

The ISRM Global Urban Resilience / Major City Management program has attracted world-wide support since its launch at the start of 2024.





Based on work done previously in partnership with the UK National Preparedness Commission, International Federation of Red Cross / Red Crescent Societies and the EU Erasmus-funded BUILD programme (Building Universities for Leading in Disaster Resilience) as well as multiple other academic, research and policy institutions, the second stage of the programme was launched in June 2024 with the initiation of the Management Award in Global Urban Resilience and Major City Management.

Attracting a global audience of academics, practitioners and policy makers, it established the programme as a significant voice in the global urban resilience dialogue.

In order to offer a platform to the global community involved in all aspects of urban resilience in its widest terms, the ISRM, together with partner organisations, has instigated a series of monthly programmes that will explore different aspects of global resilience from a multi-stranded and multi-level perspective.

Each month's programme will cover its own theme and will offer both sector experts and those with wider, non-specific interests to be involved in a dialogue that will allow the sharing of cutting-edge academic work and existing best practices together with the exploration of future potential scenarios and opportunities.

Each monthly theme will offer participants the opportunity to contribute to an ISRM Special Edition Journal on that specific subject, which over the course of twelve months should build into a significant resource that can be used for further policy-orientated and action-orientated activities. As with all of our programmes, the ISRM welcomes participation and collaboration from anyone interested in these issues, and who feel that they have a contribution to make.



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# What Is Resilience? Reconfiguring for the 2020's

Resilience, in the context of global urban resilience and major city management, has been defined as the capacity of urban systems, communities and individuals to withstand, adapt to and recover from various shocks and stresses. These can include natural disasters, economic disruptions, social upheavals and other unforeseen challenges. Whilst it can be broadly seen in terms of 'bouncebackability', any true understanding of resilience must also incorporate an organism's ability to learn, both from its own experiences and from others in similar situations. It is the ability to learn, and then to incorporate those lessons learned into all aspects fop planning, delivery and management, which underpins a truly resilient system and differentiates it from mere survival.

Effective resilience requires a holistic approach that integrates disaster risk reduction, sustainable development, social inclusion and proactive planning to create cities that are not only safe and secure but also vibrant and dynamic. By fostering a culture of resilience, cities can enhance their capacity to protect their citizens, support economic activities and maintain social harmony in the face of adversity as part of a continually evolving process that allows them to meet the ever-changing demands of urban environments.





# MONTH 2

# Community Resilience: Where It All Starts

Community resilience is the foundation of a community's ability to respond to challenging changes in their environment. It based on the fostering of strong social ties and the development of networks within and between neighbourhoods, and between communities and local government. By nurturing trust and cooperation among residents, communities can mobilise resources more efficiently and respond collectively to challenges such as natural disasters, economic downturns or social disruptions. This interconnectedness not only enhances the community's capacity to withstand shocks but also promotes a sense of belonging and shared responsibility, reinforcing resilience over the long term and on an inter-generational basis.

At its essence, community resilience involves proactive measures that strengthen local institutions and empower individuals. It encompasses strategies like enhancing infrastructure resilience, promoting sustainable practice and investing in education and healthcare accessibility. These efforts underpin the development of robust communities capable of adapting to changing conditions and emerging threats. From this perspective, community resilience extends beyond mere survival; it fosters innovation and creativity by leveraging diverse perspectives and local knowledge. By embracing inclusivity and fostering a culture of preparedness, communities can cultivate resilience as a dynamic process that enables continuous growth and improvement in the face of uncertainty.

# **Infrastructure Security: Keeping Our Cities Running**

Infrastructure security is paramount for maintaining the functionality and stability of cities. It begins with safeguarding critical systems such as transportation networks, power grids and communication channels against physical and cyber threats, but also involves the development of sustainable investment programmes that can ensure that critical infrastructures are maintained at the necessary kevel of readiness and robustness.

Despite their criticality, critical infrastructures are often inherently fragile, tightly bounded to a wide network of other system on which they have a high level of dependency, and often with little understanding of how those critical interactions and interdependencies operate, or where the vulnerabilities are. They are also often overloaded, under-resourced and working at a level of capacity that is not sustainable.

Infrastructure security requires proactive planning and investment in protective measures. By integrating resilience into urban planning and development, cities can minimise vulnerabilities and enhance their capacity to withstand unforeseen challenges. Ensuring the continuity of essential services not only supports daily operations but also promotes economic stability and public safety. By prioritising infrastructure security, cities can create the foundations for sustainable growth and prosperity whilst safeguarding both the immediate and long-term well-being of their residents.





### MONTH 4

#### Climate Change: Cities on Fire, Cities Under Water

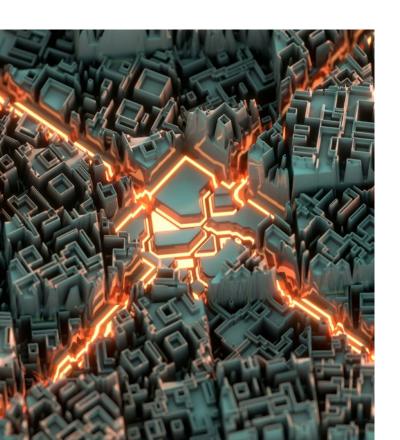
Climate change poses profound challenges to cities worldwide, reshaping urban landscapes exacerbating vulnerabilities. Rising temperatures intensify heatwaves, placing strain on urban infrastructure and public health. Cities are increasingly vulnerable to extreme weather events such as floods, hurricanes and wildfires, which threaten lives and livelihoods while straining emergency response systems. The need for resilient urban planning becomes paramount as cities face the dual challenge of mitigating greenhouse gas emissions and adapting to inevitable climate impacts. Sustainable urban development strategies, including green infrastructure and renewable energy adoption, are crucial in safeguarding cities against climate risks and ensuring a liveable future for urban residents.

In response to climate change, cities are pioneering innovative solutions to enhance resilience and reduce environmental impact. Initiatives range from implementing stringent emission reduction policies sustainable promoting transport and energy-efficient buildings. Collaborative efforts between local governments, businesses and communities are essential in fostering climate resilience. By integrating climate adaptation measures into urban planning and policy frameworks, cities can mitigate risks and seize opportunities for sustainable growth. Education and public awareness campaigns play a vital role in mobilising citizens to adopt eco-friendly behaviours and support climate action initiatives, fostering a collective commitment to building climate-resilient cities for future generations.

# The Global City Network: Complexity and Dependencies

Understanding the global city network involves recognising the intricate web of connections and dependencies that link cities worldwide in various socio-economic, cultural and technological dimensions. These networks represent a dynamic system where cities interact and collaborate on global issues such as trade, finance, innovation and sustainability. Cities within this network often specialise in different services or functions, creating interdependencies that affect global economies and policies.

The global city networks thrive on information exchange, technological advancements and mobility of goods and people. They facilitate the flow of ideas, capital and resources across borders, driving economic growth and cultural exchange. However, this interconnectedness also poses challenges, including vulnerabilities to global shocks like pandemics or economic downturns that can ripple through the network, impacting cities worldwide. The development of strategic cooperation, adaptive governance structures and innovative solutions to ensure the resilience and sustainability of cities within the global network is a focus of multiple programmes already in place, and which this project is designed to support and contribute to.





# MONTH 6

# Food and Water Security: Keeping Our Cities Fed

Food security in urban settings is critical to ensuring that cities can sustainably meet the nutritional needs of their populations. Recent events have demonstrated how fragile our global food supply networks are, whether that is from nation state actions (the disruption of grain supplies from Ukraine as a result of the Russian invasion), human error (the blocking of the Suez Canal by the Ever Given), climate change (the disruption of crop cycles across the globe), or impacts from disease, locusts and other disruptive / destructive phenomena.

Strategies to establish resilient supply chains that can withstand shocks such as natural disasters or economic fluctuations include diversifying food sources, promoting local agriculture and enhancing storage and distribution systems to minimize waste and ensure equitable distribution. Effective food security initiatives also focus on enhancing community resilience by empowering stakeholders and fostering collaboration across sectors. This may include supporting urban farming initiatives, promoting sustainable food production practices and educating residents about nutrition and food preservation.

By integrating these efforts into urban planning and policy frameworks, cities can build a robust foundation for food security that enhances public health, supports economic stability and strengthens social cohesion. Ultimately, ensuring food security not only addresses immediate hunger concerns but also lays the groundwork for sustainable development and resilience in urban environments.

#### The Unheard Voices: Empowering Marginal Communities

It is easy to think of global urban reliance in terms of London, New York, Tokyo or Geneva, and many programmes have made exactly that error. However, it is in the major and secondary cities of the developing world where urban resilience is both being most tested and where there is the greatest need for transformational thinking. Perhaps the most critical development in that area is the recognition of the need to empower and engage the marginal communities. those sections of the environment that are often unseen, overlooked or simply ignored. If urban resilience in the coming decades is to have any meaning, it will be dependent on harnessing the energy in those communities and giving them ownership and agency over their own lives, livelihoods and well-being.

Whist there can be the belief that such marginalised communities are chaotic, unmanaged and largely without structure, it is often the case that the opposite is true. They are in fact home to highly adaptive and innovative governance frameworks, often out of sight of the officials and agencies who believe that they are running the cities. It will be the ability to integrate those communities into the wide urban ecospheres that will bring energy, innovation and transformational solutions the totality of the urban reality, in ways that are perhaps unthought of in the present day.





## MONTH 8

# Cites and Crisis Management: When We Move to 'Right of Bang'

Cities are perhaps the most complex operating environments that we can imagine. They involve thousands of moving parts, all of which need to function in order to maintain the overall operational capability of the total system. Any disruption to any of highly inter-connected part the inter-dependent complex 'system of systems can lead to cascading consequences that could have major, potentially catastrophic, impacts and consequences. The truth is that we often have little understanding of how the city as a complex eco-system works, and equally little understanding of what the consequences of a disruption could mean.

We have seen increasingly frequent examples of where cities have come close to 'going offline' – losing their capacity to maintain operation functionality in a way that provides the necessary services to their citizens, organisations and networks. The Houston snowstorm of 2021, Cape Town 'Day Zero' water crisis of 2018 or the possibility of Tokyo being hit by a radioactive cloud following the Fukushima tsunami of 2011 are a reminder that the need for cities to have an 'All Threats, All Hazards' capability is increasingly critical, and one that many cities are significantly under-prepared for.

#### The Future Is Hopeful: The Positive Side of Urban Development

Urban development holds promise for fostering vibrant, sustainable communities where economic growth, social equity, and environmental stewardship converge. As cities evolve, opportunities arise to innovate urban infrastructure, enhance public spaces and promote cultural diversity. Sustainable urban planning integrates green technologies, such as renewable energy and efficient transportation systems, reducing carbon footprints and improving quality of life. Moreover, urban development encourages community engagement, empowering residents to shape their surroundings and foster inclusive, resilient neighbourhoods.

The positive impact of urban development extends beyond physical infrastructure to encompass economic vitality and social cohesion. By attracting investments and nurturing entrepreneurship, cities stimulate job creation and economic prosperity. Socially, urban environments promote cultural exchange and civic participation, nurturing a sense of belonging and collective identity among diverse populations. Embracing smart growth principles and sustainable practices, cities can realise their potential as hubs of innovation and opportunity, driving positive change and shaping a hopeful future for urban dwellers worldwide.





# MONTH 10

# Academia and Global Urban Resilience: The Next Generation

Academia plays a pivotal role in shaping the future of global urban resilience by cultivating knowledge, innovation and leadership among the next generation of scholars and practitioners. Through collaborative research and education initiatives, universities worldwide are advancing critical insights into urban challenges, from climate adaptation to social equity. By integrating diverse perspectives and interdisciplinary approaches, academia fosters holistic solutions that strengthen cities' ability to withstand and recover from shocks and stresses.

The challenges we are currently facing and will be continuing to face for the foreseeable future demand a new generation of conceptualists, able to develop models and theories that acknowledge the realities of the changing nature of urban resilience in the 2020's and beyond. At the same time, there is the need to recognise the limitations that we are all operating in, which require a realistic approach that can be considered as viable from both a thought-leadership and action-leadership perspective. The challenge for academia is to collaborate with governments, NGOs and industry leaders to develop evidence-based strategies that enhance urban planning, infrastructure management and community resilience across the world, in ways that make a genuine contribution to global security and stability.

### MONTHII

# **Technology and Transformation: Imagining the City of 2025**

Whilst it has been fashionable in recent years to talk about Vision 2030 or Strategy 2030, in terms of urban development we need to be thinking on terms of the city of 2050. That is only twenty-five years from now, which in terms of urban development can be seen as s single project life-cycle. Whilst we can consider the current age to be one of mega-city developments, that has in fact been the case throughout history.

Cites have always balanced the desire to be cutting edge with the need to maintain their basic functionalities. In many ways, our cities of today are directly related to the cities of the 17th century - and are often facing many of the same problems. The city of 2050 is likely to be both transformed and immediately recognisable, balancing the benefits (hopefully) to be brought by emergent technologies, with the reality that for the majority of the population, daily life will still be a matter of balancing home and family with work, and the need to move between them. This session will allow us to examine those issues, to imagine the city of the future and to consider how we can learn the lessons of the past to ensure that we see genuine progress and development in the years between now and 2050.





## MONTH 12

#### Looking Back, Looking Forward: The Conclusion of the Programme

As we conclude the programme on global urban resilience and major city management, it is a moment to reflect on the journey undertaken and the milestones achieved since its inception in early 2024. Collaborating with esteemed partners such as the UK National Preparedness Commission, International Federation of Red Cross and Red Crescent Societies, and the EU-funded BUiLD programme has been instrumental in shaping a robust platform for dialogue and action. Throughout the programme's evolution, it has garnered global participation from academics. practitioners. and policymakers, solidifying its role as a leading voice in the discourse on urban resilience.

Looking forward, the programme's legacy extends beyond its thematic explorations and journal contributions. It leaves a lasting impact on policy-oriented activities and community-driven initiatives worldwide. As we celebrate the culmination of this endeavour, we reaffirm our commitment to fostering resilience in cities across the globe, embracing future challenges with innovative solutions and a collaborative spirit. The programme's success lies not only in the knowledge shared and partnerships forged but also in the enduring commitment to creating sustainable urban environments that thrive amidst adversity and uncertainty.



#### AROUT

# ABOUT THE ISRM GLOBAL URBAN RESILIENCE PROJECT

The ISRM Global Urban Resilience Project was developed out of a series of papers written together with the International Federation of the Red Cross / Red Crescent Societies, and more recently in partnership with the National Preparedness Commission.

It is designed to bring together academics, policy makers and practitioners from across the global urban resilience and major city management spectrum to facilitate action-oriented dialogue and interaction from multiple perspectives.

The launch of the ISRM Management Award in Global Urban Resilience and Major City Management in May 2024 set the foundation for the latest series of programmes, based on the 130 participants from over thirty countries who participated in the programme.

For more details on the Global Urban Resilience and Major City Management project, or to discuss how you can be involved, please contact

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