



TOOLKIT FOR A RESILIENT RECOVERY

TOOLKIT SUMMARY PAPER • JULY 2020



GLOBAL
RESILIENT
CITIES
NETWORK

WHY CITIES FOR A RESILIENT RECOVERY?

The Global Resilient Cities Network (GRCN) carries on the foundational work of 100 Resilient Cities, transitioning the network to a city-led impact focused organisation. GRCN supports cities around the world to better understand shocks and stresses and incorporate resilience into city planning and operations. The Covid-19 pandemic has stretched cities to their capacity in providing immediate response and relief services, with many simultaneously aiming to focus on longer-term recovery efforts.

GRCN is identifying ways to support cities as they begin to plan for long-term recovery. This document summarises our Network's thinking and experiences in the development of a toolkit to support local governments in planning a resilient recovery.

Our work curating and developing a toolkit for a resilient recovery is generously supported by The Rockefeller Foundation. We would like to thank our partners Arup, University of Manchester, and Wood for their collaboration in the development of the tools in this toolkit.

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Front page photo: Chennai, India

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<https://www.resilientcitiesnetwork.org>



FOREWORD

It has been more than half a year since our network started to respond to Covid-19. From the onset of the pandemic, cities such as Huangshi, which lies near Wuhan, expressed their willingness to exchange resources and experiences with other network members. As the epicentre of the Covid-19 pandemic moved to urban areas across the globe, the dialogue between our cities has increased.

The Covid-19 pandemic is not only a public health emergency; it has cascading effects on the economy, food security, education, and other basic needs, further exacerbating existing chronic stresses, such as social and economic inequalities, across cities. It is a true resilience challenge.

The opportunity to emerge from this crisis better able to cope with an uncertain future cannot be lost. As we see lives heavily disrupted by the tragic loss of life, human suffering, and social restrictions, it is important to reflect on who is most affected by Covid-19, and why. Rethinking our city systems to protect the most vulnerable will also offer an opportunity to drastically reduce prevalent inequalities and the devastating impacts on our economies, climate and ecosystems.

The new normal has yet to be defined; however, there is broad agreement on the principles for a resilient recovery which include equity, health, safety, climate resilience and inclusion. Global Resilient Cities Network members have been working together for over six years, building on the foundation of the 100 Resilient Cities programme and over a decade

of investment from The Rockefeller Foundation in preparing cities to meet challenges of growing complexity.

We recognise the role our network must play in the growing global coalition of cities working towards a resilient recovery. We work with partners from the Global Commission on Adaptation, ICLEI, the United Nations Office for Disaster Risk Reduction (UNDRR) and the World Bank to advance human-centric safety and equity principles but, as practitioners, we need to go further. We need to help cities on the front line to bridge the gap from principles and visions to practice; resilience building tools help us get there.

This paper is the first in a series of knowledge products produced by GRCN and its partners to support the work of resilience practitioners globally. It summarises recovery planning approaches and tools our network members have explored collaboratively and found most useful. The toolkit is intended to facilitate recovery and renewal work in any city. Our hope is that this will lead to the adoption of evidence-based practices beyond our network, and, ultimately, boost the creation of resilience-building ideas for a safer and more equitable world.

Lauren Sorkin

Executive Director
Global Resilient Cities Network



INTRODUCTION

Photo: Comune di Milano

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Recovery as an opportunity to build resilience

While most cities globally are responding to the current pandemic, several are also preparing for and thinking about what comes next. However, planning the recovery in a manner that is responsive and relevant to the ongoing crisis requires cities to act differently; cities must go beyond the linearity of conventional planning and integrate agile decision making and feedback loops whilst science, data and the understanding of the situation evolves.

Cities can effectively respond to the Covid-19 pandemic and protect the most vulnerable by ensuring access to reliable data and agile decision-making, as well as proactive and reflective planning. As the crisis develops at a fast pace, local governments face urgent questions on how to reinstate disrupted city services and how to support vulnerable populations during subsequent stages of the crisis. What activities have we stopped that we should not restart? What have we paused that we should start again but differently? And what are the things we have started that we will keep? These are the questions Global Resilient Cities Network (GRCN) is helping cities to answer.

Whilst the impacts of the Covid-19 crisis in our cities depend on their resilience, integrating further resilience qualities into recovery activities now represents a tangible opportunity for cities to build back better and achieve better human health and wellbeing outcomes in the long-term. Learning from past crises as well as a deep and multisectoral understanding of the ongoing crisis are also essential ingredients to plan next steps.

A toolkit for resilient recovery

Listening to voices from our cities and proactively responding to the demand, GRCN and its Chief Resilience Officers are co-designing and identifying suitable methodologies to enable cities to plan a resilient recovery. The toolkit provides a reference framework to guide discussions in a phased manner and includes a combination of tools that cities can use on their own based on best practice, as well as methods that will be delivered in collaboration with GRCN. We are developing this suite of tools to

support our cities to understand the opportunities the Covid-19 pandemic has created, as well as the necessary steps to recovery; fundamentally, the tools support cities to build back better.

Our suite of tools enables each city to define their own path to recovery by considering four iterative activities: assessing and analysing the current situation (assess), defining a portfolio of action (plan), improving the proposals (optimise), and deepening learning (learn).

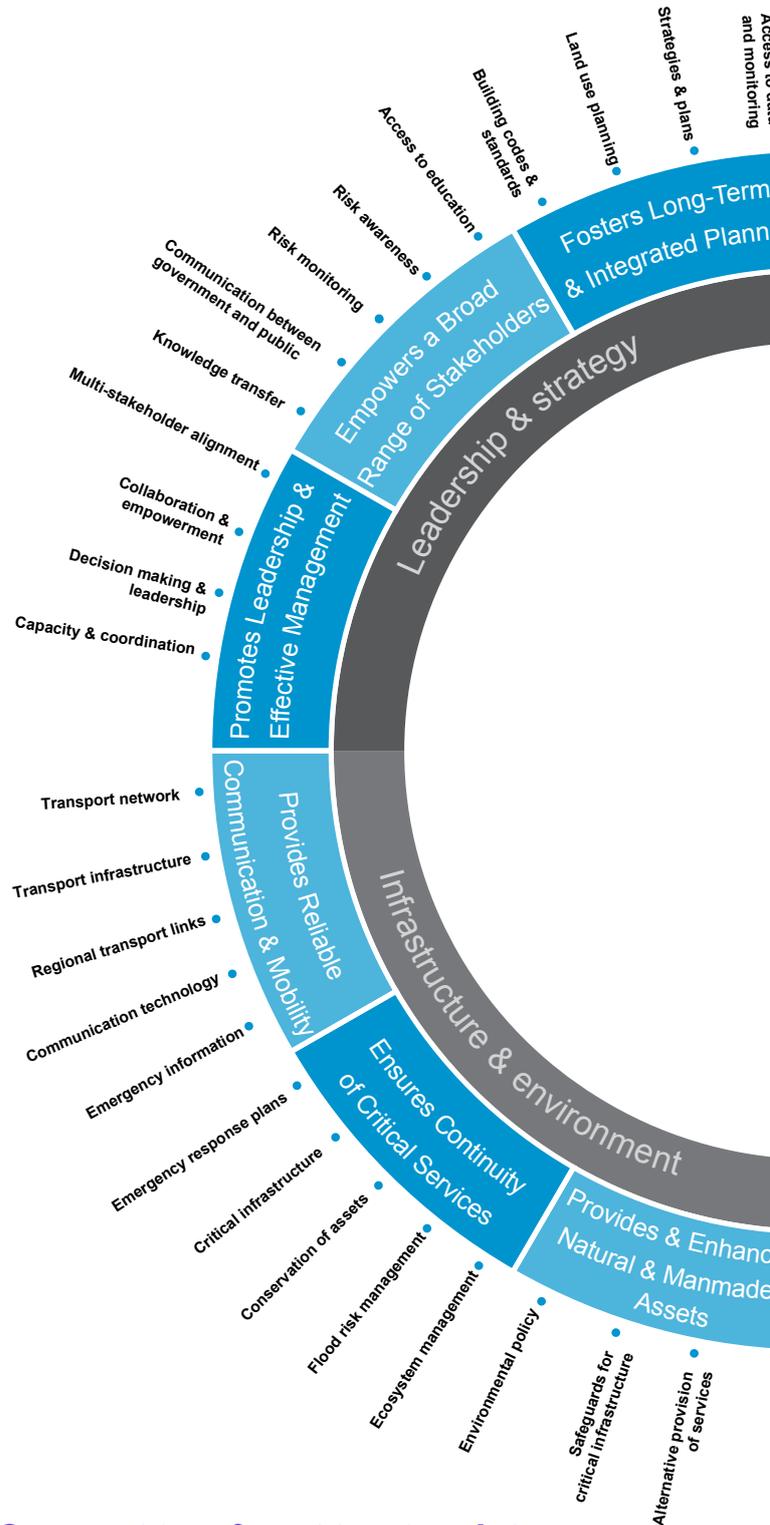
Characterised by their place-based approach, our toolkit helps local governments to identify opportunities that include not only physical solutions – such as rethinking our streets’ layout to optimise pedestrian and cycling mobility – but also cultural practices and governance arrangements to achieve carbon neutrality in the long term.

Our holistic approach to resilience

As society and the economy and infrastructure that serves it are severely impacted by the Covid-19 crisis, cities need to ensure their recovery strategies and investment decisions enhance, rather than undermine, the city's resilience. The City Resilience Framework (CRF) is a practical tool to guide this process holistically; it summarises the 12 action areas that cities need to address to build resilience, and the key objectives underpinning those.

Appraising the results of an assessment or exploring a city's recovery opportunities through the action areas included in the CRF enables leaders to map and articulate the areas where they are concentrating their efforts as well as potential gaps. The CRF also provides guidelines on key attributes cities should enhance whilst shaping resilience interventions.

GRCN is working with a small group of pilot cities to co-develop and modify a series of CRF-based tools to enable the integration of holistic resilience principles in recovery planning. To enable cities to identify their own path to recovery, we also collate international best practices so that alternative tools can be used and adapted depending on the context (e.g. UK Impact Assessment, Scenario Planning). The toolbox will be available to cities in our Cities for a Resilient Recovery page as soon as pilot development of the co-developed tools is completed.



Opportunities for cities in their recovery efforts (Dalberg, 2020)

Health & wellbeing

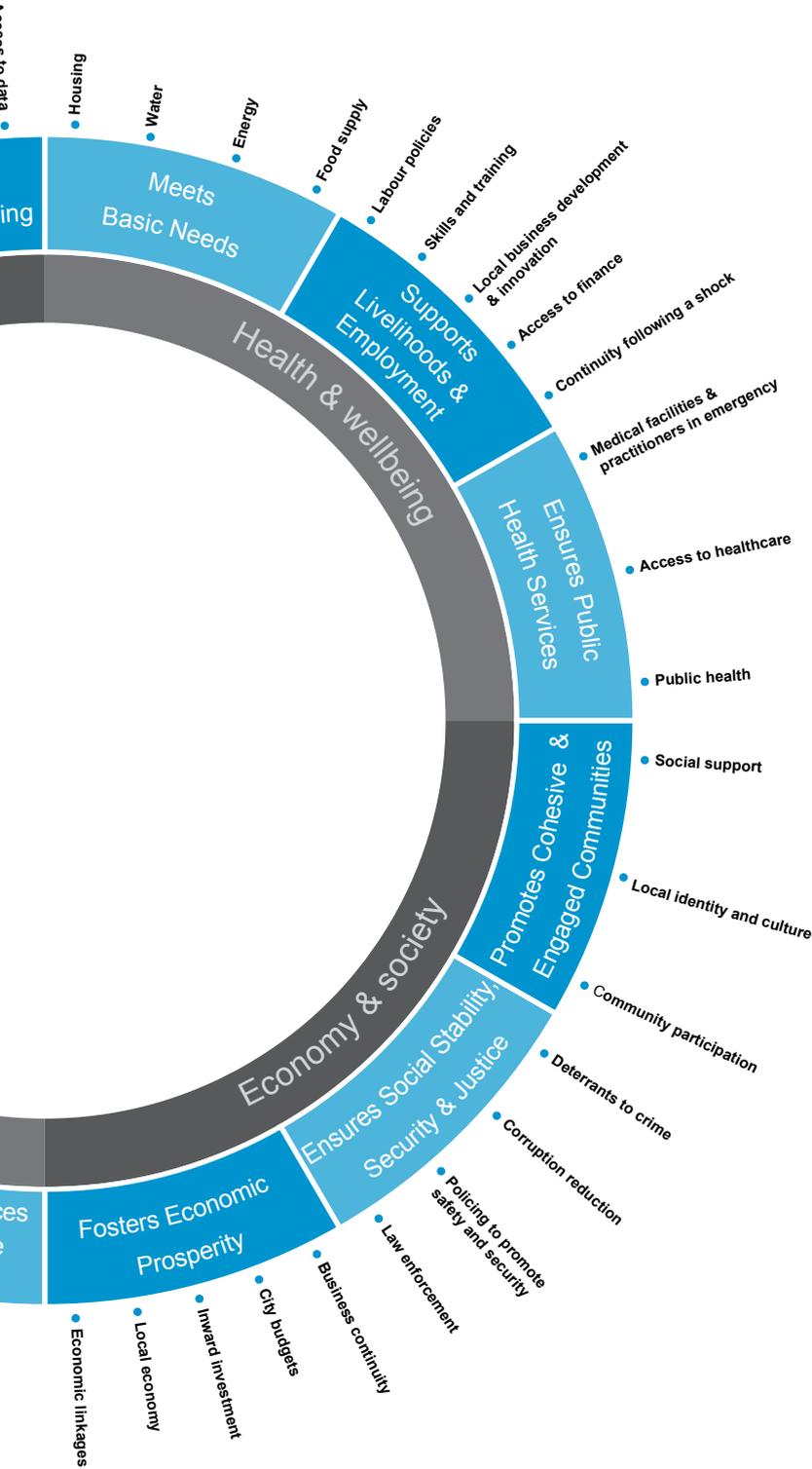
Cities have an opportunity to expand access to healthcare for all communities in the long-term in coordination with other government agencies.

Cities have an opportunity to use the new influx for food support to create long-term access points in food insecure communities.

Economy and s

Cities have an opportunity to support small and minority-owned businesses and informal workers through the allocation of resources and support.

Cities have an opportunity to provide citizens to regional and national benefits in the s



City Resilience Framework (The Rockefeller Foundation & Arup, 2015)

Society

opportunity to support city-owned businesses and as part of an equitable recovery packages and

opportunity to connect national / national recovery short-term.

Infrastructure & environment

Cities have an opportunity to increase access and affordability of public transport for low-income communities.

Leadership & strategy

Cities have an opportunity to increase connection to, and trust with, traditionally excluded populations.

Cities have an opportunity to coordinate with new partners for a more inclusive response.

DO CITIES HAVE APPROPRIATE TOOLS FOR A RESILIENT RECOVERY?



Photo: Addis Ababa by Nafkot Gebeyehu / GRCN

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Planning is a frequent activity for local authorities. Communication campaigns, budgets, land-use plans and climate mitigation strategies are just some examples of complex programmes of work that local governments create and deliver on a regular basis. However, Covid-19 poses a major new challenge to local governments to act and plan differently.

To plan a relevant response to Covid-19, local governments need to consider that this pandemic develops at a different pace in different places and its effects will be numerous; it is useful to describe it as a slow onset crisis with wide-ranging and complex impacts¹. This means there are a myriad of practical considerations that make recovery planning particularly hard: vast knock-on effects, undefined impacts and overlaps between response and recovery are just a few of the considerations that need to be taken into account².

City planning tools are normally based on non-dynamic snapshots of data and projections that are typically updated every five to ten years. City planning methodologies can be helpful in the current context, but they will fall short of integrating the key data because it is constantly changing while new urgencies are surfacing. Post-disaster tools also offer relevant insights on managing a complex situation, but often their success relies on external capacity which makes them impractical for local governments – especially those in the Global South. Importantly, post-disaster tools and methods rely on static pictures of pre- and post-disaster vulnerability conditions, which are mostly helpful after a sudden natural disaster like an earthquake or hurricane.

How can local governments systematically capture and analyse the evolving data? How can the dynamic information be articulated and communicated to all stakeholders in an accessible and clear manner? The GRCN, drawing on over six years of experience exploring methods to support strategic planning in local authorities, is collaborating with its member cities to support them in overcoming such challenges. Through its Cities for a Resilient Recovery initiative³, the GRCN is identifying how tools can be adapted to support cities in responding to the substantial challenges of this pandemic.

Our emerging hypothesis is that strategic planning tools based on existing best practice can help local governments respond to the urgencies of this moment, but to do so effectively they may require change. To support recovery from Covid-19, tools and methods need to have three key characteristics:

- **Enabling agile processes.** As the global pandemic evolves and has multiple effects locally, new science will emerge and ideas and measures may have to change in response to uncertainty and the situation on the ground. An agile approach assumes that making real-time changes is crucial not only for emergency response activities but also for recovery planning and implementation.
- **Integrating an iterative approach into planning.** Health, social and economic indicators might vary during the crisis due to multiple factors like changes in people's behaviour or policy failure. Subsequently, the focus of planning activities may have to switch back from recovery to emergency response and vice versa, and some decisions will need to be reconsidered.
- **Orienting the work through well-defined phases.** Operating in this complex environment demands local government staff to have appropriate information that clarifies key phases and priorities. Whilst in the early stages of recovery planning, priorities are focused on gathering and analysing current data, later stages of work will require focus on the articulation of ideas and their prioritisation.

¹ da Silva, 2020. See: <https://www.diplomaticourier.com/posts/disaster-versus-crisis-how-the-nature-of-the-covid-19-crisis-affects-our-response>

² Shaw, 2020. See: The Manchester Briefing, Week 2, available through www.ambs.ac.uk/covidrecovery

³ <https://www.resilientcitiesnetwork.org/recovery>



Emerging Learning from our Network

Data gathered by GRCN with support from Dalberg Advisors shows that across the cities surveyed by GRCN, almost three quarters (72%) of Chief Resilience Officers are involved in their cities' recovery process⁴. While cities are on the frontline of the Covid-19 pandemic, there is a clear demand for partnerships and stakeholder collaboration to plan and deliver a resilient recovery. Further, the survey revealed that 94% of Chief Resilience Officers are engaging stakeholders in recovery planning, and 83% listed multiple stakeholders as planning and delivery partners.

Santa Fe, Argentina

Santa Fe is slowly shifting from a long response period to recovery and renewal. To that extent, the repository of best practices prepared by the University of Manchester and GRCN⁵ has been useful, according to the resilience team.

Santa Fe's Chief Resilience Officer, Engineer Agustin Botteron, has collaborated with GRCN staff in identifying key insights, pros and cons of the various toolkit components. He suggests "some of them are more DIY-oriented, but others require full attention of the local government's staff as well as support from GRCN, and this is something worth knowing early on". Santa Fe's resilience team is disseminating the toolkit material across municipal staff in order to enable a consultative and collaborative decision on what tools will have the greatest impact on vulnerable communities, particularly with regards to historical inequalities and climate hazards.

Following the election of Mayor Emilio Jatón in 2019, the City of Santa Fe was due to prepare a new government plan (Agenda de Gobierno Santa Fe Capital) but the preparation of the plan has been delayed due to the outbreak of the pandemic. However, this delay also provided an opportunity for municipal staff to explore city priorities through the lens of resilience embedded in the [Recovery Action Plan](#). The government plan is set to be released soon. Additionally, to inform the local post-Covid economic recovery strategy, the resilience team is exploring the use of GRCN's [Deep Dive](#) tool on sustainable economy.

● See [Recovery Action Plan tool](#), p.12

● See [Resilience Deep Dive tool](#), p.16



Greater Manchester, United Kingdom

As Greater Manchester continues to address the challenges brought by the Covid-19 global pandemic and turns its attention to helping its communities and businesses to recover, urban resilience concepts are informing its thinking. The city-region is building its one year 'living with Covid' resilience plan, and GM's Resilience Team is using the learning shared by other cities and institutions within the GRCN - whether that be the 'Manchester Briefing' produced by the University of Manchester or the Cities on the Frontline webinars. GM's resilience team is also using GRCN's [Recovery Resilience Assessment](#) to provide useful analyses of proposed activities, ensuring that the work they are planning will both help GM to recover from Covid-19 as well as to build the city-region's wider resilience.

"As we move forward and implement the activities outlined in the one-year resilience plan, we are encouraging the city system to realise the co-benefits that these activities could achieve, as well as ensuring that the work is informed by those parts of society most affected by COVID-19", emphasises Karl Astbury, Senior Policy Advisor on Resilience, at Greater Manchester Combined Authority.

In responding to this global shock, the tools, learning and conceptual framing offered by GRCN are assisting Greater Manchester to find its way to a more resilient future.

● See [Recovery Resilience Assessment tool](#), p.10



Paris, France

The mission of the Paris Resilience Office is different from crisis management. Prior to the crisis, the resilience team worked on updating its knowledge of the vulnerabilities of the Parisian territory as well as on developing methods and tools to help facilitate development, management and evaluation in their daily operations. Noémie Fompeyrine, Paris Chief Resilience Officer, suggests: "The Preliminary Resilience Assessment was a precious ground we had to proceed with this update, both as a tool and as an experience from our initial PRA in 2016."

Early into the crisis, the city prepared for recovery, and Paris found the Resilient Recovery Toolkit useful for both operational and iterative activities. Noémie Fompeyrine highlights Paris' resilience team "organised a collective work session dedicated to exploring and testing the different tools and identifying how each one could merge, crash-test or improve our methods, tools or projects. For instance, we realised that our colleagues from the Crisis Management Team could benefit from the [Recovery Impact Assessment](#), and we are currently discussing how to deploy it with them. We also thought that the [Recovery Action Plan](#) was relatively similar to one of the tools we had developed internally. Finally, the [Scenario Planning](#) tool could be very useful for agenda setting at the beginning of the new political mandate. We are looking forward to improving our knowledge of the tools and sharing our experiences of using them."

● See [Recovery Impact Assessment](#), p.10

● See [Recovery Action Plan tool](#), p.12

● See [Scenario Planning tool](#), p.10

⁴ Cities for a Resilient Recovery: Emerging Data, How Chief Resilience Officers are embedding resilience in recovery efforts p 4- 7 See: <https://www.resilientcitiesnetwork.org/recovery>

⁵ <https://www.resilientcitiesnetwork.org/tools-resources#h.rbp13adpylo>

PHASES OF WORK

GUIDING QUESTIONS
(DALBERG, 2020)

- How has the COVID-19 crisis changed your understanding of disparities in the city?
- What mechanisms do you have in place to understand them, especially new insights on root causes? (Data and systems)

- How do existing city (resilience) plans need to change? Which additional initiatives do they need to incorporate for resilient and equitable recovery?
- Which additional stakeholders need to be engaged to make recovery efforts more holistic/lasting?

→ **ASSESS**

→ **PLAN**



RECOVERY ASSESSMENT

- Recovery Impact Assessment
- Recovery Resilience Assessment
- Recovery Needs Assessment



PORTFOLIO DEFINITION

- Recovery Action Plan
- Scenario Planning
- Co-lab

TOOLKIT FOR A
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- Tools in pilot stage
- Tools in development

• How can cities embed equity principles more continuously in recovery to address the root causes of existing disparity? (over time)

• How can cities measure and learn from resilience building efforts?

OPTIMISE

LEARN



PROJECT ENHANCEMENT

RESILIENCE DEEP DIVES

- Project Scan
- Resilience Opportunity Framing
- Urban Resilience Screen

- Sustainable Economy
- Effective Provision of Critical Services
- Reliable Mobility & Communications
- Equity

ASSESS: RECOVERY ASSESSMENTS

This includes methods and approaches that enable a situational analysis with a level of detail that aligns with the cities' needs and capacities. Our team is exploring how existing methods based on best practice, like the Impact Assessments used in the UK⁶ or UN's Post Disaster Needs Assessment⁷, can be helpful to local governments, by using them in an iterative manner. We have adapted one of our

tools to create a Recovery Resilience Assessment to help cities analyse the impacts of Covid-19 in their communities from a systemic perspective. By using tools like these, cities will be in a better position to identify interventions and investments relevant to their specific needs.



Guiding questions

- How can we systematise diverse data associated with the Covid-19 emergency?
- How can we quickly keep record of the actions our city is taken in response to Covid-19?

- Who is affected and how has the crisis affected them?
- How can we systematise and catalogue stakeholders' opinions?
- What has helped and what has hindered response and recovery?
- What has government/state/city done so far?

- How can we organise a local multidisciplinary team to assess the impacts of Covid-19?

Recommended tools

Recovery Impact Assessment

An excel-based framework for systematic and co-ordinated collection and sharing of information about the overall size and scale of the impacts of the Covid-19 crisis.

- * Output: Live systematised record of impacts and evidence to inform decision making.

Recovery Resilience Assessment

A method that enables the integration and comparison of impact data, stakeholder perceptions, and government actions to surface and articulate initial resilience lessons, themes and challenges emerging from the impacts of Covid-19 in a city.

- * Output: Systemic analysis of impacts and effects supported by multiple qualitative datasets.

Recovery Needs Assessment

Fieldwork and 'teaming-up' based comprehensive assessment methodology aimed at assisting local governments to critically evaluate the extent of the impacts of the Covid-19 crisis and their effects on their city.

- * Output: Multi-sector assessment of impacts and emerging needs.

Recovery Impact Assessment

A Recovery Impact Assessment can be instrumental in keeping an up-to-date inventory of impact areas born out of an emergency; by using an impact assessment, local governments can systematise evidence associated with both immediate and short-term impacts of the recovery from Covid-19.

Recovery Impact Assessments are live documents because the evidence upon which actions are based will change; this has never been more relevant than today, with the ever-evolving evidence and data related to Covid-19. A slow-onset crisis, such as this, complicates decision-making because an effective response depends on the ability to monitor the situation, information and data available to react accordingly⁶.

Ensuring a clear information pathway and database is fundamental to implementing the most effective policy, or policies, at any given moment and this information must be stored in such a way that it can be logically assessed by politicians and advisors.

Recovery Resilience Assessment

For practical reasons, conventional emergency response approaches tend to consider assets or systems alone when examining city resilience; understanding who is most affected – and how – can form the basis for a people-centred process that identifies better measures with people's well-being at its core.

As multiple actors live and work in cities, their decisions will affect both their individual and collective resilience; understanding the resilience of a city through quantitative data alone is not sufficient. Combining data-driven processes with other types of information such as perceptions can help understand complex processes involving physical and non-physical elements.

Importantly, in responding to the crisis, various levels of administrations respond with action according to their mandates. This shapes a variegated and disconnected portfolio of actions that often demands better articulation of challenges and opportunities

prior to proposing more targeted actions.

Thus, the Recovery Resilience Assessment proposes an approach that attempts to answer three questions:

- Who is affected and how has the crisis affected them?
- What has helped and what has hindered response and recovery?
- What has the government/city done so far?

Recovery Needs Assessment

The Recovery Needs Assessment is adapted from the well-known and globally accepted Needs Assessment methodology, which recognises the multi-sectoral nature of emergency response and recovery as well as the key role of evidence and data to support appropriate decision-making. This methodology has been adapted for cities so they can integrate this international best practice and effectively plan for recovery.

The Recovery Needs Assessment builds on a methodology that has been widely studied and implemented all over the world by the UN, particularly in fragile contexts. Therefore, it is grounded in well-tested methods, which have been constantly adapted to include lessons from implementation on the ground. This approach is based on the formation of a robust team able to both explore sectoral impacts of an event and integrate findings to build a holistic view of the situation in hand.

The suitability of the tool is based on its ability to respond to cities' complex challenges, particularly in the Global South. By emphasising deep analysis of existing data, team work and integrative process, the Recovery Needs Assessment can help cities tangibly understand the complex impacts of Covid-19, particularly for poor and vulnerable groups.

⁶ <https://www.gov.uk/guidance/national-recovery-guidance-common-issues#impact-assessments>

⁷ <https://www.undp.org/content/undp/en/home/2030-agenda-for-sustainable-development/planet/disaster-risk-reduction-and-recovery/post-disaster-needs-assessments.html>

⁸ <https://www.diplomaticourier.com/posts/disaster-versus-crisis-how-the-nature-of-the-covid-19-crisis-affects-our-response>

PLAN: PORTFOLIO DEFINITION

Once the impacts of the crisis are understood, local governments need to identify actions that will enable them to respond to their specific context and the complex nature of the Covid-19 impacts locally. Existing methods like scenario planning can help cities to test their ideas in the context of uncertainty. However, it can become an expensive exercise if staff do not have the necessary capacity. Prioritising actions through a holistic resilience approach is

likely to generate a more robust pipeline of projects, better able to reflect the diverse needs and gaps in each city. To enable this, we are developing a practical 'Action Plan' tool to help cities articulate the resilience value of each proposal through a simple set of questions. Following this rapid process, cities will obtain a portfolio of relevant actions to address the social, economic and infrastructure needs emerging from the Covid-19 crisis.



Guiding questions

- How can we filter the actions our city is proposing for a Recovery Plan?
- What factors shall we consider to identify the 'resilience' value of a set of proposal?
- How can we integrate a 'resilience lens' for the creation of an action plan?

Recommended tools

Recovery Action Plan

Excel-based tool designed to support cities identify new and ongoing initiatives that will create multiple resilience benefits in the context of their recovery from Covid-19. The tool is a decision support method intended to help facilitate collaborative project identification.

- * Output: Prioritised list of proposals according to their resilience value.

- What scenarios shall we consider to plan a recovery?
- What would happen if we prioritise human well-being outcomes over the economy?
- What systems are more sensitive to emerging economic and social challenges?

Scenario Planning

Methodology to explore plausible future conditions and build confidence in a city's plans by demonstrating how well a strategy or plan would perform across less likely future conditions.

- * Output: Prioritised scenarios and list of key factors to consider for future planning.

- How can we rapidly design a portfolio of actions for a specific complex problem? (e.g. water scarcity)

Co-lab

Participatory workshop-based process to explore deeply a specific problem, identify appropriate solutions and accelerate the design of the proposals.

- * Output: Portfolio of concepts to holistically address a specific sector or challenge.



● **Recovery Action Plan**

The Recovery Action Plan helps cities to quickly outline the resilience value of individual initiatives, or portfolios of initiatives, allowing stakeholders and decision makers to identify the initiatives that will contribute to the resilience of multiple systems and enhance the lives of vulnerable groups. Furthermore, it visualises the areas of resilience - shocks and stresses and the CRF - that a portfolio of initiatives will enhance, as well as identifies gaps that a portfolio needs to further address.

Through this gap-identification approach, city resilience teams and project teams can understand the areas of resilience that their current portfolio of initiatives addresses and understand to which initiatives resilience value can be added. The tool is suitable for initiatives of any scale and status and initiatives can be sourced from a range of existing plans and emerging thematic areas.

● **Scenario Planning**

As the current Covid-19 crisis is showing, resilience planning requires cities to think not only about their current risk profiles, but also about the future challenges; as it is not possible to predict the future challenges precisely, cities need to be prepared for a range of eventualities, including some scenarios they may have never encountered.

Cities are currently facing several decisions that will have both medium-term and long-term impacts. Thus, the ultimate success of decisions made today relies on the situation tomorrow. Scenario planning can help prepare cities for the effects of climate change and other future conditions. It also helps shift the planning framework from one that develops a single prediction to inform decision-making to one that evaluates a range of plausible futures and defines a robust strategy. Furthermore, it helps account for a wide range of disparate stakeholder views.

The benefits of adopting a scenario planning approach will be realized gradually. First, by engaging in scenario planning, city employees will deliberately consider how the uncertain future could

affect what they and their departments do. They will also need to engage more with other departments to understand how the different scenarios would play out.

● **Co-Lab**

Enhanced collaboration is crucial to identify suitable actions and solutions that will help local communities deal with challenges exacerbated by Covid-19. The Co-lab is a collaborative approach to build on the learnings from the crisis and identify a consistent set of actions for a particular challenge or theme.

By working with multiple stakeholders from the onset, the Co-lab approach allows for partnerships and collective action. This tool is particularly helpful to identify solutions suitable to low income or vulnerable groups as it focuses on people - women, youth, low-wage workers, small and medium entrepreneurs, actors engaged in the informal sector, and vulnerable groups.

The methodology explores potential knock-on effects of the identified actions on people's lives, their livelihoods and the economy and support workers and households.

OPTIMISE: PROJECT ENHANCEMENT

Our experience demonstrates that early stages of project development provide the best opportunities to embed holistic resilience principles in projects. By exploring their priority projects from a resilience perspective, cities can ensure their investments are more impactful, and genuinely respond to existing and emerging stresses and future shocks. Critical to this stage is that local governments own the

process using accessible methods. The GRCN, as well as other Rockefeller Foundation grantees have developed multiple methodologies, such as the Project Scan Tool, Resilience Opportunity Framing⁹ and Urban Resilience Screen¹⁰, which we are making available through our Cities for a Resilient Recovery initiative.



Guiding questions

- How can we add resilience ideas to our proposals?
- What shocks and stresses shall we consider in our project proposals?
- How can we map the co-benefits of a project?

Recommended tools

Project Scan

A tool to help cities articulate the resilience qualities of projects and their contribution to a city's overall resilience.

- * Output: List of recommendations on how a project can better integrate resilience principles and respond to shocks and stresses.

- We have a really good idea, how can we rapidly articulate it (including its resilience value) and plan its next steps?

Resilience Opportunity Framing

Workshop-based approach to identify key principles and value drivers of a project in an initial stage of development.

- * Output: Summary report clarifying a project's vision, success factors, resilience value, and a project plan.

- What process and metrics shall we consider to design a large infrastructure project?

Urban resilience screen

Technical methodology to ensure multiple factors influencing the resilience of an infrastructure project are considered throughout.

- * Output: Comprehensive project assessment with recommendations for further project development and target KPIs.

Project Scan

In the context of Covid-19, the Project Scan can help cities to quickly assess key ongoing projects and understand how modifications – minor and major – can be made to add resilience value and accelerate recovery efforts to the outbreak. It allows cities to assess proposed actions and projects and better understand how they can be used as assets to ensure that recovery leads to cities that are stronger, more equitable and more resilient to future shocks and stresses.

By involving primary and secondary stakeholders in co-designing a project and its components, it ensures that additional resilience value is realised and co-benefits that would have otherwise been lost are incorporated into the project; incorporating different stakeholder's perspectives leads to enhanced project outcomes.

Opportunity Framing

Resilience Opportunity Framing is a tool to identify the resilience value in complex projects that are in an embryonic phase. It can be applied to any project that incorporates multiple city systems.

The tool is workshop-based and can be used to bring together multiple stakeholders from a range of disciplines, which will lead to more robust discussions and a much richer understanding of the systems that a given project affects. For example, including water, transport and environmental specialists in a public spaces project can ensure that water accessibility is enhanced, the transport network allows for access to developed area and the spaces provide adaptive infrastructure in the face of the climate emergency.

Participants during a Resilience Opportunity Workshop (remote or in-person) will agree key decision points that have the potential to disrupt project scope and increase a project's resilience value. The roadmap, which is a key output of the Resilience Opportunity Framing process, is used to track project progress against such decision points and ensures that key stakeholders involved in the planning of the project and creation of the roadmap are included in key decisions.

Urban Resilience Screen¹¹

Infrastructure projects must maximise both their mitigation and adaptation potential, combining hard infrastructure and nature-based solutions, and addressing physical constraints as well and community needs. This will lead to infrastructure that is built to improve daily life, ensure survival and support continued growth in the face of increasingly hazardous climate events.

The Urban Resilience Screen was developed by The Rockefeller Foundation and Wood to help investors evaluate the resilience of an infrastructure project. This tool explores the potential of an infrastructure proposal to withstand sudden shocks and prolonged stresses, minimize negative impacts on the environment and society, as well as contribute positively to health, job creation, and community cohesion.

⁹ <https://www.resilienceshift.org/tool/rvr/>

¹⁰ <https://www.rockefellerfoundation.org/blog/urban-resilience-infrastructure-imperative-climate-uncertain-world/>

¹¹ Yee & Fairholme, 2019. See: <https://www.rockefellerfoundation.org/blog/urban-resilience-infrastructure-imperative-climate-uncertain-world/>

LEARN: RESILIENCE DEEP DIVES

Cities should consider their opportunities for deep learning once the situation has stabilised. In response to the needs emerging from our member cities, the GRCN, with the support of our partners Arup, will embark on the development of guidance and potential KPIs to help cities explore specific resilience challenges around health, resilient infrastructure, and economic prosperity, to name a few. Integrating

learning in late recovery activities will help cities modify their practices and policies based on the newly emerging evidence, and thus leverage the key lessons to inform future decision-making.



Guiding questions

- We would like to use this moment to rethink our approach to...
- We need specific guidance on processes to improve on...
- What KPIs are relevant to guide our work?

Recommended tools

Resilience Deep Dives

Thematic guideline based on the City Resilience Framework indicators to enable cities explore in depth the challenges to achieving...

- ...a sustainable economy
- ...effective provision of critical services (infrastructure)
- ...reliable mobility and communications
- ...an equitable city

- * Output: Sector specific qualitative and quantitative assessment identifying critical KPIs, areas of high and low performance, and a summary of locally-sourced ideas on how to improve key areas.



Deep Dives

To understand a problem in detail, both qualitative and quantitative data are necessary. A Resilience Deep Dive will contain questions to guide discussions and thus inform a qualitative assessment as well as the identification of relevant KPIs. Based on these two complementary approaches, stakeholders will be in a stronger position to reimagine a specific sector in their city and identify tangible actions to contribute to thematically specific resilience outcomes.

Qualitative questions will focus on descriptive observations of a challenge in the city. Answers to qualitative questions are always subjective, so need to be well informed and subject to review. To do so, deep dives will provide reference scenarios to guide the discussions. On the other hand, quantitative questions will focus on identifying appropriate measurement indicators relevant to cities.



PARTNER WITH US

Photo: Ajuntament de Barcelona

GLOBAL RESILIENT CITIES NETWORK

Support Cities for a Resilient Recovery

Cities for a Resilient Recovery (C2R) is designed to expand the reach of holistic and equitable resilience to more cities and partners throughout the globe as we recover from Covid-19 and its cascading effects.

Like the other efforts to bring information, best practices and sharing through the C2R platform, this Toolkit for a Resilient Recovery is seeking support and partnership from like-minded and aligned organisations. It is particularly important to have partners that help us and all the municipalities reach scale in this resilient recovery.

If your organisation is interested in supporting the roll out and advancement of the Toolkit and/or related C2R efforts, please send us a short email with an introduction to your organisation and potential resources/support available.

Contact us

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