



Australian Government

Australian Institute for
Disaster Resilience



#ADRC21

RESILIENT SYDNEY

The Resilient Sydney story 2015-2021

A place-based systems approach to resilience



Resilience
NSW

Acknowledgement of Country

and acknowledging the
resilience of First
Nations communities





Overview – Resilient Sydney

Program 2015 – 2021:

- Global city competition – 100RC
Rockefeller Foundation funded grant
- Metropolitan Sydney – 33 Councils
- Steering Committee – ‘Metro Board’
- Global org provided tools, frameworks
and methodologies – strategy developed
- Small facilitating team, senior exec lead
- Network of networks change model
- Hosted by City of Sydney, funded by all
metro councils



Phase 1

Preliminary Resilience Risk Assessment

**Phase I
Nov 2015 –
Aug 2016**

Phase 2

Engagement and develop Strategy

**Phase II
Aug 2016 –
Mar 2018**

Phase 3

Implement & report

**Phase III
2018 +**

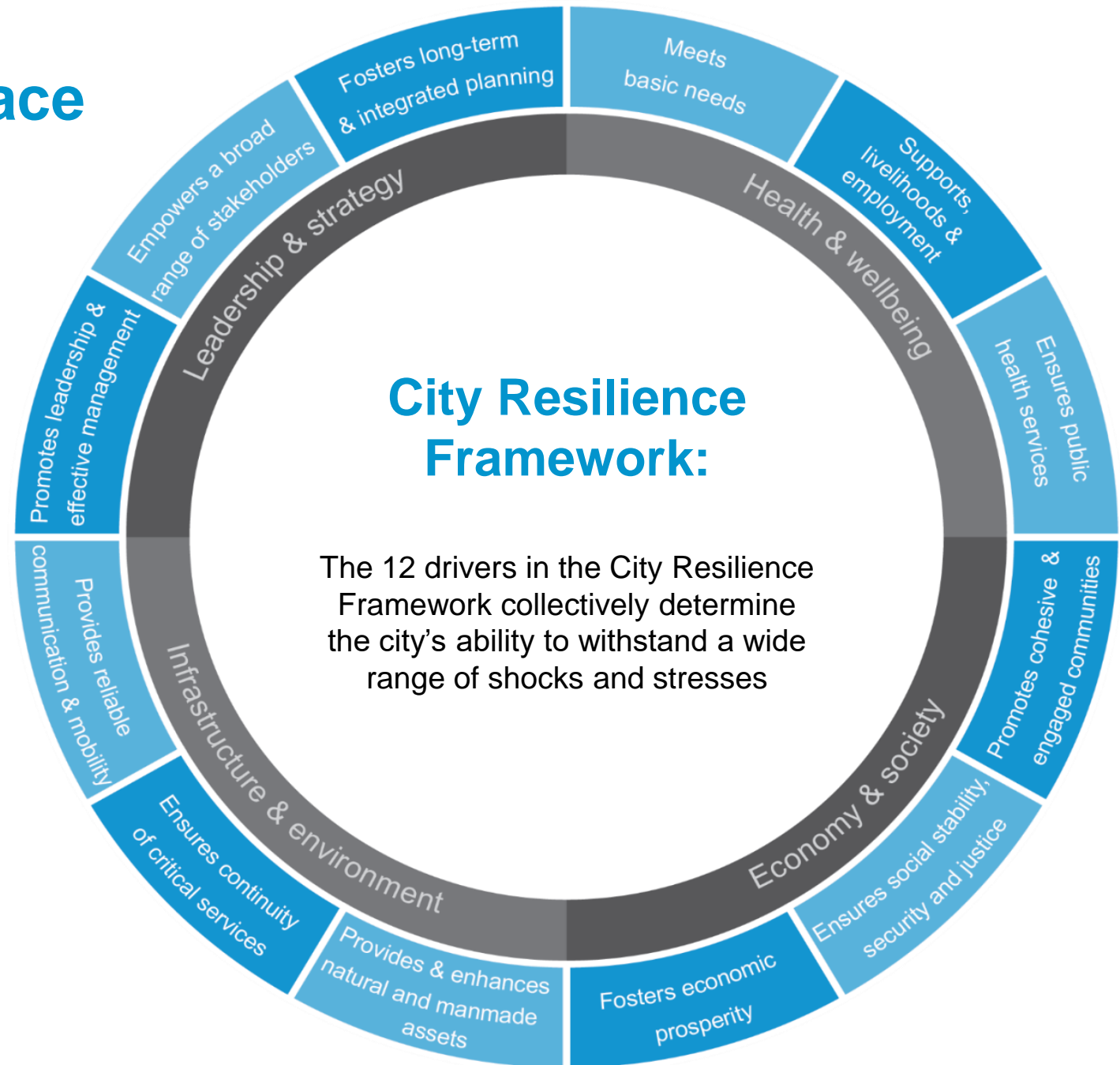
Metropolitan Steering Committee 2015-2021



Assessing resilience in place

Methodology

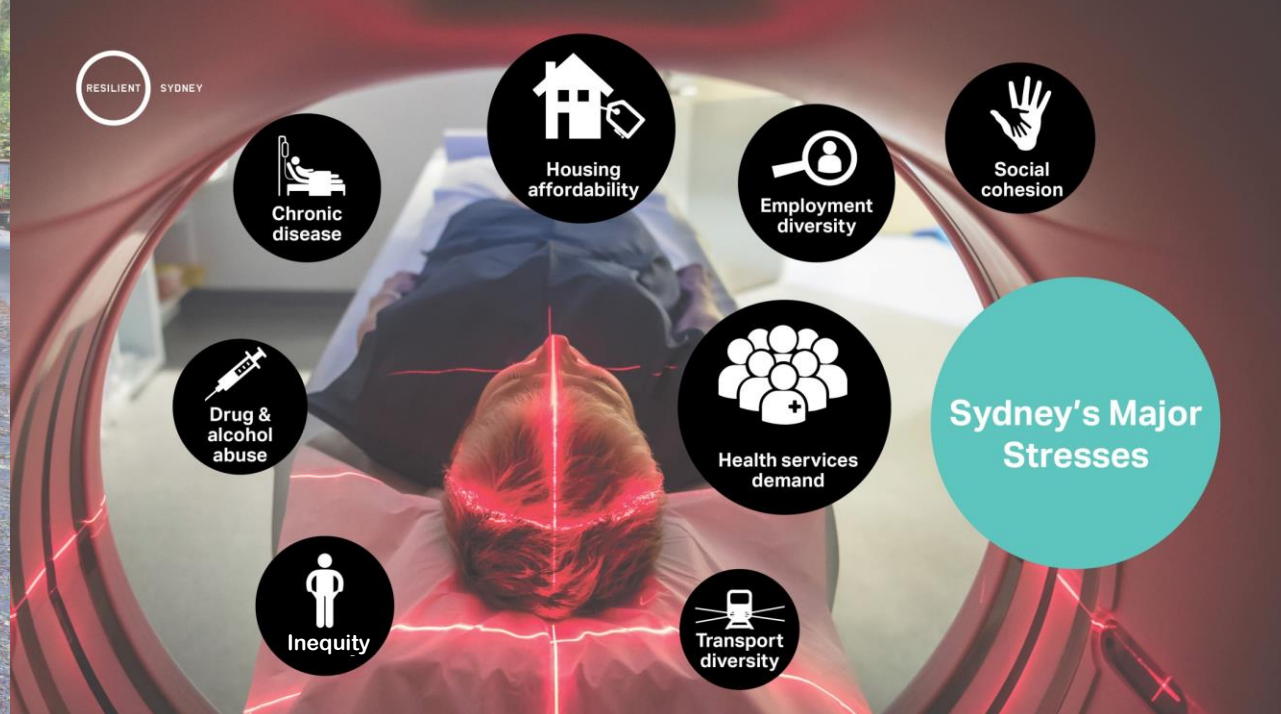
1. What happened in the past, local risk context (shocks and stresses)
2. What might happen (megatrends, growth & investment, policy)
3. What people in the place think matters (community priorities)





Sydney's Major Acute Shocks

- Terror attack
- Disease pandemic
- Cyber attack
- Financial institution failure
- Infrastructure failure
- Digital network failure
- Water crisis
- Extreme weather



Sydney's Major Stresses

- Chronic disease
- Housing affordability
- Employment diversity
- Social cohesion
- Drug & alcohol abuse
- Health services demand
- Inequity
- Transport diversity



Sydney's most vulnerable assets

- Water supply
- Commercial structures
- Railways
- Health infrastructure
- Communication networks
- Wastewater Stormwater
- Energy network
- Airports



Megatrends shaping Sydney

- Fragmented governance
- Chronic disease
- Global supply chain dependency
- Housing affordability + diversity
- Domestic + drug related crime
- Metropolitan scale governance
- Global warming + rising sea levels
- Increased cultural diversity + population distribution
- Digital reliance
- Limited access to multimodal transport

Sydney Resilience Challenges



Resilient Sydney 2015-21 – 5 years of collaboration

Heatwave Sub Plan

Introduction

Heatwaves are periods of high temperature and humidity that can be dangerous to human health. They are defined as three or more days in a row where the maximum temperature is 35°C or higher, and the minimum temperature is 20°C or higher. Heatwaves can be particularly dangerous for vulnerable populations, such as the elderly, young children, and people with pre-existing health conditions.

NSW Framework for Heatwave Response

The NSW Framework for Heatwave Response provides a coordinated approach to heatwave response across the state. It outlines the roles and responsibilities of various agencies and provides a template for local government heatwave sub-plans.

Predicted Impact of a Heatwave

Heatwaves can have a significant impact on human health, particularly for vulnerable populations. They can lead to dehydration, heat exhaustion, and heatstroke. Heatwaves can also impact infrastructure, such as power lines and roads, and can have a negative impact on the environment.

Heatwave Sub Plan

Legislative Framework and Related Plans

The following legislative framework and related plans provide the basis for the Heatwave Sub Plan:

- Local Government Act 1995
- Local Government (Financial Management) Act 1995
- Local Government (Planning and Development) Act 2015
- Local Government (Public Health) Act 1995
- Local Government (Public Works) Act 1995
- Local Government (Roads) Act 1995
- Local Government (Water) Act 1995
- Local Government (Waste Management) Act 1995
- Local Government (Community Development) Act 1995
- Local Government (Emergency Management) Act 1995
- Local Government (Public Safety) Act 1995
- Local Government (Public Health) Act 1995
- Local Government (Public Works) Act 1995
- Local Government (Roads) Act 1995
- Local Government (Water) Act 1995
- Local Government (Waste Management) Act 1995
- Local Government (Community Development) Act 1995
- Local Government (Emergency Management) Act 1995
- Local Government (Public Safety) Act 1995

Objectives

The objectives of the Heatwave Sub Plan are to:

- Minimise the impact of heatwaves on human health and the environment.
- Ensure the safety of vulnerable populations.
- Ensure the continuity of essential services.
- Ensure the safety of infrastructure.
- Ensure the safety of the environment.

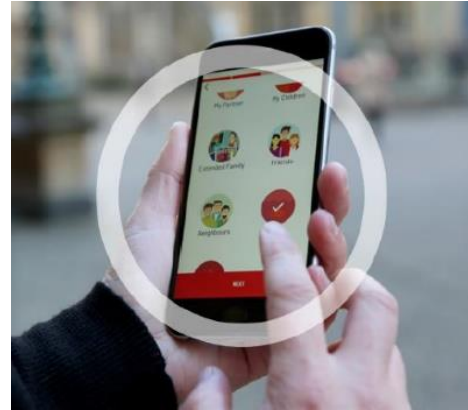
Council's Role and Responsibilities

The Council's role and responsibilities in the Heatwave Sub Plan are to:

- Develop and implement a heatwave response plan.
- Coordinate with other agencies and organisations.
- Provide information and advice to the community.
- Ensure the safety of vulnerable populations.
- Ensure the continuity of essential services.
- Ensure the safety of infrastructure.
- Ensure the safety of the environment.

Activation of the Heatwave Sub Plan

The Heatwave Sub Plan is activated when the NSW Government issues a heatwave warning. The Council should activate the plan as soon as possible after the warning is issued.



Network: sharing EM, COVID, heatwave templates & plans

Get Ready campaigns: 25,000+ ready Sydneysiders

Social Cohesion: metro cohesion & wellbeing data

Resilience Planning: 12 councils with plans



Neighbour Day campaign: 30 councils engaged communities to connect



Cool Suburbs Project: new planning tools in Western Sydney



Resilient Sydney Data Platform: 250+ users from local and state government



Three types of change:



Structural changes
(cross-sector & intra-
sectoral changes)

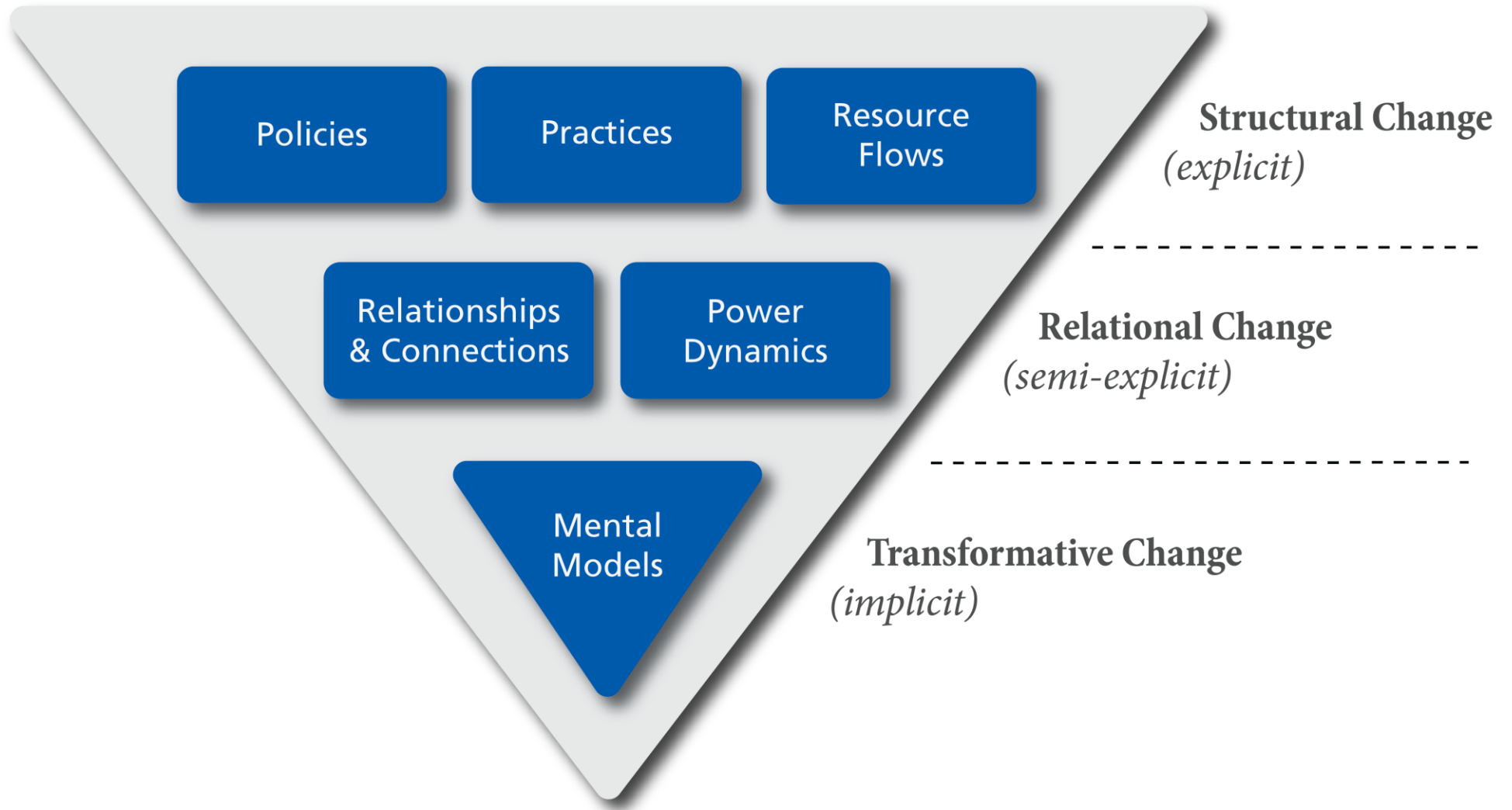


Relational changes
(networks, connections,
processes that build &
maintain relationships)



Transformational changes
(of people, decisions,
behaviours)

Six Conditions of Systems Change



The six conditions of systems change (from Kania, Kramer and Senge, 2018)

Sydney is connected, inclusive and resilient

City level resilience

Equitable access to opportunities to thrive and prosper across Sydney

Adaptation to, and mitigation of, extreme weather reduces risks to life safety, the economy and the environment

Levels of social cohesion ensure disaster preparedness, response and recovery

People and organisations are prepared for emergencies

Governing organisations provide collective leadership for resilience

Systemic changes

Governance processes

Governance and decision making processes include communities, address place based risk and promote opportunities for growth

Policies

Policies, legislation, regulation and service models consider place and meet community needs

Investment

Investment in place based risk management to meet community needs

Connectedness

Connected communities and organisations

Enablers for change

Understanding

Citizens and organisations build understanding of place based risks, interdependencies, vulnerabilities and their responsibilities /duties of care

Capacity

Citizens and organisations build capacity for place based preparation, planning (mitigation, adaptation), response and recovery

Connections

Citizens and organisations build collaborations, networks and aligned actions to address our challenges

Tools, standards, service models

are developed to prepare and manage risk are developed. E.g inclusive decision making/governance models, standards etc.

Influence Activities

Resilient Sydney Office

Effective engagement activities
(e.g. forums, workshops and presentations)

Provision of robust, relevant and useful data,

Neutral, visible and persuasive leadership.

Facilitate connections and collaboration across Sydney, - including knowledge sharing.

Effective project management and administrative services

Provision of training and capacity building

Collaborative effort

Facilitators and collaborators are working together to deliver on the Strategy and its 35 actions

Independent, visible and persuasive leadership.

Foundations

Metro-scale willingness and political support to develop a systems approach to resilience

Funding and resources for Resilient Sydney are engaged and aligned

Measurement

Impact

The effect of our collaborative efforts on city level resilience

1. Access to opportunities
2. Adaptation to and mitigation of extreme weather events
3. Social cohesion
4. Emergency preparedness
5. Collective leadership amongst governing organisations

Systems change

How our collective efforts influence changes in the system

1. Changes in governance and decision making
2. Changes in policies, legislation, regulation and service models
3. Changes in investment
4. Changes in connections

Enablers for change

The outcomes of our influencing activities

1. Changes in understanding
2. Changes in capacity
3. Changes in connections
4. Changes in policies, tools, processes and service models

Influence activities

1. Collecting data about the role of, and services provided by, the Resilient Sydney Office
2. Collecting data about Action implementation

Strategic Learning & Evaluation

a. Learning about **what is working and what is not** – in terms of our activities

b. Learning about **our assumptions and understanding about the resilience system and our role in it** – are we doing the right things, in the right way?

Report from the Evaluators

Clear Horizon

Action 33 in the Resilient Sydney strategy



Overall impact – what has changed?

- Resilient Sydney has **significantly changed the political and institutional landscape in metropolitan** Sydney, and set an important precedent for city-wide resilience
- **Impacts are already emerging at the structural, relational and transformational levels:**
 - More visible among the organisations and institutions that participate directly in Resilient Sydney than in the wider community
 - Evidence for emerging positive systems impacts are compelling
 - There are also some challenges for the program



Cross-sector & inter-sectoral structural changes

1. Resilient Sydney provided a narrative and evidence for the need to address community risks

“[Resilient Sydney has] **expanded the definition of resilience**. It’s [now] about the capacity of people to thrive - this wasn’t the case when Resilient Sydney started. **Interdependencies matter and community resilience matters** – it’s not just about shocks, it includes long term stresses.”

“Resilient Sydney [has translated] ‘resilience’ into **relevant and understandable components** that can be **communicated and acted upon** by local government, community and business organisations.”



Cross-sector & inter-sectoral structural changes (cont.)

2. Resilient Sydney facilitated investment & amplified recognition of resilience in policies & resources

As a result of participating in Resilient Sydney, survey respondents (or their organisations) had:

- Developed new plans, tools, processes, policies and/or service models (62%)
- Embedded Sydney's top shocks, stresses and challenges into organisational planning and reporting (51%)
- Included community/customers in decision making (45%)
- Invested in assets or projects that focus on addressing local resilience challenges (44%)
- Established jobs/roles that focus on resilience (32%)

“Councils now have their own resilience strategies for the first time ever, and I put that down to the work of Resilient Sydney.”

“[Resilient Sydney's] findings are being translated by other organisations, (private sectors) and departments on living projects across Sydney...”



Relational changes

3. Enabled unique, diverse & effective relationships, partnerships & networks

The most significant changes were the **establishment of new collaborations**, and **increased intra-sector engagement**:

- Two thirds (66%) were involved in **new collaborations** to manage resilience challenges because of Resilient Sydney
- 62% confirmed **increased engagement within respondents' own sectors** to manage resilience challenges

“People have been able to respond more quickly in a crisis because they haven't second guessed [each other's] motive. If you get that trust right, that makes the significant difference in [disaster] recovery.”



Relational changes

4. Resilient Sydney intervened in distribution of decision-making power

Respondents had increased their engagement with local communities by:

- **Researching** local risks and needs (42%)
- Creating **action plans** for local resilience (46%)

Participants saw signs of improvement in residents/communities in:

- Inclusion of community/customers in **resilience planning** (38%)
- **Social connections** between residents/communities (35%)
- Residents' **preparedness for emergencies** (30%)

“The work they did to link the difficult governance structures around our city mattered”

“[Resilient Sydney has tackled] the major chronic stress of inequity throughout metropolitan Sydney, and **extends care and responsibility from the more privileged core to the periphery.**”



Transformational change

5. Shifting concepts & mindsets

“Many councils were just dealing with climate resilience and [Resilient Sydney] broadened their understanding of what resilience was... **I think there was a real step change in people’s understanding.**”

“Resilient Sydney [is] normalising what **resilience means in a broader context** [and] providing a richer understanding of what communities face, and looking at what does a long term intervention or support look like – **as opposed to a superficial understanding and short-term agendas.**”

“Some of our board members have come back [after Resilient Sydney events] saying, ‘I finally get it – that really made sense’”

**How did Resilient
Sydney achieve these
changes?**

Core practices & activities

6. Executive level leadership & governance
7. Used & shared robust tools & templates to establish an evidence base
8. Built the capacity of people & organisations

“The establishment of the Steering Committee [gave] local government a voice on resilience, in partnership with the state government and private sector. That was key as it **allowed dialogue at the more senior level** to happen, and **cut through the silos** between the various levels of government and agencies.”

The provision of data relating to Sydney’s shocks, stresses and challenges was rated *the most important factor in normalising resilience*, with **94%** of survey respondents saying it was important/very important

Collaboration, processes, legitimacy

9. Championed collaboration & encouraged best practice
10. Highly effective management & delivery of processes
11. Created a legitimised a 'common problem' in a global & local context

“There could be more investment with the private sector... This goes to sealing lasting change and requires additional investment and capacity”

“Resilient Sydney makes it easier for councils to adopt resilience because they're getting a toolkit, they're getting a strategy and they're getting guidance from Resilient Sydney.”

“Because the engagement was so wide and deep [and stakeholders] were actively involved in coming up with the key findings, they had the buy in and were confident in taking them back to their organisation”

What have we learnt?



A place-based systems approach to resilience

Focus on:

- Shifting the conditions that hold a problem in place – understand the system first
- International research based process and tools
- Good quality processes (especially deep community engagement) and service delivery
- Create new networks, activities to facilitate collaboration & rapid learning loops
- Evidence based data, performance metrics for the city/ place/ region
- Advocacy for policy to make changes stick
- Capacity building across the whole system

“Real and equitable progress requires exceptional attention to the detailed and often mundane work of noticing what is invisible to many.”

From 'The Water of Systems Change', Kania, Kramer and Senge (2018)

People make change

The program worked on amplifying City Resilience Behaviours (after 100RC):

1. Awareness of Risks
2. Diversity in decision making
3. Adapting to change and disruption
4. Connecting people/community/organisations - Integration
5. Leadership, polices and structures - stability and innovation

Next steps 2021+:

- Program is effective – continue strategy implementation, seek funding
- Resourcing remains a challenge – right size the ambition to the resource
- Mature focus to policy changes and institutionalising resilience



Urban resilience

“ The capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and thrive no matter what kinds of chronic stresses and acute shocks they experience. ”



References/ acknowledgements



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Acknowledging the collaboration and efforts of all 33 local governments of Sydney, and support of the NSW Government and partners.



Thank you

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