



# DISASTER RESILIENCE SCORECARD FOR CITIES



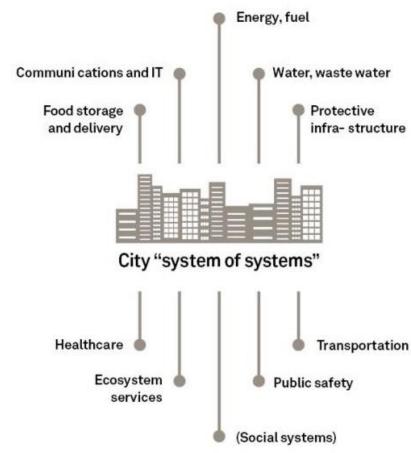




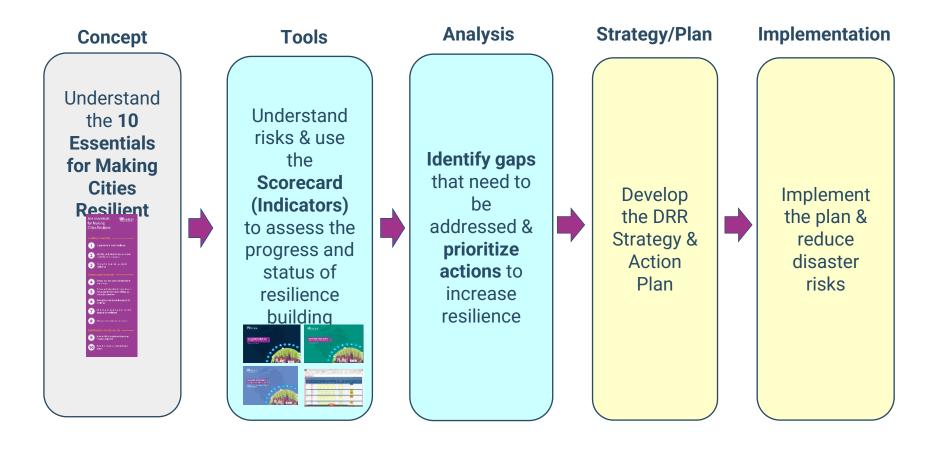


# Resilience has to address the "system of systems" that makes up a city.

- City is made up of different systems
- These systems have multiple connections and interactions
  - Causal
  - Resources
  - Data
- Because each system will have different owners and stakeholders, resilience is a multi-organizational endeavor.

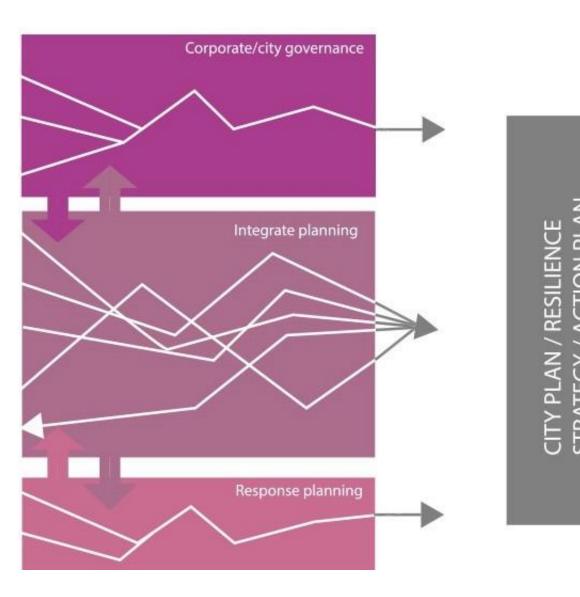


# Resilience is a process... Paving ways towards disaster risk reduction and disaster resilience building at the local level



### The Ten Essentials for Making Cities Resilient





### Why use the Scorecard?

The Scorecard provides a set of assessments that allow local governments to assess their disaster resilience, structuring around UNDRR's Ten Essentials for Making Cities Resilient. It also helps to monitor and review progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030 and supports the baseline analysis for preparation of the disaster risk reduction and resilience strategies.







https://mcr2030.undrr.org/disaster-resilience-scorecard-cities

#### **DISASTER RESILIENCE** SCORECARD FOR CITIES

DETAILED LEVEL ASSESSMENT



#### **Disaster Resilience Scorecard for Cities**







**Detailed Assessment** 

- Provides a set of assessments that allow cities to assess their disaster resilience, structured around the new 10 Essentials for Making Cities Resilient.
- **Preliminary** has just **47 criteria** and simpler scoring. Designed for use in multistakeholder workshops and reports back directly progress made against Sendai targets. (Scoring between 0-3)
- **Detailed** assessment includes **117 criteria**. (Scoring between 0-5)

# **Introduction to the Scorecard**

- The Disaster Resilient Scorecard for Cities (Scorecard) aims to:
  - Assist countries and local governments in monitoring and reviewing progress in the implementation of the Sendai Framework for DRR 2015-2030
  - Enable the development of a local DRR and resilience strategies.

Cities say the Scorecard helps them to:

- Establish a baseline;
- Increase awareness and understanding;
- Enable dialogue and consensus between key city stakeholders;
- Enable discussion of priorities for investment and action;
- Ultimately lead to actions and implementable.

## **Scorecard (PDF)**





Put in place an organizational structure and identify the necessary processes to understand and act on reducing disaster risks.

- Establishing a single point of coordination in the city. accepted by all stakeholders.
- Exercising strong leadership and commitment at the highest elected level within the city authority, such as
- Ensuring that all departments understand the importance of disaster risk reduction for achieving objectives of their policies and programs; and that they have a framework within which to collaborate as required.
- assessed; and that action is taken upon these as
- Engaging and building alliances with all relevant traiging into occuping the country and the country as a stakeholder groups including government at all levels is e.g. national, state, city, country, parish or other sub-division, neighbouring cities or countries as applicable), chill society and community organizations and the country of t and the private sector.
- Engaging and learning from other city networks and Initiatives (e.g. city to city learning programmes, climate change, resilience initiatives etc.)
- Recognizing that the exact format / structure will vary thin and between countries, this will include but is not instead to the precision of t of existing risk.
  - Creating policies to gather and manage data for sharing amongst all stakeholders and citizens.
  - Putting in place reporting mechanisms for all citizens that capture key information about resilience and promote transparency, accountability and improved

This Scorecard provides a set of assessments that will allow local governments to monitor and review progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030, and assess their disaster resilience. It is structured around UNISDR's Ten Essentials for Making Cities Resilient.

#### Resilience Scorecard for Cities

Resilience as defined by the Sendal Hesistence as demined by the Sendal Framework is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its Essential basic structures and functions through risk management.

Increasingly in the context of cities it is framed around the ability to withstand and bounce back from both acute shocks (natural and manmade) such as floods, earthquakes, hurricanes, wild-fires, chemical spills, power outages, as well as chronic stresses occurring over longer time scales, such as groundwater depletion or deforestation, or socio-economic issues such as homelessness and unemployment.

Disaster resilience, and indeed this Scorecard, covers Disaster resilience, and indeed this Scoreard, covers the ability of a city to understant this desider risks it may face, to mitigate those risks, and to respond to disasters that may occur so that timediate and inorger term loss off file or damage to livelihoods, property, inflastructure, concomic activity and the envelonment is minimized. However, this also requires practitioners to



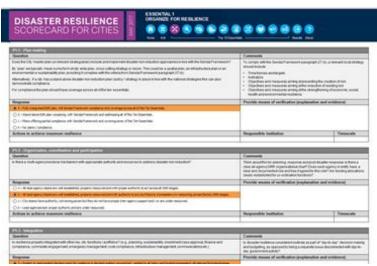
or severity of an acute shock event, as well as undermine a city's capacity to respond and adapt. For example, deforestation may increase the potential for flash flooding, or deprived (and likely uninsured) communities

#### Preliminary assessment

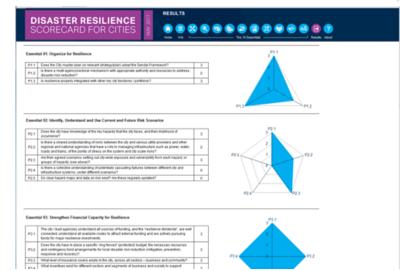
Ref	Subject/Issue	Question / Assessment Area	Indicative measurement scale	Comments
P 1.1	Plan making	Does he will yn maeter jaar her reinwert instrugt jake in hebitsel and trippenen foarbeit ner he deudstruck great ander sicht werden fan deudstruck great ander in her will hie farrich in merent? In great part great great great great great great great farriches great great great great great farriches great great great great great great farriches great g	3-hily integrated DOISpin, hild South Proviewark complexes were convergence on and for him To extend for the To extend of the To the Section of the Sectio	To comply with the Sended Framework presupper 70 the service cloud strikely should not be serviced to the service of the service and the service of the serv
P1.2	Organization, coordination and participation	In these any utilisage only leading in the manufacture with agreement aboutly and resources to address disaster risk reduction?	3-All last dysory forem served eliabilities, properly manacoed self with proper estimating to access at DRR stages.  2-All last approxy forem served established, properly neurocide and with suitburity to act, but there is incomisionary in neurocide, access the law DRR stages.  1-City is sean have suitburity and convening power but do not have proper the superny support suit or we under resourced.  0-Last agencies lasts proper suitburity and are under neurocide.	This should this for pre-event, event response and poet disselve responses, to there is clear sit-appeary, ORI organizations cheer 10 ces settle appeary or ORI organizations cheer 10 ces settle appear or entity seek clear and documented roles and has it appear to this rold A ex intring allocations or this rold A ex intring allocations or settlement of the contraction of settlement or settlement or
P 1.3	Integration	In resiliance properly triagrated with other key city functions a port before large training, sustained Billy, investment case approved, framers and complaince, community engagement, energency naragement, code complaince, which should be management, continuation of the continuation of the community engagement, en	3 - Expeller or more segular discribing point for resistance in december—realizing processions, appelled and pulsely were budget proposals in sall relevant functional areas.  2-Ne format process, bud disease resiliance benefits are generally understood to be "helpful" to a proposal, in most functional areas.  1-Applied and focor or constoraily.  0-Net applied.	Is disaster resilience considered routinely as part of 'tay-do-dey' decision making an budgeting, see opposed to being a separate boxe disconnected with day-to-day government activity?

### **Scorecard (Excel Tool)**











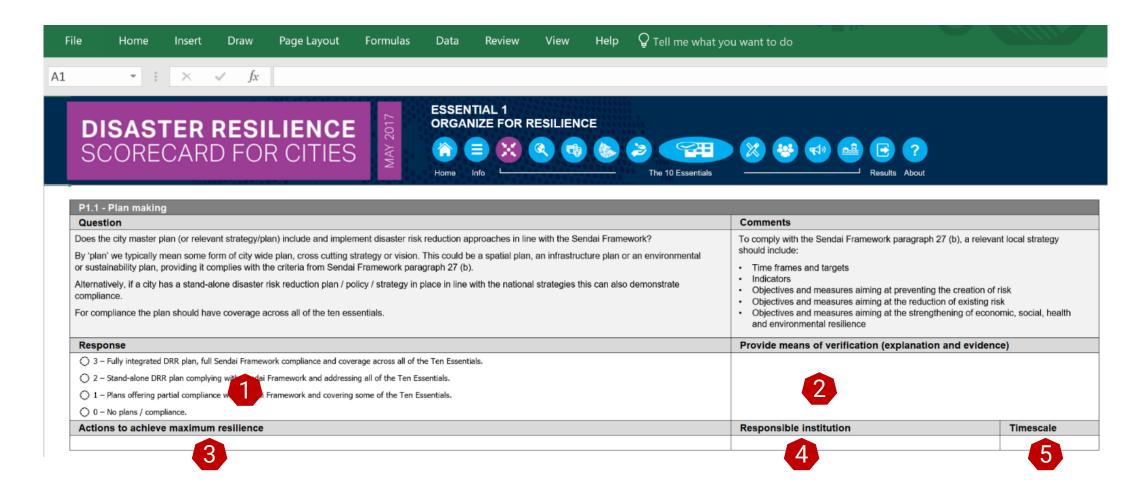
#### **Sample Indicator and Scoring**

#### **Essential 1. Plan making**

Does the city master plan (or relevant strategy/plan) include and implement disaster risk reduction approaches in line with Sendai Framework?

- **3 -** Fully integrated DRR plan, full Sendai Framework compliance and coverage across all the Ten Essentials.
- 2 Stand-alone DRR plan complying with Sendai Framework and addressing all of the Ten Essentials.
- **1 -** Plans offering partial compliance with Sendai Framework and covering some of the Ten Essentials.
- **0** No plans.

#### **Using the Scorecard Excel Tool**



#### **Essential 1: Organise for Disaster Resilience**

1.1 Plan Making	1.2 Organization, coordination and participation	1.3 Integration
Does the city plan include disaster risk reduction approaches in line with Sendai Framework?	Is multi-agency teams established with authority and resources to address DRR?	Is there an integration of disaster resilience with other initiatives in the city?

#### **Essential 2 : Identify, Understand and Use Current and Future Risk Scenarios**

2.1 Hazard Assessment	2.2 Shared understanding of infrastructure risk	2.3 Knowledge of Exposure and vulnerability	2.4 Cascading impacts	2.4 Risk Information
Knowledge of hazards, and likelihood of occurrence	Understanding of risk between the city and utility providers	Existence of scenarios from each hazard	Understanding of potentially cascading failures (city and infrastructure)	Availability of hazards maps and risk data
N	lote: UNDRR Quick Ri assessm	sk Estimation Toc ent against these		rt

#### **Essential 3: Strengthen Financial Capacity for Resilience**

3.1 Attracting new investments	3.2 Resilience Budgets	3.3 Insurance	3.4 Incentives
Knowledge of all possible sources of funding	Presence of financial plan with a set of priorities	Level of insurance coverage in the city	Existence of incentives to support resilience building

#### **Essential 4: Pursue Resilient Urban Development & Design**

4.1 Land Use Zoning	4.2 New Urban Development	4.3 Building Codes and Standards	4.4 Application of zoning, building codes and standards
Is the city appropriately zoned (impact of key risk scenarios)?	Use of urban design solutions	Existence of building codes and regularly updated	land use zoning, building codes and standards applied and verified

#### **Essential 5: Natural Ecosystems**

Complements Essential 4

5.1 Awareness of ecosystem services

5.2 Integration of green and blue infrastructure into city policy and projects

5.3 Transboundary environmental issues

Awareness of the role that ecosystem services may play in city's disaster resilience

Green and blue infrastructure is routinely embedded into city projects

Is the city aware of ecosystem services outside of the city boundaries. Are agreements and collaborations in place?

#### **Essential 6: Institutional Capacity for Resilience**

6.1 Skills and experience	6.2 Public education and awareness	6.3 Data sharing	6.4 Training delivery	6.5 Languages	6.6 Learning from others
Clear access to the Skills, knowledge and experience to respond to reduce risk and disasters	Coordinated public education campaigns (information made public)	Sharing data on city's resilience with other organizations	Training on risk resilience available to all sectors in the city (government officials, NGOS, community)	Availability of training materials in the language spoken in the city	City learning from other cities

#### **Essential 7: Strengthen Societal Capacity for Resilience**

7.1 Community 7.2 Social 7.3 Private 7.4 Citizen networks organizations Sector engagement Is the community Regular training Business Effective city and provided to the participating in Continuity citizen most vulnerable Planning (BCPs) engagement pre event planning and post (through multiple groups media channels) event response?

#### **Essential 8: Increase Infrastructure Resilience**

8.1 Critical Infrastructure overview		8.2 Protective Infrastructure		8.3 Wate Sanitatio			Energy - tricity
Is Critical Infrastructure resilience a city priority?		Protective infrastructure designed and on risk information	based	Potential services disaster	loss of in case of	serv	ential loss of vices in case of ester
8.5 Transportation	8.6 Com	munications	8.7 Healthc	are	8.8 Education facilities		8.9 First Responders assets
Potential loss of services in case of disaster		ntial loss of ces in case of ster	Sufficient healthcat capability deal with expected injuries	are ties to h	% of education structures at		Sufficient first responder equipment

#### **Essential 9: Ensure Effective Disaster Response**

9.1 Early Warning	9.2 Response plans	9.3 Staffing responders needs	9.4 Equipment and relief supply needs
Existance of plan to act on early warning and forescast. What proportion of the population is reacheable?	Existence of emergency response plan	The disaster management authority have sufficient staffing capacity to support first responders in surge event	Equipment and supply needs are defined (police, fire, ambulance vehicles, rescue equipment, medical supplies etc)
9.5 Food Shelter	9.6 Interoper	ability 9.7 Drill	S

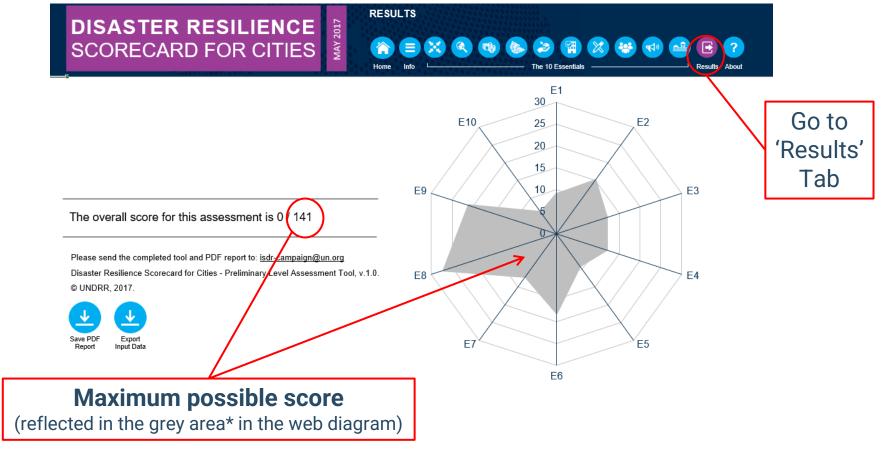
9.5 Food Shelter	9.6 Interoperability	9.7 Drills
Ability to continue to feed population	Is there an emergency operation center?	Practices and drills involving the public and professionals

#### **Essential 10: Recovery and Build Back Better**

# 10.1 Post Disaster Recovery Planning Planning Planning for post disaster recovery and reconstruction including economic reboost. Does post-event assessment processes incorporate failure analysis and the ability to capture lessons learned?

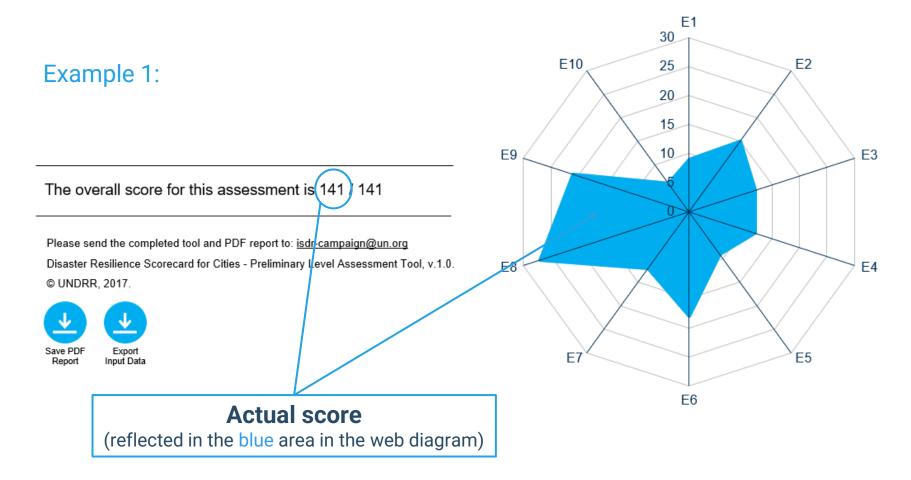
# **Analyzing the Results**

#### **Analyzing Results – Overall Score**



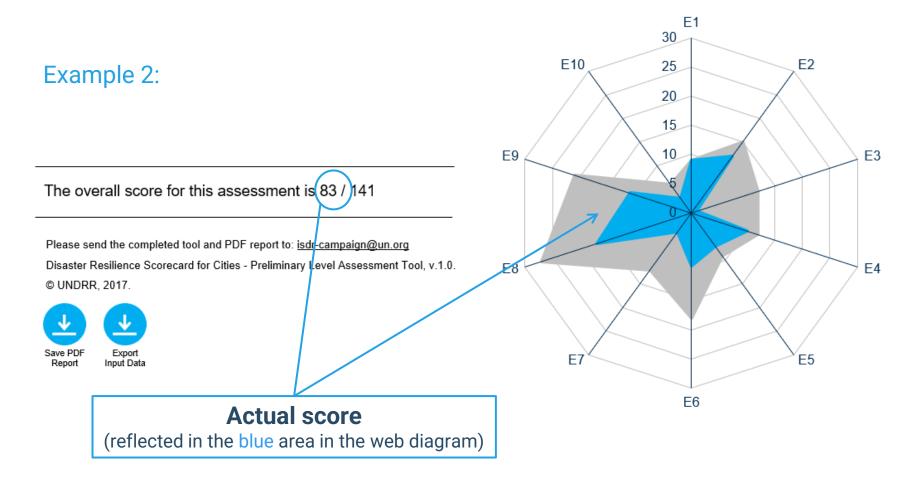
\*Each essentials has different numbers of indicators, therefore the maximum possible scores for each essential will be different. For example, Essential 1 has 3 indicators. The maximum score for each indicator is 3. So, the maximum possible score for Essential 1 is 9. Similarly, as Essential 10 has 2 indicators, the maximum possible score for Essential 10 is 6.

### **Analyzing Results – Overall Score**



# How is this city doing?

#### **Analyzing Results – Overall Score**

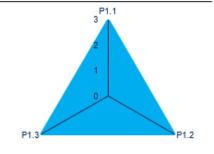


# How is this city doing?

# **Analyzing Results – by essentials**

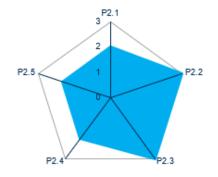
#### Essential 01: Organize for Resilience

P1.1	Does the City master plan (or relevant strategy/plan) adopt the Sendai Framework?	3
P1.2	Is there a multi-agency/sectoral mechanism with appropriate authority and resources to address disaster risk reduction?	3
P1.3	Is resilience properly integrated with other key city functions / portfolios?	3



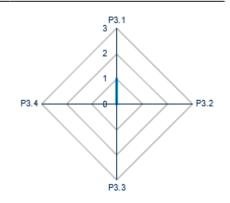
#### Essential 02: Identify, Understand and Use Current and Future Risk Scenarios

P2.1	Does the city have knowledge of the key hazards that the city faces, and their likelihood of occurrence?	2
P2.2	Is there a shared understanding of risks between the city and various utility providers and other regional and national agencies that have a role in managing infrastructure such as power, water, roads and trains, of the points of stress on the system and city scale risks?	3
P2.3	Are their agreed scenarios setting out city-wide exposure and vulnerability from each hazard, or groups of hazards (see above)?	3
P2.4	Is there a collective understanding of potentially cascading failures between different city and infrastructure systems, under different scenarios?	2
P2.5	Do clear hazard maps and data on risk exist? Are these regularly updated?	2

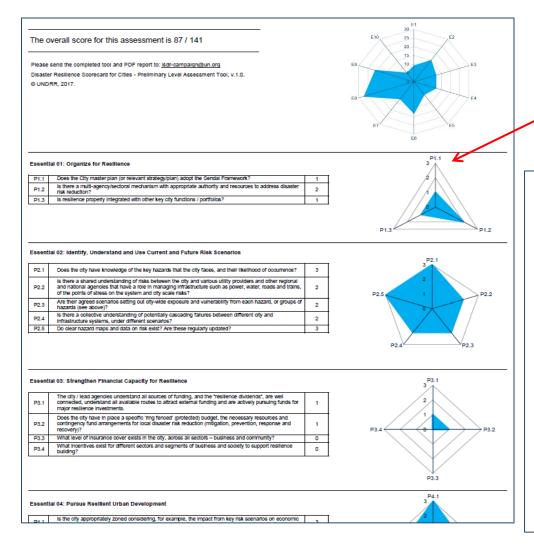


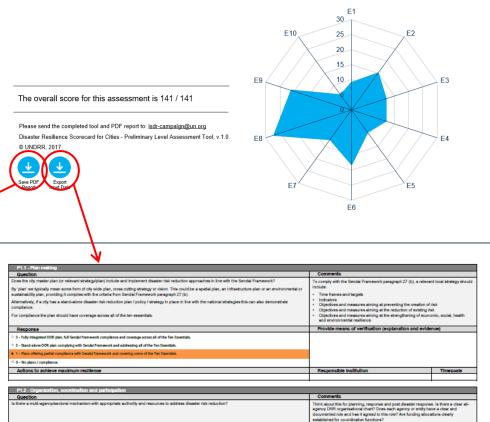
#### Essential 03: Strengthen Financial Capacity for Resilience

P3.1	The city / lead agencies understand all sources of funding, and the "resilience dividends", are well connected, understand all available routes to attract external funding and are actively pursuing funds for major resilience investments.	1
P3.2	Does the city have in place a specific 'ring fenced' (protected) budget, the necessary resources and contingency fund arrangements for local disaster risk reduction (mitigation, prevention, response and recovery)?	0
P3.3	What level of insurance cover exists in the city, across all sectors – business and community?	0
P3.4	What incentives exist for different sectors and segments of business and society to support resilience building?	0



#### **Reports**





Question	Comments	Comments	
is there a multi-agency/sectoral mechanism with appropriate authority and resources to address disseler risk reduction?	agency DRR organisational chart? Does each agency or entit	Think about this for planning, response and post disaster response. Is there a clear all- sigency DRR organisational chart? Does each agency or entity have a clear and documentation is ent has it agreed to this role? Are funding allocations clearly established for co-ordination functions?	
Response	Provide means of verification (explanation and ev	Provide means of verification (explanation and evidence)	
<ul> <li>3 - All lead agency teams are well established, properly resourced and with proper authority to act across all DRR stages.</li> </ul>			
2 - All lead agency teams are well established, properly resourced and with authority to act, but there is inconsistency in reso unding across the key DRR dages.			
1 - City teams have authority and convening power but do not have proper inter-agency support and / or are under resourced.			
0 - Lead agencies lack proper authority and are under resourced.			
Actions to achieve maximum recilience	Responsible Institution	Timescale	

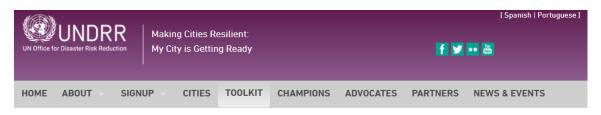
P1.3 - Infegration		
Question	Comments	
Is resilience properly integrated with other key city functions / portfolios? (e.g., planning, sustainability, investment case approval, finance and compliance, community engagement, emergency management, code compliance, infrashudure management, communications etc.)	is dissister realisence considered routinely as part of "day-to-day" decision making and budgeting, as opposed to being a separate issue disconnected with day-to-day	
Response	Provide means of verification (explanation and evidence)	
<ul> <li>3 - Explict or semi-explicit decision point for resilience in decision-making process(es), applied to all policy and budget pro-posals in all relevant functional areas.</li> </ul>		
2 - No formal process, but disaster resilience benefits are generally understood to be "helpful" to a proposal, in most function al areas.		
* 1 - Applied ad hox or occasionally.		
© 0 - Not applied.		
Additions to achieve maximum recilience	Responsible Institution	Timecoale

#### **Benefits**

The benefits of completing the scorecard extend far beyond reporting – the conversations the process can generate may even be more important than the score. If completed in a collaborative way, cities can:

- Establish a baseline measurement of their current level of disaster resilience
- Increase awareness and understanding of resilience challenges
- Enable dialogue between key city stakeholders who may otherwise not collaborate regularly
- Enable discussion of priorities for investment and action, based on a shared understanding of the current situation
- Enable the development of a city resilience strategy / action plan
- Ultimately lead to actions and implementable projects that will deliver increased resilience for the city over time.

#### **Download the Scorecard**



Home > Toolkit > ASSESSMENT TOOLS

#### Disaster Resilience Scorecard for Cities



#### A tool for disaster resilience planning

United Nations Office for Disaster Risk Reduction with the support of European Commission, IBM, AECOM and other partners and cities participating in the Making Cities Resilient Campaign have updated **the Disaster Resilience Scorecard for Cities**.

The Scorecard provides a set of assessments that will allow local governments to assess their disaster resilience, structuring around UNDRR's Ten Essentials for Making Cities Resilient. It also helps to monitor and review progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030.

It offers the potential for scoring at two levels:

#### **English Version**

Preliminary Assessment

**Detailed Assessment** 

Preliminary Assessment Excel Tool

**Detailed Assessment Excel Tool** 

Reference Note - Preliminary

<u>Assessment</u>

Reference Note - Preliminary & Detailed Assessment

#### Arabic Version

Preliminary Assessment

Preliminary Assessment Excel Tool

Detailed Assessment

Download the guide and excel tool from the MCR2030 website

https://bit.ly/41zDSjt

Or

Access the Online Disaster Resilience Scorecard for Cities!

https://scorecard.undrr.org/



# Thank you.

mcr2030-africa@un.org
MCR2030 Africa Secretariat
UNDRR Regional Office for Africa
Nairobi, Kenya









