GLOBAL CITIES GOVERNANCE COUNCIL

ACADEMIC GUIDE: GLOBAL CITIES GOVERNANCE COUNCIL (GCGC)



MUNUR XVII

UNIVERSIDAD DEL ROSARIO

What is MUNUR XVII?

The Model United Nations at the Universidad del Rosario (MUNUR) is the first of its kind at the university level in Colombia. It is a space led and organized entirely by students and for students, designed to foster public speaking, critical thinking, and the development of solutions to the challenges of the international system. MUNUR invites its participants to explore the world, understand the issues of the present, learn from the lessons of the past, and imagine the responses that the future will demand.

Founded as an initiative by students at the Colegio Mayor de Nuestra Señora del Rosario, MUNUR has, over the course of seventeen editions, established a tradition of academic excellence, leadership, and commitment. More than just a model, it is a community where people from different parts of the country and the world come together to strengthen friendships, promote diversity, celebrate inclusion, and demonstrate that respectful dialogue remains the most powerful tool for transforming realities.

For this seventeenth edition, we have decided to look toward the future without losing sight of what has defined us since our inception. Under the theme "Beyond Legacy, Towards Impact," we seek to go beyond the legacy we've built over the years to make a real impact on every delegate, every committee, and every debate. We want this experience to not only develop better speakers and negotiators, but also leaders of integrity who are aware of their ability to transform their surroundings and contribute to a more just, cooperative, and sustainable world.

For this reason, MUNUR XVII offers a wide variety of committees designed to cater to different interests and levels of experience, with innovative activities that will challenge delegates to step outside their comfort zones, put their creativity, negotiation skills, and academic excellence to the test, and discover the true extent of their potential.

This document contains the necessary information for delegates interested in participating in this committee. It should be emphasized that the academic guidelines are merely a suggested research path developed by the Steering Committees. However, it is the responsibility of each participant to prepare thoroughly for the days of debate. We also remind you that all rules of procedure are set forth in this edition's Handbook, which we recommend all participants read carefully.

At MUNUR XVII, we don't just debate ideas: we develop leaders, inspire change, and demonstrate that our true legacy is the impact we have on others.

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WELCOME LETTER

Secretary General

Juan David Rincon



Hello, everyone!

My name is Juan David Rincón Vásquez, and in this edition of MUNUR, I have the privilege of serving as Secretary-General.

Whenever I came to this section of the guide, I used to skip it or simply not give it much thought; but today I see firsthand the work, effort, and dedication that come with having the honor of writing these lines. That's why, if you're reading this, I'm immensely grateful to you for recognizing the value behind every word.

If I had to describe my journey at MUNUR from day one in a single word, it would be: challenge. For many people, the word "challenge" may be synonymous with something negative; however, I am convinced that human beings only hone their skills and character when they face situations for which they may not feel fully prepared or that force them to step outside their comfort zone. In the four years I've been participating in this model, I can say that the moments when I've learned and grown the most always coincide with the same dates: late October and early November.

If this is your first time participating in the event, get ready for a truly life-changing experience. But best of all, you won't be alone throughout the process. At MUNUR and the Universidad del Rosario, we're known for doing everything with excellence but, above all, with deep human warmth. Rest assured that you'll see this reflected in every aspect of the model: from the team that will guide you through the registration process, to the tables and support centers that will be there for you at all times, to a Board of Directors fully dedicated to serving every delegate.

Take advantage of this opportunity to grow, debate, put your skills to the test, and, above all, build experiences and friendships that will stay with you for a lifetime.

A warm welcome to everyone at MUNUR XVII!

Juan David Rincón Vasquez

Secretary General of MUNUR XVII

WELCOME LETTER

Sub-secretary General

Andres Acosta





Dear delegates, sponsors, observers, and staff welcome to this new and extraordinary academic and personal experience. Participating in a Model United Nations conference means much more than simply representing a country or debating international issues. It means committing to the values of dialogue, cooperation, and the tireless pursuit of solutions to the challenges facing our global community.

Throughout each session, you will discover that a delegate's true greatness lies not only in delivering good speeches, but in the ability to listen, understand different perspectives, and build consensus.

As an International Relations student and a member of the MUNUR XVII organizing team, I have had the privilege of witnessing the profound impact these experiences have on those who participate in them. Model United Nations programs shape leaders of integrity, inspire vocations, and forge friendships that transcend borders. Through them, we learn that authentic leadership is exercised with humility, responsibility, and a commitment to service.

May this program be the beginning of new dreams and the setting in which you discover the full extent of your own potential. The future of international cooperation needs committed, creative, and courageous leaders, and I am convinced that each of you has the ability to contribute to building that future, and that this seventeenth edition will help you challenge yourselves.

I wish you every success and hope that this experience will remain in your memory as a lasting source of inspiration and growth.

Andrés Acosta

Sub-secretary General of MUNUR XVII

WELCOME LETTER

General Director

Santiago Sepulveda Perez



Dear delegates:

It is a true honor to welcome you to MUNUR XVII. As General Director, I am proud to welcome you to a new edition of this simulation, a forum that, over the course of seventeen editions, has brought together students committed to dialogue, critical thinking, and developing solutions to the challenges facing our world.

Each of you has decided to take on the challenge of representing a country, defending a position, and participating in debates that will require preparation, discipline, negotiation skills, and, above all, a willingness to listen. That decision demonstrates your interest in going beyond the classroom and becoming citizens with a global perspective and a genuine commitment to your community.

MUNUR is much more than a simulation of the United Nations. It is a setting where leadership, advocacy, teamwork, and conflict resolution skills are strengthened, but also where friendships are formed, unforgettable memories are created, and participants discover the enormous impact that a conversation can have when guided by respect and cooperation.

I invite you to take advantage of every committee, every speech, every caucus, and every informal conversation as an opportunity to learn and grow. Don't be afraid to defend your ideas, question your own perspectives, and build consensus. It is precisely these moments that make a Model United Nations a transformative experience.

I want to thank you for placing your trust in MUNUR XVII and for being part of this edition. Behind this Model United Nations stands a team that has worked diligently for months to offer you an academic and personal experience of the highest quality, and we hope that each of you will find here a space where you can challenge yourselves, learn, and enjoy yourselves.

Welcome to this new edition. I am confident that, with your commitment, enthusiasm, and talent, we will make MUNUR XVII a memorable experience.

I wish you every success and look forward to seeing you make your mark on this edition.

Sincerely,

Santiago Sepúlveda Pérez

General Director, MUNUR XVII

WELCOME LETTER

General sub-director

Carolina Echeverri Echeverria



Dear delegates:

I extend my warmest welcome to you all at MUNUR XVII. As General Sub-director, it is a privilege to greet you and to see how this model, now in its seventeenth edition, continues to be a breeding ground for critical thinkers, empathetic leaders, and young people committed to the future of our society.

Taking on the role of a nation's spokesperson and defending its interests requires courage, preparation, and discipline, but above all, a tremendous willingness to listen and build consensus. That determination that brings you here today is what makes a Model United Nations a truly transformative experience.

Beyond diplomatic rigor and committee debates, MUNUR is a setting for personal growth where networks are forged, friendships are formed, and lasting memories are created. I encourage you to make the most of every caucus, every statement, and every exchange to challenge yourselves, question perspectives, and learn from your peers.

Behind MUNUR XVII is an extraordinary team that has taken care of every detail to ensure you have an unforgettable academic and personal experience. Make the most of every space we have prepared for you.

I wish you the greatest success during this event. May your ideas and voices leave an indelible mark on this edition.

With appreciation and admiration,

Carolina Echeverri,

General Sub-director, MUNUR XVII

WELCOME LETTER

USG of Specialized committees

Luis Felipe Forero Pérez



Dear Delegates,

A letter can sometimes say more than a thousand words. It is a pleasure to introduce myself as the Under Secretary-General for Specialized Committees. My name is Luis Felipe Forero Pérez, I study International Relations at Universidad del Rosario, and I am genuinely proud of you, of the staff, and of what this project has become.

I believe that in these committees you will find the best of yourselves. From our office, we have worked to build spaces that are rigorous and technical, grounded in history, but above all driven by purpose. You will move through topics such as urban studies, a Latin America in transformation, a State that, if we are honest, doesn't look like one, and an increasingly complex oikoumene. The idea is simple: that this becomes a space where you can think carefully, question with intention, and engage in meaningful debate.

This has not been an easy process, but it has been a meaningful one. I owe much of that to my team, my friends. Together, we designed dynamics, cases, and discussions that will challenge not only what you know, but how you think and how you understand the world, without losing academic rigor along the way. I am confident that you will find in these committees something more than just an exercise.

Throughout this process, I also found some clarity about my own path. I hope that happens to you as well. Because, as Jorge Luis Borges wrote in The Other, "in the end, in remembering oneself, there is no person who does not encounter themselves." Between ideas, disagreements, and challenges, there is always something else at stake: understanding who we are and what we want to contribute.

In me, you will find someone willing to support you. I hope your debates are thoughtful, your ideas solid, and that you remain open to listening to others. I am certain you will not only rise to the occasion, but give new meaning to what we have built.

Stay curious, keep an open mind, and above all, respect one another.

Felipe Forero

+573192239782

luisf.forero@urosario.edu.co

WELCOME LETTER

Secretariat coordinator

Maria Alejandra Hajduk





Hello, My name is María Alejandra Hajduk. I am a student of Political Science and Government, I have the privilege of being part of the XVII edition of MUNUR as Secretariat coordinator, and I want to welcome you to this experience.

If you are reading this, it means you will be part of a committee within the Specialized Committees Undersecretary. This undersecretary has a very particular identity: from understanding the construction of the modern State, to examining the role of the Catholic Church in today's society, the use of negotiation as a tool to address diplomatic crises, and the connectivity of global cities in the contemporary world. Through this, we aim to create a space where each delegate can fully develop their interests, push their potential beyond what they expect, and reflect on dynamics—often historical—that continue to have a real impact today.

I hope you enjoy this experience as much as we did while organizing it, and that it strengthens your interest in what is, at the end of the day, a very special space: Model of United Nations.

Thank you for being part of this project, and welcome.

Maria Alejandra Hajduk Sánchez

+57 3207864319

mhajduksanchez@gmail.com

Welcome letter from the Honorable Dais

Nicolás Amador

Every global crisis ends up landing somewhere, and that somewhere is almost always a city. It is with that idea in mind that I welcome you to the Global Cities Governance Council and to MUNUR XVII, a model that connects tradition with innovation and an event I love deeply, one to which I have given my work and my heart. Welcome to MUNUR!

I am Nicolás Amador, a political scientist and historian from Universidad del Rosario, currently completing my Master's in Global Affairs and Political Processes at the same university. MUNUR has been part of my path for years: I had the honor of serving as Secretary General of MUNUR XV, and today I return with great joy as a member of the dais of this committee. Over these days, my goal is to offer you the best possible experience and to make the Global Cities Governance Council an unforgettable committee for you.

This council invites you to look at global politics from the perspective of cities. From the origins of municipalism to today's data-driven urban governance, you will debate how cities can act as autonomous and democratic actors capable of facing complex contemporary crises.

My expectations for this committee are high. For that reason, I hope you bring not only the best attitude but also thorough academic preparation, which will be your key tool for proposing innovative and realistic ideas that allow you to achieve everything you set out to do. Remember that you will shape the course of this council through your decisions. Make the most of your strengths to reach the goals you set.

Something I have learned throughout my time on the circuit is that a delegate who wants to become "the best" must first seek integrity. An upright delegate is one who strikes a balance: capable of leading a lobby, reaching agreements, delivering memorable speeches, producing outstanding documents and masterfully embodying their delegation. Above all, it is a delegate with values who genuinely enjoys the committee they are part of.

Don't be afraid to take risks. After all, the point of these events is to grow while learning, so I hope to see delegates who are unafraid to defend what they believe in. Be intelligent, creative and strategic; find ways to persuade others of your proposals. Speak with confidence and, most importantly, enjoy MUNUR and make friends. Model United Nations are always an excellent excuse to meet people with whom you can build lasting friendships.

Finally, if you have any questions, comments or suggestions, I am always just a message away. I wish you every success and the best of luck in this great experience.

Sincerely,

Nicolás Amador

Dais, Global Cities Governance Council MUNUR XVII

niko.amador18@gmail.com | +57 318 386 2515

ABOUT THE COMMITTEE



INTRODUCTION TO THE COMMITTE

Cities have traditionally been understood as spaces where people live, work, and interact, and a space where local governments are responsible for providing services and managing the territory. However, the role of cities has changed considerably as urbanization, globalization, technological development, and the growing interdependence between societies have transformed the way political and economic relations take place. Cities are no longer places where national policies are implemented; instead, they increasingly participate in the discussion and management of issues that extend beyond their administrative boundaries.

This transformation has been particularly visible in the relationship between cities and international affairs. Local governments increasingly establish relationships with other cities, participate in international organizations and networks, exchanging technical knowledge, and cooperating on common problems; this process is commonly associated with city diplomacy and paradiplomacy. Through this, mayors, municipal governments, and local institutions develop external relations without necessarily acting through the traditional diplomatic channels of national governments.

City diplomacy does not mean that cities have replaced States as the main actors of international relations. Rather, it reflects the development of a more complex system of governance in which different levels of government and different types of actors interact. National governments continue to control important legal, financial, and political resources, while cities possess direct knowledge of local conditions and are responsible for implementing many policies that have consequences for everyday life.



Taken from: C40 cities

The increasing importance of cities has also encouraged the creation of transnational municipal networks. Organizations such as C40 and ICLEI connect cities facing similar challenges and provide spaces for exchanging experiences, developing common initiatives, and promoting policy experimentation. Through these networks, a policy developed in one city can become a reference for another city facing a similar problem. At the same time, participation in these networks is not necessarily equal. Differences in financial resources, institutional capacity, technological infrastructure, and political influence can determine which cities have greater opportunities to shape the agendas of international urban networks.

This creates an important question for contemporary urban governance: to what extent can cities act collectively and influence global governance while remaining dependent on national political and institutional structures? The answer is not straightforward. On one hand, cities can develop considerable influence through international networks, technical cooperation, knowledge exchange, and the implementation of innovative policies. On the other hand, their ability to act internationally may depend on national legislation, access to financial resources, institutional capacities, and the political relationship between local and national governments. The internationalization of cities therefore creates new opportunities for urban cooperation while also exposing existing inequalities between cities.

The same tension can be observed in the development of smart cities. The use of data, digital infrastructure, sensors, geographic information, and other technological tools has created new possibilities for understanding and managing urban systems. Technology can help authorities, identifying patterns, monitoring infrastructure, improving public services, managing transportation, and anticipating potential risks. However, technological solutions do not automatically produce better governance; their effectiveness depends on institutional capacity, access to reliable information, technical expertise, and the ability of governments to translate data into concrete decisions.

Smart urban governance therefore involves more than adopting new technologies. It concerns the way governments use information and technological capabilities to understand urban problems, coordinate different actors, evaluate alternatives, and make decisions. This also raises questions about who controls urban data, who has access to technological resources, and whether cities with fewer resources can participate on equal terms in international networks focused on urban innovation. These questions become particularly important when cities address problems that cannot be solved individually, climate change for example. Cities are responsible for a significant share of global emissions and are also directly exposed to many of the consequences of climate change. As a result, urban governments have increasingly participated in transnational climate networks and developed initiatives involving emissions reduction, adaptation, resilience, and environmental management.

Mobility presents a similar challenge. Traffic congestion, public transportation, road infrastructure, air pollution, and accessibility are usually managed at the local or metropolitan level, but they are also influenced by economic activity, urban expansion, regional transportation systems, and national infrastructure policies. Cooperation between cities can therefore provide opportunities to exchange solutions and coordinate strategies, particularly in metropolitan areas where administrative boundaries do not correspond to the actual movement of people and goods.



Taken from: LinkedIn

The growing role of cities has consequently produced a form of global urban governance that is neither completely centralized nor entirely independent. It is characterized by interaction between municipalities, national governments, international organizations, private companies, civil society, research institutions, and transnational networks. Cities can become important actors within this system, but their influence depends on the relationships and resources available to them.



Taken from: The chicago council on globaj affairs

The Global Cities Governance Council is situated within this context. The committee provides a space for city representatives to discuss how urban governments can cooperate beyond their borders while addressing problems that directly affect their populations. Rather than treating cities simply as administrative units, the Council considers them as actors capable of developing partnerships, exchanging knowledge, participating in international networks, and contributing to broader processes of governance.

The GCGC therefore combines two dimensions of contemporary urban governance. The first is the capacity of cities to manage their own territories and respond to local challenges. The second is their ability to cooperate internationally and influence the policies, practices, and networks through which common urban problems are addressed.

This distinction will be particularly important throughout the committee. Delegates will not only have to identify possible solutions to urban problems, but also consider who has the authority to implement them, which actors need to participate, what resources are available, and whether cooperation between cities can produce results that individual governments could not achieve on their own.

The committee is designed to focus on two areas in which these questions become especially relevant: urban mobility and traffic congestion management, and climate resilience and disaster management in urban areas. Both cases require coordination between different institutions and levels of governance, while also creating opportunities for cities to learn from one another and develop common approaches.

Ultimately, the Global Cities Governance Council is based on a simple but increasingly relevant premise: many of the challenges faced by contemporary cities are local in their consequences, but international in their connections. Understanding this relationship is essential for examining how cities can cooperate, how urban networks function, and how local governments can participate in a global governance system that continues to evolve.

COMMITTEE HISTORY

The history of global city governance reflects a gradual transformation in the way cities have been organized, represented, and connected to one another. What initially emerged as international cooperation between municipalities around technical and administrative questions progressively developed into a broader system involving city diplomacy, transnational networks, global cities, and, more recently, technology and data-driven urban governance.

Union Internationale des Villes (UIV)

The origins of organized international municipal cooperation can be traced to the beginning of the twentieth century, during a period in which European cities were experiencing rapid urbanization and facing increasingly complex problems related to urban development, public services, and municipal administration.

In this context, the Union Internationale des Villes (UIV), also known as the International Union of Cities, was established in Ghent, Belgium, in connection with the International Congress on the Art of Building Cities and Organizing Community Life. The organization sought to create a permanent structure through which municipalities could exchange information and experiences regarding urban management.



Taken from: Wikipedia

The UIV established a Provisional Council composed of 30 members and created a permanent office responsible for communication and documentation on municipal affairs. This structure represented an early attempt to institutionalize cooperation between cities beyond national borders and provided one of the first organizational foundations for international municipal cooperation.

Union Internationale des Autorités Locales (IULA)

The development of international municipal cooperation continued during the interwar period. In 1928, the UIV was reorganized and renamed the Union Internationale des Autorités Locales (IULA). The transformation expanded its membership and scope beyond individual cities to include national associations of local governments and other territorial authorities.

The organization moved its headquarters to The Hague, Netherlands. During this period, the role attributed to local governments also began to change. Municipalities were increasingly understood not simply as technical institutions responsible for delivering local services, but as relevant actors in questions of development and democratic stability. This represented an important step in the institutional development of municipalism and international local-government cooperation.

Post-war International Cooperation and the Consolidation of Municipal Networks

The period following the Second World War brought significant changes to international cooperation. The creation and expansion of international organizations, the reconstruction of cities, and the increasing importance of development policy created new spaces for local governments to cooperate internationally.



Taken from: Getty Images

During the second half of the twentieth century, municipal organizations expanded their activities beyond the exchange of administrative experiences. Cities and local governments increasingly participated in international discussions concerning development, public services, environmental issues, and urbanization. At the same time, growing urbanization strengthened the importance of metropolitan areas within national economies and international systems.

This period also contributed to the emergence of increasingly interconnected cities. Major metropolitan areas became important centers of finance, trade, transportation, culture, and information, creating the conditions for the later development of the global city concept.



Taken from: DW.com

The Emergence of Global Cities

From the 1970s onward, the growing concentration of financial, economic, political, and informational activities in certain metropolitan areas led scholars and policymakers to increasingly examine the role of cities within global systems. Cities such as New York, London, and Tokyo became prominent examples of urban centers whose influence extended well beyond their national territories.

The concept of the global city emphasized that some metropolitan areas were becoming important nodes within international networks of capital, information, production, and human mobility. Their international relevance was therefore connected not only to their formal position within national governments, but also to their economic and institutional connections with other parts of the world.

During the following decades, this development encouraged cities to establish direct relationships with other municipalities, international organizations, businesses, universities, and civil society organizations. These relationships contributed to the emergence of new forms of city diplomacy and transnational municipal cooperation.

United Cities and Local Governments (UCLG)

The institutional consolidation of international municipal cooperation reached an important milestone in 2004. In Paris, the Union Internationale des Villes, the Union Internationale des Autorités Locales, and the Metropolis network merged to create United Cities and Local Governments (UCLG).

Taken from: United Cities and Local Government

UCLG brought together cities, local and regional governments, and national associations of local authorities within a single global organization. Its creation represented the consolidation of several decades of municipal cooperation and provided cities with a stronger collective platform in international affairs.



Council of the Organisation for Economic Co-operation and Development. Taken from: The United Nations

The organization maintained the principle of defending democratic local self-government while expanding its activities toward global governance and sustainable development. UCLG also developed relationships with international institutions, including the United Nations and the Organization for Economic Co-operation and Development (OECD), allowing local and regional governments to participate more directly in international policy discussions.

The Expansion of Transnational City Networks and City Diplomacy

During the late twentieth and early twenty-first centuries, international cooperation between cities expanded through specialized transnational municipal networks. Instead of focusing exclusively on general municipal administration, many of these networks were organized around specific global challenges, including climate change, environmental sustainability, migration, public health, mobility, and urban resilience.

Organizations and networks such as C40 and other transnational municipal networks allowed cities to exchange policies, develop common initiatives, coordinate actions, and represent shared interests internationally. This period contributed to the consolidation of city diplomacy and paradiplomacy, as local governments increasingly established relationships with foreign cities, international organizations, national governments, private actors, and civil society.

However, the expansion of these networks also revealed important differences among cities. Financial resources, institutional capacity, technological infrastructure, and political influence affect the ability of cities to participate in international networks and shape their agendas. Consequently, city networks have become both instruments for cooperation and spaces in which existing inequalities between cities can be reproduced.

New Municipalism and Fearless Cities

During the 2010s, another transformation took place through the emergence of new municipalist movements. These initiatives sought to connect municipal institutions with citizen organizations, social movements, and grassroots platforms.

Fearless Cities became one of the most visible international expressions of this new municipalism. The movement promoted greater citizen participation and sought to use local governments as spaces for experimentation in areas such as housing, public services, human rights, and democratic participation.

Its development reflected a broader attempt to connect local political action with international networks. Rather than treating the municipality as an isolated level of government, new municipalism sought to use cities as platforms through which local experiences could be shared and connected to wider political debates.

The Rise of Smart Cities

During the 2010s and into the 2020s, the development of digital technologies introduced another major transformation in urban governance. The concept of the smart city gained prominence as cities began incorporating sensors, geographic information systems, digital platforms, telecommunications infrastructure, data analytics, and automated systems into urban management.



Smart City Components Infographic. Taken from: Medium

The smart city approach changed the way many municipalities approached problems such as traffic congestion, public transportation, energy consumption, environmental monitoring, infrastructure management, and emergency response. Instead of relying exclusively on traditional administrative information, cities increasingly sought to collect and analyze large volumes of data to understand urban conditions and support decision-making.

International city networks also became important spaces for the exchange of smart city strategies. Cities could compare technological solutions, share experiences, and cooperate on the development of digital infrastructure and governance models. At the same time, the smart city agenda raised questions about unequal access to technology, differences in institutional capacity, data governance, privacy, and the dependence of municipalities on private technology providers.

This development is particularly relevant to contemporary global urban governance because technological capacity does not exist independently from political and institutional capacity. The ability of a city to use data effectively depends on its infrastructure, financial resources, technical expertise, regulatory environment, and ability to translate information into public decisions.

From Municipal Cooperation to Contemporary Global Urban Governance

The historical evolution from the UIV in the early twentieth century, through the transformation into IULA in 1928, the emergence of global cities during the second half of the twentieth century, the creation of UCLG in 2004, the expansion of transnational municipal networks and city diplomacy during the late twentieth and early twenty-first centuries, and the rise of new municipalism and smart city governance during the 2010s and 2020s demonstrates a significant transformation in the international role of cities.



Founding of UCLG Taken from: Getty Images

Cities have progressively moved from being primarily administrative units responsible for local services to becoming actors that cooperate across borders, participate in international networks, develop diplomatic relationships, exchange policies, and use technological systems to address complex urban challenges.

This evolution provides the historical foundation for the Global Cities Governance Council. The committee brings together several stages of this development: the tradition of municipal cooperation, the international role of global cities, transnational city networks, city diplomacy, and the contemporary use of data and technology in urban governance. These developments are particularly relevant to the committee's two areas of discussion: urban mobility and traffic congestion management, and climate resilience and disaster management.

COMMITTEE COMPETENCE

The Global Cities Governance Council (GCGC) is a specialized forum focused on the role of cities and local governments in addressing complex urban challenges through international cooperation, innovative governance, and the use of data and technology. Its competence is based on the growing capacity of cities to act beyond their administrative boundaries while remaining connected to national and international governance structures.



Taken from: American digital news tv

The committee may discuss and develop proposals concerning:

- **Urban Governance and Policy Coordination**

The GCGC can examine how cities design, implement, and coordinate public policies in response to urban challenges. This includes cooperation between municipal departments, coordination between neighboring cities, and the development of governance mechanisms that allow different public and private actors to participate in decision-making.

- **City Diplomacy and Transnational Cooperation**

The committee may address mechanisms through which cities cooperate with other municipalities, international organizations, national governments, private actors, and civil society. This includes city networks, international partnerships, knowledge exchange, and the development of joint initiatives addressing shared urban problems.

- **Data and Smart City Governance**

The GCGC can discuss the use of data, digital infrastructure, geographic information systems, sensors, and other technological tools in urban management. They may focus primarily on the way cities can transform information into evidence for decision-making while addressing differences in technological and institutional capacity.

- **Urban Mobility and Traffic Management**



Taken from: Forbes Mexico

The committee has competence to examine policies related to traffic congestion, public transportation, urban mobility, infrastructure, and the integration of technological systems into transportation management. Delegates may consider measures such as intelligent transportation systems, data-based traffic management, multimodal mobility, and cooperation between cities facing similar mobility challenges.

• Climate Resilience and Disaster Management



Taken from: Crest stream

The GCGC may address the capacity of cities to anticipate, prepare for, respond to, and recover from climate-related and other urban disasters. This includes early-warning systems, risk mapping, resilient infrastructure, emergency coordination, nature-based solutions, and cooperation between local governments.

• International Networks and Knowledge Exchange

The committee may promote mechanisms for cities to exchange technical knowledge, policy experiences, data, and best practices through international municipal networks. These mechanisms should take into consideration differences in resources, institutional capacity, and local conditions among participating cities.

• Public-Private and Multi-Actor Cooperation

The GCGC may examine forms of cooperation involving municipal governments, national institutions, international organizations, private companies, universities, civil society, and other relevant actors. Such cooperation is particularly relevant to smart city projects, infrastructure, urban data, mobility systems, and climate resilience.

The committee's competence is not limited to the discussion of technological solutions. Delegates should consider the institutional, financial, political, social, and territorial conditions that determine whether an urban policy can be implemented effectively. The GCGC, therefore, provides a space to examine how cities can strengthen their capacity to govern complex urban systems while cooperating with other actors at the local, national, and international levels.



Taken from: Qilimanjaro

ABOUT THE TOPIC



INTRODUCTION TO THE TOPIC

Cities have traditionally been understood as territorial and administrative spaces in which governments provide public services, regulate land use, manage infrastructure, and respond to the needs of their populations. However, the increasing scale and complexity of contemporary urbanization have changed the conditions under which these responsibilities are exercised. Metropolitan areas are now characterized by dense networks of transportation, energy, water, telecommunications, housing, economic activity, and public services that interact with one another and frequently extend beyond the boundaries of a single municipality.

This transformation has also changed the position of cities within global governance. Urban governments increasingly participate in international networks, establish relationships with other municipalities, cooperate with international organizations, and exchange policies and technical knowledge. City diplomacy, paradiplomacy, and transnational municipal networks have created additional channels through which local governments can participate in discussions traditionally associated with national governments. Contemporary urban governance is therefore increasingly organized across several levels at once, connecting municipal institutions with metropolitan authorities, national governments, international organizations, private companies, universities, civil society, and networks of cities.

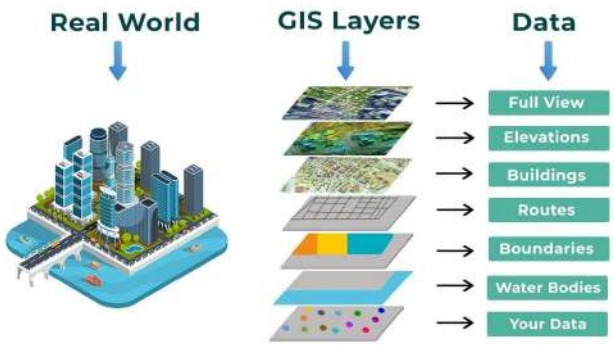
The development of these relationships has contributed to a shift from conventional municipal administration toward networked and multilevel urban governance. Rather than being governed exclusively through a hierarchical relationship between the local and national levels, many urban problems are addressed through interactions between multiple institutions and actors. Climate governance, infrastructure planning, public transportation, digitalization, environmental management, and disaster preparedness are examples of areas in which responsibilities and resources are distributed across different organizations.



Taken from: OECD

At the same time, cities have increasingly been understood as complex systems. Their infrastructure is interconnected, meaning that the functioning of one system may depend on another. Transportation can depend on electricity and telecommunications; water systems require energy and digital monitoring; emergency services depend on transportation and communications; and digital infrastructure supports the operation of many physical services. The management of a city therefore cannot always be reduced to individual sectors. Understanding the relationships between systems has become an important component of contemporary urban governance.

The emergence of intelligent urban governance represents another stage in this transformation. The concept refers to the increasing use of information, digital infrastructure, analytical tools, and technological systems to understand urban conditions and support public decision-making. This includes technologies such as Geographic Information Systems (GIS), Internet of Things (IoT) devices, remote sensing, big data, artificial intelligence, predictive analytics, digital twins, and simulation.



Taken from: Science online

These technologies allow urban governments to collect and process information at scales and speeds that were previously difficult to achieve. Sensors can provide continuous information about physical conditions, GIS can connect different forms of information to specific locations, and simulation can allow policymakers to examine possible scenarios before implementing an intervention. Digital platforms can also integrate information produced by different agencies and infrastructure systems, creating new possibilities for coordination.

Nevertheless, intelligent urban governance should not be understood simply as the digitalization of municipal services. The effectiveness of technological systems depends on the institutional environment in which they operate. Data must be collected, managed, interpreted, shared, and transformed into decisions. This requires technical expertise, financial resources, institutional coordination, regulatory capacity, and mechanisms of accountability. The existence of sophisticated technology does not automatically produce better governance.

This distinction is particularly relevant to the concept of the smart city. Earlier approaches to smart cities often emphasized technological infrastructure and connectivity, while more recent approaches increasingly consider governance, sustainability, institutional capacity, and citizen participation. The question is consequently not only how many technologies a city possesses, but how effectively those technologies are incorporated into its planning and decision-making processes.

Contemporary urban governance is therefore situated at the intersection of several dimensions: physical infrastructure, digital infrastructure, institutions, data, international cooperation, public policy, and citizens. The GC-GC's topic reflects this intersection by examining how cities can use data, simulation, and intelligent systems within broader governance structures to manage increasingly complex urban environments.

HISTORICAL CONTEXT

The contemporary transformation of urban governance is rooted in the long-term development of cities as political, economic, and administrative spaces. Industrialization and urbanization fundamentally changed the scale of urban settlements, concentrating populations, economic activity, infrastructure, and public services in increasingly dense areas. Municipal governments consequently assumed responsibilities that extended beyond basic administration, including sanitation, transportation, housing, infrastructure, public health, and urban planning.

During the nineteenth and early twentieth centuries, these developments encouraged the professionalization of municipal administration. Cities increasingly required specialized institutions and technical knowledge to address problems associated with rapid urban growth. At the same time, municipalities began to recognize that many of the challenges they faced were not unique to a single city. The exchange of experiences and technical knowledge therefore became an important component of municipal cooperation.



Urban Sanitation, 19th-Century London Taken from: World Atlas

This process contributed to the emergence of international municipal organizations in the early twentieth century. These organizations provided mechanisms for cities and local authorities to exchange information concerning urban management and public services. Over time, their activities expanded from technical cooperation toward broader discussions about the political and institutional role of local governments.

After the Second World War, the expansion of international institutions and the reconstruction of urban areas created additional opportunities for local governments to participate in international cooperation. At the same time, fast urbanization continued to increase the importance of metropolitan areas. Cities became increasingly important centers of economic production, infrastructure, transportation, communication, and social interaction.



Taken from: Artofit

During the second half of the twentieth century, globalization further transformed the relationship between cities and the international system. The emergence of the global city concept highlighted the role of metropolitan areas that were strongly connected to international flows of capital, information, people, and economic activity. Cities such as New York, London, and Tokyo became examples of metropolitan areas whose influence extended beyond their immediate territories and national borders.

This development also contributed to the emergence of city diplomacy and paradiplomacy. Local governments increasingly established direct relationships with foreign municipalities, international organizations, and other non-state actors. Cities could exchange policies, attract investment, cooperate on technical issues, and participate in international initiatives without necessarily relying exclusively on national governments.

During the 1990s and 2000s, these processes increasingly became organized through transnational municipal networks. Environmental issues, sustainable development, climate change, public health, and other policy areas provided incentives for cities to cooperate around common objectives. These networks became part of an increasingly polycentric system of governance in which different levels and types of actors participate simultaneously.

Climate governance became particularly important within this process. Municipal networks allowed cities to share experiences and coordinate policies while creating new channels through which local governments could participate in international environmental discussions. Research on these networks has nevertheless questioned the extent to which they are genuinely decentralized. Differences in economic resources and institutional capacity can influence participation, while a relatively small group of highly connected and economically powerful cities may exercise greater influence over network agendas.

The sustainable city agenda developed alongside these changes. Urban sustainability increasingly connected environmental protection with infrastructure, transportation, energy, land use, economic development, and social conditions. International frameworks progressively encouraged governments to consider urban development through an integrated perspective rather than treating environmental, economic, and social policies as separate areas.

The development of the smart city agenda during the 2000s and especially the 2010s introduced another important transformation. Advances in information and communication technologies made it possible to incorporate sensors, connected devices, digital platforms, geographic information systems, and increasingly sophisticated analytical tools into urban management.

Early smart city approaches often focused strongly on technological infrastructure. Cities invested in connectivity, sensors, control centers, digital platforms, and automated systems. Over time, however, academic and policy debates increasingly emphasized the importance of governance. Data and technology were understood as tools whose effectiveness depended on institutional arrangements, public policy, citizen participation, and the capacity of governments to use information appropriately.



Taken from: The New York Times

The development of big data further expanded the possibilities of urban analysis. Instead of relying exclusively on periodic administrative statistics, cities could increasingly work with continuous or high-frequency information generated by sensors, transportation systems, mobile devices, digital platforms, and other sources. This contributed to the emergence of urban analytics and data-driven management. Research has examined how these systems can support both short-term operational decisions and longer-term strategic planning.

During the same period, urban simulation became increasingly relevant. Rather than simply describing existing conditions, computational models could be used to examine possible scenarios and estimate how urban systems might respond to different interventions. This created new possibilities for decision support, particularly in complex environments where direct experimentation can be costly or impractical.

More recently, the development of digital twins has expanded this approach. Digital representations of physical infrastructure and urban environments can combine spatial information, real-time data, and simulation to support monitoring and scenario analysis. Their development has become particularly relevant to the management of complex infrastructure and climate-related risks.



Infrastructure digital twin. Taken from: Innoter

The concept of urban resilience has developed in parallel. Rather than considering urban disasters exclusively as isolated emergency events, contemporary approaches increasingly examine vulnerability, preparedness, adaptation, infrastructure interdependence, and recovery. This has encouraged greater integration between disaster-risk management, infrastructure planning, environmental information, and urban governance.

Consequently, the historical development of contemporary urban governance can be understood as a sequence of interconnected transformations: the expansion of municipal responsibilities through urbanization; the institutionalization of cooperation between cities; the emergence of globally connected metropolitan areas; the expansion of city diplomacy and transnational networks; the development of sustainable urban governance; and, more recently, the integration of digital technologies, data, simulation, and intelligent systems into urban management.

CURRENT CONTEXT

Contemporary urban governance is taking place in a context of increasing urban complexity, technological transformation, and stronger interaction between cities and actors operating at different levels of governance. Urban authorities are no longer dealing only with isolated administrative problems. Transportation, infrastructure, environmental conditions, public services, and emergency management are increasingly understood as interconnected systems whose functioning depends on coordination, information, and institutional capacity.

This transformation has encouraged a shift from conventional urban administration toward more integrated forms of urban governance. Cities increasingly use digital technologies, spatial information, real-time monitoring, and analytical tools to understand what is happening within their territories and to support decisions. At the same time, municipalities participate in international networks through which they exchange knowledge, coordinate policies, and develop common approaches to urban challenges.

1. Urban Support Systems and Critical Infrastructure

Modern cities depend on interconnected systems that provide essential services and support everyday urban life. Transportation networks, energy systems, water and drainage infrastructure, telecommunications, public facilities, and emergency services operate through relationships of mutual dependence. A disruption in one system can consequently affect the functioning of others.

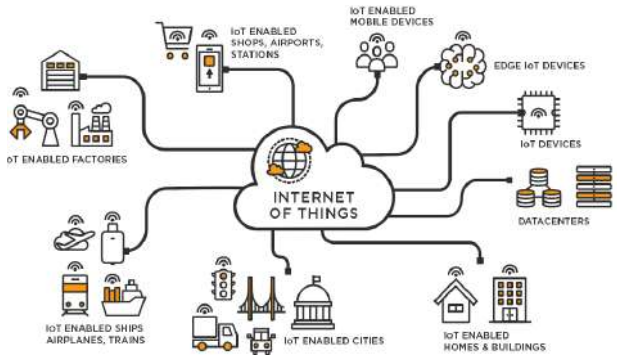
This interdependence has increased the need for urban support systems capable of combining information from different sectors. Rather than managing infrastructure independently, authorities increasingly need to understand how changes in one system may affect other parts of the city. This requires coordination between institutions, compatible information systems, technical standards, and procedures for sharing and interpreting data.

The development of these systems is particularly important because urban decisions increasingly depend on information generated by multiple sources. Sensors, administrative databases, geographic information, infrastructure monitoring, and external datasets can provide different perspectives on the same urban problem. Their usefulness, however, depends on whether institutions can integrate and interpret them effectively.

2. Intelligent Urban Systems

The concept of intelligent urban systems emerged from the growing capacity of cities to collect and process information about their territories. Digital infrastructures allow governments to move beyond periodic assessments and obtain increasingly continuous information about urban conditions.

Several technologies contribute to this transformation. Geographic Information Systems (GIS) organize information according to its spatial dimension; the Internet of Things (IoT) connects sensors and devices capable of generating information about urban environments; remote sensing provides observations over large areas; and data analytics, artificial intelligence, and simulation can assist in identifying patterns and exploring possible scenarios.



The Internet of Things (IoT). Taken from: TRG Solutions

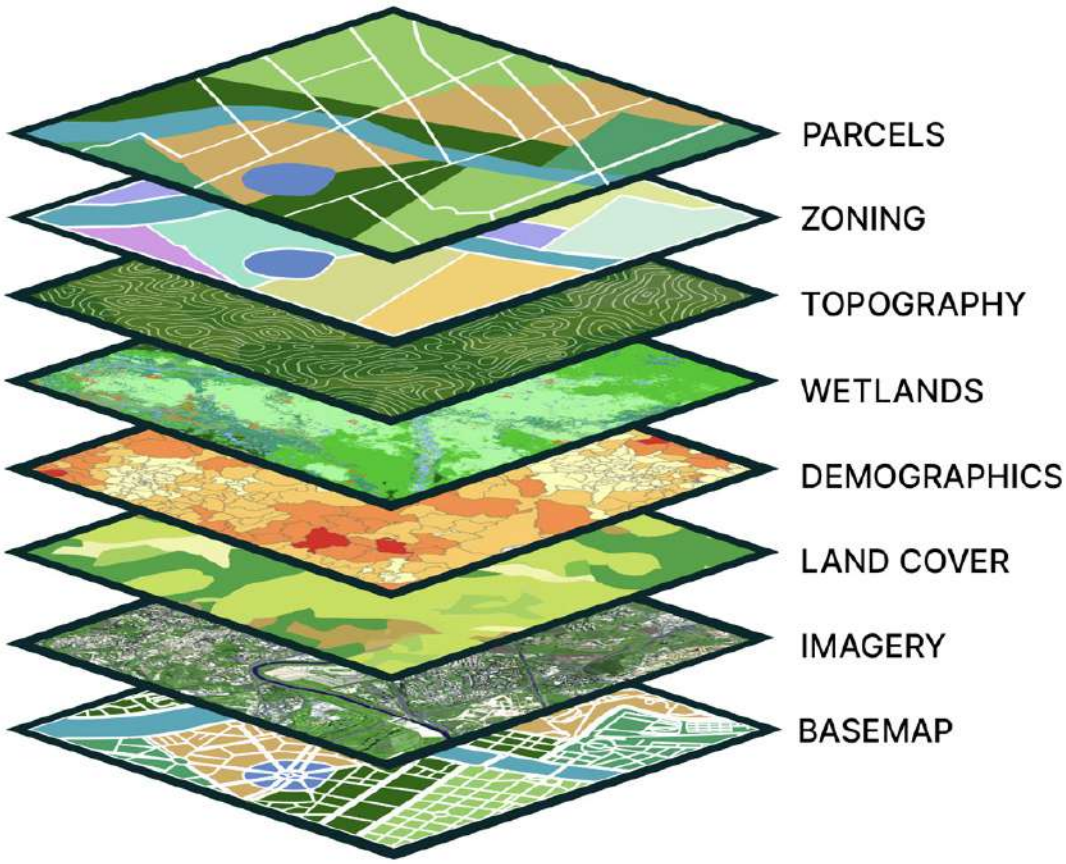
These technologies should not be understood as independent solutions. Their value increases when they are integrated into broader systems that allow diffe-

rent types of information to be combined. A city may, for example, connect geographic information with sensor data, demographic information, infrastructure records, and environmental observations to obtain a more comprehensive understanding of a particular urban condition.

The development of intelligent systems has consequently shifted attention from simply collecting information toward the capacity to transform information into knowledge that can support public decisions.

3. Geographic Information Systems (GIS)

GIS has become an important component of urban governance because many urban processes have a clear spatial dimension. Population distribution, infrastructure, land use, transportation networks, environmental conditions, and areas exposed to different risks can be analyzed according to their location and their relationship with other territorial variables.



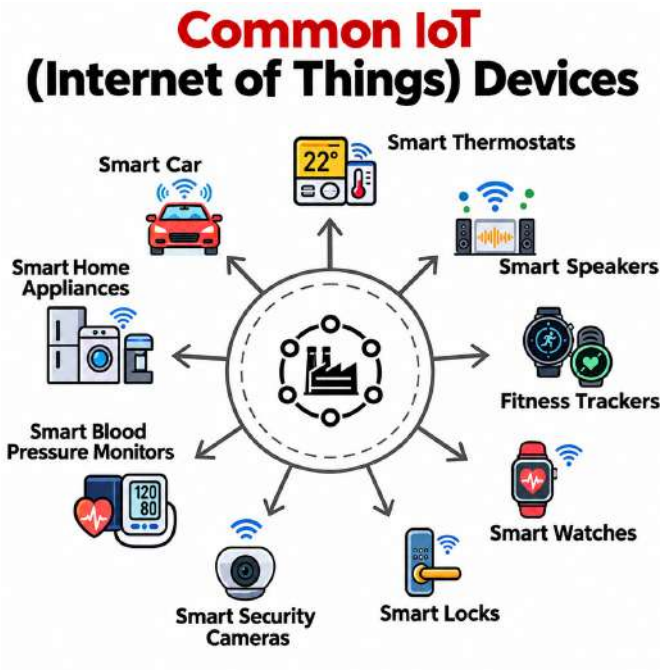
Layers of a GIS. Taken from: NASA Earthdata

This allows authorities to identify not only the existence of a problem but also its spatial distribution and the populations, infrastructures, or territories potentially affected. GIS can therefore support urban planning, infrastructure management, territorial analysis, resource allocation, and monitoring.

Its role becomes particularly significant when geographic information is connected to other forms of urban data. Sensor measurements, satellite imagery, demographic databases, and administrative records can be incorporated into spatial platforms, allowing cities to build more dynamic representations of their territories. GIS thus operates not simply as a mapping tool, but as part of a wider decision-support system.

4. Internet of Things (IoT)

The Internet of Things has expanded the capacity of cities to observe urban conditions through connected devices and sensors. These systems can generate continuous information concerning infrastructure, transportation, environmental conditions, buildings, and other components of the urban environment.



Taken from: Instagram

The main contribution of IoT to urban governance is the possibility of obtaining information at a much higher frequency than conventional data collection methods. When connected to GIS, databases, and analytical platforms, sensor data can contribute to more dynamic monitoring of urban systems.

However, the incorporation of IoT into public management also introduces questions that go beyond technology. Governments must consider who collects and controls the data, how it is stored and protected, which institutions can access it, and how information produced through public-private arrangements can be incorporated into public decision-making. The expansion of connected infrastructure therefore requires both technological capacity and appropriate governance arrangements.

5. Big Data, Artificial Intelligence and Urban Simulation

The expansion of digital infrastructures has produced increasingly large volumes of urban information. This has changed the challenge faced by governments: the issue is no longer simply whether information is available, but whether different datasets can be integrated, analyzed, and transformed into useful knowledge.

Big Data techniques can help identify patterns across large and heterogeneous datasets, while artificial intelligence can support classification, prediction, and the identification of relationships that may not be immediately visible through conventional analysis. Simulation tools can complement these approaches by allowing authorities to explore possible scenarios before implementing particular interventions.

Digital twins represent a further development of urban simulation. By creating digital representations of physical systems and incorporating different types of spatial, infrastructural, and operational information, they can support scenario analysis and the understanding of complex urban interactions.

Nevertheless, these technologies do not eliminate uncertainty or replace institutional judgment. Their results depend on the quality of the data, the assumptions incorporated into models, and the capacity of institutions to interpret their outputs. Research has identified important gaps in the validation and implementation of advanced decision-support systems, particularly in urban environments that lack the resources and technical capacity of the largest global cities.

6. From Smart Technologies to Intelligent Governance

The development of smart city technologies has gradually expanded the meaning of urban intelligence. Earlier approaches frequently focused on technological infrastructure, connectivity, and the collection of data. More recent approaches place greater emphasis on how these technologies are incorporated into institutions, public policies, and decision-making processes.

This distinction is important because technological capacity does not automatically produce better governance. A city can have sensors, digital platforms, databases, or artificial intelligence systems while still experiencing institutional fragmentation, limited financial resources, or difficulties coordinating different government agencies.

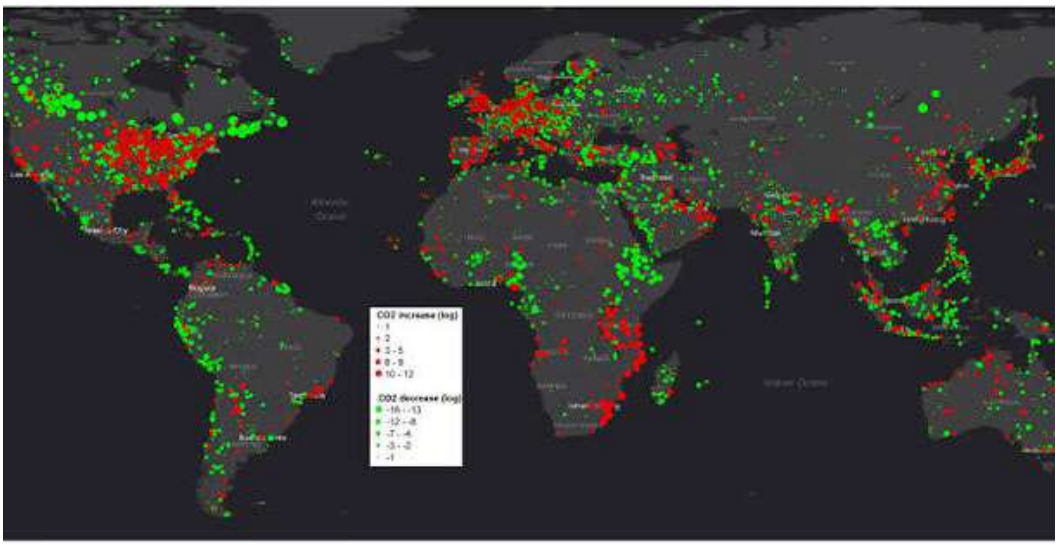
Intelligent governance therefore depends on the relationship between technological tools and institutional capacity. Data must be interpreted within a political and administrative context, technological systems must respond to actual public needs, and decisions must remain connected to the institutions responsible for implementing them.

7. International Cooperation and Urban Networks

Urban governance is also increasingly influenced by cooperation between cities. Transnational municipal networks provide spaces through which local governments can exchange experiences, coordinate initiatives, develop common practices, and interact with international organizations and other actors.

This has contributed to a more polycentric structure of global urban governance. Cities can participate directly in international cooperation and develop relationships beyond their national borders through city diplomacy, paradiplomacy, and transnational municipal networks.

However, these networks do not operate under conditions of complete equality. Differences in financial resources, institutional capacity, geographic representation, and political influence can affect which cities participate most actively and which issues receive greater attention. Research has identified a stratified structure within transnational municipal networks, in which a relatively small group of economically powerful cities can exercise disproportionate influence over international urban agendas.



Transnational municipal networks study on mitigation of the carbon pollution of the world's power plants. Taken from: Nature

International cooperation can therefore facilitate knowledge exchange and policy experimentation, but it can also create tensions when approaches developed in one urban context are transferred to cities with substantially different institutional, economic, or social conditions.

8. International Standards and Sustainable Development Frameworks

As urban governance has become increasingly interconnected, international organizations and networks have developed frameworks, standards, and common objectives to facilitate cooperation between cities and governments. These frameworks are relevant because they provide shared references for issues such as infrastructure, sustainability, resilience, climate action, and institutional cooperation.

The Sustainable Development Goals are particularly relevant to the contemporary urban agenda:

SDG	Relevance to Urban Governance
SDG 3 – Good Health and Well-being	Urban conditions, infrastructure, mobility, environmental quality, and emergency management influence population health and well-being.
SDG 6 – Clean Water and Sanitation	Supports resilient and accessible water and sanitation systems and sustainable management of urban water resources.
SDG 7 – Affordable and Clean Energy	Relates to reliable energy infrastructure, energy efficiency, and more sustainable urban systems.
SDG 9 – Industry, Innovation and Infrastructure	Connects technological innovation, digital infrastructure, resilient infrastructure, and intelligent urban systems.
SDG 11 – Sustainable Cities and Communities	Provides the most direct framework for sustainable, inclusive, safe, resilient, and well-managed cities.
SDG 13 – Climate Action	Addresses climate adaptation, mitigation, resilience, and the integration of climate considerations into urban planning.
SDG 16 – Peace, Justice and Strong Institutions	Highlights effective, accountable, transparent, and inclusive institutions.
SDG 17 – Partnerships for the Goals	Emphasizes cooperation among governments, cities, international organizations, private actors, and civil society.

Other international frameworks, including the New Urban Agenda, the Sendai Framework for Disaster Risk Reduction, and the Paris Agreement, complement these objectives by establishing broader principles concerning sustainable urban development, disaster risk reduction, resilience, and climate action.

These frameworks do not establish a single model that every city can apply in the same way. Their implementation depends on the institutional, financial, territorial, and social characteristics of each urban context.

9. Unequal Urban Capacities

The transition toward intelligent and networked urban governance is occurring under highly unequal conditions. Cities differ considerably in access to financing, digital infrastructure, technical expertise, reliable data, institutional stability, and international partnerships.

These differences influence not only whether a city can adopt a particular technology, but also whether it can maintain it, interpret its results, protect the information generated, and incorporate it into public policy. The capacity to participate in international networks is similarly affected by resources and institutional expertise.

This creates an important challenge for contemporary urban governance. International cooperation and technological innovation can expand the capacity of cities, but they can also reproduce existing inequalities when solutions developed by highly resourced cities are treated as universally applicable. Studies of transnational municipal networks have identified precisely these tensions between cooperation, knowledge exchange, and unequal influence within global urban governance.

For this reason, intelligent urban governance should not be understood simply as the adoption of new technologies. It involves the interaction between infrastructure, data, institutions, standards, international cooperation, and the capacity of governments to translate information into legitimate and effective decisions.

The GCGC addresses this broader transformation through two specific areas of urban governance: urban mobility and traffic congestion management, and climate resilience and disaster management. These cases provide concrete settings in which the institutional, technological, and international dimensions discussed in this section can be examined in greater detail.



Taken from: Eco TV Panama



CASE OF STUDY A

URBAN MOBILITY AND TRAFFIC CONGESTION MANAGEMENT

HISTORICAL CONTEXT

Urban mobility cannot be understood only by looking at the number of vehicles circulating through a road network. It is also a consequence of how cities are designed. For much of the twentieth century, urban development in many parts of the world was strongly influenced by the expansion of the private automobile. Roads were widened, highways connected increasingly distant residential areas with employment centers, parking became an important component of urban design, and residential, commercial, and industrial activities were frequently separated across the territory. This model allowed cities to expand geographically, but it also increased the distances that many people need to travel in their daily lives.



Taken from: Secret Los Angeles

The result is a distinction that has become increasingly important in contemporary urban planning: mobility is not the same as accessibility. Mobility refers broadly to the ability to move, while accessibility concerns the ability to reach the opportunities, services, and activities that people need. A city can have a highly developed road network and still provide poor accessibility if schools, employment, healthcare, commerce, and public services are located far from residential areas.

Car-oriented urban development can reinforce this problem. When new roads make distant areas easier to reach by car, development can move further away from existing urban centers. Over time, this can generate urban sprawl and increase dependence on private vehicles. The International Transport Forum identifies urban sprawl, induced demand, and the weakening of active and shared modes as important mechanisms contributing to car dependency.

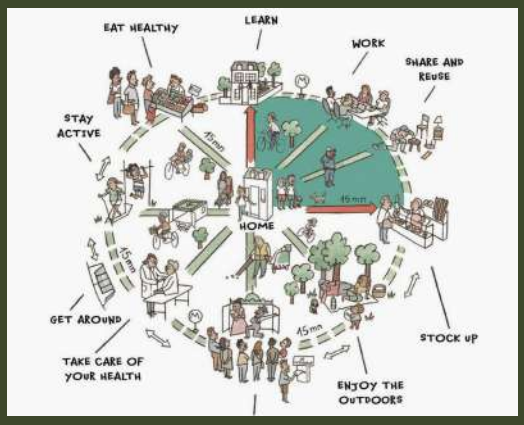


Taken from: Toi Tre News

This creates a difficult cycle. As urban areas become more dispersed, longer journeys become more common. Longer journeys increase the attractiveness of private vehicles, particularly where public transportation is unable to provide comparable travel times or coverage. Greater dependence on cars increases traffic volumes, while congestion can then encourage demands for additional road infrastructure. Expanding road capacity may temporarily improve travel conditions, but it can also make previously peripheral areas more accessible and contribute to further urban expansion.

The problem is particularly evident in metropolitan areas where housing and employment have become spatially separated. A resident may have relatively affordable housing in the urban periphery but face a long daily journey to reach employment or education. In such circumstances, the transportation problem cannot be solved exclusively by improving traffic flows; the underlying distribution of opportunities across the territory also matters.

This has led to growing interest in planning models based on proximity. One of the most prominent is the "15-minute city", associated with urban planner Carlos Moreno. Rather than organizing the city around the need to travel long distances, the concept seeks to create urban environments in which essential daily activities—such as education, commerce, healthcare, recreation, and, where possible, employment—can be reached within a short journey, particularly by walking or cycling. The OECD describes the model as part of a broader shift toward compact, mixed-use urban development and greater accessibility.



Taken from: Dezeen

Paris has become one of the most visible examples of this approach. The concept was incorporated into the city's urban policy agenda with an emphasis on proximity, neighborhood services, cycling, walking, and the reallocation of public space. Barcelona has pursued a related but distinct approach through its superblocks, which reorganize street space to reduce through-traffic and create more room for pedestrians, cycling, and public activities.

The 15-minute city does not mean that people should never travel beyond their neighborhood. Rather, its underlying argument is that people should not be forced to make long motorized journeys for activities that could reasonably be available closer to home. This distinction is important because metropolitan mobility will always involve longer trips. The objective is to reduce unnecessary travel while improving the alternatives available for journeys that remain necessary.



Taken from: KJZZ

Public transportation remains essential within this model. Proximity and public transit are complementary rather than competing ideas. Transit-oriented development, for example, concentrates housing, services, and economic activity around high-capacity public transportation, allowing people to live closer to opportunities while maintaining access to the wider metropolitan area. The OECD and ITF emphasize the importance of integrating land-use and transportation planning to reduce travel distances and reverse car dependency.

Technology has entered this debate by changing how cities understand and manage mobility. Applications such as Waze and Google Maps allow users to obtain information about traffic conditions, travel times, incidents, and alternative routes. Moovit provides route-planning and public transportation information by combining data from operators, authorities, and users. These platforms have made mobility information more immediate and have created new relationships between citizens, transportation providers, technology companies, and governments.

Waze's Waze for Cities initiative is particularly relevant because it illustrates how a privately operated platform can become part of a public mobility-information ecosystem. Participating authorities can exchange information concerning incidents, construction, road closures, and traffic conditions with the platform. This creates opportunities for better coordination but also raises questions about data governance and the role of private companies in managing information concerning public infrastructure.

The contemporary mobility environment therefore involves several overlapping systems: physical infrastructure, public transportation, private vehicles, digital platforms, municipal databases, sensors, and information generated by users. GIS can connect many of these datasets spatially, while IoT systems can provide increasingly continuous information about traffic and infrastructure conditions. Publicly available information can occasionally complement official sources, while satellite and aerial imagery can help authorities understand changes in the physical structure of urban areas. OSINT and IMINT are consequently relevant as supporting sources within a much broader urban information ecosystem, rather than as substitutes for official transportation data.

CURRENT SITUATION

The current debate over urban mobility has increasingly moved away from a simple question of how to move more vehicles faster. It asks what kind of urban structure should be created, how much space should be allocated to different modes of transportation, and whether cities should prioritize movement or accessibility.



Taken from: C40 Knowledge hub

This is particularly relevant because cars occupy a disproportionate amount of urban space. Roads, intersections, parking facilities, and other automobile infrastructure consume significant portions of the public realm. The OECD and ITF have noted that the amount of urban space dedicated to cars does not always correspond to their share of trips, while walking, cycling, and public transportation may receive considerably less space despite their importance for sustainable mobility.

This has generated a gradual rethinking of the street. Instead of treating streets primarily as corridors for moving vehicles, many cities have begun to consider them as public spaces that also need to accommodate pedestrians, cyclists, public transportation, commerce, recreation, and social interaction.

Barcelona's superblocks are one example of this shift. Rather than eliminating cars entirely, the model seeks to reduce through-traffic within selected areas and reorganize the use of streets. Paris has pursued a broader proximity strategy, including pedestrian and cycling infrastructure and changes to public space as part of its 15-minute-city agenda. Similar discussions have emerged in cities that have experimented with reallocating road space to buses, bicycles, pedestrians, or public activities.

At the same time, cities cannot simply remove cars without considering the people who depend on them. Peripheral residents, people with disabilities, workers with irregular schedules, families with mobility needs, and areas poorly served by public transportation may have fewer alternatives. The transition away from car dependency therefore raises questions of equity as well as environmental sustainability. Policies designed to discourage private vehicle use need to be accompanied by reliable alternatives and adequate accessibility.

This tension is particularly relevant in metropolitan areas of the Global South. In cities such as Bogotá and Mexico City, improving public transportation and reducing private vehicle dependency involves not only redesigning streets but also addressing the enormous distances between peripheral housing and central employment opportunities.



Bogota metro planning. Taken from: The Bogota post

Bogotá provides a useful example of this complexity. The city's transportation system has expanded considerably, particularly through TransMilenio and the integrated public transportation system, yet congestion remains connected to metropolitan growth, travel demand, private vehicle use, and the spatial relationship between Bogotá and surrounding municipalities. The situation cannot be separated from the broader pattern of development in the Bogotá metropolitan region. If employment, housing, education, and services remain geographically separated, transportation infrastructure will continue to absorb large volumes of daily travel.

The same problem appears in other metropolitan regions. Mexico City's transportation system must accommodate movements between the capital and surrounding municipalities, while London has had to manage mobility across a metropolitan territory where different forms of transportation operate together. Singapore, meanwhile, has pursued a more deliberate combination of public transportation, road-demand management, and technological monitoring.



Taken from: Nomadic Backpacker

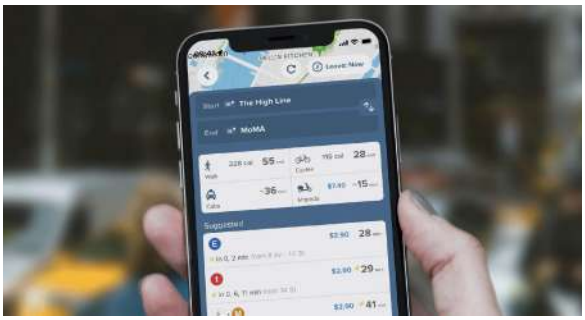
These differences are important because they demonstrate that there is no universal solution to congestion. A city can invest heavily in public transportation and still face congestion. Another may have highly sophisticated traffic-management technologies but remain structurally dependent on automobiles because of its urban form. A third may reduce car use in central areas while still struggling with accessibility in its suburbs.

This is also where digital platforms have become increasingly significant. Waze can provide near-real-time information about congestion and incidents, while Moovit and similar platforms can make public transportation options more visible to users. Such systems can influence travel behavior by helping people select different routes, modes, or departure times.

For public authorities, however, the value of these platforms extends beyond individual navigation. Aggregated mobility information can contribute to the identification of recurrent congestion, changes in travel patterns, transportation disruptions, or demand for determined services. The challenge lies in establishing how these datasets can be integrated with official information while protecting privacy and addressing commercial interests.

The increasing availability of mobility data also creates the possibility of more sophisticated urban modelling. Cities can combine traffic information with land-use data, demographic information, public transportation networks, and infrastructure conditions. GIS can reveal where congestion overlaps with underserved areas, while simulation can help authorities explore how changes in road design, public transportation, or land use might affect travel patterns.

Yet there is a danger in assuming that increasingly sophisticated technology automatically produces better mobility. A predictive model may optimize traffic within the existing network without questioning whether the network itself reflects an inefficient urban structure. An application may provide the fastest route between two points without asking why residents are required to make that journey in the first place. Data can improve the management of a car-dependent city without necessarily reducing car dependency.



Taken from: Popular science

This distinction between optimization and transformation is central to the contemporary debate. Intelligent transportation systems can make existing systems more efficient, but intelligent urban governance also requires questioning whether the underlying organization of the city is generating unnecessary travel.

The 15-minute city, transit-oriented development, pedestrianization, cycling infrastructure, mixed-use neighborhoods, and the redistribution of public space all approach the problem from this second perspective. Rather than focusing exclusively on moving people more efficiently, they seek to change the relationship between people and the places they need to reach.

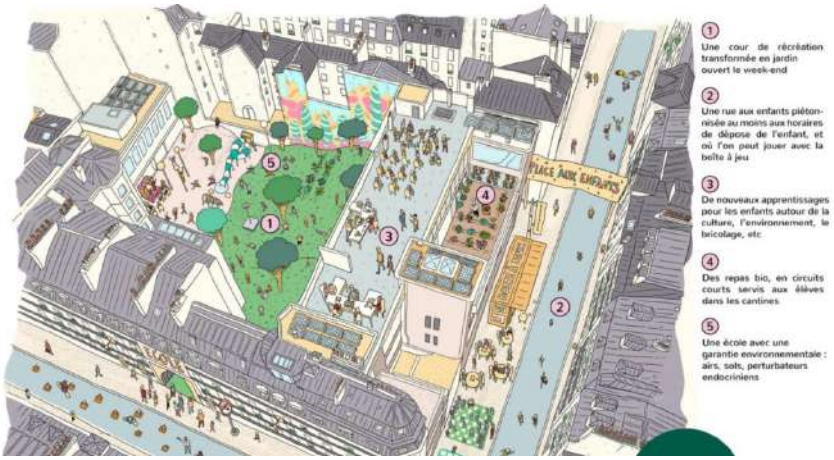
The two approaches do not have to be mutually exclusive. Digital systems can help manage traffic while land-use policies reduce the need for long journeys. Public transportation can connect neighborhoods while proximity planning ensures that essential services are available closer to where people live. The challenge is to coordinate these interventions rather than treating technology, infrastructure, and urban planning as separate policy areas.

IMPORTANCE TO THE TOPIC

Urban mobility is particularly relevant to the GCGC because it demonstrates that intelligent urban governance is ultimately a question of how cities organize relationships between territory, infrastructure, information, institutions, and people.

The case moves beyond the traditional question of "How can we reduce traffic?" toward a broader set of questions: Why are people travelling such long distances? Which parts of the city generate the greatest demand for movement? Who has access to public transportation? How is public space distributed between cars and other users? Which data should cities have access to? And how can different municipalities coordinate when the urban system extends beyond a single administrative boundary?

The concept of the 15-minute city is particularly useful for this discussion because it changes the starting point. Instead of asking only how transportation can become faster, it asks whether people can live closer to the opportunities they need. This connects mobility with housing, land use, public services, economic activity, public space, and urban design. The OECD and ITF similarly frame accessibility and proximity as central components of efforts to reduce car dependency.

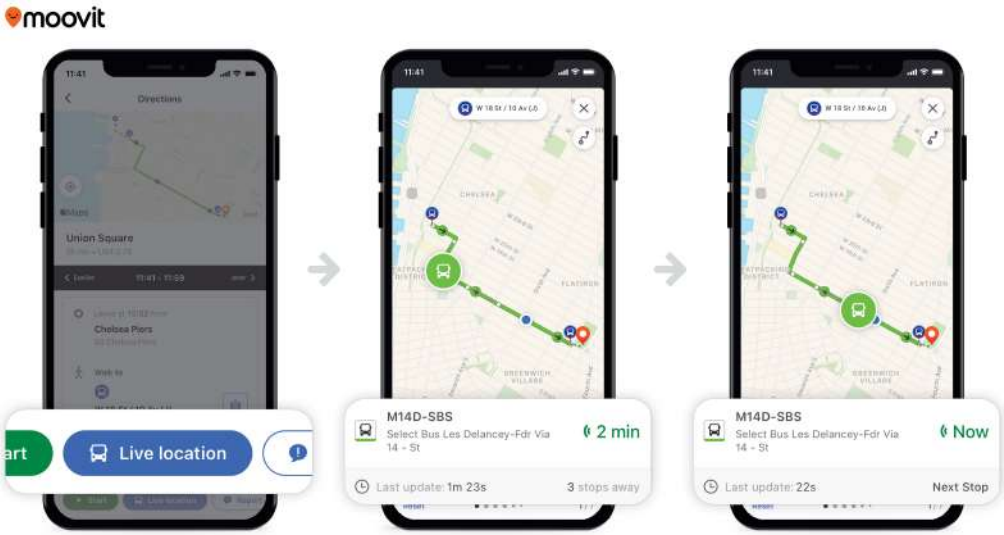


Taken from: Benandanti

At the same time, proximity cannot replace metropolitan mobility. People will continue to travel across cities and regions, and some activities cannot be distributed equally across every neighborhood. High-capacity public transportation, regional connections, and intelligent traffic management therefore remain necessary.

This creates the central governance challenge for the case. Cities must determine how to combine long-term changes in urban form with the immediate management of existing transportation systems. They must also decide how public authorities, private mobility companies, transportation operators, and citizens should share information and responsibilities.

Platforms such as Waze and Moovit are useful precisely because they sit at this intersection. They demonstrate how everyday mobility can generate enormous amounts of information and how private digital services can become relevant to public governance. GIS, IoT, OSINT, and IMINT can complement this ecosystem by providing additional spatial, operational, or contextual information, but none of them eliminates the need for institutional judgment.



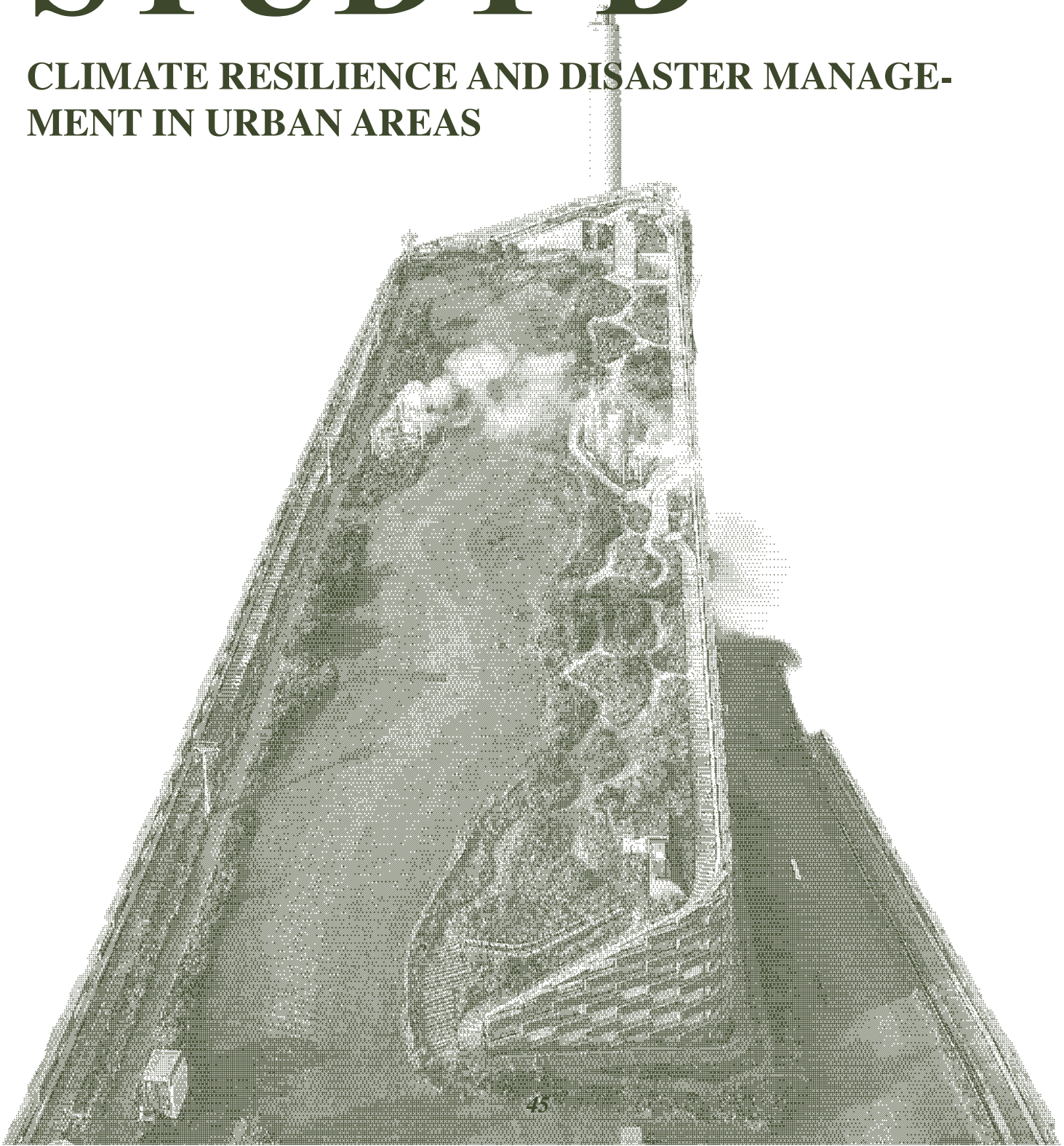
Taken from: Moovit

For the GCGC, the challenge is therefore not to identify a single "smart mobility" solution. Delegates should consider how cities can move toward systems in which transportation infrastructure, land-use planning, public transportation, digital technologies, data governance, and international cooperation reinforce one another.

The broader question is whether cities should continue adapting themselves to increasingly complex patterns of movement, or whether urban governance should also address the reasons why so many movements are necessary in the first place. That distinction, between moving people more efficiently and creating cities in which people need to travel less for their everyday needs, is at the heart of the contemporary debate on urban mobility.

CASE OF STUDY B

CLIMATE RESILIENCE AND DISASTER MANAGEMENT IN URBAN AREAS



HISTORICAL CONTEXT

Climate resilience has become an increasingly important concern for cities as urbanization and climate change interact with the way territories are planned, built, and governed. Urban areas concentrate population, infrastructure, economic activity, public services, and critical facilities, which means that climate-related hazards can generate consequences that extend well beyond the location where the initial event occurs. Floods, extreme heat, droughts, storms, landslides, wildfires, and other hazards can affect transportation, electricity, water supply, telecommunications, healthcare, housing, and emergency services simultaneously.

The effects of these events are also highly uneven. The exposure of a city to a hazard does not automatically determine its level of vulnerability. Land-use decisions, housing conditions, the location of informal settlements, the quality of infrastructure, access to public services, environmental degradation, and institutional capacity all influence how different populations experience the same event. Two neighborhoods within the same metropolitan area may therefore face very different consequences from a flood or heatwave because of differences in drainage, vegetation, housing quality, access to transportation, or proximity to emergency services.

This has gradually changed the way urban governments approach disaster management. Traditional approaches often concentrated on emergency response after a disaster had occurred. Contemporary resilience strategies increasingly seek to anticipate risks, reduce exposure, strengthen infrastructure, and improve the capacity of institutions and communities to respond and recover. The objective is not necessarily to eliminate every hazard, which is rarely possible, but to reduce the probability that a climatic event will produce severe and cascading disruptions.

The importance of this approach becomes clearer when urban systems are considered as interconnected rather than as isolated infrastructures. A flood, for example, can damage roads and prevent emergency vehicles from reaching affected areas; power failures can interrupt water pumping and telecommunications; disruptions to public transportation can limit access to hospitals or evacuation centers. These interactions make climate resilience a governance problem as much as an engineering problem. Preparing for a disaster requires coordination between agencies responsible for infrastructure, transportation, water, energy, health, environmental management, emergency response, and territorial planning.

Cities have consequently experimented with different forms of adaptation. Rotterdam, for example, has incorporated water management into its urban planning through flood protection, water storage, public spaces, and infrastructure designed to accommodate periods of heavy rainfall. In other contexts, cities have combined drainage improvements with parks, wetlands, permeable surfaces, and other forms of green infrastructure. These approaches illustrate how adaptation can be incorporated into everyday urban development instead of being treated exclusively as emergency infrastructure.



Taken from: The New Economy

Adaptation can also involve infrastructure serving several functions simultaneously. Copenhagen's CopenHill, for instance, combines waste-to-energy infrastructure with energy production and recreational uses. Although the project is not itself a comprehensive climate-resilience strategy, it illustrates a broader tendency in contemporary urban planning to make infrastructure multifunctional and integrate environmental management with other urban objectives. Similar approaches can be found in projects involving green roofs, urban forests, water-retention spaces, renewable energy systems, and redesigned public spaces.



Copenhill Waste To Energy Plant, Copenhagen, 2023
Taken from: DirectIndustry e-Magazine

New York provides another relevant example of how a major disaster can alter long-term urban planning. Hurricane Sandy in 2012 exposed vulnerabilities in transportation, energy, housing, and coastal infrastructure and contributed to subsequent efforts to strengthen the city's capacity to deal with coastal flooding and extreme weather. Tokyo, meanwhile, has developed extensive disaster-prevention infrastructure and preparedness mechanisms in response to its exposure to earthquakes, flooding, typhoons, and other hazards. These experiences demonstrate that resilience is usually developed through a combination of infrastructure, planning, institutional coordination, and preparedness rather than through a single technological intervention.



Effects of the Hurricane Sandy, New York State, 2012
Taken from: NYC.gov

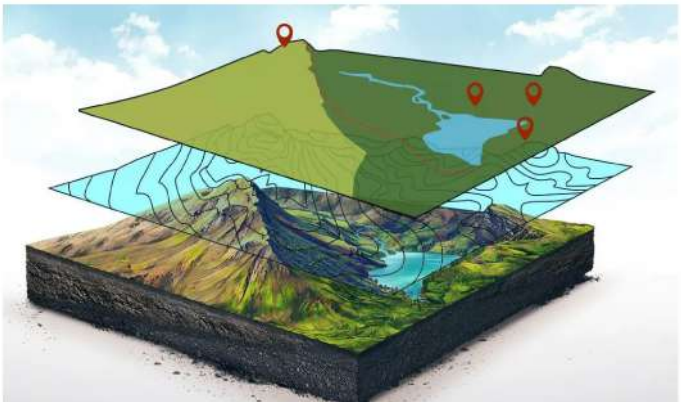
The urban context is particularly important in cities of the Global South. São Paulo and Rio de Janeiro, for example, face combinations of intense rainfall, flooding, landslides, heat, rapid urbanization, and socioeconomic inequality. In such environments, climate resilience cannot be separated from questions of housing, land occupation, infrastructure provision, and social vulnerability. Technological systems may improve monitoring and response, but their effectiveness depends on whether municipalities possess the institutional and financial capacity to act on the information they receive.



Taken from: Earth.org

CURRENT SITUATION

Contemporary urban climate management is increasingly moving toward anticipatory governance: identifying potential risks before they become emergencies and using information to support decisions before, during, and after an event. This requires cities to understand not only where hazards may occur, but also which populations, infrastructure, and services could be affected and how disruptions might spread through the urban system.



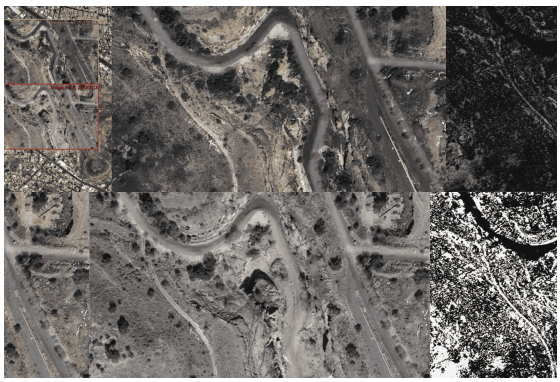
Obtenido de: Urban design Lab

Digital technologies have expanded these capabilities. Geographic Information Systems (GIS) allow municipalities to combine information about terrain, land use, population, infrastructure, drainage, environmental conditions, and hazard exposure. Remote sensing and satellite imagery can provide information about changes in vegetation, surface temperature, flooding, land cover, and urban expansion. Internet of Things (IoT) devices can provide continuous information from water levels, weather stations, traffic systems, energy networks, or other infrastructure.

These sources can be incorporated into simulation and decision-support systems. Digital twins and other urban simulation tools can represent relationships between infrastructure and environmental conditions, allowing authorities to explore possible scenarios before implementing interventions. For example, a municipality could use spatial and simulation models to examine how intense rainfall could affect drainage systems, roads, electricity infrastructure, and emergency routes at the same time.

The value of these systems is not simply the amount of data they generate. Their usefulness depends on whether information can be converted into decisions. A city may have extensive sensor networks and sophisticated analytical platforms but still face difficulties if agencies do not share information, if datasets are incompatible, if responsibilities are fragmented, or if there are insufficient resources to implement the measures identified by the analysis. The transition from data collection to effective urban resilience therefore requires institutional coordination as well as technological capacity.

Information obtained from open digital sources can also complement formal monitoring systems. Public reports, citizen observations, publicly available images, mapping platforms, and other forms of open-source information can contribute to situational awareness during rapidly developing events. OSINT can support the identification of emerging disruptions, while IMINT and satellite imagery can provide complementary information about affected areas. These tools should not replace official data or professional assessment, but they can contribute to a more complete operational picture when information is incomplete or rapidly changing.



IMINT. Obtenido de: LISA News

Another important development is the growing attention to cascading risks. Urban authorities increasingly need to consider what happens when one infrastructure failure triggers another. A flood that damages an electrical substation can interrupt water treatment; the resulting disruption can affect hospitals and households; damaged roads can make it more difficult for emergency services to respond. Managing these situations requires coordination across infrastructure sectors rather than treating each system independently.

Climate adaptation is also increasingly connected to nature-based solutions and the transformation of public space. Wetlands, urban forests, permeable surfaces, green corridors, restored rivers, and other ecological interventions can help reduce heat, manage stormwater, and improve environmental conditions while providing recreational or social benefits. Their implementation, however, involves decisions about land use, financing, maintenance, and competing urban priorities. A technically effective intervention may generate limited benefits if it is disconnected from the neighborhoods in which it is located or inaccessible to populations most exposed to climate risks.



Taken from: UNDP Climate promise

International cooperation adds another dimension. Cities increasingly exchange experiences, technical knowledge, financing mechanisms, and planning approaches through transnational municipal networks and other forms of urban diplomacy. These networks can help municipalities access expertise and develop common approaches to climate adaptation. At the same time, participation in international networks does not eliminate differences in financial resources, institutional capacity, technological infrastructure, or political influence. Research on transnational municipal networks has highlighted the unequal distribution of influence within these systems and the possibility that internationally promoted solutions may not always correspond to the priorities of cities in the Global South.

This creates a central challenge for urban climate governance: cities need access to international knowledge and technological resources without simply reproducing models designed for different institutional, environmental, or socioeconomic conditions. Adaptation strategies must be capable of incorporating local knowledge and territorial characteristics while remaining connected to broader international frameworks.

For the GCGC, this means that climate resilience cannot be approached exclusively as a question of infrastructure or technology. It involves deciding what information cities need, who produces and controls that information, how different institutions coordinate their actions, how risks are distributed among populations, and how international cooperation can support local adaptation without imposing uniform solutions.

IMPORTANCE TO THE TOPIC

Climate resilience and disaster management directly reflect the central concerns of the Global Cities Governance Council because they require cities to combine territorial planning, infrastructure management, technological systems, institutional coordination, and international cooperation.

The first relevant dimension is the relationship between data and decision-making. Cities increasingly have access to real-time information from sensors, satellites, GIS platforms, weather systems, and other sources. The challenge is to determine how this information should be interpreted and incorporated into public decisions. A GCGC discussion should therefore go beyond the question of whether a city has access to advanced technology and consider whether its institutions can transform information into timely and effective action.

The second dimension concerns the interdependence of urban systems. Climate-related disasters rarely remain confined to a single sector. Mobility, energy, water, communications, healthcare, housing, and emergency management can become interconnected during a crisis. This makes coordination between municipal agencies and neighboring jurisdictions particularly important, especially in metropolitan areas where infrastructure and population movements cross administrative boundaries.

The third dimension is inequality. Resilience strategies can produce different outcomes depending on where people live and the resources available to them. A city may have sophisticated early-warning systems while vulnerable communities continue to face inadequate drainage, precarious housing, or limited access to emergency services. Intelligent governance must therefore consider not only the technical capacity to predict a risk but also the capacity to protect populations once that risk has been identified.

The fourth dimension concerns the relationship between local governments and international urban networks. Cities can benefit from cooperation, technical exchange, and international financing, but the transfer of policies and technologies raises questions about adaptation to local circumstances. The GCGC can examine how cities participate in international networks while maintaining sufficient autonomy to define their own priorities.

Finally, the case raises a broader question about what constitutes intelligent urban governance. A city can install sensors, develop digital twins, improve satellite monitoring, or create sophisticated emergency platforms, but these technologies do not automatically produce resilience. Their effectiveness depends on institutional arrangements, public investment, coordination, accountability, and the ability to connect technological information with the realities experienced by communities.



Obtenido de: One Bangkok

For the GCGC, climate resilience therefore provides an opportunity to discuss how cities can move from reacting to disasters toward anticipating and managing complex urban risks. The central issue is not simply how cities can obtain more data or deploy more technology, but how those resources can be incorporated into governance systems capable of making coordinated, equitable, and context-sensitive decisions.

SPECIAL DOCUMENTS

The Global Cities Governance Council will follow the regular MUNUR documentation requirements. Delegates will be expected to prepare the following documents throughout the committee:

- **Position Paper:** Before the committee, each delegation must prepare a position paper addressing the main issues that will be discussed during the session. Since the GCGC works through urban case studies, the position paper should include a preliminary study of the represented city, identifying its main urban challenges, relevant actors, existing policies, institutional capacities, and the problems related to mobility, climate resilience, infrastructure, data, and urban governance that may become relevant during the committee. Delegates should use this preparation to establish the position of their city and identify possible areas for cooperation with other delegations.

- **Final Document:** At the end of the committee, delegates will produce the final document following the usual MUNUR procedure. The document will take the form of a draft resolution in which delegations translate the negotiations developed during the committee into concrete proposals, agreements, mechanisms, and actions for addressing the issues discussed. Its requirements and format will follow the provisions established in the MUNUR XVII Handbook.

SPECIAL PROCEDURE

The Global Cities Governance Council will follow the standard traditional procedure of MUNUR XVII (Harvard procedure). There will be no special procedure for this committee. Delegates should therefore follow the general rules, stages, motions, points, debate dynamics, and documentation requirements established in the MUNUR XVII Handbook.

QARMAS

- How can cities strengthen their capacity to make autonomous decisions while remaining within national legal and institutional frameworks?
- To what extent can transnational city networks influence urban governance without reproducing inequalities between cities with different economic and institutional capacities?
- How can cities use data, GIS, IoT, artificial intelligence, and simulation without allowing technological capacity to replace political accountability and local knowledge?
- What mechanisms can cities develop to ensure that urban data is interoperable, reliable, accessible, and useful for public decision-making?
- How should cities balance investments in technological innovation with more traditional infrastructure and public services?
- How can urban mobility policies reduce traffic congestion while also addressing the spatial conditions that generate long-distance and unnecessary trips?
- What role can public transportation, walking, cycling, transit-oriented development, and mixed-use neighborhoods play in reducing dependence on private vehicles?
- How can cities incorporate climate adaptation into infrastructure, land-use planning, and everyday urban management rather than treating disasters only as emergency situations?
- How can urban governments anticipate cascading failures between transportation, energy, water, telecommunications, healthcare, and other critical systems?
- How can international cooperation support climate adaptation while allowing cities to develop solutions appropriate to their own territorial and socioeconomic conditions?
- What mechanisms can ensure that smart-city and climate-resilience projects benefit vulnerable communities rather than increasing existing inequalities?
- How can cities combine technological information with citizen participation and local knowledge when designing urban policies?
- What forms of cooperation can improve coordination between municipalities when urban problems extend beyond administrative boundaries?
- How can cities evaluate whether an urban innovation is producing meaningful improvements in governance rather than simply increasing technological infrastructure?
- What responsibilities should cities, national governments, private companies, international organizations, and civil society assume in the development of intelligent and resilient urban systems?

Global municipalism: A form of municipalist organization that transcends national borders and connects cities through global networks, allowing them to exchange tools, experiences, and strategies while recognizing themselves as part of a broader movement.

Local trap: The assumption that political action at the local level is inherently more sustainable, just, democratic, or desirable than action undertaken at larger scales.

Municipalism: A form of political organization that advocates greater autonomy and authority for cities and local governments, particularly in matters that directly affect urban populations.

City diplomacy: The engagement of cities and local governments in international relations through cooperation, negotiation, knowledge exchange, partnerships, and participation in international or transnational networks.

Paradiplomacy: International activity undertaken by subnational governments, such as cities, regions, or provinces, in areas related to their competences and interests.

Transnational Municipal Network (TMN): A network through which cities and local governments cooperate across national borders to exchange knowledge, coordinate policies, develop common initiatives, or influence international agendas.

Polycentric governance: A governance structure in which decision-making is distributed among multiple interconnected actors and institutions rather than concentrated in a single authority.

Intelligent urban governance: The use of technological, informational, institutional, and participatory capacities to improve how cities understand urban conditions, make decisions, coordinate actors, and respond to complex problems.

Smart city: An urban approach that uses digital technologies, data, infrastructure, and innovation to improve the management of urban systems and the provision of services.

Urban resilience: The capacity of an urban system and its population to anticipate, withstand, adapt to, and recover from disruptions while maintaining essential functions.

Climate adaptation: The process of adjusting urban systems, infrastructure, policies, and practices to actual or expected climate impacts in order to reduce vulnerability and potential damage.

GLOSSARY

Critical infrastructure: Physical and digital systems whose disruption can significantly affect essential urban functions, including energy, water, transportation, telecommunications, healthcare, and emergency services.

GIS (Geographic Information System): A system used to collect, manage, analyze, and visualize geographically referenced information, allowing different urban variables to be studied spatially.

Internet of Things (IoT): A network of connected physical devices and sensors capable of collecting, transmitting, and exchanging data that can be used to monitor and manage urban systems.

Big Data: Large, diverse, and rapidly generated datasets that can be processed and analyzed to identify patterns, relationships, and trends relevant to urban decision-making.

Urban simulation: The use of computational models to represent urban systems and explore how different policies, interventions, or external events may affect them.

Digital twin: A digital representation of a physical urban system that can incorporate real-world data to monitor conditions, analyze interactions, and explore possible scenarios.

Data governance: The institutional rules, responsibilities, practices, and mechanisms that determine how data is collected, managed, shared, protected, and used.

Accessibility: The ease with which people can reach employment, education, healthcare, commerce, recreation, and other essential services from a given location.

Mobility: The capacity of people and goods to move through an urban transportation system.

Induced demand: The phenomenon in which increasing transportation capacity, particularly road capacity, can generate additional demand for travel and eventually contribute to renewed congestion.

15-minute city: An urban planning approach that seeks to organize neighborhoods so that essential services and activities can be reached within a short distance, particularly through walking, cycling, or public transportation.

Nature-based solutions: Actions that use or restore natural processes and ecosystems to address urban challenges such as flooding, heat, water management, and climate adaptation while potentially providing additional environmental and social benefits.

GLOSSARY

OSINT (Open-Source Intelligence): The systematic collection and analysis of information available from publicly accessible sources to support situational awareness and decision-making.

IMINT (Imagery Intelligence): The analysis of information obtained through imagery, including satellite or aerial imagery, to identify and interpret relevant characteristics of a territory or situation.

Cascading failure: A situation in which the disruption of one infrastructure or urban system produces consequences in other interconnected systems, potentially amplifying the initial impact.

Multilevel governance: A governance arrangement in which responsibilities and decision-making are distributed among different levels of government and other actors, including local, regional, national, and international institutions.

City network: A structured form of cooperation connecting cities or local governments around shared interests, policies, knowledge exchange, or collective action.

Urban data ecosystem: The combination of datasets, sensors, digital platforms, institutions, private actors, and communities involved in producing, managing, exchanging, and using information about the city.

GLOSSARY

RECOMMENDED BIBLIOGRAPHY

Acuto, M. (2013). Global Cities, Governance and Diplomacy: The Urban Link. https://doi.org/10.4324/9780203073810

Acuto, M., & Leffel, B. (2020). Understanding the global ecosystem of city networks. Urban Studies, 58, 1758–1774. https://doi.org/10.1177/0042098020929261

Bansard, J. S., Pattberg, P., & Widerberg, O. (2017). Cities to the rescue? Assessing the performance of transnational municipal networks in global climate governance. International Environmental Agreements: Politics, Law and Economics, 17, 229–246. https://doi.org/10.1007/s10784-016-9318-9

Barns, S. (2017). Smart cities and urban data platforms: Designing interfaces for smart governance. City, Culture and Society, 12, 5–12. https://doi.org/10.1016/j.ccs.2017.09.006

Bibri, S. (2021). Data-driven smart sustainable cities of the future: Urban computing and intelligence for strategic, short-term, and joined-up planning. Computational Urban Science, 1. https://doi.org/10.1007/s43762-021-00008-9

Davidson, K., Coenen, L., Acuto, M., & Gleeson, B. (2019). Reconfiguring urban governance in an age of rising city networks: A research agenda. Urban Studies, 56, 3540–3555. https://doi.org/10.1177/0042098018816010

De Macedo, L. V. D., Jacobi, P., & De Oliveira, J. A. D. (2023). Paradiplomacy of cities in the Global South and multilevel climate governance: Evidence from Brazil. Global Public Policy and Governance, 3, 86–115. https://doi.org/10.1007/s43508-023-00060-7

Giuliodori, A., Berrone, P., & Ricart, J. (2022). Where smart meets sustainability: The role of smart governance in achieving the Sustainable Development Goals in cities. Business Research Quarterly, 26, 27–44. https://doi.org/10.1177/23409444221091281

Hickmann, T. (2021). Locating cities and their governments in multi-level sustainability governance. Politics and Governance, 9, 211–220. https://doi.org/10.17645/pag.v9i1.3616

Jakobi, A., Loges, B., & Haenschen, R. (2024). What do international city networks contribute to global governance? Towards a better conceptual and empirical assessment. Global Society, 39, 158–180. https://doi.org/10.1080/13600826.2024.2356815

Kosovac, A., Hartley, K., Acuto, M., & Gunning, D. (2021). City leaders go abroad: A survey of city diplomacy in 47 cities. Urban Policy and Research, 39, 127–142. https://doi.org/10.1080/08111146.2021.1886071

RECOMMENDED BIBLIOGRAPHY

Leffel, B., Derudder, B., Acuto, M., & Van Der Heijden, J. (2023). Not so polycentric: The stratified structure and national drivers of transnational municipal networks. Cities. https://doi.org/10.1016/j.cities.2023.104597

Martinez, R., & Bunnell, T. (2024). National sovereignty across city networks: Singapore and the diplomacy of a global city-state. Environment and Planning C: Politics and Space, 42, 1170–1186. https://doi.org/10.1177/23996544241226855

Thouez, C. V., & Schweiger, R. (2026). From local action to global influence: How cities shape governance in a polycentric world. Social Sciences. https://doi.org/10.3390/socsci15050304

Cases of Study Bibliography

Abbiasov, T., Heine, C., Sabouri, S., Salazar-Miranda, A., Santi, P., Glaeser, E., & Ratti, C. (2024). The 15-minute city quantified using human mobility data. Nature Human Behaviour, 8, 445–455. https://doi.org/10.1038/s41562-023-01770-y

Carramiñana, D., Bernardos, A., Besada, J., & Casar, J. (2024). Towards resilient cities: A hybrid simulation framework for risk mitigation through data-driven decision-making. Simulation Modelling Practice and Theory, 133, 102924. https://doi.org/10.1016/j.simpat.2024.102924

Elvas, L., Mataloto, B., Martins, A., & Ferreira, J. C. (2021). Disaster management in smart cities. Smart Cities, 4, 819–839. https://doi.org/10.3390/smartcities4020042

Ferrer-Ortiz, C., Marquet, O., Mojica, L., & Vich, G. (2022). Barcelona under the 15-minute city lens: Mapping accessibility and proximity potential based on walking travel times. Smart Cities. https://doi.org/10.3390/smartcities5010010

Khavarian-Garmsir, A. R., Sharifi, A., & Sadeghi, A. (2023). The 15-minute city: Urban planning and design efforts to create sustainable neighborhoods. Cities. https://doi.org/10.1016/j.cities.2022.104101

Mohebbi, S., Zhang, Q., Wells, C. E., et al. (2020). Cyber-physical-social interdependencies and organizational resilience: A review of water, transportation, and cybersecurity infrastructure systems and processes. Sustainable Cities and Society, 62, 102327. https://doi.org/10.1016/j.scs.2020.102327

Moreno, C., Allam, Z., Chabaud, D., Gall, C., & Pratlong, F. (2021). Introducing the "15-Minute City": Sustainability, resilience and place identity in post-pandemic cities. Smart Cities. https://doi.org/10.3390/smartcities4010006

RECOMMENDED BIBLIOGRAPHY

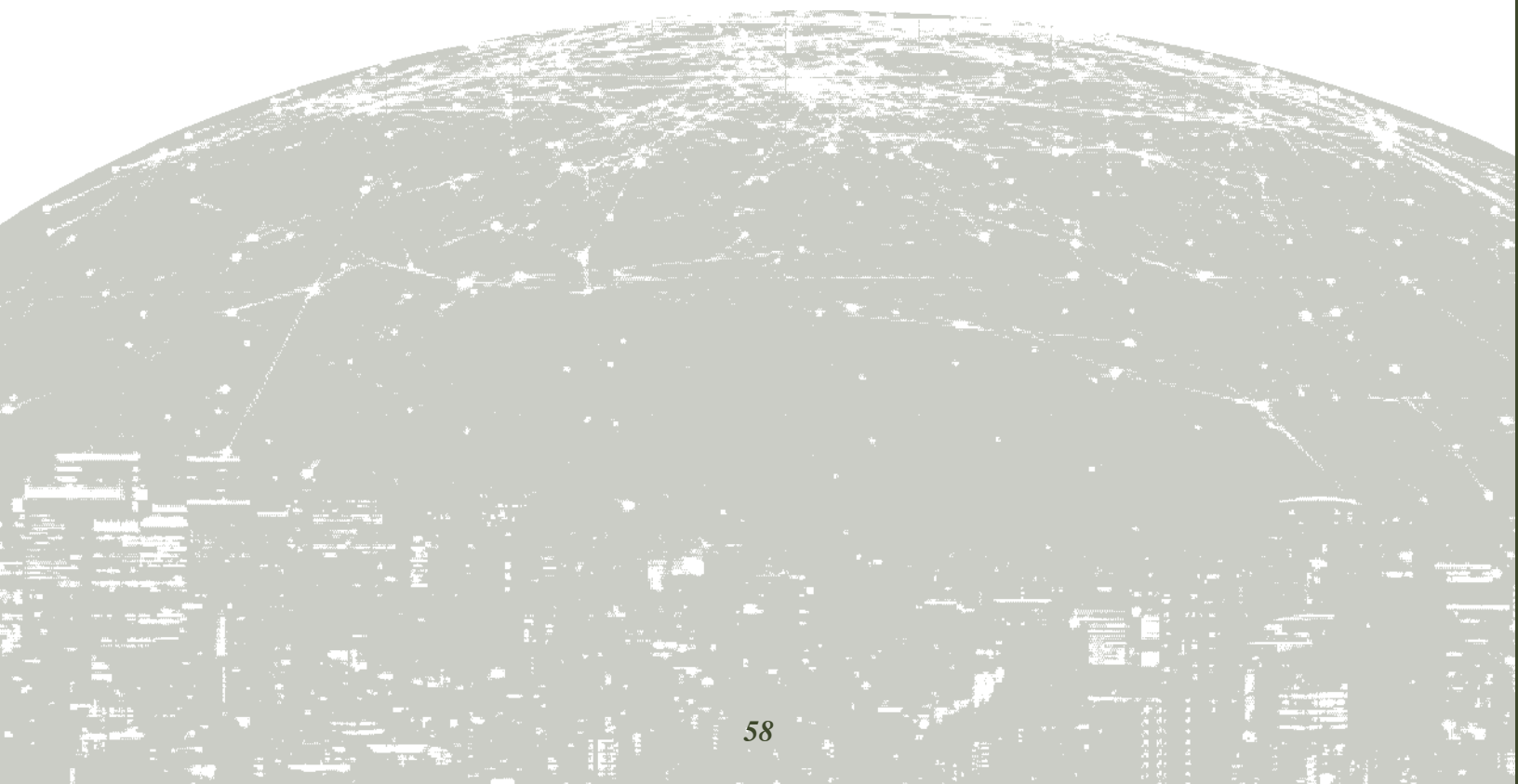
Mouratidis, K. (2024). Time to challenge the 15-minute city: Seven pitfalls for sustainability, equity, livability, and spatial analysis. Cities. https://doi.org/10.1016/j.cities.2024.105274

Nielsen, A. B., & Papin, M. (2020). The hybrid governance of environmental transnational municipal networks: Lessons from 100 Resilient Cities. Environment and Planning C: Politics and Space, 39, 667–685. https://doi.org/10.1177/2399654420945332

Sayed, K., Abokhalil, A. G., Aref, M., Almalki, M. M., & Mossa, M. A. (2026). Digital twin-enabled urban systems for sustainable and resilient futures: A global urban science perspective. Sustainable Futures. https://doi.org/10.1016/j.sftr.2026.101902

Tozer, L., Bulkeley, H., & Xie, L.-J. (2022). Transnational governance and the urban politics of nature-based solutions for climate change. Global Environmental Politics, 22, 81–103. https://doi.org/10.1162/glep_a_00658

Zhu, M., & Jin, J. (2025). Data-driven urban digital twins and critical infrastructure under climate change: A review of frameworks and applications. Urban Planning. https://doi.org/10.17645/up.10109



REFERENCES

General Bibliography

Acuto, M. (2013). Global Cities, Governance and Diplomacy: The Urban Link. https://doi.org/10.4324/9780203073810

Acuto, M., & Leffel, B. (2020). Understanding the global ecosystem of city networks. Urban Studies, 58, 1758–1774. https://doi.org/10.1177/0042098020929261

Bansard, J. S., Pattberg, P., & Widerberg, O. (2017). Cities to the rescue? Assessing the performance of transnational municipal networks in global climate governance. International Environmental Agreements: Politics, Law and Economics, 17, 229–246. https://doi.org/10.1007/s10784-016-9318-9

Barns, S. (2017). Smart cities and urban data platforms: Designing interfaces for smart governance. City, Culture and Society, 12, 5–12. https://doi.org/10.1016/j.ccs.2017.09.006

Bibri, S. (2021). Data-driven smart sustainable cities of the future: Urban computing and intelligence for strategic, short-term, and joined-up planning. Computational Urban Science, 1. https://doi.org/10.1007/s43762-021-00008-9

Davidson, K., Coenen, L., Acuto, M., & Gleeson, B. (2019). Reconfiguring urban governance in an age of rising city networks: A research agenda. Urban Studies, 56, 3540–3555. https://doi.org/10.1177/0042098018816010

De Macedo, L. V. D., Jacobi, P., & De Oliveira, J. A. D. (2023). Paradiplomacy of cities in the Global South and multilevel climate governance: Evidence from Brazil. Global Public Policy and Governance, 3, 86–115. https://doi.org/10.1007/s43508-023-00060-7

Giuliodori, A., Berrone, P., & Ricart, J. (2022). Where smart meets sustainability: The role of smart governance in achieving the Sustainable Development Goals in cities. Business Research Quarterly, 26, 27–44. https://doi.org/10.1177/23409444221091281

Hickmann, T. (2021). Locating cities and their governments in multi-level sustainability governance. Politics and Governance, 9, 211–220. https://doi.org/10.17645/pag.v9i1.3616

Jakobi, A., Loges, B., & Haenschen, R. (2024). What do international city networks contribute to global governance? Towards a better conceptual and empirical assessment. Global Society, 39, 158–180. https://doi.org/10.1080/13600826.2024.2356815

Kosovac, A., Hartley, K., Acuto, M., & Gunning, D. (2021). City leaders go abroad: A survey of city diplomacy in 47 cities. Urban Policy and Research, 39, 127–142. https://doi.org/10.1080/08111146.2021.1886071

Leffel, B., Derudder, B., Acuto, M., & Van Der Heijden, J. (2023). Not so polycentric: The stratified structure and national drivers of transnational municipal networks. Cities. https://doi.org/10.1016/j.cities.2023.104597

REFERENCES

Martinez, R., & Bunnell, T. (2024). National sovereignty across city networks: Singapore and the diplomacy of a global city-state. Environment and Planning C: Politics and Space, 42, 1170–1186. https://doi.org/10.1177/23996544241226855

Thouez, C. V., & Schweiger, R. (2026). From local action to global influence: How cities shape governance in a polycentric world. Social Sciences. https://doi.org/10.3390/socsci15050304

Cases of Study Bibliography

Abbiasov, T., Heine, C., Sabouri, S., Salazar-Miranda, A., Santi, P., Glaeser, E., & Ratti, C. (2024). The 15-minute city quantified using human mobility data. Nature Human Behaviour, 8, 445–455. https://doi.org/10.1038/s41562-023-01770-y

Carramiñana, D., Bernardos, A., Besada, J., & Casar, J. (2024). Towards resilient cities: A hybrid simulation framework for risk mitigation through data-driven decision-making. Simulation Modelling Practice and Theory, 133, 102924. https://doi.org/10.1016/j.simpat.2024.102924

Elvas, L., Mataloto, B., Martins, A., & Ferreira, J. C. (2021). Disaster management in smart cities. Smart Cities, 4, 819–839. https://doi.org/10.3390/smartcities4020042

Ferrer-Ortiz, C., Marquet, O., Mojica, L., & Vich, G. (2022). Barcelona under the 15-minute city lens: Mapping accessibility and proximity potential based on walking travel times. Smart Cities. https://doi.org/10.3390/smartcities5010010

Khavarian-Garmsir, A. R., Sharifi, A., & Sadeghi, A. (2023). The 15-minute city: Urban planning and design efforts to create sustainable neighborhoods. Cities. https://doi.org/10.1016/j.cities.2022.104101

Mohebbi, S., Zhang, Q., Wells, C. E., et al. (2020). Cyber-physical-social interdependencies and organizational resilience: A review of water, transportation, and cybersecurity infrastructure systems and processes. Sustainable Cities and Society, 62, 102327. https://doi.org/10.1016/j.scs.2020.102327

Moreno, C., Allam, Z., Chabaud, D., Gall, C., & Pratlong, F. (2021). Introducing the "15-Minute City": Sustainability, resilience and place identity in post-pandemic cities. Smart Cities. https://doi.org/10.3390/smartcities4010006

Mouratidis, K. (2024). Time to challenge the 15-minute city: Seven pitfalls for sustainability, equity, livability, and spatial analysis. Cities. https://doi.org/10.1016/j.cities.2024.105274

Nielsen, A. B., & Papin, M. (2020). The hybrid governance of environmental transnational municipal networks: Lessons from 100 Resilient Cities. Environment and Planning C: Politics and Space, 39, 667–685. https://doi.org/10.1177/2399654420945332

REFERENCES

Sayed, K., Abokhalil, A. G., Aref, M., Almalki, M. M., & Mossa, M. A. (2026). Digital twin-enabled urban systems for sustainable and resilient futures: A global urban science perspective. Sustainable Futures. https://doi.org/10.1016/j.sftr.2026.101902

Tozer, L., Bulkeley, H., & Xie, L.-J. (2022). Transnational governance and the urban politics of nature-based solutions for climate change. Global Environmental Politics, 22, 81–103. https://doi.org/10.1162/glep_a_00658

Zhu, M., & Jin, J. (2025). Data-driven urban digital twins and critical infrastructure under climate change: A review of frameworks and applications. Urban Planning. https://doi.org/10.17645/up.10109

