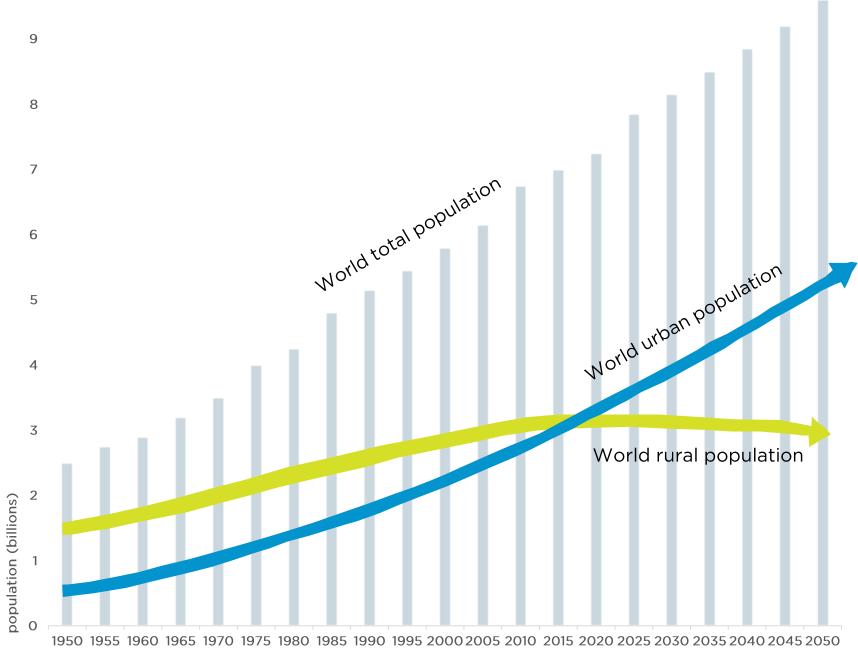
PIONEERED BY THE ROCKEFELLER FOUNDATION RESILIENT 100 **CITIES**





10

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

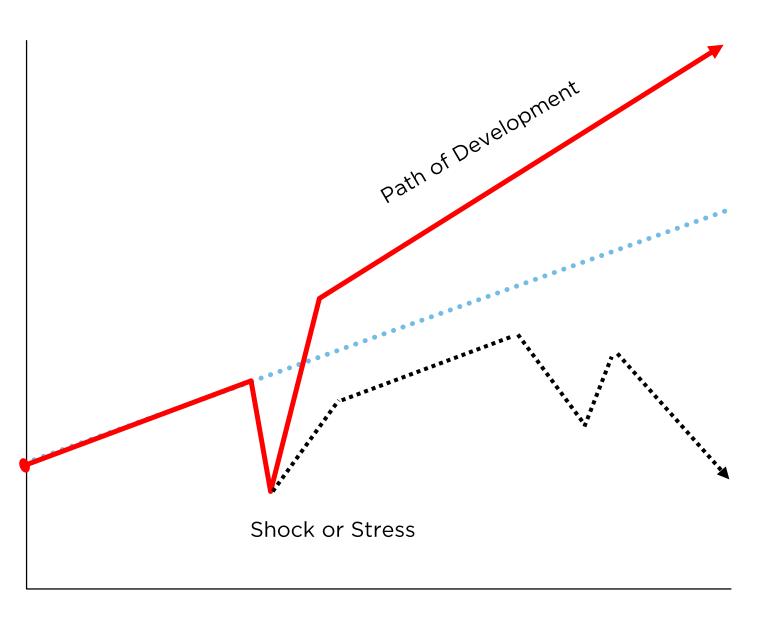
ACUTE SHOCKS

CHRONIC STRESSES

Earthquake Wildfires Flooding Sandstorms Extreme cold Hazardous materials accident Severe storms and extreme rainfall Terrorism Disease outbreak Riot/civil unrest Infrastructure or building failure Heat wave

A city's ability to maintain essential functions is threatened by both acute shocks and chronic stresses.

Water Scarcity Lack of affordable housing Poor air quality High unemployment Homelessness Changing demographics Lack of social cohesion Poverty/inequity Aging Infrastructure Shifting macroeconomic trends Crime & violence



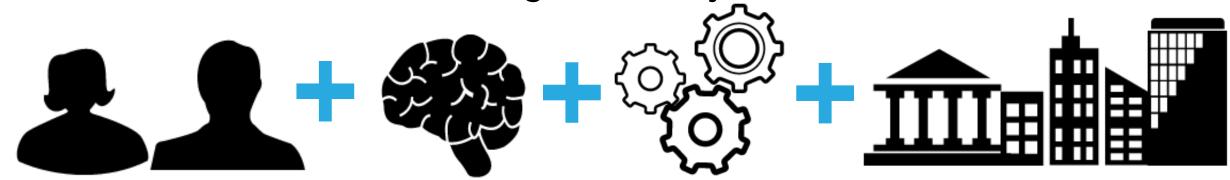
Shocks and stresses
can bring
opportunities for
cities to evolve and
in some
circumstances
transform.

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.

Cities rely on a complex web of people, institutions, infrastructure and information;

their resilience depends on strengthening the capacities of individual systems in order to strengthen the city overall







Case Study: Sakarya Province, Turkey

- Toyota facility in Turkey <u>after</u> 1999 7.6 magnitude Izmit Earthquake
- Engineered to withstand strong earthquakes and seismic shocks
- Immediate surrounding infrastructure hardened such as roads
- Modern systems and plant designed to improve economic opportunity



Case Study: Sakarya Province, Turkey

- Elsewhere in region 17,118 people killed, nearly 50,000 injured
- Estimated 3 6.5 billion U.S. dollars in damage, 500,000 people left homeless
- Water, electric, transportation and communications systems were disrupted
- Severe economic impact across region

Resilient systems exhibit certain qualities that enable them to withstand, respond, and adapt more readily to shocks and stresses

Reflectiv	ve Resourceful	Robust	Redundant	Flexible	Inclusive	Integrated
Ability to lea	arn and act	conceiving systems & assets that can withstand shocks & stresses as well as using alternative strategies to facilitate rapid recovery			planned to take account of city-wide needs and promote coordinated actions	



Why 100RC?

1913: 10%

of the world's population lived in cities.

2013: 50%

of the world's population lives in cities.

2050: 75%

of the world's population will live in cities.



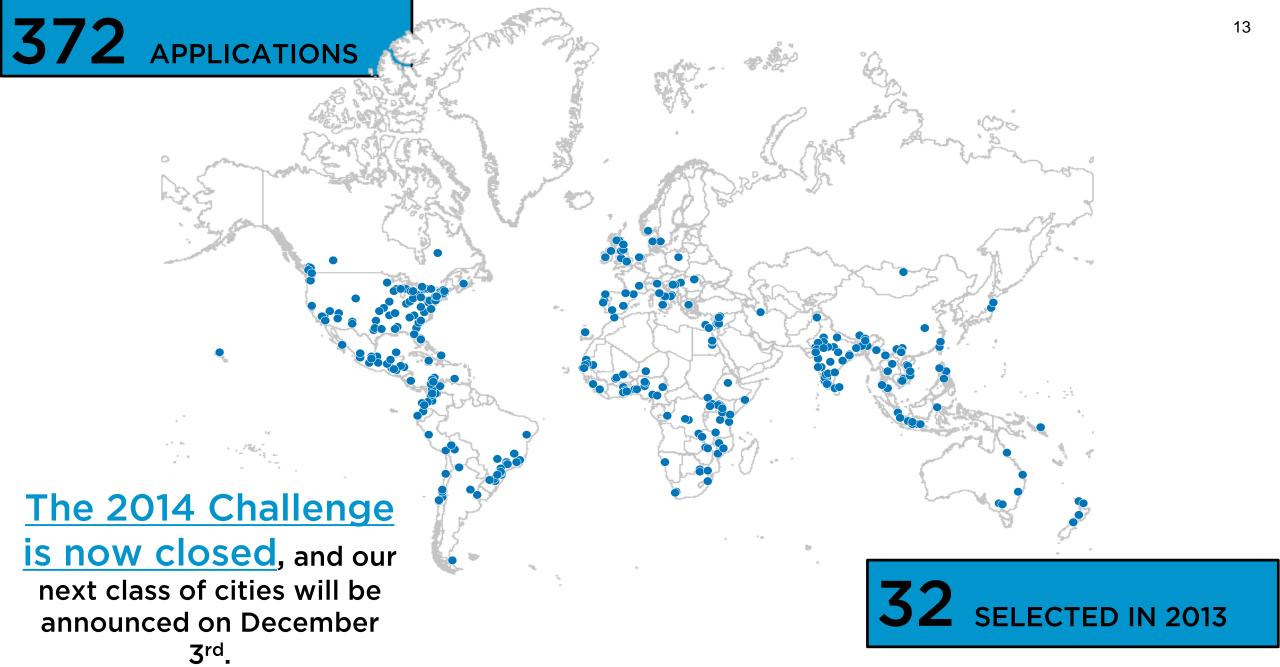




There's no doubt: natural and manmade shocks and stresses will continue to hit the world's cities.

The cost of urban disasters in 2011 alone was estimated at over \$380 billion.

IT'S TIME FOR CITIES TO ACT.



Wave 1 Members of 100RC

NORTH AMERICA

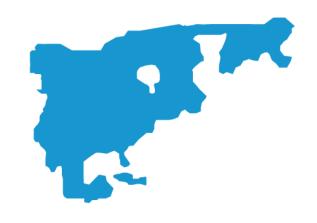
SOUTH AMERICA

EUROPE

AFRICA



DAKAR (SN)
DURBAN (SOUTH AFRICA)



BOULDER (CO)
BERKLEY (CA)
EL PASO (TX)
JACKSONVILLE (FL)
LOS ANGELES (CA)
MEXICO CITY (MEXICO)
NEW ORLEANS (LA)
NEW YORK CITY (NY)
NORFOLK (VA)
OAKLAND (CA)
SAN FRANCISCO (CA)

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

BRISTOL (UK)
GLASGOW (UK)
ROME (ITALY)
ROTTERDAM
(NETHERLANDS)
VEJLE (DK)

Wave 1 Members of 100RC

MIDDLE EAST



ASHKELON (ISRAEL)

RAMALLAH (PALESTINE)

BYBLOS (LEBANON)

OCEANIA



MELBOURNE (AUSTRALIA)

CHRISTCHURCH (NEW ZEALAND)

SOUTH ASIA



SURAT (INDIA)

EAST ASIA



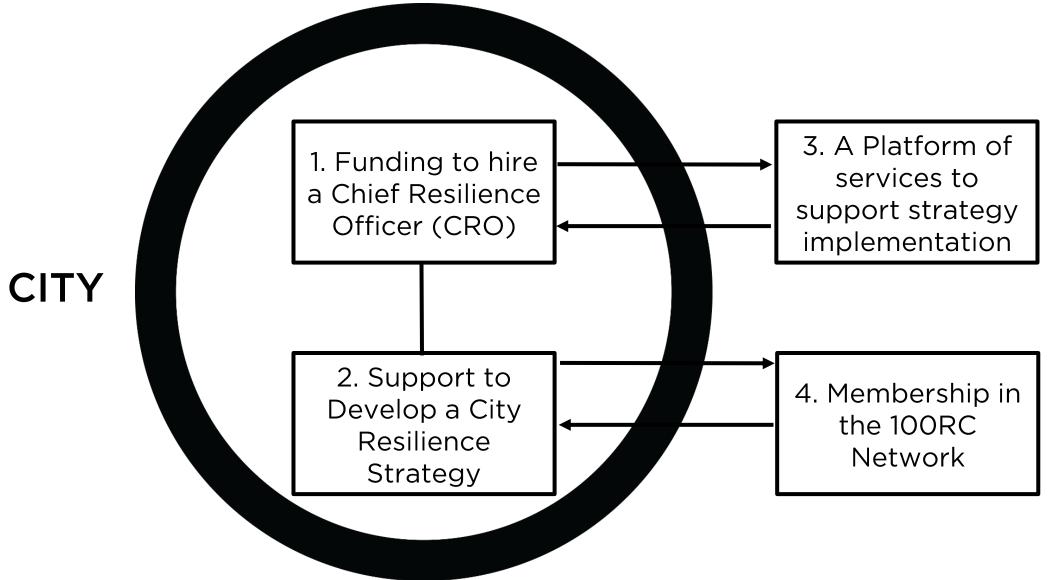
BANGKOK (THAILAND)

MANDALAY (MM)

DA NANG (VIETNAM)

SEMARANG (ID)

Each member city will receive four types of support



The Chief Resilience Officer will have broad responsibilities



Work across silos to create and implement resilience strategy



Serve as a senior advisor to the mayor or municipal leader



Promote resilience thinking and act as global thought leader



Coordinate resilience efforts across government and multi-sector stake-holders



Liaise with other CROs, 100RC staff, and service providers via the network and platform

Overview of the City Resilience Strategy





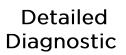






Resilience Focus
Areas
& Custom City
Approach





& Opportunity Assessment





Priorities & Initiatives









I.C City Context & Preliminary Resilience Assessment 1.D: Focus Areas and Custom City Approach













Platform

WORLD BANK CREDIT-**WORTHINESS ACADEMY**



THE WORLD BANK

TOOLS

DATA ANALYTIC



ENERGY, WASTE, WATER

BEST PRACTICES

Q Palantir

ARUP

LONG-TERM ENERGY

RESILIENCE

CITY RESILIENCE

○ VEOLIA

Swiss Re

HAZARD RISKS

ASSESSMENT TOOL



PLANNING Sandia **National**

Laboratories

DISASTER SCORECARD

FEASIBILITY STUDY SUPPORT

REGIONAL DESIGN STUDIOS



METRICS FOR

SHOCKS AND

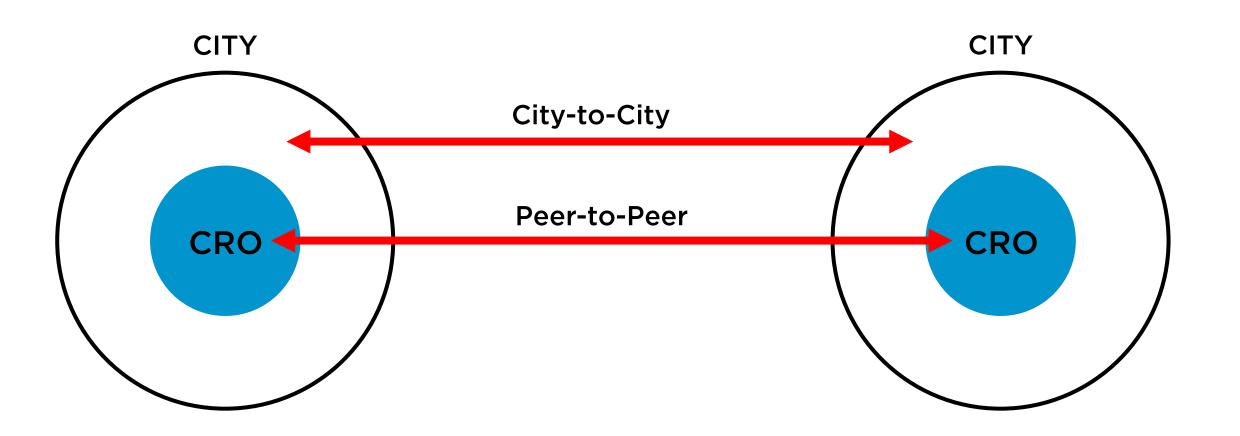
STRESSES







Cities will be part of a 100RC "network" that will help them learn, gain visibility, and join a global resilience conversation.



PIONEERED BY THE **ROCKEFELLER FOUNDATION** RESILIENT **CITIES** 100