

City Resilience – Sydney's journey with 100 Resilient Cities



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Introduction to 100RC

Why was 100 RESILIENT CITIES created?



Bangkok, Thailand

To help cities respond to the impacts of three worldwide trends:

- **URBANIZATION**

Urban populations are growing rapidly: of an estimated global population of 9 billion by mid-century, 70% will live in cities. Many are in fragile ecosystems, and the number of people at risk is unprecedented.

- **GLOBALIZATION**

Cities are more interconnected than ever before, and a system failure in one city can cause problems across the globe.

- **CLIMATE CHANGE**

Climate change places new social, fiscal and political pressures on urban systems.

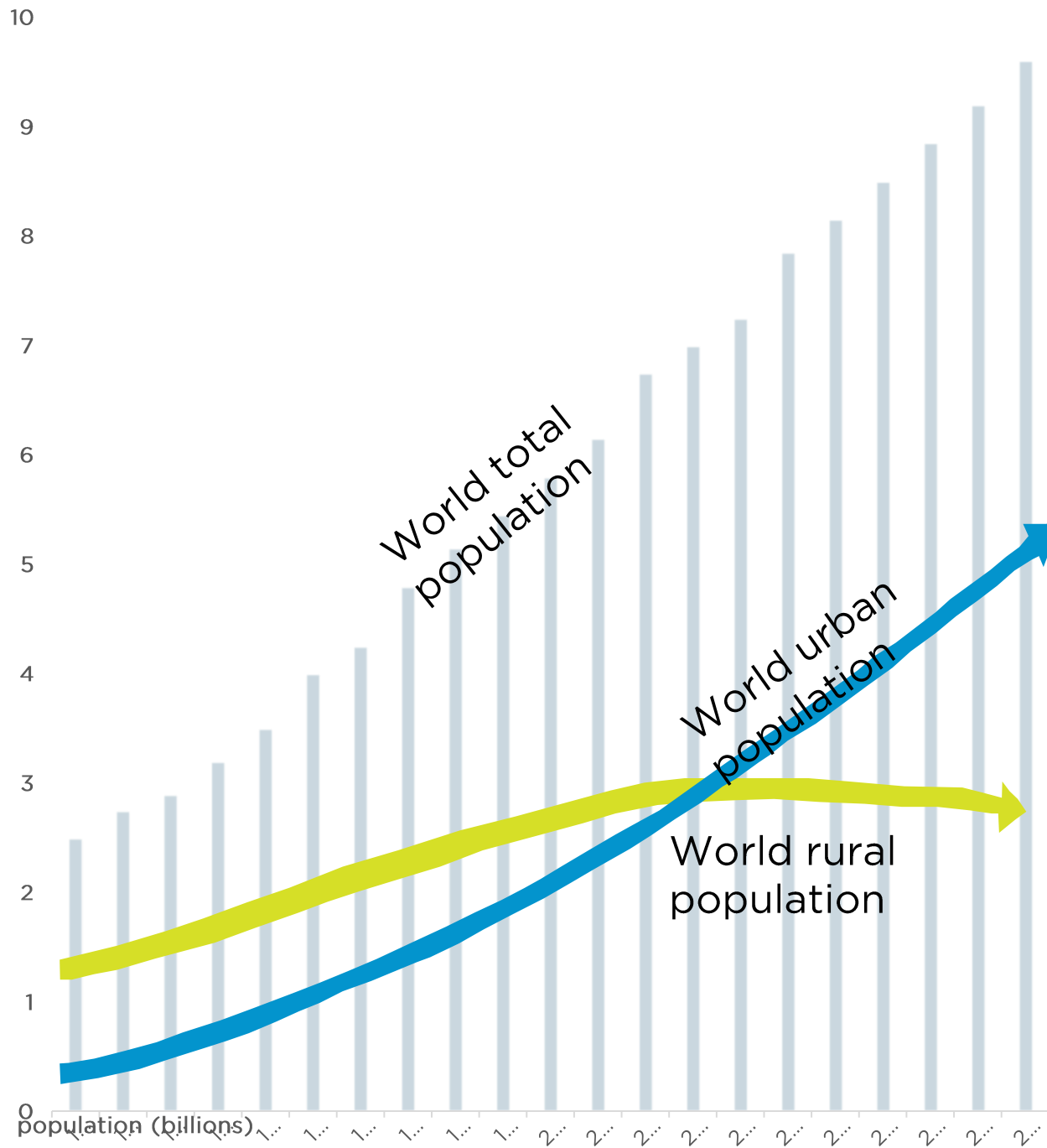


100RC **partners with cities** around the world to **help them become more resilient** to the social, economic and physical challenges that are a growing part of the 21st century.



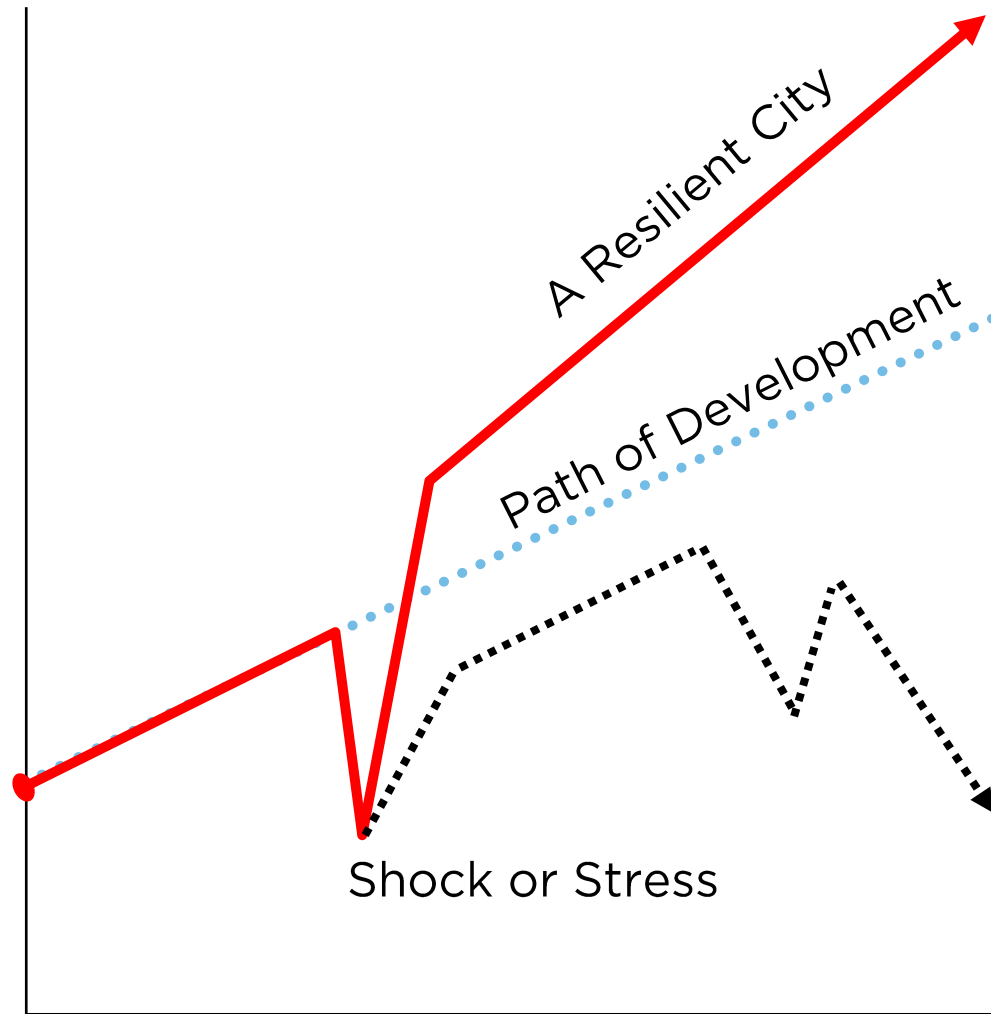
URBAN RESILIENCE

Is 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.



People are drawn to cities as centres of economic activity, social connection, opportunity and innovation.

Shocks and stresses can bring opportunities for cities to evolve, and in some circumstances, transform.



Round 1 & 2 Cities selected thus far..

NORTH AMERICA



LATIN AMERICA & THE CARIBBEAN



EUROPE



AFRICA



MIDDLE EAST



OCEANIA



SOUTH ASIA



EAST ASIA



BOULDER (CO)
BERKELEY (CA)
EL PASO (TX)
JACKSONVILLE (FL)
LOS ANGELES (CA)
MEXICO CITY
(MEXICO)

MEDELLÍN
(COLOMBIA)
PORTO ALEGRE
(BRAZIL)
QUITO (ECUADOR)
RIO DE JANEIRO
(BRAZIL)

BRISTOL
(ENGLAND)
GLASGOW
(SCOTLAND)
ROME (ITALY)
ROTTERDAM
(NETHERLANDS)
VEJLE
(DENMARK)

ATHENS (GREECE)
BARCELONA
(SPAIN)
BELGRADE
(SERBIA)
LONDON
(ENGLAND)
LISBON
(PORTUGAL)
MILAN (ITALY)
PARIS (FRANCE)
THESSALONIKI
(GREECE)

DAKAR
(SENEGAL)
DURBAN
(SOUTH AFRICA)
ACCRA
(GHANA)
ARUSHA
(TANZANIA)
ENUGU
(NIGERIA)
KIGALI
(RWANDA)

ASHKELON
(ISRAEL)
RAMALLAH
(PALESTINE)
BYBLOS
(LEBANON)
AMMAN (JORDAN)

MELBOURNE
(AUSTRALIA)
CHRISTCHURCH
(NEW ZEALAND)
SYDNEY
(AUSTRALIA)
WELLINGTON
CITY (NEW
ZEALAND)

SURAT
(INDIA)
BANGALORE
(INDIA)
CHENNAI
(INDIA)

BANGKOK
(THAILAND)
MANDALAY
(MYANMAR)
DA NANG
(VIETNAM)
SEMARANG
(INDONESIA)
DEYANG (CHINA)
HUANGSHI
(CHINA)
PHNOM PENH
(CAMBODIA)
SINGAPORE
(SINGAPORE)
TOYAMA
(JAPAN)

NEW ORLEANS (LA)
NEW YORK CITY (NY)
NORFOLK (VA)
OAKLAND (CA)
SAN FRANCISCO (CA)
BOSTON (MA)
CHICAGO (IL)
DALLAS (TX)
JUAREZ (MEXICO)
MONTREAL (CANADA)
PITTSBURGH (PA)
ST. LOUIS (MO)
TULSA (OK)

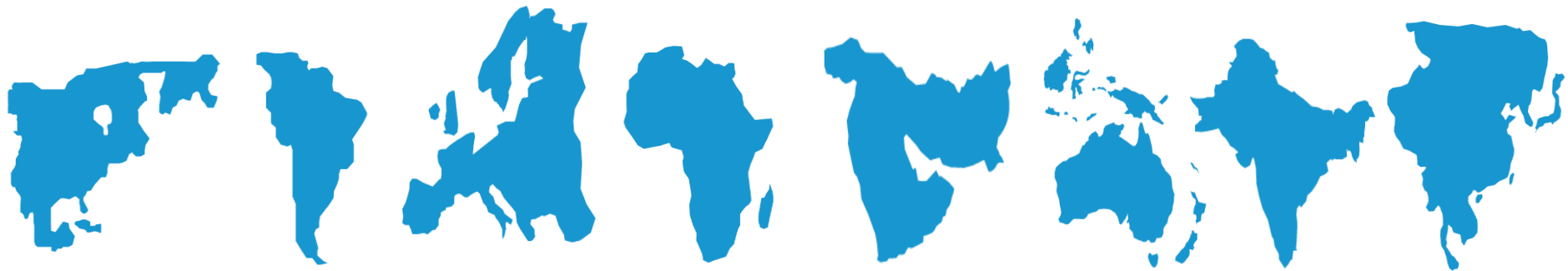
CALI (COLOMBIA)
SAN JUAN (UNITED
STATES)
SANTA FE
(ARGENTINA)
SANTIAGO DE LOS
CABALLEROS
(DOMINICAN
REPUBLIC)
SANTIAGO, METRO
AREA (CHILE)

A black and white photograph of a city skyline, likely Sydney, Australia, featuring the Sydney Harbour Bridge and various skyscrapers. In the foreground, a multi-lane highway is shown with long-exposure light trails from cars, indicating traffic flow. The text 'AECOM and 100RC' is overlaid in blue on a semi-transparent dark band across the middle of the image.

AECOM and 100RC

AECOM and 100RC

AECOM is partnering with 100RC working with 15 of the 67 cities selected thus far including:
Sydney, Christchurch, Melbourne, Wellington, San Francisco, Berkeley, Oakland, Bangkok, Quito, Montreal, Dallas, Santiago De Los Caballeros, Juarez, Mexico City, and San Juan.

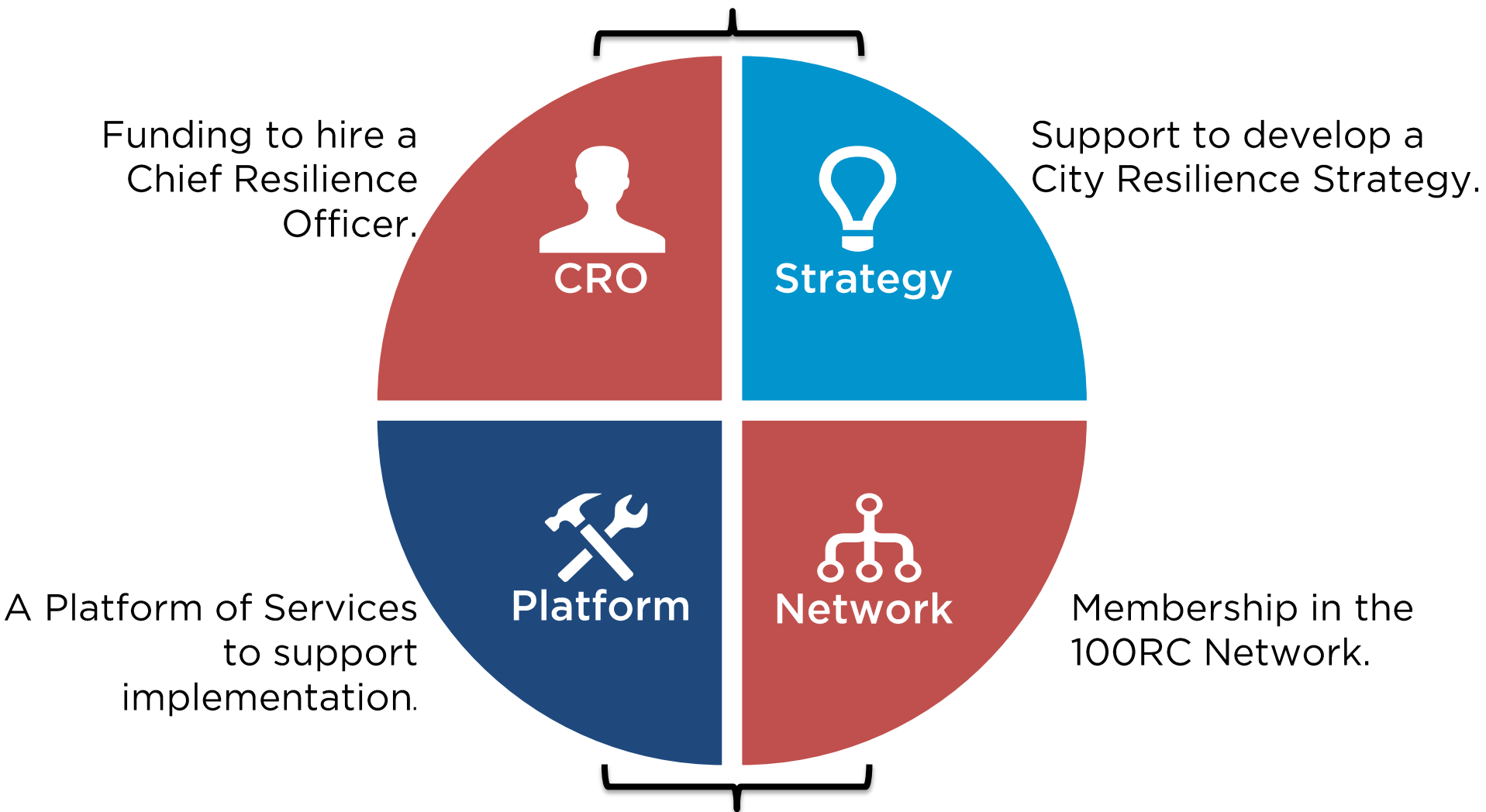


A black and white photograph of a city skyline, likely Sydney, Australia, featuring the Sydney Harbour Bridge and various skyscrapers. In the foreground, a multi-lane highway is shown with long-exposure light trails from cars, indicating traffic flow. The text "Developing a resilience strategy" is overlaid in blue on a semi-transparent dark band across the middle of the image.

Developing a resilience strategy

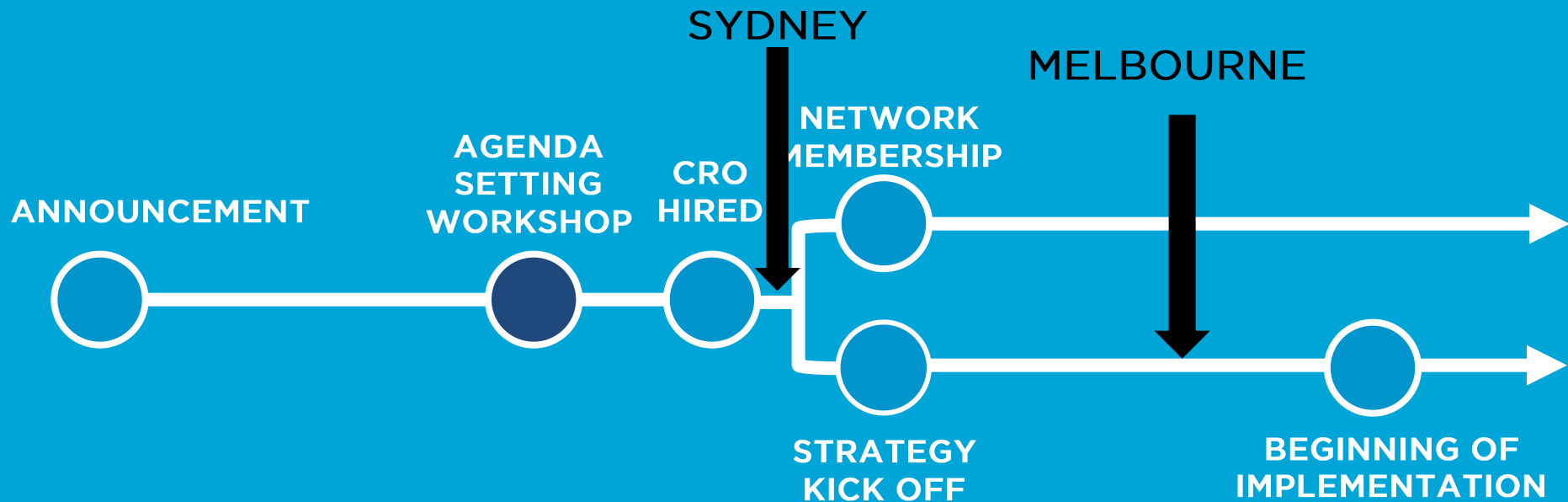
100RC OFFERS 4 TYPES OF SUPPORT

TO HELP COMPLEX URBAN SYSTEMS ORGANIZE AROUND
RESILIENCE



TO SCALE RESILIENCE-BUILDING TOOLS AND SOLUTIONS
EFFICIENTLY

The Journey of a 100 RC City





CHIEF RESILIENCE OFFICER

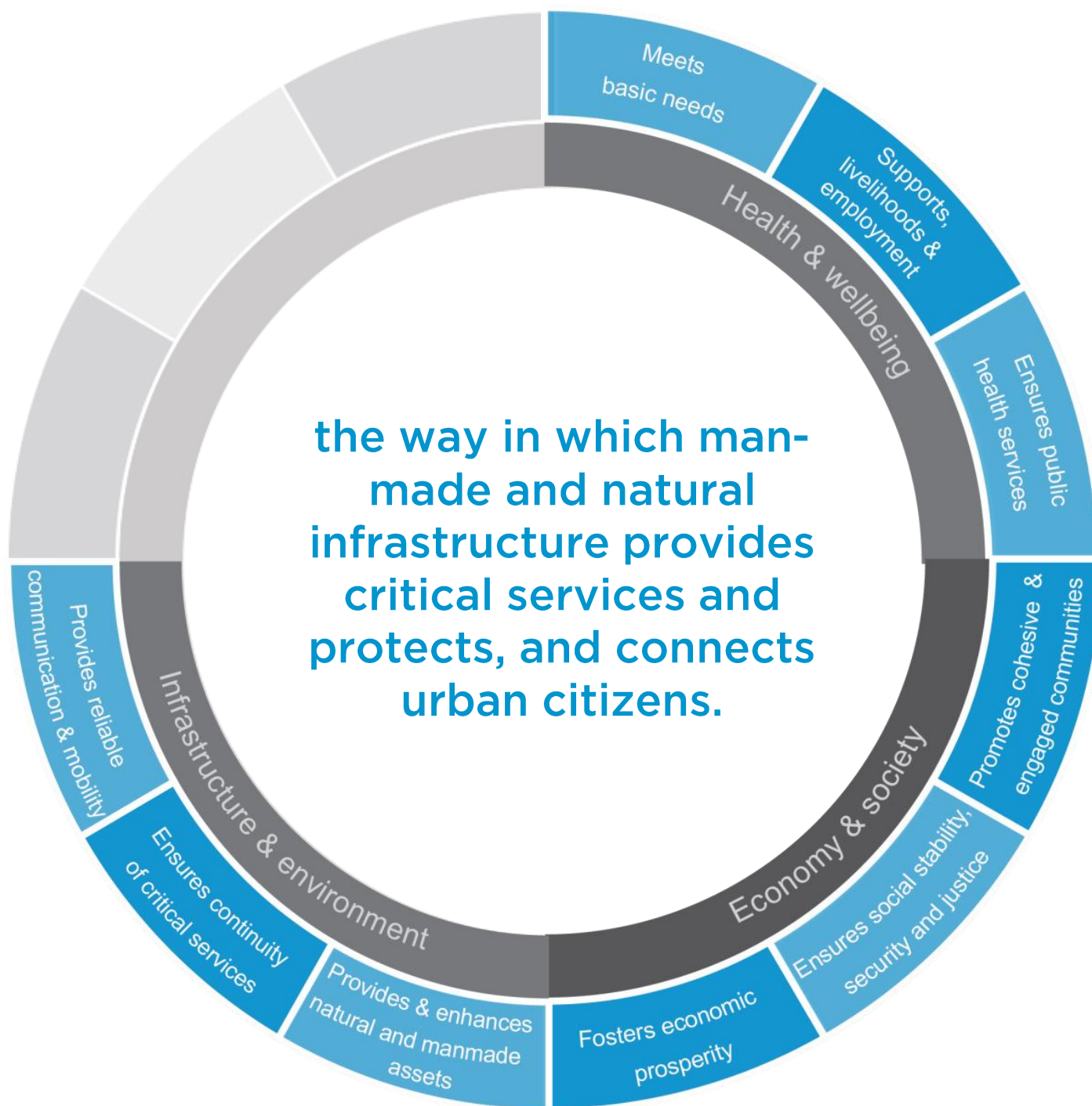
- Engaged by lead local government
- The CRO will lead the City's resilience building efforts
- Work across silos to create and implement a resilience strategy
- Senior advisor to the Mayor and municipal leadership
- Coordinate efforts across the government
- Liaise with other CROs and 100 RC















RESILIENT

SYDNEY

Metropolitan Sydney Resilience Strategy

One of the 100 Resilient Cities pioneered by the
Rockefeller Foundation

CITY OF SYDNEY



PIONEERED BY THE
ROCKEFELLER FOUNDATION

100

RESILIENT

CITIES



AECOM

AECOM engaged by 100RC to partner with City of Sydney to deliver the Metropolitan Sydney Agenda Setting Workshop





RESILIENT

SYDNEY

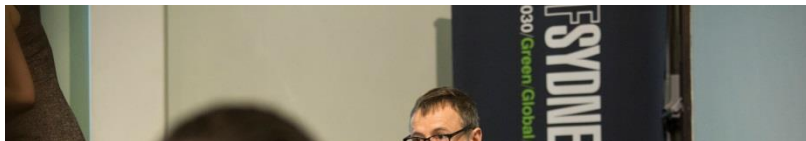


Sydney Workshop



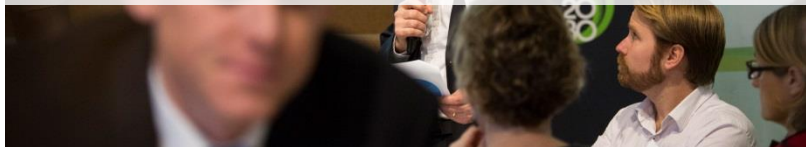
"The workshop has broadened my thinking about resilience to encompass more issues, the regional impacts, and the interconnectedness of issues. It requires high level long term integrated planning to effectively address issues."

Local Government Workshop Participant



"The first time that all the metropolitan Councils sat down to consider strategic issues"

Local Government Workshop Participant



"What about the globalisation agenda and Sydney's reliance on the global economy?"

Workshop participant



Resilience challenges

Shocks	Stresses
Heatwaves	Lack of affordable housing
Flooding (Coastal and rainfall)	Aging infrastructure
Infrastructure failure (building, transport, water, energy etc)	Poor transportation system



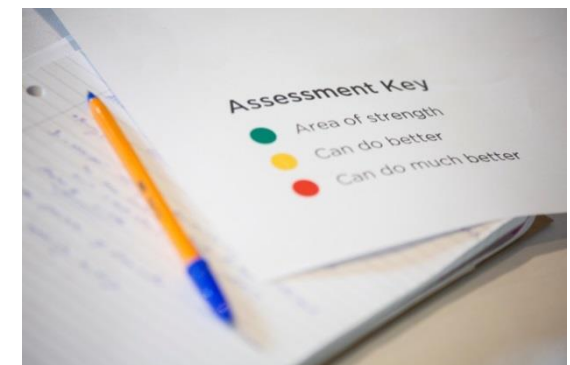
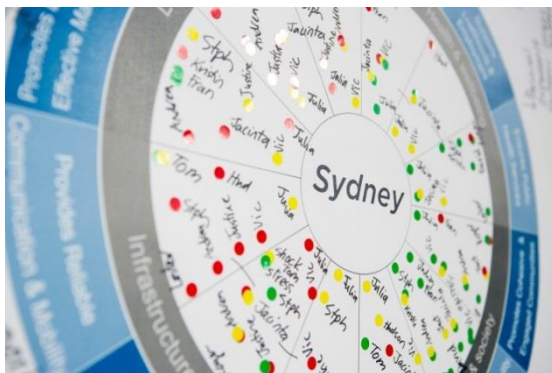
Feedback from workshop stakeholders

- Weakness in meeting basic needs - affordable housing
- Strong link between economic prosperity and supporting livelihoods
- Impact on Sydney's future economic prosperity, population growth, and competitiveness.
- Inequity of resilience across socioeconomic groups
- Depoliticising critical decision making processes



Results from the Sydney Workshop

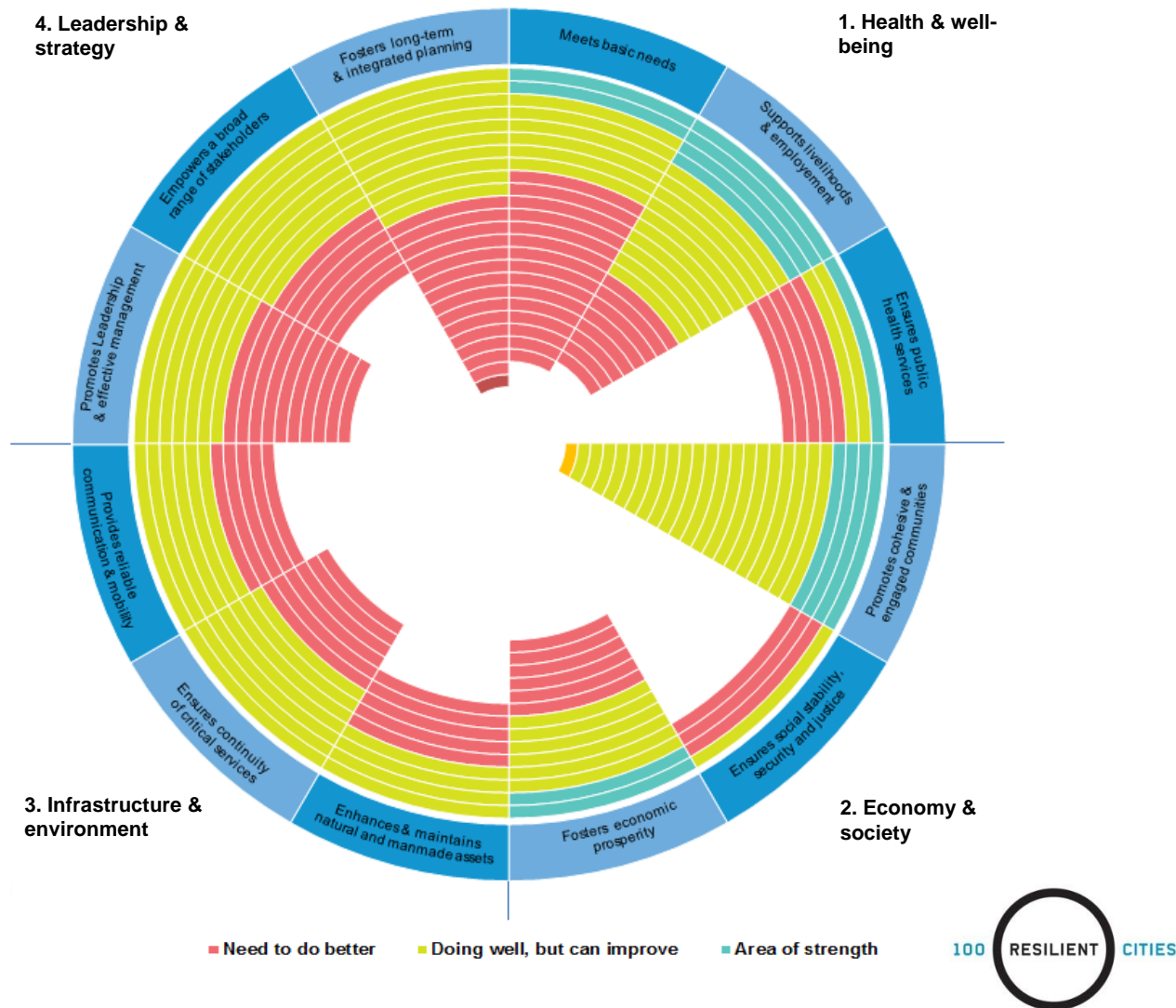
<p>Promotes Leadership & Effective Management</p> <p>Empowers a Broad Range of Stakeholders</p> <p>Fosters Long-Term & Integrated Planning</p>	<p>Can do much better:</p> <p>Leadership & Strategy</p>	<p>Can do better:</p> <p>Health & Wellbeing</p>	<p>Meets Basic Needs</p> <p>Supports Livelihoods and Employment</p> <p>Ensures Public Health Services</p>
<p>Enhances & Provides Natural & Man-Made Assets</p> <p>Ensures Continuity of Critical Services</p> <p>Provides Reliable Communication and Mobility</p>	<p>Can do better:</p> <p>Infrastructure & Environment</p>	<p>Area of strength:</p> <p>Economy & Society</p>	<p>Promotes Cohesive & Engaged Communities</p> <p>Ensures Social Stability, Security & Justice</p> <p>Fosters Economic Prosperity</p>



Melbourne - Preliminary resilience assessment

Stresses	Shocks
Alcohol and drug abuse	Bushfire
Climate change	Flood (riverine, stormwater and coastal)
Development pressures on ecosystem services	Transport infrastructure emergency
Family violence	Heatwave
Higher rates of chronic illnesses	Electricity supply disruption
Increased incidence of age-related diseases and disability	Influenza pandemic
Increasing pressure on healthcare services	Hazardous materials incident
Increasing social inequality	Marine pollution
Lower rates of community participation	Cyber attack
Radicalisation and terrorism	
Unemployment, particularly among young people	

Stakeholder feedback - Melbourne's performance against 100RC resilience criteria



Preliminary resilience assessment – Focus areas

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?*

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?*

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?*

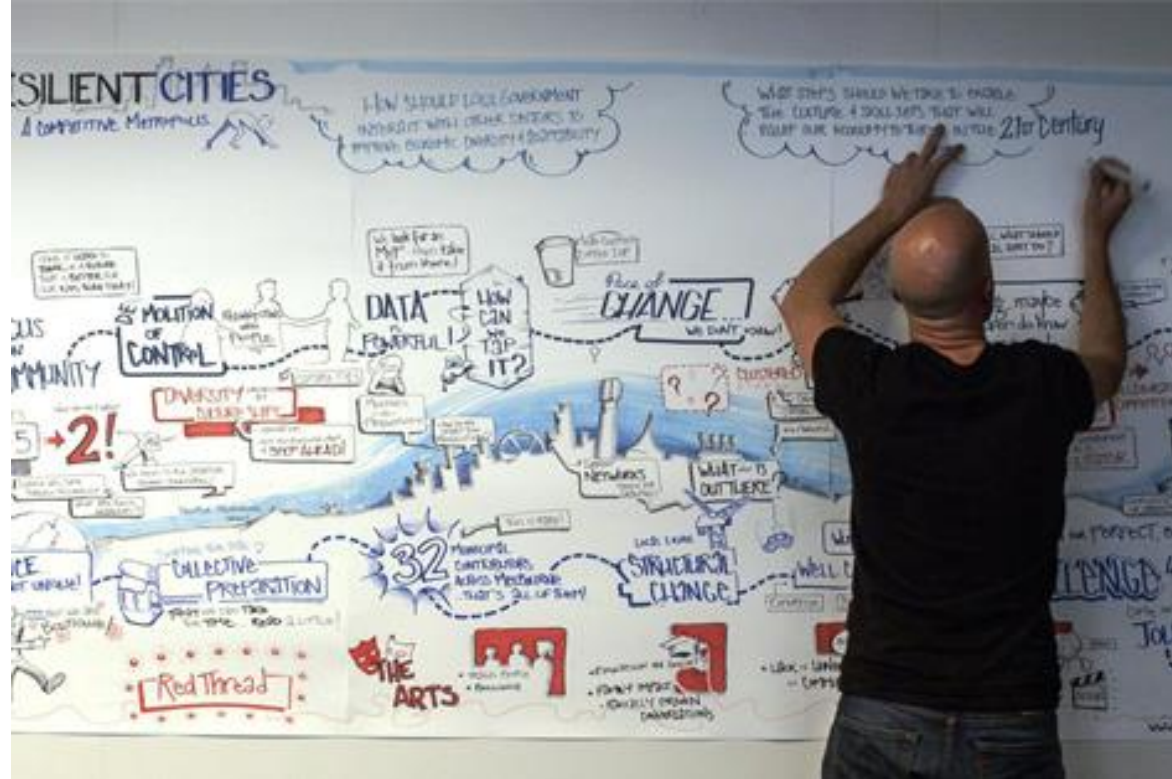
Brimbank, Maroondah, Moreland, Hobsons Bay, Wyndham

Focus Area 4. A healthier environment - *How do we preserve and strengthen our natural assets and ecosystems alongside a growing population?*

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?*

Bayside, Cardinia, Melton, Whittlesea





CITY OF
MELBOURNE

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For Residents

For My Business

For Visitors

100 Resilient Cities

Melbourne Resilience

Melbourne is participating in the [100 Resilient Cities](#) (100RC) challenge.

The initiative, fully funded by the Rockefeller Foundation, is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges of the 21st century.

In November 2014, Australia's first [Chief Resilience Officer](#) was appointed to lead the development of a resilience strategy for the 31 local government areas that make up metropolitan Melbourne.

The development of this strategy is an opportunity for Melbourne to foster the long-term viability, safety and wellness of our interconnected communities and municipalities.

What is resilience?

Resilience is the capacity of individuals, communities, businesses and systems within a city to survive, adapt and grow not just as a response to shocks (such as heat, fires and floods) – but also to the stresses that weaken the fabric of a city on a day to day or cyclical basis.

Examples of these stresses include high unemployment, an over-stretched or inefficient public transportation system, endemic violence, or chronic energy and water shortages.

To find out more, we asked leaders from across Melbourne involved in the project, [‘what does resilience mean to you?’](#)

Understanding Melbourne's current state of resilience

Melbourne's resilience project is seeing people from across sectors, council boundaries and interest groups come together to help address a shared challenge; what can we do to protect and improve the way of life for Melbourne communities now, and for the future?

At its essence, this project is about having a plan so that Melbourne is stronger in good times and in bad.

In early 2015 leaders from government, academic, infrastructure, emergency management, environment, community and health sectors worked together to identify issues that impact Melbourne's resilience, both now and in the future.

Resulting from four months of forums, roundtables, interviews and research five clear themes, or focus areas, emerged. These will now be analysed further to inform the development of Melbourne's first Resilience Strategy.

This preliminary resilient assessment was endorsed by Future Melbourne Committee on Tuesday 9 June.

Read the [Preliminary Resilience Assessment \(PDF 1.6MB\)](#).

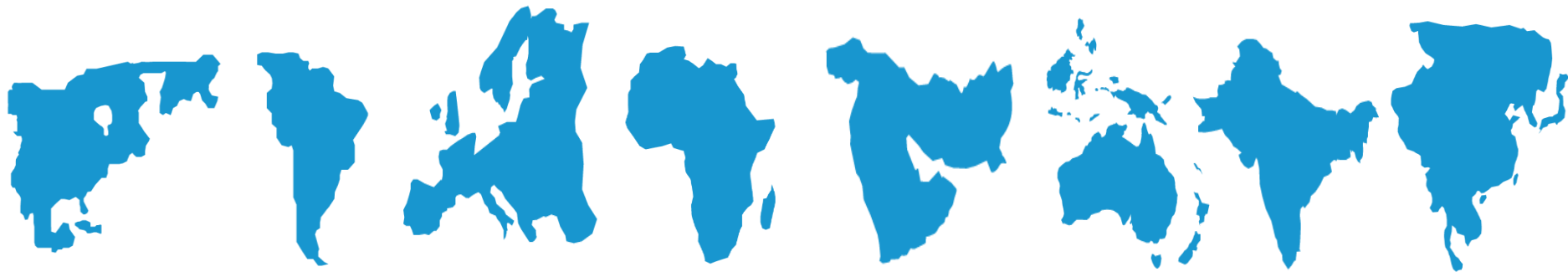


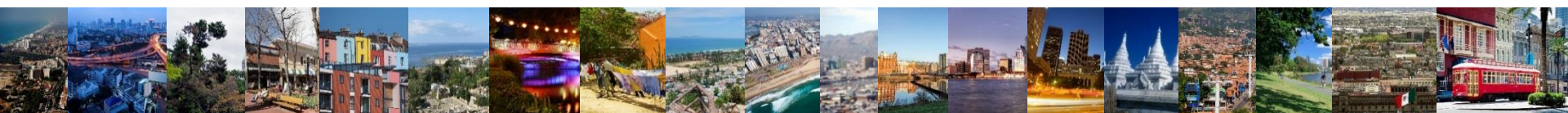
CITY OF MELBOURNE

100RC Round 3 applications open now..

And, other international initiatives:

- United Nations International Strategy for Disaster Risk Reduction (UNISDR)
- The UNISDR AR!SE initiative has a target of 500 cities to complete a Resilience Scorecard assessment (co-developed by AECOM and IBM)





Closing thoughts..

- Opportunity to build the resilience of cities in the face of the challenges that we face
- CRF is a useful tool to ensure that all aspects of resilience are considered
- But, need to consider sustainability and restorative measures



RESILIENT

SYDNEY

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