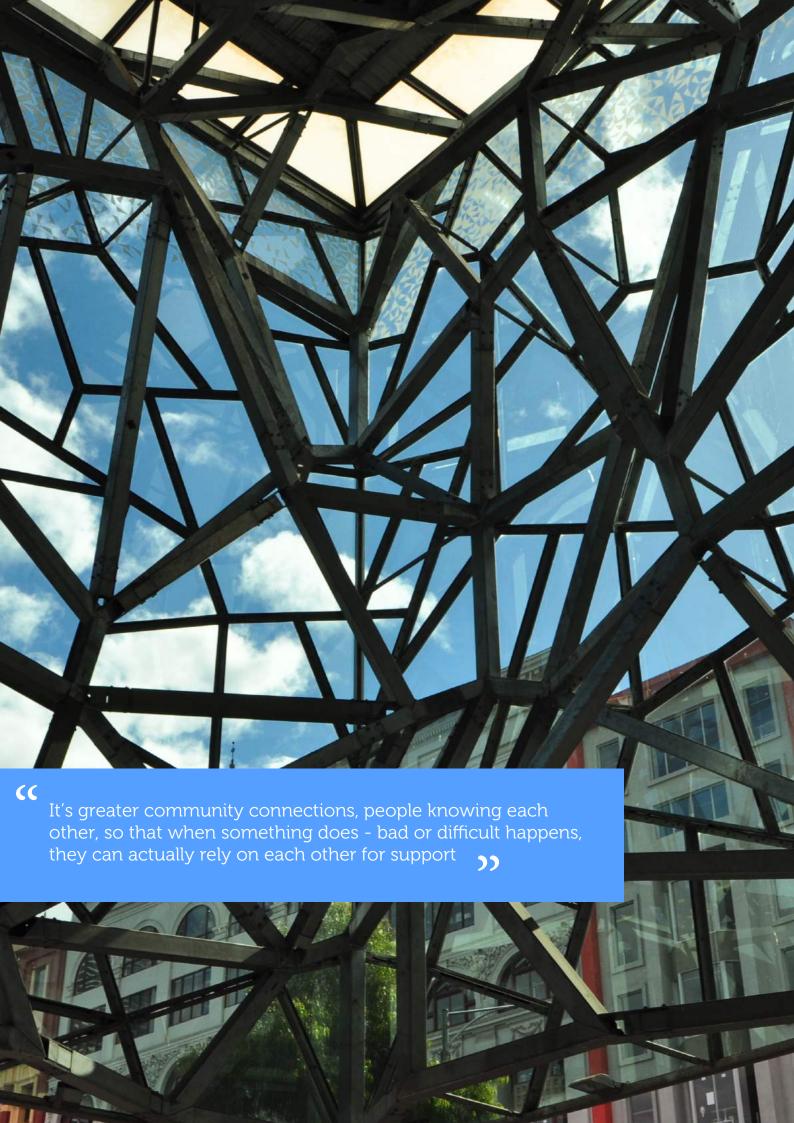
All interview recordings were transcribed. Only two interviewees made minor changes. The transcripts were then subjected to thematic analysis in order to collate responses to the starting questions and also make note of points made when the conversations strayed beyond the scope of the starting questions. An initial set

of Key Findings was presented orally at a meeting of the project Steering Committee on April 6 and discussion on these findings—during and after the meeting—helped us prepare this written report. Consent forms were used to confirm permission at the end of each interview to use interview transcripts and the transcripts were sent to each interviewee in case they wished to amend what had been said. Specific approval was sought to use quotations in this report, with interviewees having the choice to be identified by name or made anonymous. The research was conducted in accordance with the requirements of the Human Ethics Advisory Network (CHEAN) of the College of Design and Social Context at RMIT.

List of interviewees

Name	Position of affiliation
Toby Kent	Chief Resilience Officer
Mark Duckworth	Steering Committee; Department of Premier and Cabinet
Craig Lapsley	Steering Committee; Emergency Services Commissioner for Victoria
Geoff Lawler	Steering Committee; Director of Operations, City of Melbourne
Rob Spence	Steering Committee; CEO Municipal Association of Victoria
Linda Weatherson	Steering Committee; Director City Communities, City of Melbourne
Liz Johnstone	Steering Committee; AECOM
David Turnbull	CEO City of Whittlesea [until April 2016]
Tracey Slatter	CEO City of Port Phillip
Tom Melican	Councillor City of Banule; Chair Melbourne Transport Forum
Cathy Oke	Councillor City of Melbourne
Renae Walton	Climate Change Adaptation Officer City of Port Phillip
Sally MacAdams	Community Sustainability Officer, City of Yarra
Karen Cameron	Environmental Programs Officer, City of Yarra
Council officer	City of Monash
Bridget Tehan	Policy Analyst Emergency Management VCOSS
Sue Noble	CEO Volunteering Victoria
Mary Farrow	Manager Emerald Community House, Yarra Ranges
Julie Prideaux	Director of Communications Jesuit Social Services
Fran Macdonald	Co-ordinator Western Alliance for Greenhouse Action
Greg Hunt	Executive Officer South East Councils for Climate Change Action
Anne Martinelli	Environment Victoria

> "It's greater community connections, people knowing each other, so that when something does - bad or difficult happens, they can actually rely on each other for support"

3 Findings

3.1 Understanding resilience

When interviewees were asked if they had encountered the language of resilience in their professional work before hearing about the Rockefeller 100RC project most associated it with emergency management. This reflects the dominance of resilience as a policy idea in this sector.

A number of interviewees said that the need to prepare for unexpected developments or changing circumstances in the future was already present in professional discourses around strategic planning for future employment and infrastructure needs. Others said that the idea was familiar to those involved in future-oriented social planning or community development. A few felt the concept of resilience adds little to existing thinking, but most felt that it helps to cut across past policy and practice boundaries, e.g. past boundaries between physical and social planning.

While most people understood resilience in the context of broader systems, the idea of community resilience in particular featured strongly in people's understandings, focused on strengthening social connections and empowering people to act and support each other separately from government. Notably, this reflects the community-focused understanding of resilience adopted in the emergency management sector in Australia.

> " Empowering people to make their changes and developing those connections so when things do go wrong they've got that base to work from.. "

> " It's greater community connections, people knowing each other, so that when something bad or difficult happens, they can actually rely on each other for support. "

Following on from this, highlights the need to draw a distinction between 'urban resilience' and 'community resilience'. A number of interviewees said that the whole-of-city approach is needed to address major urban vulnerabilities—such as 'critical urban infrastructure'—while a focus on 'community resilience' is needed to implement social responses to stresses and potential shocks at a more local level. Mark Duckworth made the point that urban communities can sometimes learn from rural communities about how to respond collectively to major challenges.

> "Connected communities are resilient communities because they are ready to look after each other in times of crisis, whether that be a flood, a bushfire or an incident of violent extremism."
> **Mark Duckworth, Department of Premier and Cabinet**

3.2 Identifying Melbourne's resilience challenges

The consequences of past urban planning models and decisions was identified by a number of interviewees as a key factor underpinning many of the resilience challenges in Melbourne. As a

senior local government social planner told us:

> "We still have social isolation that is the result of poor planning over the last 30 years"

The City of Whittlesea's CEO David Turnbull—whose professional experience has been in urban planning—noted that the 'curvilinear' model for suburban development had resulted in car dependency and significant social isolation. He also noted that people living in large new houses in 'growth corridors' may experience significant stresses due to high mortgage payments and separation by distance from family or other social networks. He suggested that household incomes may be a poor indicator of resilience because people living in one growth corridor in the Whittlesea area, where house prices are relatively high, appear to feel more isolated than many of the people living in another lower socio-economic growth corridor, where houses are cheaper yet the "cultural mix" of residents means people are more likely to share and do things like "passing food over the fence". Turnbull said that Whittlesea Council is now trying to consider both the obvious and largely hidden social impacts of all planning, land use and employment generating policies for the region.

> "We put a lens on preventing family violence into all our policy making, whether it be land use, community services, or whatever
> **David Turnbull, City of Whittlesea CEO**

A number of interviewees noted that the steady demise of manufacturing industries in Melbourne has highlighted the need to think more boldly about the "jobs of the future" and the forms of employment that can be made available to people living in different parts of the metropolitan region. Some highlighted the need to diversify employment opportunities within localised job

'markets'. While local government authorities have been the key stakeholders for developing Melbourne's participation in the 100RC project, several interviewees suggested that employment generating strategies will need greater involvement from private sector organisations. It was noted that small businesses have much to gain by building stronger links with LGAs and community-based organisations.

Public policies which have favoured car-use over public transport for many decades have resulted in multiple problems, including: acute traffic congestion in particular areas; social isolation in outer suburbs; untimely contributions to greenhouse gas emissions. Banyule city councillor and Melbourne Transport Forum convenor Tom Melican noted that retrofitting the city to favour public transport will now be expensive and difficult, yet he argued that this should be an all-of-Melbourne priority.

> "We have built this city around cars. You try and [retrofit] it now, that's going to be incredibly difficult
> **Tom Melican, City of Banyule and Melbourne Transport Forum**

When interviewees were asked to reflect on the framework of resilience promoted by the Rockefeller Foundation[22] — i.e. paying attention to both unpredictable shocks and accumulating stresses—most chose to focus on accumulating stresses and neglected vulnerabilities and did not necessarily relate it to withstanding or recovering from shocks. This suggests that resilience thinking is moving beyond the confines of emergency management. The following are some of the particular vulnerabilities that interviewees nominated:

• Population growth and accumulating pressure on expensive public infrastructure

22 Rodin, Judith, The Resilience Dividend: Being Strong in a World Where Things Go Wrong, PublicAffairs/Perseus, 2014.

- Job insecurities and vulnerable household incomes
- The centralisation of employment opportunities in the central business district that require people to commute long distances
- Housing affordability and mortgage stress that can cause or exacerbate social isolation and even domestic violence
- The need to strengthen social cohesion within culturally diverse local communities, especially in relation to dangerous forms of 'youth alienation'
- Climate change impacts on vulnerable people and communities; including the elderly or those with little capacity to cope with extreme weather events
- People and communities most exposed to bushfires or flooding events
- The growing risk of flooding in bayside areas
- Complacency about possible disruptions to essential supplies: including food, electricity and gas, medicines, oil-based products
- Loss of peri-urban land suitable for food production and issues related to food security in general
- The risk of catastrophic fires in high-rise apartment blocks

> "
> A city can only be as resilient as its most vulnerable communities
> **Toby Kent, Chief Resilience Officer for Melbourne**
> "

As a result of the Royal Commission on the Black Saturday bushfires in Victoria, the state government has called on the emergency services to strengthen their engagements with vulnerable local communities. Under the leadership of Craig Lapsley, Emergency Management Victoria (EMV) has piloted new ways to work directly with diverse local communities and the organisation has developed expertise in an area of responsibility that previously may have been left to local government authorities to administer. In relation to metropolitan Melbourne, strategies for building

'community resilience' sit within or alongside strategies for building 'urban resilience'.

> "
> A community is more than just the people; it's about the services, it's about the businesses; it's about the environment and the people…. It's about mapping what's in there and who's got capacity
> **Craig Lapsley, Emergency Services Commissioner for Victoria**
> "

A range of interviewees said that local government authorities have no choice but to engage with diverse local communities and, in doing so, they have forged relationships with community-based organisations in their municipalities. However, the 'community sector' also operates at wider geographical scales and the Victorian Council of Social Services (VCOSS) is trying to co-ordinate community responses to growing challenges such as climate change. VCOSS Senior Policy Analyst for Emergency Management Bridget Tehan said that she strongly welcomed Melbourne's participation in the 100RC project and she hoped that there would be an active role for VCOSS member organisations—which are rarely confined to one local government area—in the evolution of resilience policies and practices.

> "
> Our member organisations are acutely aware of the disadvantage and vulnerability that … people face every day
> **Bridget Tehan, Policy Analyst, Victorian Council of Social Services**
> "

3.3 Aspirations for the project

The aspirations that people held for the both the outcomes and the process of the Resilient Melbourne project reflected their views on what a resilient city looks like, and what actions and measures are needed to pursue it. Notably, aspirations are high and people's visions for what they would expect to be included in a city-wide resilience strategy are varied and reflected

people's various fields of interest. However, there was also overall agreement with the broad goals and approach of the project, even amongst those who had not been closely associated with it. As one interviewee who was less-involved in the project summed up:

> " Resilience just needs to be an accepted part of what is done every single day, almost like an overarching objective "

In submitting the bid to become one of the 100 cities selected for participation in the Rockefeller Foundation project, the City of Melbourne understood that this could provide important global acknowledgement of the all the work undertaken to make the city dynamic and innovative, while also setting up expectations that it would seriously address a wide range of growing vulnerabilities. Melbourne has regularly been at or near the top of international rankings of the world's 'most liveable' cities and the bid was premised on the view that work needs to be done to sustain this status.

Some interviewees suggested that CoM has sometimes overstated its ability to represent the metropolitan area as a whole in international forums, but they conceded that it was entirely appropriate for CoM to take this initiative and to then auspice the project when the bid was successful. A leader of the CoM bid team and member of the project Steering Committee, Geoff Lawler, said that the success of the bid to participate in such a prestigious international project gave CoM the "facilitative authority" to lead an effort to build collaboration across the city's 32 local government authorities. Lawler also said that Toby Kent had been selected for the role of Chief Resilience Officer because of his evident

> " In all the time that I've worked here, which is about 20 years now, this has attracted more interest from other metropolitan local governments than anything we've tried
> **Geoff Lawler, City of Melbourne Director of Operations** "

ability to act as a negotiator and facilitator to try

and engage all 32 LGAs in the project. Geoff Lawler and other project Steering Committee members Craig Lapsley and Mark Duckworth all said that participation in the international project was timely because the concept of resilience had recently appeared within a range of state and federal government policies, yet few people felt able to anticipate what this might mean in practice.

Geoff Lawler acknowledged that the promise of Rockefeller Foundation funding to cover the costs of the appointment of a Chief Resilience Officer for a period of two years was a major incentive. However, he also listed "inspiration" and "credibility" as other incentives for participating in such an international project. As mentioned earlier in this report, the Rockefeller Foundation also provided funding for an approved consultancy firm—AECOM[23] —to work with Toby Kent and AECOM was represented on the project Steering Committee by Liz Johnstone. The participating cities are provided with a 'playbook' to help develop their projects in line with Rockefeller Foundation's framework and CROs are encouraged to participate in meetings and forums and communicate directly with other CROs in the network.

While the Rockefeller Foundation monitors the development of the project in each participating city, Toby Kent said that CROs and Steering Committees are given considerable latitude to develop strategies appropriate to their local circumstances. Our cursory review of how different cities in the network have adapted the 100RC process suggests that Melbourne has taken a rather flexible approach and Toby Kent emphasised the need for adaptability when he told us: "It has got no value if it is not right for Melbourne". The flexible approach was commended by a wide range of interviewees with one person who has only observed the project from afar commenting:

> " It's the way Melbourne works and it will probably lead to some interesting initiatives "

23 AECOM is a multinational consultancy firm with a branch in Melbourne

While highlighting the need to adapt the 'playbook' to the local context, Toby Kent said that he felt well supported by the international network of CROs. He also regarded the 100RC framework to be a sound and valuable one for cities to work within, while also acknowledging that it was a starting point and was evolving over time.

> " Having been in other international networks in the past, I see this as [a] more supportive one
> **Toby Kent** "

All interviewees were asked what they thought Melbourne might be able to learn about resilience from other cities in the world, even if they were not part of 100RC. Toby Kent noted that New Orleans had been the first city recruited to 100RC and, having attended the public launch of the city's resilience strategy in late 2015, he felt that there was much to learn from the way the strategy had been developed. Several interviewees stressed that Melbourne can only learn from similar cities and most nominated cities in Europe or North America as potential inspirations. Craig Lapsley—who had visited numerous countries to look at their emergency services—said that 'you have to keep your eyes open' to see what you can learn from any city in the world'. However, only Toby Kent, Mark Duckworth and one other less-involved stakeholder argued that Melbourne has much to learn about resilience from cities that have more fragile infrastructure and services. There was some indication that people living in Melbourne have become complacent about the city's capacity to guarantee essential supplies. Toby's view on this was undoubtedly influenced by the fact that he spent many of his formative years living in Nairobi.

> " [When the power goes down in Nairobi] communities work around that, businesses work around that…. There can be a profound difference between community resilience and the resilience of a city
> **Toby Kent** "

However, a number of other interviewees referred to the importance of learning from the experiences of cities anywhere in the world which have successfully tackled challenges similar to those faced by Melbourne. Examples given included "where cities have set very clear and specific and time-based objectives" and "jurisdictions around the world that have got that joined up policy response".

Several cities were also singled out by interviewees as particularly able to provide inspiration for Melbourne:

- Vancouver for its efforts to redress mistakes in CBD planning
- Bogota for its emphasis on public transport
- Rotterdam for its flood management work
- Barcelona and several other European cities for how they seems to make children and the elderly feel welcome in public spaces

As well as learning from specific cities, Toby Kent noted that the 100RC network circulates information about policies, programs and projects that are not limited to particular cities. Rob Spence from the Municipal Association Victoria (MAV) noted that he heard about two UK initiatives from the 100RC network; the 'Casserole Club' project which encourages people to cook a little extra food for neighbours who may not have enough and the 'Patchwork' approach ensures the co-ordination of services for children at risk. MAV is promoting both of these concepts in Victoria.

There was considerable expectation reflected throughout the interviews that participation in the 100RC Challenge would provide an important mechanism to bring stakeholders together to plan for metropolitan Melbourne as an entity rather than a composite of many LGAs.

Several interviewees noted that the three-tiered structure of government in Australia makes it hard to develop policies and projects aimed at benefiting cities as a whole and any serious effort to build collaboration across metropolitan LGAs should be welcomed. In regard to the project's

capacity to shake up government thinking on urban governance, Liz Johnstone went further in expressing the hope that it might help to undermine cultures of blame-shifting.

> " I think there's a lot of hope that it can be a vehicle which cuts through a lot of the short-termism and politicisation of important policies
> **Liz Johnstone, AECOM** "

3.4 Adapting the process to Australian models of city governance

Most members of the project Steering Committee noted that the Rockefeller Foundation had based its thinking about urban resilience on the model of city governance which prevails in the USA, where single city authorities hold significant legal and political authority and control large budgets. Only Toby Kent and Craig Lapsley had read the book by Rockefeller Foundation president Judith Rodin (2014) which reflected on the experiences of a wide range of cities around the world. However, it is the case, as Rodin's book explains, that 100RC originated in the experiences of New Orleans where government structures have nothing in common with Australia.

In Australia, local government authorities have the ability to raise their own revenue by imposing property rates and service charges and councillors are elected directly by the residents. This gives them a degree of independence and they are given room within local government legislation to develop local policies and strategies. However, they are the creation of state governments, which have the power to redraw boundaries and dismiss elected councillors and non-elected administrators. The size and structure of LGAs varies from one state to another and even within state boundaries. A number of interviewees who work in local government said that state and federal government authorities rarely provide them with enough resources to undertake the work mandated to them by such authorities, yet they also say that LGAs in

Australia are obliged to work more closely with local communities than their larger counterparts in countries like the USA.

As mentioned previously, Toby Kent was appointed as Melbourne CRO because of his skills in negotiation and facilitation and he was set the principle task of convincing the mayors and CEOs of metropolitan Melbourne's 32 LGAs to join the project. While reaching out to the leaders of LGAs individually he also initiated a range of forums and workshops to develop ideas for the Preliminary Resilience Assessment (PRA) and he invited five LGA CEOs to lead further analysis of the five focus areas identified in the PRA. Mark Duckworth suggested that this rather painstaking process for engaging LGAs in the project would eventually make it stronger while some interviewees who had attended an early forum or workshop wondered why they had heard little about the project since. While the effort to engage the leaders of 32 LGAs may seem like a very horizontal process to the project Steering Committee it may be perceived rather differently by those who work in community based organisations. One interviewee, an LGA officer, told us:

> " There's a difference between having one big flagship program and having lots of disbursed and decentralised little solutions all over the place, which is what, I think, is getting more towards resilience "

Several of the Steering Committee members said that securing the engagement of LGA mayors and CEOs would make it possible to embed resilience work in the policies, strategies and practices of their organisations as a whole. They said it would also pave the way to engage community-based organisations that work closely with LGAs. Geoff Lawler described this as a "top down AND bottom up" approach. However, other interviewees felt that it was important to win support for the project within lower layers of LGAs in order to build pressure on LGA leaders.

While some interviewees also suggested that the project could run out of steam unless it gained wider community support in order to exert political pressure on both LGA leaders and state government ministers to make it a priority. Toby Kent agreed that it is important to build wider community support without neglecting the need to engage LGA mayors and CEOs.

Whittlesea CEO David Turnbull and Port Philip CEO Tracey Slatter both said it would be hard for busy LGAs to keep this project in their list of priorities, with Slatter and Turnbull wondering if the project's ambitions might exceed the available resources.

> "
> We have 318 service activities at the moment, so you just can't keep adding and adding
> **David Turnbull, City of Whittlesea CEO**
> "

Rob Spence from MAV suggested that LGA leaders are more likely to feel the need to compete with each other compared to people working at a "middle management" or officer level. He felt that more could be done to engage middle management staff and their cross-boundary networks in the 100RC project.

> "
> When you get to the middle management levels of LGAs they are incredibly co-operative. It's a pretty collegiate sector when you get below
> **Rob Spence, MAV**
> "

The need to focus so much attention on gaining support for the project across 32 LGAs made it difficult to build support in other 'sectors' of the city. When asked about the importance of building support for the project outside the LGA sector a number of interviewees suggested that the biggest challenge maybe in building support among private enterprises. Mark Duckworth noted that finance corporations—especially in banking and insurance—have an obvious interest in addressing vulnerabilities but they have little

relationship with LGAs. Small, local businesses are more likely to have direct dealings with LGAs and they can benefit from their participation in community projects. Mary Farrow, from Emerald Community House, suggested that the project should aim to work with private sector associations trying to increase employment opportunities, particularly in urban growth corridors and outer suburbs, in order to reduce the need for people to commute long distances from where they live to where they work.

3.5 Building on existing laws, policies, programs and practices

According to Geoff Lawler the timing of this project has been better than those working on the bid had imagined because "state and national governments had already started to move down this road of resilience". Craig Lapsley pointed out that emergency services in Victoria have been focusing on resilience as a policy objective since the findings of the Black Saturday Royal Commission and that this work has intensified following the release of the National Strategy for Disaster Resilience in 2011 and the Victorian Government Risk Management Framework in 2015. These policies establish a framework for thinking about disaster resilience across metropolitan Melbourne.

Mark Duckworth played a significant role in shaping the national and state policies on disaster resilience and he has noted[24] that the state government has asked him to expand policy work on resilience beyond focus on natural disasters. There is a need to consider other 'threats' such as the capacity of critical infrastructure to cope with population growth or the recruitment of alienated young people by extremist organisations. He told us that his responsibilities have continued to expand and, as the Chief Resilience Officer in the

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24 The Idea of Resilience and Shared Responsibility in Australia." In Strategies for Supporting Community Resilience: Multinational Experiences, edited by Robert Bach, 83-117. Stockholm: CRISMART, The Swedish Defence University, 2015.

Victorian Department of Premier and Cabinet, he has been asked to develop strategies for building 'community resilience' more broadly. Obviously it is important for a Chief Resilience Officer working at the city level to work closely with the Chief Resilience Officer working at the state level.

Another reason why Geoff Lawler felt the project was timely was because it came at a time when the state government was conducting the first significant review of the 1989 Local Government Act. At the time of interview he was urging his counterparts in other LGAs to call for a strong focus on resilience in the amended Act so that it would become a policy framework for all LGAs. Consultations on amendments to the Act closed on December 18, 2015. Others noted that the Victorian government was also conducting a review of the Plan Melbourne strategy adopted by the previous government in 2014, with review submissions open in the first part of 2016. The 'refreshed' Plan Melbourne will outline the state government's vision for the future of the city and this sets clear policy parameters for the city's 32 LGAs.

A number of interviewees referred to the importance of embedding the Resilient Melbourne goals into existing council plans within each LGA. City of Whittlesea CEO David Turnbull highlighted the fact that all LGAs are obliged to develop and maintain a Health and Wellbeing Plan. He suggested that these plans present an opportunity to develop policies and programs aimed at reducing social isolation.

As a whole-of-city approach, the Resilient Melbourne project presents a valuable opportunity to highlight, cross fertilise or scale up existing projects, programs and collaborations. A range of interviewees noted that LGAs tend to be at the forefront of policy and practice related to climate change mitigation and adaptation. Some of Melbourne's LGAs have designated officers working on climate change challenges and many of them support the work of greenhouse action alliances operating in different regions of the metropolitan area. The LGAs that front

onto Port Phillip have formed an Association of Bayside Municipalities in order to improve planning for climate-related coastal management issues, such as sea level rise and storm surges. It was suggested by a number of interviewees that the Resilient Melbourne project should aim to highlight and 'scale up' these kinds of collaborations. Additionally, Tom Melican from Banyule City argued that any strategy for increasing Melbourne's resilience should highlight the important work of the metropolitan Melbourne Transport Forum in trying to reduce car dependency.

Notably, there is strong alignment between this view, held by numerous interviewees including those who are closely connected with the project and many who are not, and a core guiding principle of the project that was emphasised by Toby Kent: to harness and scale up existing activities.

> " I feel that 70 to 80 per cent of the work [we do] is about existing or scaled up activities
> **Toby Kent** "

A few interviewees suggested that the City of Melbourne has led the way in developing an ambitious urban forest strategy to increase the overall canopy of trees and the diversity of plants in public spaces. It was suggested that at least some of this strategy could be rolled out in other LGAs. It was noted that nature does not respect human boundaries so biodiversity conservation is better tackled at a regional or metropolitan level rather than at the level of individual LGAs. Suggested opportunities for upscaling projects that may be strong in particular LGAs or areas of the city included:

• Local Agenda 21 initiatives
• Australian Urban Research Infrastructure Network data project
• Neighbourhood grant matching
• Household energy efficiency programs

- Urban agriculture
- Transition Towns initiatives

While it was widely agreed that LGAs have strong relationships with community sector organisations, the work of the Victorian Council of Social Services extends across the city as a whole, making VCOSS a critical player in any metropolitan resilience strategy. The same can be said of other 'community sector' organisations that work across metropolitan Melbourne or even more widely.

Additionally, the CEO of Volunteering Victoria, Sue Noble, stated that much more needs to be done to acknowledge the contribution that volunteers already play in building stronger local communities.

> " We want to start talking about volunteers as active citizens [who can] transform their lives, their communities, their organisations
> **Sue Noble, CEO of Volunteering** "

3.6 Project challenges and opportunities

Given that this research focused on how Melbourne could make the most of the investment by the Rockefeller Foundation, interviewees were asked to comment on what they considered to be the project's major challenges and opportunities.

A number of the people we interviewed had only attended early consultations or workshops related to the project yet most of them strongly welcomed the idea of looking at the city as a whole. Most noted there had been a "positive mood"' at the sessions attended. Renae Walton, from the City of Port Phillip said that "Everyone I have spoken to has been really open to it [resilience strategy]". While no-one doubted the need to work patiently with mayors and CEOS of the 32 LGAs, some LGA interviewees felt that more should be done to win support at lower levels within LGAs. For example, one interviewee cautioned that CEOs may leave the role without securing wider support within the organisation. A number of people

working in local government told us that they were very keen to see the project 'reach down' into the structures of participating LGAs in order to foster greater ownership throughout LGAs and deeper support.

Some interviewees from outside the LGA sector felt that the focus on local government buy-in within the project so far ran the risk of eroding some of the early enthusiasm for the project. Noting that community awareness of the project was very low, one interviewee suggested that it will gain support when it creates opportunities for people to work together because:

> " People just need a chance to practice working together doing something "

Many interviewees stressed the need to embed resilience thinking into a wide range of LGA policies, plans and strategies. Some suggested that LGAs should be required to report against resilience goals, for example by amending the Local Government Act to require reporting against resilience goals in council plans. One interviewee suggested that contributions to community resilience could be written into local government grant criteria while another suggested that 'integrated local planning' with community organisations could aim to identify 'hotspots' and vulnerabilities that could be addressed before they become bigger problems.

While some of the LGA leaders interviewed warned that it will be hard to keep new ideas and imperatives on the rather crowded agendas of busy LGAs, others suggested that new collaborations between and across LGAs could make the work of individual LGAs more efficient and effective. International literature on 'resilience thinking' has suggested the need to move from a focus on government to a focus on collaborative forms of governance (e.g. Folke 2006) and this has led to thinking about 'multi-scale governance' (Hooghe and Marks 2001), 'polycentric' and 'adaptive' governance (Folke 2006), and context-sensitive 'emergent governance' (Chandler 2014). Mark Duckworth acknowledged the need for new kinds of partnership in Victoria

between government agencies and those who can speak for particular communities facing new and complex challenges. Supporting this type of viewpoint, Toby Kent reported that: "As Councils, we exist for the benefit of the people who live within our boundaries and make use of services. Resilient Melbourne needs to help achieve better outcomes for those communities."

> "
> My sense is that problems are bigger than Councils or government can deal with now. So you need to work with the community
> **Liz Johnstone, AECOM**
> "

> "
> We recognise that these are complex issues which require a high degree of collaboration and trust between governments and communities; between different communities and between individuals and civil society
> **Mark Duckworth, Department of Premier and Cabinet**
> "

Mark Duckworth agreed with the proposition that community development work carried out within LGAs and by people working in a wide range of community based organisations has not received the acknowledgement it deserves. It is probably not as easy as many people in government think to work within communities that may have experienced disruptions and traumas already or which are coping with a range of accumulation stresses and strains. Mary Farrow, an experienced community development worker from an outer metropolitan community, suggested that people working in government need to acknowledge they need help in learning how to build more resilient communities.

> "
> Here the community is lateral, fluid, changeable, flexible, dynamic. [Government] has got to embrace it and not be afraid. Step into the estuary or we'll drag you in
> **Mary Farrow, Emerald Community House**
> "

Many of the interviewees stressed that the project needs to demonstrate practical relevance by the end of the two years of Rockefeller Foundation funding if it is to have ongoing relevance. For many, this meant selecting projects which can clearly benefit from a whole-of-city approach or at least by expanding LGA buy-in. It should then be possible, some argued, to demonstrate that wider support for particular projects can increase the prospects for gaining state and national government support and funding. At the same time, many interviewees warned of the danger of simply duplicating what already exists or of adding another layer of accounting and responsibility which would hinder rather than help project development.

One non-LGA interviewee suggested that the project could open the way for new, "boundary challenging", even controversial projects which may not otherwise be considered. Mark Duckworth and Liz Johnstone said that resilience thinking should encourage people to think differently about familiar challenges and Mark added that it should encourage people not to look solely to government agencies for solutions.

> "
> "Initiatives driven by governments alone will not succeed, nor will any approaches that are solely driven from the 'top down'."
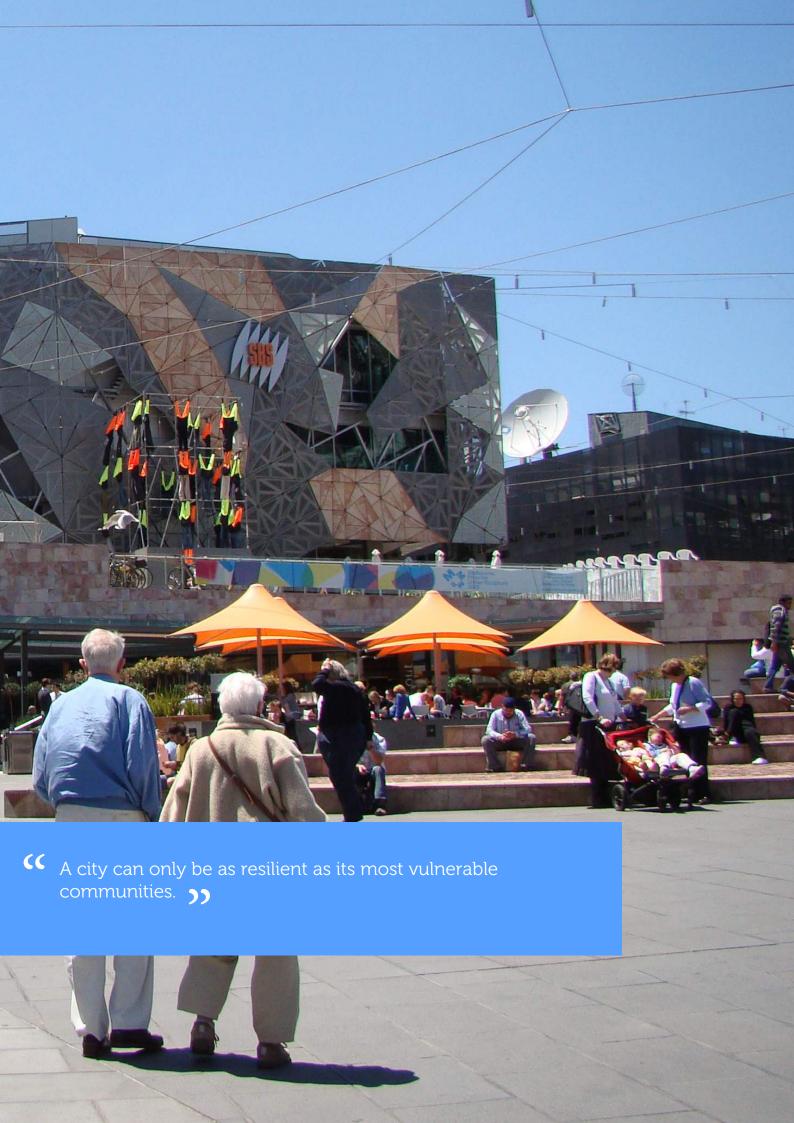> **Mark Duckworth, Department of Premier and Cabinet**
> "

As mentioned in Section 3.3, a number of interviewees suggested that a key challenge for the project was to engage private sector organisations. Of course LGAs work with businesses operating in their areas, but a whole-of-city approach may attract the interest of bigger corporations, such as those in insurance or finance. One interviewee suggested that the best way to increase the engagement of targeted organisations is to find people whose enthusiasm for the project could make them 'champions' for it within their own organisations. Such champions need to be identified first and then kept informed of all developments.

Members of the project Steering Committee felt that funding needs to be sought in order to continue the employment of someone like Toby Kent as Melbourne CRO beyond the two years of Rockefeller Foundation funding. At the time of writing this report, City of Melbourne had offered Toby a continued role beyond the initial two-year appointment.

There was general consensus among our interviewees that it has been entirely appropriate for City of Melbourne to take the lead in making Melbourne part of the Rockefeller 100RC network. However, some interviewees living in outer urban areas suggested that it remains to be seen if the project can address issues of concern to them. Rather than drawing attention to the city as a bounded entity it was argued that the gaze also needs to turn to issues in the peri-urban regions where urban sprawl and peri-urban agriculture are often in conflict with each other. Several members of the project Steering Committee told us that they were confident that evidence showing how the project had already influenced relevant national, state and local policies and practices would be available by the time the Rockefeller Foundation funding runs out. Mark Duckworth and Liz Johnstone were prominent in saying that evidence would continue to mount to support the project's whole-of-city approach and the potential for resilience thinking to encourage people to think differently about how they can tackle familiar problems and neglected vulnerabilities. However, the pressure to demonstrate that this particular initiative can add value to what already exists will continue to mount.

> " A city can only be as resilient as its most vulnerable communities. "

References

100 Resilient Cities. "City Resilience and the City Resilience Framework." New York: 100 Resilient Cities, 2015.

"100 Resilient Cities Strategy Process [Powerpoint Presentation]." Surat, India: Resilient Surat, 2014.

Berkowitz, Michael. "What a Chief Resilience Officer Does." 100 Resilient Cities, http://www.100resilientcities.org/blog/entry/what-is-a-chief-resilience-officer1#/-_/.

Chandler, David, Resilience: the governance of complexity, London: Routledge, 2014.

COAG. "National Strategy for Disaster Resilience: Building Our Nation's Resilience to Disasters." Canberra, ACT: Council of Australian Governments, 2011.

Commonwealth Government. "Critical Infrastructure Resilience Strategy." Canberra: Attorney-General's Office, 2015.

Commonwealth of Australia. "Counter-Terrorism White Paper: Securing Australia, Protecting Our Community." Canberra: Department of the Prime Minister and Cabinet, 2010.

da Silva, Jo, and Braulio Morera. City Resilience Framework. December 2015 ed. London: ARUP, 2015.

Duckworth, Mark. "The Idea of Resilience and Shared Responsibility in Australia." In Strategies for Supporting Community Resilience: Multinational Experiences, edited by Robert Bach, 83-117. Stockholm: CRISMART, The Swedish Defence University, 2015.

Folke, Carl, "Resilience: The emergence of a perspective for social-ecological systems analyses", Global Environmental Change, Vol 16, pp 253-267.

Hooghe, Liesbert and Gary Marks, "Types of Multi-Level Governance", European Integration Onliine Papers Vol 5, 2001, http://eiop.or.at/eiop/pdf/2001-011.pdf

Resilient Melbourne. "Preliminary Resilience Assessment." Melbourne: City of Melbourne, 2015.

Rockefeller Foundation. 100 Resilient Cities: Pioneered by the Rockefeller Foundation. New York2013.

Rodin, Judith, The Resilience Dividend: Being Strong in a World Where Things Go Wrong, PublicAffairs/Perseus, 2014.

Victorian Government. "Critical Infrastructure Resilience Strategy." Melbourne: Emergency Management Victoria, 2015.

———. "Plan Melbourne: Metropolitian Planning Strategy." Melbourne: Victorian Government, 2014.

———. "Strategic Framework to Strengthen Victoria's Social Cohesion and the Resilience of Its Communities." Melbourne: Department of Premier and Cabinet, 2015.

———. "Victorian Emergency Management Reform: White Paper." Melbourne: Victorian Government, 2012.

Appendix

Interview questions

In conducting semi-structured interviews we worked with a number of 'starting questions' but adapted these to suit particular interviews. Most of the interviews with people who were closely involved in the project extended to an hour or more and we could cover at least 20 of our starting questions in that time. Interviews with less involved people were more commonly around 30 minutes in duration and this reduced the number of questions that could be covered. The following is the full list of 'starting questions' that we worked with.

1. The Rockefeller 100RC program works with an understanding of resilience which largely comes from Judith Rodin's book on the topic and this involves becoming resilient to a wide range of stressors and shocks. Do you see strengths and weaknesses in this approach?

2. What is your own working definition of 'resilience'?

3. How resilient do you think Greater Melbourne currently is, what are the key threats it faces, and what are some of the key factors that influence its capacity to become more resilient?

4. What do you see are the limits for what can be addressed at the municipal level and also at the level of greater Melbourne?

5. In a project like this you have to rely on a range of existing agencies and consultancies to carry out much of the work. What are some of the agencies or consultancies involved?

6. While the project is primarily targeted at LGAs what are some of the other key organisations, sectors or agencies you want to work with and how are you trying to involve them with the overall project aims? Do you need to have different strategies for working with different sectors and/or agencies?

7. In the literature on resilience a distinction is made between 'urban resilience' and 'community resilience', while the Rockefeller 100RC tends to blur that distinction. What do you think about that? What has this project taught you so far about the aim of making communities more resilient?

8. Inevitably a project like this must adopt a top-down approach and there is an assumption that leaders can teach organisations and communities how to become more resilient. From your experiences to date in this project where do you think ideas about resilience can come from and how can they be 'relocated'?

9. In working across an entire city there is an assumption that ideas and practices can be scaled down and up. Can this really be a two-way transfer of ideas and practices and how can ideas and practices be 'localised'?

10. The City of Melbourne is hosting the project which aims to work across 32 LGAs in metropolitan Melbourne. Are there strategic advantages or weaknesses in CoM playing this role?

11. Can you nominate some good examples of LGA 'horizontal partnerships' in Melbourne?

12. To get LGAs on board you obviously have to work with CEOs and mayors but what do you think it will take to ensure that 100RC can have an impact in particular LGAs below that level?

13. Is there perhaps a danger of a local government 'culture' dominating the R 100RC project in Melbourne to the extent that it may be hard to get meaningful buy-in from other sectors, such as the private sector or community sector?

14. Can you nominate examples of good practice when it comes to forming partnerships between LGAs and organisations in other sectors?

15. Several people have told us that the highest priority of 100RC in Melbourne must be to get significant buy-in from most, if not all, of the 32 LGAs in Greater Melbourne. Do you also think that is the key strategic priority and, if so, how can you tell when there has been significant buy-in?

16. Others have also said that it is a big challenge to bring a strategy for making more resilient cities from the US to Australia because the model of local government is so different. What is your view on this?

17. How can you make best use of the international network of Rockefeller 100RC cities?

18. Has anything happened yet in the R 100RC in Melbourne which has come as a pleasant surprise to you? Anything notable, memorable or out of the ordinary happened so far?

19. Anything that has disappointed you so far?

20. In summary, who do you think are the most important stakeholders?

21. What do you think Melbourne can gain from inclusion in the Rockefeller international program? What can be gained from working with the projects in other cities?

22. Can ideas be taken from a city elsewhere in the world and applied in Melbourne? How might this work?

23. How can you work with Melbourne as a whole (urban resilience) and with local communities (community resilience)? How might this project advance our thinking on 'community resilience'?

24. What do you think needs to be in place at the end of two years in order to ensure that the Rockefeller investment leaves a lasting legacy for Melbourne?

25. You know that literature on resilience tends to draw a distinction between 'bounce-back' and addressing vulnerabilities and social inequities. Do you think R 100RC can make a contribution on the latter?

26. Many of the social vulnerabilities in a city like Melbourne reflect the 'urban form'; e.g. urban sprawl and social isolation. Can R 100RC do anything about this kind of legacy?

27. Coming back to the idea of 'shared responsibilities' that has come to dominate emergency management policies and strategies in Victoria and the criticism that this can sometimes mean passing the buck to people who have very few resources. Do you think that R 100RC in Melbourne can address questions of resources and responsibilities?

28. Can a focus on accumulating stressors and unexpected shocks create stronger linkages between physical and social planning within LGAs?

29. To what extent do you think this project can reach into local communities across Melbourne within its two-year timeframe and what strategies might ensure that it can?

30. Given that we live in a globalised world, what do you think a single city can do to become more resilient and what are some of the key limitations on what a city can do on its own?

31. How can cities work together in order to be more effective in addressing vulnerabilities?

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