How to Build a Resilient City: The City Resilience Framework

The Rockefeller Foundation
100 Resilient Cities
Arup

Nancy Kete, PhD
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“By April 2014, to **articulate urban resilience** in a measurable, evidence-based and accessible way that can inform urban planning, practice, and investment patterns which better enable urban communities (e.g. poor and vulnerable, businesses, coastal) to survive and thrive multiple shocks and stresses.”

Opportunity Statement, February 2013
“In order to get a grip on it, one must be able to relate resilience to other properties that one has some means of ascertaining, through observation.”

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<th>Delivers basic needs</th>
<th>Safeguards human life</th>
<th>Protects, maintains and enhances assets</th>
<th>Facilitates socio-cultural identity and human relationships</th>
<th>Promotes information education and innovation</th>
<th>Defends rule of law, justice and equity</th>
<th>Supports livelihoods</th>
<th>Stimulates economic progress</th>
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<td>Epidemic</td>
<td>Power failure</td>
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Factors of resilience from secondary sources
City functions
“In Concepción we had two earthquakes: the 8.8 one and the social earthquake – looting, arson... I think the last one affected our soul most violently.”
Mayor of Concepción, Chile
Army patrol in Greater Concepcion – February 2010
In Concepción we had two earthquakes: the 8.8 one and the social earthquake—looting, arson… I think the last one affected our soul most violently.

Mayor of Concepción

Due to scarcity of labour, competition in the country and demand for craftsmanship, employers had to be nice to their immigrant employees – they needed to retain their employees. They tried to understand their issues and treated them like family… This sentiment has continued.

Elected standing committee member, Surat, India
“The city wasn’t designed by economic forces; instead it was designed by social engineering. Maybe we need social engineering to change it again?”
Representative of the Cape Town Partnership, South Africa
“Things that initiated the positive trajectory in the development of our city were better management, projects, and trust in our Mayor”

Private sector representative, Cali, Colombia
“How do we help? We try to get where the state is unable to reach. We listen, we support, and work with the social fabric of our community.”
Fundación Paz y Bien volunteer, Cali, Colombia
The City Resilience Framework provides a lens through which the complexity of cities and the drivers that contribute to a city's resilience can be understood.
The 12 capacities in the 100RC City Resilience Framework collectively determine its ability a city’s resilience to a wide range of shocks and stresses.
City resilience has 4 key dimensions
People, place, organisation, knowledge
Basic human needs
Livelihoods & employment
Health & emergency services

People
“the health and wellbeing of everyone living and working in the city”
Place
“the way in which man-made and natural infrastructure provides critical services and protects, and connects urban citizens.”
Identity & mutual support

Social stability & security

Finance and funds

Organisation “the social and financial systems that enable urban populations to live peacefully and act collectively”
Knowledge
“effective leadership, empowered stakeholders, and integrated planning”
Resilience is the result of cumulative action to strengthen these capacities over time. Multiple factors contribute to resilience and there are multiple entry points for action.
Qualities of resilience

Robust and inclusive labour policies and standards, as well as social security provision for the unemployed

How is this demonstrated?

- Fair employment standards and regulation
- Living or decent wage
- Accessible social welfare
How is this demonstrated?

Active management & restoration of coastal ecosystems

Active management & restoration of tree cover

Active management of rivers & watersheds

Qualities of resilience

Reflective, flexible and resourceful management and restoration of ecosystems and environmental assets
Strong civil society

Empowerment of vulnerable members of society

Neighbours know each other

Qualities of resilience: integrated and inclusive engagement of civil society within the city

How is this demonstrated?
How is this demonstrated?

- Effective and diverse mechanisms for communication and coordination between local government, and citizens
- Government communication to the public in local languages
- Transparent communications between government and citizens about government plans and performance

Qualities of resilience

Inclusive, integrated and transparent mechanisms for communication and coordination between local government and citizens

How is this demonstrated?
Leading the city out of the ‘plague’ in Surat, India by empowering government department heads to take action independently while putting in place measures for accountability.
Integrating public art with disaster management in New Orleans, USA by raising awareness of evacuation procedures within the communities in which they are placed.
Relying on community-action in New Orleans, USA to support the rebuilding of homes, provide primary healthcare and livelihood training
Keeping the business going
In Concepción, Chile
by redeploying staff to other
shopping centre was rebuilt
Every city is unique. The way resilience manifests itself plays out differently in different contexts. The Rockefeller Foundation’s Resilience Framework provides a lens through which the complexity of cities and the numerous factors that contribute to a city’s resilience can be understood. It comprises 12 key indicators that describe the fundamental attributes of a resilient city.