Infrastructure for resilient places
Resilient Sydney
R-Cities Network – 24 March 2022
Resilient Sydney 2015-22 – 7 years of collaboration

Network: sharing EM, COVID, heatwave templates & plans

Get Ready campaigns: 35,000+ ready Sydneysiders

Social Cohesion: metro cohesion & wellbeing data

Resilience Planning: 13 councils with plans

Neighbour Day campaign: 30 councils engaged communities to connect

Cool Suburbs Project: new heat mitigation planning tools in Western Sydney

Resilient Sydney Data Platform: 300+ users from local and state government
Sydney Resilience Challenges

1. People centred city
   - Growing inequity and differential opportunity across the city

2. Live with our climate
   - Lack of action adapting to heat and climate

3. Connect for strength
   - Declining social cohesion

4. Get ready
   - Community understanding & preparedness for emergencies

5. One city
   - Disjointed governance and distrust
Identify local resilience challenges:

- Review shocks, stresses, scenarios with council assets
- Interdependency assessment
- Review internally – operations, finance, emergency management, strategy, sustainability, resilience teams
- Review resilience dividends of asset investments – be ready for mitigation/ recovery funding!
Infrastructure for Resilient Places

Project funded through Citi Foundation Leadership for Urban Resilience and Sustainable Development Program and partners

Key outputs:
1. Infrastructure for Resilient Places - Guidance for Asset Managers
2. Asset Independency and Resilience Assessment Tool

Prepared by: AECOM

Supported by: Citi Foundation
R-Cities Interdependency and Shock Assessment Tool

As part of this assessment you must consider:

1. Identify assets, organisations and communities that are dependent on your asset, or that your asset is dependent on.
2. Define the direction of dependency.
3. For each asset, organisation or community, assess the flow-on impact that a particular shock could have.
4. Review the Interdependency Dashboard to see which shocks and which assets, organisations or communities are the highest priority for your asset.

Level of Interdependency
- Community Level
- Organisational Level
- Asset Level
1. Identify priority shocks
2. Develop risk statements for each shock and conduct a risk assessment
3. For each 'high' or 'very high' risk, develop a mitigation action
4. Evaluate the resilience dividends
5. Track risk mitigation actions
6. Document infeasible actions for future updates

Stakeholder Engagement

R-Cities Interdependency & Shocks Assessment Tool
Consequence criteria at all 3 levels
Provides context to decision making

<table>
<thead>
<tr>
<th>Consequence Criteria</th>
<th>Asset Resilience</th>
<th>Organisational Resilience</th>
<th>Community Resilience</th>
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<tbody>
<tr>
<td><strong>Catastrophic</strong></td>
<td>Significant permanent damage and/or complete loss of the asset and the asset’s service. Loss of asset support and translocation of service to other sites. Early renewal of asset &gt;90%.</td>
<td>An event with the clear potential to lead to the collapse of the organisation. Organisation would be seen to have failed and in need of external intervention.</td>
<td>The community would become moribund and unable to access services through this organisation or similar assets from other organisations. 50-100% reduction in service.</td>
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<tr>
<td><strong>Major</strong></td>
<td>Extensive asset damage.</td>
<td>An event which requires</td>
<td>Severe and widespread</td>
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Outputs of process support decision making

Process supports an asset manager to:

1. Get on the front foot to manage emerging risks
2. Take a place-based and community view of risk
3. Clarify role of assets/asset classes for the organisation, and the community
4. Provide reporting context for regulators, authorisers, politicians, communities and investors – captures the decision logic
5. Prioritise investments, prepare for mitigation/recovery funding with ‘return on investment’ models
6. Enables the region/state to compare and review resilience investment opportunities and risks at scale – replicable for cities anywhere

“What our assets are connected to matters as much as the asset itself”
Sharing the approach

Pilots with:
- State agencies
- Local councils

Sharing learnings with:
- Industry bodies
- Private sector
- Global cities