



Delivering Inclusive Design in Cities: A Global Action Report



Executive Summary

Delivering inclusive cities

The aim of this report is to equip cities with practical but evidence-based actions to accelerate accessibility and inclusion in their physical infrastructure, buildings, services and operation.

Cities worldwide are experiencing continued growth and increasing resource challenges. In low-and-middle income settings, this is particularly challenging, where in many cases huge infrastructural development is necessary. With resource constraints and increasing global challenges (rising inequality, climate changes, pandemics), it is even more critical that accessibility and inclusive design are seamlessly integrated into the planning and design of cities and all their functions, to ensure the effective and resilient use of resources to create liveable and enjoyable cities and ensure persons with disabilities are not left behind.

Disability policy is generally set by national governments, while cities need locally-adaptable and practical frameworks for inclusive action. This suggests a need for a global agenda of inclusive practices for cities to catalyse shared learning and collective efforts, not reinvent the wheel, and help cities to create their inclusive city.

An inclusive city is...

An inclusive city is a place where the built environment, infrastructure and services are planned and designed to accommodate and empower everyone who lives there. An inclusive city is created through processes that enable inclusion and participation, by fostering inclusive culture, alleviating stigma and engaging all citizens in its design. By applying the principles and mindset of 'Inclusive Design,' to city governance, planning, design, services, education and culture, it is possible to create enabling environments that foster participation and independence for all people.

To achieve this outcome, cities must be designed with its citizens who experience marginalisation and barriers to access and participation. This is why inclusive design must be grounded in the participation of persons with disabilities. A disability-inclusive city is an inclusive city for all, where leaders and citizens all commit to equality, embrace diversity and ensure accessibility. By embracing Inclusive Design and engaging in participatory research, cities can create environments that not only meet the needs of persons with disabilities but also enrich the lives of all inhabitants.

Who

This report primarily targets city, local and regional governments to drive inclusion in cities, however, a broad range of stakeholders should be engaged in the delivery of inclusive cities, including persons with disabilities.

A city should develop an inclusive city stakeholder map by applying the people, policy and practice framework, that responds to the profile and culture of that city.

Where

- City Planning and Governance
- Essential Infrastructure and Services
- Transport systems
- Neighbourhoods, including informal settlements
- Housing
- Public Space and Green Space
- Streets
- Public and private buildings
- Products
- Workplaces
- Policies (government and institutional)

Principles

1. Inclusive cities by all, for all.
2. People and communities (persons with disabilities) - are included in shaping their cities.
3. Leaders and champions - Enable inclusion and demonstrate why inclusive design is effective.
4. Culture in inclusive cities supports people and communities to thrive.
5. Shared values and accountability drive progress.
6. From global to local - A city's inclusive design strategy is localised
7. Addressing global challenges through inclusive design.
8. Resilient cities are future-proofed. Adaptable to support persons with disabilities to thrive.
9. Innovation and ambition to drive inclusion.
10. Inclusive cities are an investment in the future.

City action areas

- » Partnerships and cross-sectoral action.
- » Education and training actions.
- » Labour market actions.
- » Frameworks and policy.
- » Strategic planning and procurement.
- » Budgeting and investment.
- » Design, development and implementation.
- » Operations and services.
- » Culture and attitudes.
- » Neighbourhoods and communities.
- » Marginalised communities and informal settlements.
- » Climate adaptation and mitigation.
- » Technology and digital inclusion.
- » Recreation, tourism and heritage.
- » Mobility.
- » Data, knowledge and evaluation.

How to use this report



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We'd like to thank all of the participants in the research for their enthusiasm and honesty. It is our goal to amplify the voices of persons with disabilities in our research and we hope this report reflects your vision for a more inclusive and accessible world.

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About the Global Action Report

Purpose

The aim of this report is to equip cities with practical actions to accelerate accessibility and inclusion in their physical infrastructure, buildings, services and operation.

The mission behind this work at Global Disability Innovation Hub is to support cities in their journey to ensure persons with disabilities can access, participate and enjoy urban life on an equal basis with all urban residents. This transformation will ultimately result in better cities where all urban residents can thrive throughout their lives.

How it was developed

This global action report on delivering inclusive design in cities has been developed from four years of research under the UK Aid funded AT2030 programme on the current state of accessibility and inclusive design in cities worldwide. Six case studies were undertaken in six diverse cities to understand the current experience of persons with disabilities living in those cities and the awareness, interest and engagement of built environment practitioners and city governments to prioritise accessibility and inclusive design in city planning and design.

The research was participatory with local partners engaging persons with disabilities and urban stakeholders in co-design activities to identify barriers, opportunities and aspirations for a more inclusive city. One unique aspect of this research is that it explores the experience of accessibility and inclusion in cities from the perspective of assistive technology (AT) users specifically, which includes persons with disabilities, but can extend to other groups. This is important to gain insights on how these tools, products and services interact with the built environment to ensure that as we drive AT access globally through AT2030, we also support enabling environments that optimise use.

Following the six city case studies and working with all of the local city partners, a global comparison report was produced that forms the evidence-base for the recommendations contained within this report. To learn more about the research findings, you can access the global comparison report and individual case studies [here](#):



Case studies on Inclusion and accessibility in cities:

- Ulaanbaatar, Mongolia
- Varanasi, India
- Surakarta, Indonesia
- Nairobi, Kenya
- Freetown, Sierra Leone
- Medellín, Colombia

Four years of research between 2020-23 developed new insights on why inclusive environments and infrastructure are necessary to enable access and use of AT.

Who it is for

This report and its recommendations are primarily targeted at city, local and regional government actors who are responsible for the governance, planning, design and operation of cities.

The report can also be used by built environment and urban sector practitioners to embed inclusive design and disability inclusion in their work.

It also has value for Organisations of Persons with Disabilities (OPDs), disability activists and disability sector practitioners who want to engage with cities.



Holistic approaches are needed to combat accessibility gaps.

How to use it

The report is designed to support city, local and regional governments to develop more inclusive cities through inclusive design. It can be used to facilitate the development of a city action plan on inclusive design and support pilot projects within cities that help drive disability inclusion.

The steps are as follows:

- **Training and capacity building through the Global Action Report and accompanying research resources.**
- **Assessment of the city baseline.**
 - Tool: Rapid assessment through the 'Inclusive City Assessment Methodology (forthcoming).'
- **Develop bespoke action plan, recommended to focus on 3-4 priority action areas.**
- **Deliver action plan.**
 - Undertake pilot(s) under priority action areas with an inclusive design approach.
- **Evaluation and impact measurement.**
- **Legacy delivery.**

The report structure details the who, what and where of defining an inclusive city including common areas and types of interventions. The main body of the report describes 10 key principles for delivering inclusive cities and 16 priority action areas that our research has identified as opportunity areas for transformative action based on research co-created with persons with disabilities and inclusive city stakeholders in the six case study cities.

To understand more of the background on why these areas are strategic priorities, we recommend referring to the [Global Comparison Report on Inclusive Infrastructure and Cities](#).



Global Trends

Cities worldwide are experiencing continued growth and increasing resource challenges. In low-and-middle income settings, this is particularly challenging, where in many cases huge infrastructural development is necessary.

With resource constraints and increasing global challenges such as rising inequality, climate change and pandemics, it is even more critical that accessibility and inclusive design are seamlessly integrated into the planning and design of cities and all their functions, to ensure the effective and resilient use of resources to create liveable and enjoyable cities and ensure persons with disabilities are not left behind.

Disability policy is generally set by national governments, while cities need locally adaptable and practical frameworks for inclusive action. This Global Action Report provides principles and recommendations for action that can apply globally, drawing on learnings from six global cities, and which can be adapted locally to individual cities.

Persons with disabilities

- An estimated 1.3 billion people experience significant disability. This represents 16% of the world's population, or 1 in 6 of us. ¹
- 80% of persons with disabilities live in low and middle-income countries, many of which are highly climate-vulnerable. For example, 25.5% of people in Bangladesh have a disability, and the country is ranked as the 7th most climate-vulnerable country in the world. ²

Ageing populations

- The world's population is growing older, with the age group of 65 and over growing the fastest.
- By 2050, one in six people in the world will be over age 65 (16%), up from one in 11 in 2019 (9%). Regions where the share of the population aged 65 years or over is projected to double between 2019 and 2050 include Northern Africa and Western Asia, Central and Southern Asia, Eastern and South-Eastern Asia, and Latin America and the Caribbean. By 2050, one in four persons living in Europe and Northern America could be aged 65 or over. The number of persons aged 80 years or over is projected to triple, from 143 million in 2019 to 426 million in 2050. ⁴

Investment in cities

- African cities need to raise USD 20–25 billion investment in basic infrastructure and USD 20 billion for housing to accommodate urban growth. ⁸

AT access

- Globally, more than 2.5 billion people need one or more assistive products. With an ageing global population and a rise in noncommunicable diseases, an estimated 3.5 billion people will need assistive technology by 2050. ³

Urban growth

- Urban areas are already home to 55 per cent of the world's population, and that figure is expected to grow to 68 per cent by 2050. ⁵
- According to UN estimates, the global urban population will increase by 2.5 billion over the next three decades, and 90% of this growth will occur in Africa and Asia. Africa alone is projected to absorb close to a billion additional urban dwellers by 2050. ⁶
- Half of the world's population already lives in cities, generating more than 80 percent of global GDP today. Only 600 urban centers, with a fifth of the world's population, generate 60 percent of global GDP. ⁷

Investing in climate resilient futures

- Urban climate finance has more than doubled between 2017 and 2022, reaching USD 831 billion. Private actors provided 49% of urban climate finance and public actors 22%, with the rest from unknown sources. Private finance has tripled since 2017/18, and public finance has more than doubled. ⁹

Improving current building stock

- Improving current building stock: Around 80% of the buildings we have today will exist in 2050, so it is essential for combating climate change that we retrofit them for energy efficiency. ¹⁰

Disability and informal settlements

- While 16% of the world's population lives with a disability, there is no global data on disability precedence in informal settlements. After conducting a rATA WHO survey last year, GDI Hub found that 26% of people surveyed across four informal settlements in Indonesia and Sierra Leone experienced at least 'some difficulty' in seeing, walking, hearing, remembering and/or communicating. ¹²

Cities and climate change

- Reducing emissions in line with the 1.5°C target of the Paris Agreement and advancing climate resilient development requires unprecedented investments in sustainable and resilient urban infrastructure – up to US\$5.4 trillion a year to 2030.
- Cities are indispensable to tackling climate change. Nearly 80% of global GDP and over half the world's population (56%) are concentrated in urban areas, which are responsible for up to 70% of global emissions. Yet cities have also been identified as being among the most vulnerable to the effects of climate change by the IPCC's (Intergovernmental Panel on Climate

Inequality and cities

- In 2020, an estimated 1.1 billion urban residents lived in informal settlements or insecure housing, and over the next 30 years, an additional 2 billion people are expected to live in such settlements, mostly in developing countries. ¹¹

Mobility in cities

- In 2022, only half of the global urban population had convenient access to public transport. ¹³

Change) latest Assessment Report, with nearly half lacking plans to keep their populations safe.

- Estimates suggest that the global economic costs to cities, from rising seas and inland flooding, could amount to \$1 trillion by mid-century. ¹⁴
- By 2050, 800 million people will live in cities where sea levels could rise by more than half a metre. ¹⁵
- 215 million urban poor, living in around 500 developing country cities will be exposed to average summertime temperature highs of over 35°C (95°F). ¹⁶
- By 2050, 685 million people in cities will face a decline in freshwater availability. ¹⁷

Defining an Inclusive City

An inclusive city is a place where the built environment, infrastructure and services are planned and designed to accommodate and empower everyone who lives there. An inclusive city is created through processes that enable inclusion and participation, by fostering inclusive culture, alleviating stigma and engaging all urban residents in its design.

By applying the principles and mindset of 'Inclusive Design,' to city governance, planning, design, services, education and culture, it is possible to create enabling environments that foster participation and independence for all people.

To achieve this outcome, cities must be designed with their urban residents who experience marginalisation and barriers to access and participation. This is why inclusive design must be grounded in the participation of persons with disabilities. A disability-inclusive city is an inclusive city for all, where leaders and urban residents all commit to equality, embrace diversity and ensure accessibility. By embracing Inclusive Design and engaging in participatory research, cities can create environments that not only meet the needs of persons with disabilities but also enrich the lives of all inhabitants. Creating a disability-inclusive city involves comprehensive planning, community engagement, and a steadfast commitment to inclusion, ensuring that every person can fully participate in and

contribute to society. An inclusive city is also a resilient city. It is necessary to break the siloes between sectors and ensure inclusion and resilience are designed hand-in-hand. An inclusive city, co-designed with all urban residents and urban stakeholders will be designed to adapt and evolve to challenges and be designed with long-term resilience and adaptation in mind.

What is Inclusive design? (GDI Hub ID Strategy) ¹⁸

Inclusive design can help all human beings experience the world around them in a fair and equal way by creating safe and accessible environments, products and services for all members of the community.

Inclusive design is a mindset, a methodology that embraces diversity to create a world that is more intuitive, elegant and usable for all of us.

Findings from the research identified various ideas about what an inclusive city should look like for those who live there



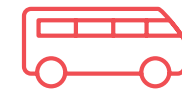
A city everyone can enjoy: equity of access to all infrastructure, information and services



Leisure and culture: cities with cultural recreational spaces and green spaces for all, and that enable inclusive tourism,



Participation: A city where persons with disabilities are recognised and directly involved in urban planning and development.



Mobility: A city with an integrated inclusive transport network that facilitates people's mobility from door to door.



Awareness, understanding and joy: a culture of genuine inclusion without stigma and exclusion



Opportunities: A city offering equity of education and work, livelihood and information for all, including for those living in informal settlements or employed in the informal sector.



Urban life: A city where all types of spaces are inclusive and accessible, enabling persons with disabilities to fully participate in urban life



Resilience: Inclusive and sustainable infrastructure that supports resilience to crises and climate change



Healthy cities: that foster the mental and physical health and well-being of all its residents

The role of city government

Every city government will be unique to some extent. However, all cities must be responsible and accountable to their citizens, listening to their voices and taking action on the basis of community aspirations.

Example: Gold Coast inclusive city action plan ¹⁹

Role of the local government includes:

- **Delivering** city infrastructure and services.
- **Funding and supporting** other organisations to deliver services.
- **Regulating** activities through local laws and other legislation.
- **Partnering** with other levels of government, agencies, organisations and individuals.
- **Facilitating** partnerships between stakeholders advocating to decision-makers and influencers to promote the interests of the community.

Role of the sector/community

Urban residents and the urban sector have a critical role in holding the city government to account and advocating for, and where possible, leading change from the ground up. Urban sector professionals have responsibilities to ensure their work is serving the communities that need it.

The role of inclusive design

Inclusive Design is not merely about making spaces accessible but it goes further to create environments that are intuitive and enjoyable for all. It involves the thoughtful integration of accessible features and inclusive practices into the core of urban planning and architecture, ensuring that every public space, building, and transportation system is navigable and functional for all urban residents. By doing so, Inclusive Design promotes social inclusion, equality, and enhances the quality of life for persons with disabilities.



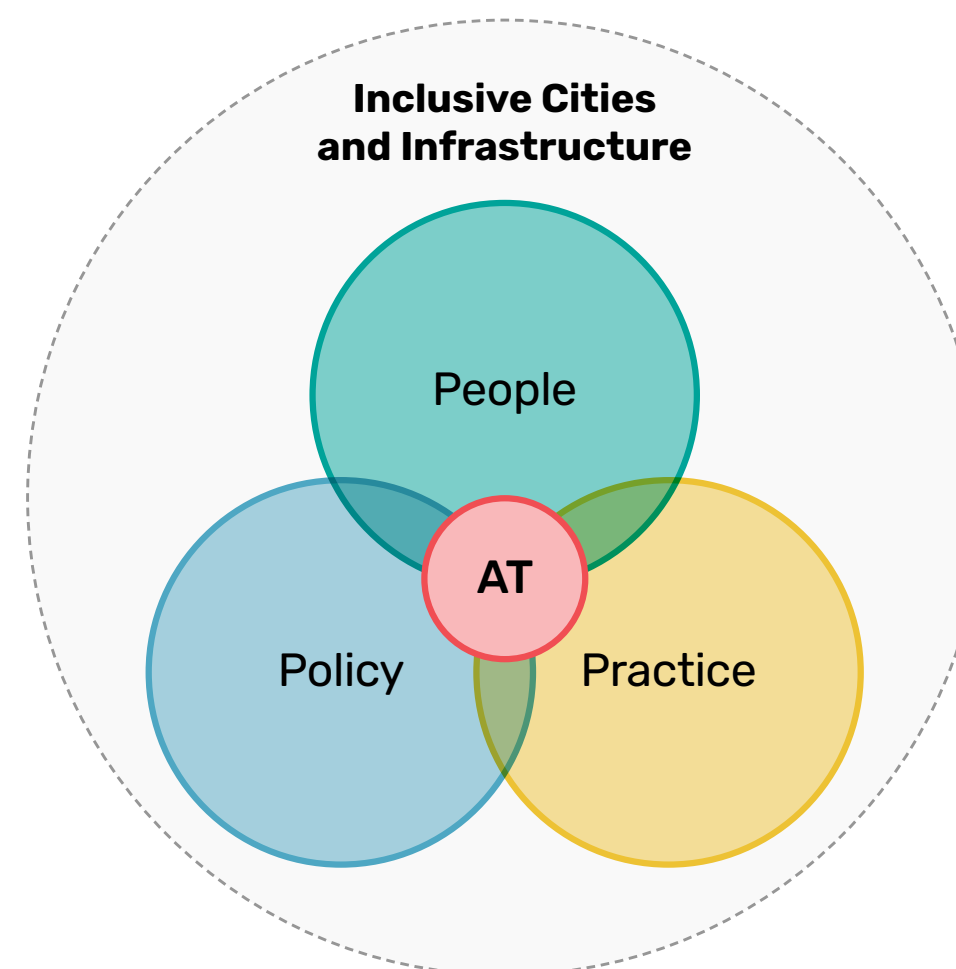
Who (should be involved)

This report primarily targets city, local and regional governments to drive inclusion in cities. However, a broad range of stakeholders should be engaged in the delivery of inclusive cities, including persons with disabilities.

A city should develop an inclusive city stakeholder map by applying the people, policy and practice framework, that responds to the profile and culture of that city. Example stakeholders include:

- Persons with Disabilities and AT users.
- Local and Municipal Governments.
- Urban and Built Environment Sector.
- Development Sector.
- Representative Organisations such as OPDs.
- Funders.
- Other groups that commonly experience marginalisation.
- All urban residents.

Framework for delivery

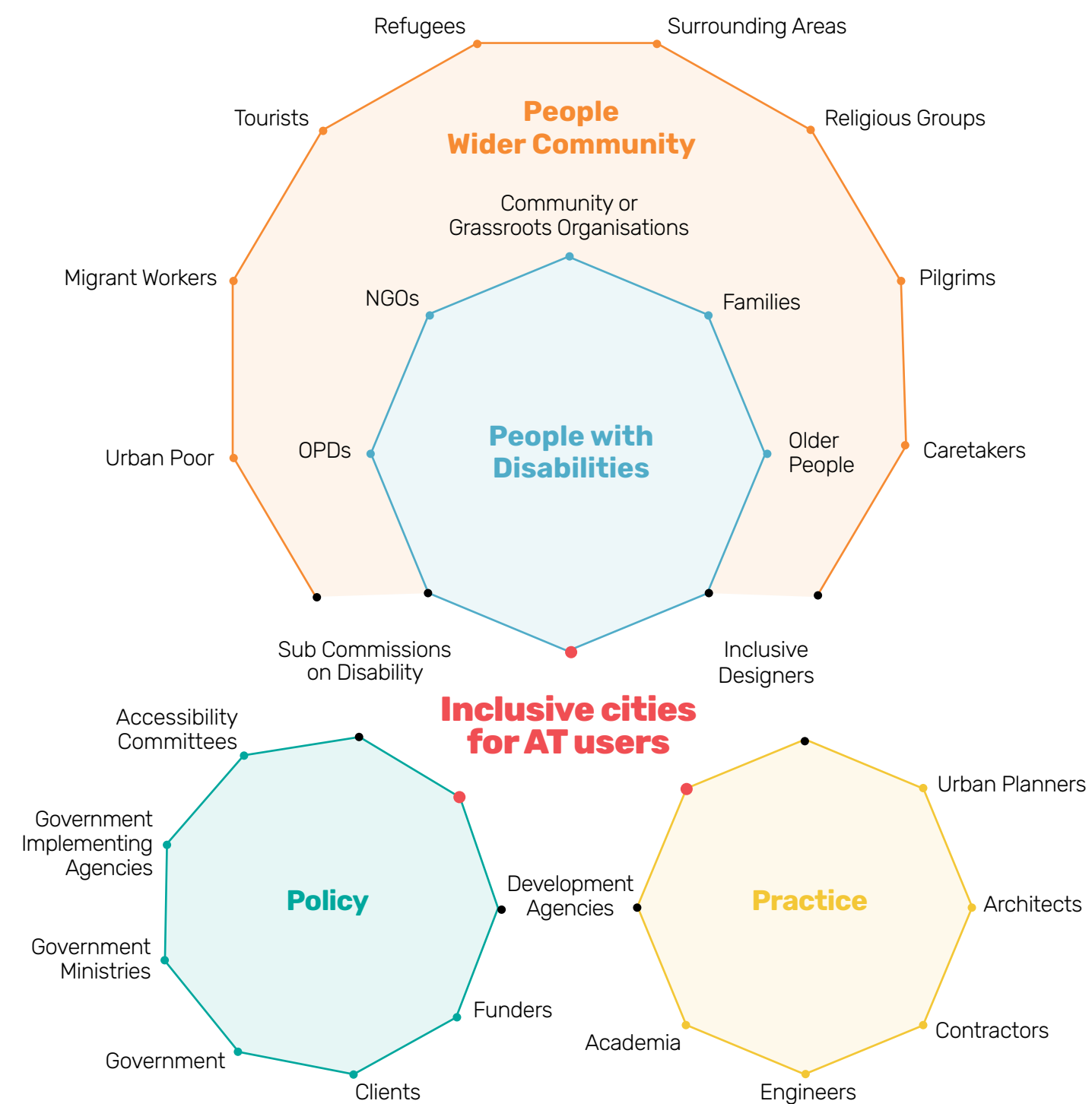


Delivering inclusive infrastructure:

- **People** - the community experience of disability and the built environment;
- **Practice** - industry focused research with urban and built environment stakeholders on the awareness and application of inclusive design and successful delivery in practice; and
- **Policy** - research with local government stakeholders on the governance, strategy, guidelines and protocols of accessibility and inclusive design at local, regional and national levels of government.



Inclusive city stakeholders



Example of people, policy and practice stakeholders from the six city case studies.

What interventions are needed where

Inclusive design can be applied across city infrastructure and services. From our research, housing, healthcare and education emerged as top priorities in the six city case studies.

City planning and governance

- City masterplans to consider accessibility from the outset.
- Governance structures and processes to proactively engage persons with disabilities.

Essential infrastructure and services: healthcare, education, WASH, energy, connectivity, financial services

- Design schools and educational institutions to be accessible, offering resources such as sign language interpreters, braille materials, and adaptive technologies. Ensure teachers are trained to teach in an inclusive way.
- Ensure hospitals and clinics are accessible, with appropriate equipment and trained staff to assist persons with disabilities.

Public and private buildings

- Ensure businesses adopt inclusive practices, from physical accessibility in stores and restaurants to providing accessible customer service options.

Products and technology

- Ensure products and technology employed in city services are accessible.

Transport systems and mobility

- Access chain, first and last mile.
- Equip buses, trains, and stations with ramps, lifts, and audible/visual announcements. Ensure that timetables and information are available in accessible formats.

Public space and green space

- Ensuring public space interventions such as seating and playgrounds are accessible and inclusive.
- Design parks with accessible pathways, restrooms, and seating.
- Ensure green space interventions do not reduce accessibility.

Streets

- Implement dropped kerbs, tactile paving, and audible signals at controlled pedestrian crossings to assist people with mobility and sensory impairments.
- Maintain well-lit, obstacle-free walking routes and provide adequate crossing times at traffic signals.

Neighbourhoods, including informal settlements

- Access to services in the community.
- Reach of standards and guidance.
- Support for community-led design, build and repair.

Housing

- Build homes that incorporate inclusive design principles, making them accessible to all. This includes features like wider doorways, step-free entrances, and adaptable bathrooms.
- Ensure affordable housing options are available to persons with disabilities.

Workplaces

- Design workplaces that are fully accessible, with features such as adjustable desks, accessible restrooms, and clear signage etc.
- Ensure workplaces have inclusive policies and culture.

Policies (government and institutional)

- **Inclusive Policies:** Develop and implement policies that mandate accessibility standards in all aspects of urban development.
- **Community Involvement:** Involve persons with disabilities in the planning and decision-making processes to ensure their needs and perspectives are represented.
- **Political participation:** Accessibility of electoral processes etc.

10 Principles for Inclusive Cities

The following ten principles are strategic outcomes of inclusive city interventions.

1. Inclusive cities by all, for all

Cities need a cross-cutting strategy to disability inclusion and inclusive design with clear lines of responsibility and accountability to achieve the desired outcomes. This involves collaboration across sectors, breaking those siloes, systems thinking and a participatory approach that engages all stakeholders to create a sense of ownership. Setting a shared vision through a city-wide strategy can support consistency and accountability for action.

2. People and communities (persons with disabilities) - are included in shaping their cities

Collaboration and co-design with local people, including persons with disabilities is vital. A proactive engagement strategy should involve persons with disabilities throughout the urban sector, through strategic planning, employment, participatory consultation, and in leadership. Only an inclusive process can deliver an inclusive outcome. You cannot apply what you do not know. Basic education and training around inclusive design is essential for key decision makers and those engaged in project delivery. Similarly, persons with disabilities, their families and the community should be made aware of the benefits of inclusive environments for everyone in the community.

3. Leaders and champions - Enable inclusion and demonstrate why inclusive design is effective

National, regional and city governments dedicate resources to drive inclusivity. Leaders and champions can ensure inclusive design initiatives are prioritised. Cities should support progression pathways for persons with disabilities to enter leadership positions in city governments. Ideally, a trained inclusive design professional in the city level government should be responsible for seamless delivery of inclusive environments in the cities.

4. Culture in inclusive cities supports people and communities to thrive

A culture of inclusion is necessary to deliver lasting change. Inclusive culture should be nurtured at a whole city level but also within individual organisations and institutions. If city governance adopts an inclusive culture, it will have beneficial impacts across city delivery. Inclusive and accessible infrastructure will support an inclusive culture to thrive as persons with disabilities are able to participate in daily life in the city on an equal basis.

5. Shared values and accountability drive progress

Establishing shared values and commitments can strengthen progress aligned to a city strategy or vision. City, local and regional governments take responsibility and ensure processes are in place to foster inclusive development and redevelopment of cities. Monitoring mechanisms that can hold both the public and private sector accountable for their actions is important to ensure policies and strategies are delivered on.

7. Addressing global challenges through inclusive design

Cities are increasingly facing extreme challenges from climate change to pandemics to geopolitical insecurity. This requires resilience and adaptive capacity, for the whole city and its communities. Inclusive design is an approach and tool that can be used to find solutions for complex challenges in an inclusive and participatory way, ensuring those who are most excluded are not left behind.

6. From global to local – A city's inclusive design strategy is localised

Cities are unique, and while our research has shown that cities share common challenges and opportunities to deliver inclusive design, it is important a city has a vision of what an inclusive city looks like to them. Stakeholders shared how important it was to understand what good looks like and see relevant examples for their city. Local knowledge and capacity must be cultivated to ensure strategies and actions are fit for purpose.

8. Resilient cities are future-proofed – Adaptable to support persons with disabilities to thrive

Building resilience and ensuring cities are future-proofed requires inclusive design to be part of those processes. If persons with disabilities are excluded, construction will need to be retrofitted which is more costly and will likely result less seamless solutions. To build sustainably and with resilience in mind, inclusive design should be integrated from the start to ensure a city's infrastructure can serve its whole population across their life course, through shocks and challenges.

9. Innovation and ambition to drive inclusion

Meet the need, not just the regulation. Work with persons with disabilities to understand the issues and co-design solutions. This approach drives innovation and success. Regulations should be seen as minimum standards and city governments should aim to facilitate innovation and excellence.

10. Inclusive cities are an investment in the future

All city initiatives should consider the long-term legacy and longevity of projects, considering aspects such as community leadership, stewardship, ongoing maintenance and long-term sustainability and financing.

Action Areas

Acknowledging that driving genuine inclusive transformation in a city requires a systematic approach, these 16 action areas can apply across sectors of urban governance, planning, design and delivery. They are purposefully not sector-specific as the actions could be applied or integrated across urban sectors from transport to housing to sanitation. Each is broken down into specific recommendations.

- » Partnerships and cross-sectoral
- » Education and training
- » Labour market
- » Frameworks and policy
- » Strategic planning and procurement
- » Budgeting and investment
- » Design, development and implementation
- » Operations and services
- » Culture and attitudes
- » Neighbourhoods and communities
- » Marginalised communities and informal settlements
- » Climate action
- » Technology and digital inclusion
- » Recreation, tourism and heritage
- » Mobility
- » Data, knowledge and evaluation

Ultimately, creating more inclusive environments is about making cities more liveable and enjoyable for all residents.





Action area

Partnerships and cross-sectoral

Why: Having a cross-sectoral, user-centric vision and strategy is critical for creating a seamlessly inclusive city. Multi-stakeholder engagement and collaboration is important, targeting and promoting hard to reach voices. This approach can help foster ownership and a sense of responsibility across sectors and empower local people to meet their needs and aspirations.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Support initiatives to raise awareness including:
 - The private sector on their role in creating inclusive environments.
 - The service delivery staff to make sure the service delivery is inclusive
 - Persons with disabilities & their families on the importance of inclusive environments.
- » Enable and support the participation of persons with disabilities in city processes
- » Increase institutional capacity to deliver inclusive design
- » Ensure leadership demonstrates political will at the highest levels
- » Have non-political civil servants in city government planning departments, not affected by party politics, to achieve a consistent approach to city planning and inclusive design
- » Produce a disability inclusion 'strategy' that requires cross-cutting collaboration to avoid a siloed approach to inclusive design delivery.
- » Support the capacity building of city government stakeholders at all levels around disability inclusion and inclusive design by providing training and expert support. Local OPDs can often provide this, and it's a good way to establish those working relationships, ensuring OPDs are properly recognised for their time and expertise.

Co-designing *Taman Rusun Mangkubumen* in Solo

Taman Rusun Mangkubumen is located in one of the low-cost, social housing areas in the Kali Pepe riverbank area. This program aimed to foster cooperation among various stakeholders to create riverbank spaces that are inclusive and accessible to the public.

The development of public spaces in Mangkubumen was carried out by Kota Kita, in collaboration with Ayo Ke Taman and Urban+ Institute with support from UN-Habitat, the Surakarta City Government and the local community. Academic partners such as UNS and UCL, along with the Disability Advocacy Team of Surakarta, provided valuable knowledge and expertise.

A series of participatory workshops with a diverse group of residents including children, older individuals, women and persons with disabilities were organised to understand the aspirations and needs of the residents, in turn fostering a stronger sense of belonging. Creative methodologies and tools were used, such as 'Minecraft' and the creation of personas to actively engage the children and gather innovative design ideas for the needs of diverse groups.

The features available in the public space include :

- Safe playground for children
- Football area
- Dedicated seating area for older people equipped with foot reflection features on the ground
- Seating areas equipped with guiding block to navigate persons with visual impairments
- Amps and handrail in several parts of the space
- Rainwater harvesting in front of the public space.



Taman Rukun Mangkubumen: A New Public Space for All to Enjoy. Photo credit: Kota Kita and Anggabaktif



Action area

Education and training

"I think Nairobi has the inadequate capacity to accommodate inclusive design. We need to build capacity and have more engineers, urban planners and architects trained in the area of inclusive design."

Stakeholder

Why: Education and training are foundational to both sensitise and inform non-disabled stakeholders about disability and inclusive design. Building capacity in this area supports collaboration and co-design and ensures that built environment practitioners have the knowledge they need to do a good job.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

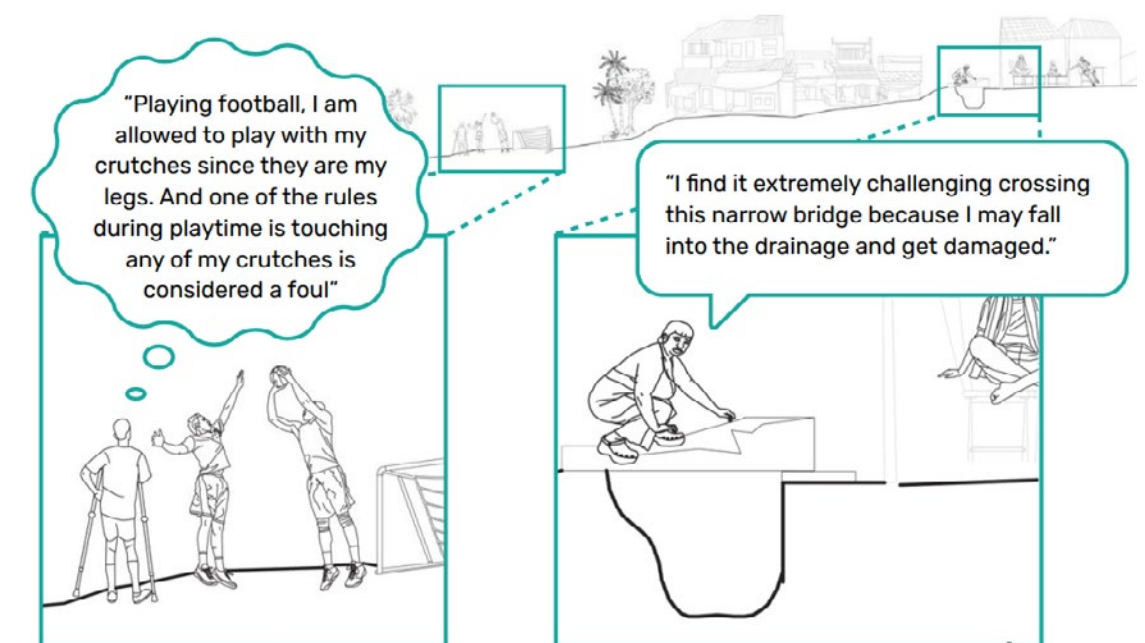
- » Ensure inclusive design education and training is provided to all key personnel involved in the planning, design, build and management of the built environment. Well trained, knowledgeable professionals are a pre-requisite for successful delivery
- » Have the ambition that all design, urban and built environment education courses integrate mandatory training on inclusive design. The training content could be shared across courses to streamline resources and ensure consistency of approach
- » Make available continued professional development courses on inclusive design to all urban sector professionals working in industry
- » Provide access to assistive technology (AT) for education and training purposes for those who need it, such as screen readers and digital devices.
- » Ensure inclusive education begins from the early years. Education pathways and access to opportunities are influenced by access to education from an early age. National and regional governments must also ensure that school curriculum covers disability inclusion to counter stigma and negative attitudes towards disability
- » Make available technical courses and alternative education pathways for people who have had limited access to education due to inaccessibility
- » Support scholarships and bursaries for persons with disabilities to continue education and train in the urban sector
- » Ensure all service delivery staff have appropriate disability equality and awareness training, to support delivery of inclusive and equitable services to all. More specific training should also be available, such as sign language training
- » Train procurement personnel on the importance and added value of procuring inclusive goods and services.

Providing inclusive design training to Asian Development Bank

The Asian Development Bank (ADB) commissioned GDI Hub to deliver inclusive design training to their project managers working around the world. This helped ensure they had the knowledge and understanding to embed inclusion in the infrastructure and service delivery projects they were working on. The feedback was so positive that an online e-learning course was developed and opened up to all ADB staff globally.

Developing methods to communicate with built environment stakeholders

To communicate research findings in relevant ways, GDI Hub has been developing a process to employ tools of architectural visualisation to depict accessibility challenges and the experiences of persons with disabilities.





Action area Labour market

Why: There is a close link between inaccessible environments and negative attitudes towards persons with disabilities, including around employment. More accessible infrastructure could reduce stigma by allowing persons with disabilities to be more visible and play a more active role in society and the labour market. There is also a need to raise awareness on the value of a diverse workforce. Bringing unique perspectives together often increases productivity and creates more dynamic and innovative teams. It is also necessary to consider the impact of informal workers. For example, street vendors who often block circulation routes and contractors who often don't implement inclusive designs as intended.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Create inclusive employment pathways including skills training programmes and inclusive recruitment processes for persons with disabilities.
- » Ensure inclusive employment cultures through appropriate HR policies such as reasonable accommodations, flexible and remote working and organisation-wide training.
- » Sector leaders should drive mindset shifts in their profession to champion inclusive design as a cross-cutting process for successful delivery.
- » Assistive technology (AT) should be made available to urban sector professionals as needed, to support a more diverse workforce.
- » Graduate schemes should be developed to support persons with disabilities into the labour market.
- » Inclusive design training programmes should be made available to informal workers including service providers, contractors and contractors to help support implementation on the ground.

Inclusive employment opportunities in Varanasi and Medellín

In **Varanasi**, Kiran Society works to support local persons with disabilities to access employment. One example of this is a bakery run by Kiran Society, the Kiran Joy Café where young persons with disabilities can be trained and access employment as bakers, cooks and shop assistants. They also sell handcrafts produced in Kiran village, promoting a holistic approach looking at education and livelihoods.

In **Medellín**, MATT is an innovative business developing AT that is also looking at employment models to ensure a sustainable business model. MATT stands for 'mobility, accessibility, time and work (trabajo in Spanish)'. People who access an assistive device from MATT can also work as tour guides on their city tours, and adapt their MATTs to work as couriers or sell goods.



The Kiran Joy Café.



One of the MATT devices.



Action area

Frameworks and policy

Why: Frameworks and policy set benchmarks to deliver more inclusive cities. In many cases, legislation, regulation and standards regarding disability and accessibility are set at the national level which can be challenging as they may not be fit for purpose for individual city needs. Developing local policy and standards can help drive a unique, localised vision for an inclusive city. These documents can set minimum standards, support advocacy and uphold accountability. Mandating accessibility standards supports better uptake across the urban sector.



Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Involve local communities in the development of legislation, policy, regulation and standards, including persons with disabilities. This can be individuals, OPDs or through the creation of disability led committees or commissions.
- » Develop aspirational inclusive design standards at the city level that go beyond meeting minimum regulations
- » Simplify the legislative framework. Harmonise existing legislation, policy, building codes and standards to give clarity and consistency.
- » Mandate the requirement to deliver inclusive built environments in law, otherwise it risks not being acted upon. There also needs to be adequate responsibility and accountability for implementation
- » Support the localisation of national legislation, policy, regulation and standards to reflect the local context. This is especially true of large and diverse countries.
- » Build the capacity of policy stakeholders at all levels around disability inclusion and inclusive design through training and expert support.

Harmonisation of guidelines in India

In 2022, India undertook a process of harmonising the national inclusive design guidelines. The intention was to streamline existing guidance in a single document that would serve as a benchmark for the country. This can help bring consistency and clarity and supports more strategic action and alignment. However, localisation is also important, at the regional and city level, especially in a country as large and diverse as India.



Implementation of policy is key, this involves diverse stakeholders to ensure standards are met.

Action area

Strategic planning and procurement

Why: Good inclusive design does not begin at the design stage, but at project inception. Incorporating accessibility features at later stages is more expensive and less seamless, leading to less effective outcomes. Procurement is also an essential stage to set inclusive outcomes to ensure providers prioritise inclusion, work with and employ persons with disabilities and agree to set a vision for inclusion throughout project delivery. Our research found that third party contractors can often create issues in the final stages of delivery, demonstrating the importance of effective and inclusive procurement at all levels.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Conduct research to understand the city baseline, employing rapid assessment tools to do so.
- » Set a vision for disability inclusion at a city level from the outset – the disability inclusion ‘strategy’ – and socialise this with all actors, including procurement teams.
- » Plan for the sustainability of inclusion in the long term, setting aspirational long term goals.
- » Facilitate collaboration so inclusive design practice is not isolated to singular, disjointed interventions.
- » Public procurement must ensure that inclusive goods and services are being secured.
- » Prioritise working with companies that are disability inclusive .
- » Take a comprehensive approach to embedding inclusion in project delivery teams.

Integrated Urban Projects (Proyectos Urbanos Integrales – PUI), Medellín,

In Medellín, Colombia, the city administration created the ‘Integral Urban Projects’ (PUI) team. This team had a focus on inclusion and mobility and supported the Metrocable (cable cars) project for the Northeast area of Medellín. It also supported the ‘Senderos de Conexión Independencias’ project (electric stairs) in Comuna 13, a historically marginalised neighbourhood. Although these mobility interventions differ in scale, they share a common innovative spirit and have both made significant positive impacts on social equity.



The cable cars in Medellín.

Action area

Budgeting and investment

Why: Dedicated resources are fundamental to ensure cities are able to plan, design and deliver inclusive design. Our research found that initiatives often lacked dedicated budgets or long-term financing plans, creating a barrier to sustained inclusion. Furthermore, the investment case for inclusive design, understanding of the overall cost and potential return on investment, is limited and an area that requires data. The financial impact of inaccessibility (taking no action) is not well understood, with general perceptions of accessibility (taking action) being that it is expensive.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Funders must acknowledge the need to deliver inclusive solutions and hold projects to account, ensuring delivery.
- » Dedicate cross-sector budget to disability inclusion on a strategic, annual basis
- » Consider a percentage allocation of all built environment project budgets dedicated to inclusive design
- » Build the investment case through research and evaluation of the costs of financing inclusive projects, including return on investment, over time
- » Create inclusive design budget allocations for retrofitting in redevelopment projects and where possible, create incentives for building owners to make improvements
- » Consult on the financial barriers for persons with disabilities living in your city, such as the affordability of services and consider initiatives to address these barriers such as travel subsidies or support in access to work
- » Ensure project budgets account for inclusive and participatory processes, such as remunerations for persons with disabilities who participate in consultation processes
- » Provide financial support to community-led solutions championing inclusion.

Insights from the research on the inaccessibility of financial services

“Every month we have to go to the state bank where we get the monthly pension but they are not accessible. Even I enter the bank and the counter is high.”

Participant in Ulaanbaatar



Inaccessible banks in Varanasi.



Action area

Design, development and implementation

"Too often the rules remain on the paper."

Research Participant in Medellin, Colombia

Why: The delivery process for all built environment infrastructure is vital to creating more inclusive cities, from the initial concept design through to the implementation and construction. Research shows that accessibility features are often 'value engineered' out during the delivery process. It is vital that persons with disabilities are included and inclusive design processes are followed throughout the entire process to ensure delivery of inclusive outcomes. Correct implementation, from fit out to material selection, is essential to ensure inclusive design translates from plans to place.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Ensure city design and planning processes recognise and meaningfully involve persons with disabilities in urban planning and development. This could be through the creation of local 'access panels' who can operate as critical friends and with autonomy so they can advocate if delivery is not happening as intended .
- » Employ an inclusive design lead within city government that can provide overall management of inclusive design processes at the city level.
- » Prioritise improving implementation. This can include:
 - Penalties or sanctions for non-compliance with relevant inclusive design standards that are effective. Local governments to be responsible for monitoring and actioning these.
 - Reward good practice and implementation. This could be in the form of industry recognition awards or financial incentives. A positive approach could have more impact than retrospective sanctions.
 - Ensure consistency of implementation across both public and private developments.
 - Develop building ratings and certification in accessibility akin to environmental sustainability initiatives, to promote inclusive design and encourage healthy competition to do better.
- » Support effective monitoring and evaluation once 'in-use'. This could be through access audits or mystery shopper initiatives to gather feedback on infrastructure and service delivery. This feedback data can then be used to inform the process in a continuous cycle of improvement.

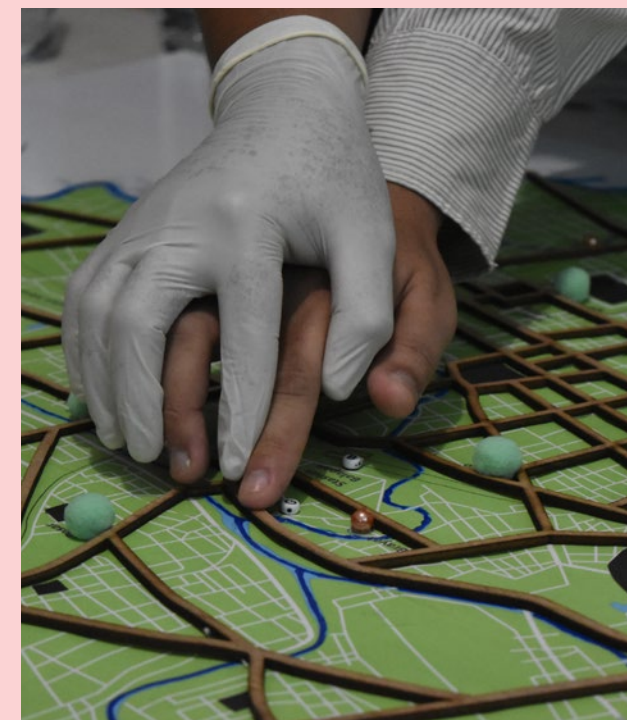
Tools to deliver inclusive design

Throughout the research under AT2030, GDI Hub employed participatory and inclusive design tools as part of the research process. This had two purposes, firstly to incorporate participatory and design-led approaches in the research and secondly, to look at how these tools can be accessible for diverse groups. The tools were developed and refined with the local research partners.

Methods employed included:

- Photo diaries.
- Journey mapping.
- Participatory mapping.
- Card sorting.
- Priority and action setting.

These methods were made more accessible by consulting with local partners, one example of this was Kota Kita developing tactile maps to ensure participants with visual impairments could participate on an equal basis.



An example of the tactile map in use.



An example of how virtual participation is enabled to support further accessibility.

Action area **Operations and services**

Why: The operation of buildings and services is as critical to realising an inclusive city as the physical infrastructure. It is vital that service staff have appropriate training to ensure inclusive experiences. Often, the way in which spaces are used can create new and unplanned accessibility barriers, such as improper storage blocking circulation routes. On public transport, research participants often cited the lack of awareness of operators as the most significant barrier to inclusion.

Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Ensure policies are in place to support inclusive management and operation of public facilities and services.
- » Train all staff and especially staff in customer-facing roles in disability equality and awareness, including inclusive language and communication.
- » Prioritise robust servicing and maintenance policies for public facilities, such as passenger lifts, to ensure access is maintained.
- » Consider the impact of pricing for public facilities and services, offering subsidies to persons with disabilities as appropriate, such as free access for personal assistants and access for assistance dogs.
- » Consider opening times and providing 'quiet' times in public venues and public conveniences to support accessibility.
- » Mandate the provision of 'pre-visit' information on accessibility and provide clear contact details for enquires.
- » Make reasonable adjustments as required and provide access to assistive technology (AT) to support persons with disabilities to access services being offered.

Challenges of inclusive service delivery across transport systems

Throughout the research, participants reported issues in the service delivery of transport options. For example, in Nairobi participants spoke about how Matatu drivers would not stop for disabled passengers as they would not want to fold wheelchairs or remove batteries. Another participant shared that the Matatus no longer stop in dedicated places, so they need to use a visual guide for mobility.

Initiatives to combat this include the training of Matatu bus drivers in Nairobi, through an initiative that facilitated understanding and cooperation, drivers learned to accommodate disabled passengers. This was done by bringing drivers and service users with disabilities together to discuss the issue and become acquainted.



The use and maintenance of facilities is critical to ensuring inclusion. Here, user behaviour is creating new barriers.



Action area

Culture and attitudes

Why: The culture of a city and its residents' awareness of disability inclusion can have a huge impact on how inclusive a city is. Persons with disabilities often experience stigma which can be hugely limiting to living daily life. Cities where the culture was more inclusive were generally perceived to be more inclusive and persons with disabilities reported that feeling included helped overcome some of the physical barriers. Conversely, the lack of accessibility of the built environment was perceived to be stigmatising by creating isolation and separation and by encouraging 'special' treatment of persons with disabilities.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Facilitate an inclusive mindset and culture in the city. This permeates all aspects of civil society and manifests itself in the policies produced, services offered and attitudes presented.
- » Enable persons with disabilities to take part actively in society. Visibility can shift mindsets and help to change attitudes and counter stigma.
- » Work with the media (mainstream and social) as a powerful and effective advocacy tool.
- » Facilitate collaborations with arts and culture. Creative and fun initiatives can support awareness raising.
- » Fund public awareness programmes for the community on disability inclusion and the co-benefits of inclusive environments, framing inclusion as a positive way forward for all.
- » For city government staff engaging in urban development and design, mandate awareness programmes on disability inclusion and culture, working closely with local communities and organisations.

Surakarta 'Repaint the City' initiative, Surakarta (Solo)

"Repaint the City" aims to connect the voices of the deaf community in Solo with visual art expressions as a means of awareness raising and reclaiming of spaces, as well as amplifying the aspirations of political participation of this marginalised group to the public.

The city of Solo is well known for street murals adorning public places. At the same time, Kota Kita found that many young people who are deaf show a great interest in photography and murals due to their strength in visual communication. In 2023, Kota Kita collaborated with practitioners from Gerkatin Solo (a Deaf youth group) and artists from Ruang Atas in organizing Repaint the City: A Participatory Urban Arts Initiative. This program, funded by the VOICE Innovate and Learn Grant, proposed a series of activities for Deaf youth in Solo to collectively build their position through participatory methods in creative placemaking. Kota Kita have gone on to develop guidelines to replicate this methodology. ²⁰



"Repaint the City".

Action area

Neighbourhoods and communities

Why: Cities are diverse. Our research found that cities were often most accessible in central areas and business centres, leaving neighbourhoods and more residential areas as less accessible. Prioritising housing and communities through neighbourhood scale interventions and solutions would benefit city residents.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Prioritise accessibility upgrades in residential areas, with a holistic approach – from housing to public space and streets to enable inclusive communities.
- » Fund the creation of healthy and inclusive public spaces, such as green spaces and play spaces and undertake supporting research to help understand the additional value they bring.
- » Form local access panels to help guide inclusive neighbourhood developments.
- » Pro-actively support local amenities and businesses that prioritise inclusion.
- » Fund and champion community-led solutions.
- » Co-develop programmes with local communities that support access to opportunities for persons with disabilities within their neighbourhoods.
- » Develop guidance for inclusive neighbourhoods for all, considering multi-generational accessibility and inclusion from children to older people, including persons with disabilities of all ages and genders.

“Some of them we have not been able to implement yet, for example, the development of housing units, ensure that they provide disability access. We’ve not been able to undertake housing development yet because we do not have the resources yet.” Research participant in Freetown on the challenges of delivering accessible and affordable housing.

Engaging communities in planning and budgeting in Surakarta (Solo)

In 2007, a new spatial planning law in Solo, encouraged horizontal coordination between cities and communities. Central to this was that community participation, where ground up knowledge and local wisdom is considered and maintained. One of the ways this is done is through the ‘Musrenbang’, a formal discussion forum for prioritising development planning activities and budgeting.

The Musrenbang operates at community, city and regional scales to ensure knowledge is transferred from the ground up. There is the intention to include diverse communities in these consultations and women’s groups have been very active. However, the engagement of persons with disabilities has so far been limited and research participants reported challenges in the accessibility of the forums. In 2018, the Mayor passed a regulation to accommodate everyone regardless of gender, age, ability, etc in the Musrenbang process in 2018.

“We can say that meaningful participation needs the complete involvement of marginalised people. It’s not only talking about their presence or absence but also about how they can participate in such a space to share ideas, convey and discuss different views as openly as possible, enabling them to intervene in such policy changes.”

Participant in Solo



Housing in Freetown is very inaccessible, the steep topography does not help.



Action area

Marginalised communities and informal settlements

Why: Cities can have high levels of inequality, with persons with disabilities often experiencing high levels of poverty and consequently living in more insecure or informal living environments. Such settlements can lack essential infrastructure and services. Unregulated construction can create additional challenges for ensuring accessibility.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Develop localised standards for informal settlements, in consultation with those local communities.
- » Support community-led solutions and construction with locally available resources, in a safe and accountable way.
- » Consider subsidies or benefits to residents who need to make accessible adaptations to their homes.
- » Provide support and recognition for people living in conditions of housing insecurity.
- » Prioritise infrastructure upgrades to the most marginalised communities, providing access to basic services and mobility in informal settlements.
- » Support research to enable inclusive, low-cost, resilient construction in informal settlements.

The Integrated and Inclusive Infrastructure Framework for Kenya (3IF), Kounkuey Design Initiative

The 3IF project in Kenya is a collaboration between Kounkuey Design Initiative (KDI), the Architectural Association of Kenya, Arup East Africa, University College London (UCL) and Akiba Mashinini Trust; funded by the Royal Academy of Engineering. The research conducted helped develop a new, inclusive infrastructure framework for Kenya that focussed on the following four principles:

- Integrating Disciplines
- Integrating Systems
- Including the Excluded
- Including Users

This work urgently address the need for design approaches that are suited to informal settlements.



An example of inaccessible housing in Nairobi.



Action area

Climate action

Why: Cities are increasingly at the forefront of the impacts of climate change and urban interventions to adapt to or mitigate climate change are proliferating. However, these interventions do not routinely integrate accessibility or inclusive design and so risk leaving persons with disabilities behind. Inclusive interventions are needed to ensure resilience in cities such that persons with disabilities can be safe when climate-related disasters occur and are supported in immediate recovery and long-term reconstruction.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Ensure all city climate action plans involve persons with disabilities.
- » Apply accessibility standards to climate mitigation and adaptation infrastructure standards.
- » Engage persons with disabilities in city climate advocacy and ensure their voices are represented in negotiations.
- » Mandate that disaster risk management and emergency response planning is inclusive of persons with disabilities.
- » Ensure that local production and low carbon construction consider accessibility from procurement to use.
- » Recognise the importance of continuous access to assistive technology (AT) in disasters and climate transitions.
- » Raise awareness of how cross-cutting disability inclusion is to climate resilience, from disaster resilience, energy access, to improving water, sanitation and hygiene infrastructure.

Inclusive eco-friendly house, Ulaanbaatar

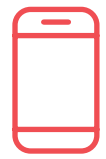
In Ulaanbaatar, an entrepreneur, Oidov Vaanchig, has developed the first attempt of an inclusive PassivHaus in the country.

The completed Inclusive and Eco-Friendly House in Mongolia embraces a strong commitment to disability inclusion and accessibility, considering the impact of air quality on health. Key disability inclusion aspects include:

- Accessibility features, primarily for people with physical impairments.
- Barrier-free design.
- Experiential learning spaces – as a real living laboratory.
- Environmental sustainability through incorporating passive house principles.
- Air quality considerations to combat health risks.



A climate-responsive and inclusive house is critical in the harsh climate of Ulaanbaatar.



Action area

Technology and digital Inclusion

Why: Increasingly cities are turning to digital solutions and technology to make cities more liveable. Smart city approaches are popular and frequently digital devices or technological solutions are seen as a way to overcome other barriers in the built environment. However, such solutions may not be accessible to persons with disabilities due to lack of affordability, unequal energy access or skills gaps due to inaccessible education. Integrating inclusive design to the design of digital solutions and technological innovation in cities can ensure solutions are inclusive for persons with disabilities.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Ensure technology embedded in the city's infrastructure is enabling for all citizens, including persons with disabilities. Smart cities must first be inclusive cities and support all its urban residents, leaving no one behind.
- » Provide incentives for delivering good inclusive digital design and technological solutions.
- » Audit existing digital and technological solutions, as with physical infrastructure, to retrofit accessibility and inclusion where necessary.
- » Don't accept existing standards created for a different context. Ensure policies and standards support the local context and are specific to the digital or technological solution in question.

Mobile as AT

In all cities in the research, mobile phones were a key enabler of inclusion and communication. However, access to such devices is limited due to cost, energy supply and the accessibility of the devices and their applications. Many participants used technology, mobile phones and computers, to work remotely and independently.



Technology can be an enabler of opportunities.

Action area

Recreation, tourism and heritage

Why: Everyone should have an equal right to access and enjoy the cities they live in. Due to limited resources, often recreational spaces are not targeted as a high priority for city stakeholders. However, persons with disabilities often referred to these spaces as key to the improvement of their daily life. Tourism and heritage sites are equally a part of the living, breathing, fabric of a city and should be made accessible for all.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

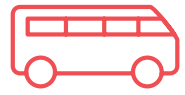
- » Advocate for inclusive recreational spaces, tourism and heritage sites.
- » Provide information on the accessibility of popular destinations, providing up to date pre-visit accessibility information.
- » Fund programmes or initiatives that prioritise inclusive recreation in cities, such as inclusive sports.
- » Leverage innovation to create inclusive experiences for all where heritage and conservation regulations can be a barrier to physical accessibility.
- » Recognise that tourism can be a lever or hook for improving inclusive design. Tourism can be a massive income generator for cities with many tourists being older people with a higher incidence of disability.
- » Recognise that heritage and 'listed' building consent or protection should not be used as an excuse for not delivering disability inclusion. There is always something that can be done to provide a positive experience.

Pedestrianisation of Dashwamedh Ghat to Gadowlia Chowk, Varanasi

The city of Varanasi attracts a lot of older people, particularly visiting Kashi Vishwanath Temple and Dashawamedh Ghat. The route has a number of places to eat and has undergone a pedestrianisation initiative of the route from Godowlia Chowk, incorporating principles of universal design, thereby enabling wheelchair movement on the pathway. The city authority has also started wheelchair renting service, to add convenience for older people on the 1.2 km route.



Recreational activities are important for social life in cities, as seen here in Freetown.



Action area Mobility

Why: To enable day to day life for all city residents, seamless mobility is crucial. Our research found that public transport options are rarely accessible. Private transport options such as taxis and private cars are often unaffordable for those who experience the most barriers. Service provision on transport often lacks disability awareness and last mile transport or door-to-door accessibility are often missed due to a lack of coordination between providers.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Produce a whole city strategy for inclusive mobility.
- » Regulate and design inclusive public transport.
- » Subsidising or funding public transport options to consider affordability and enable mobility for persons with disabilities.
- » Plan for door-to-door accessibility by using an access chain or journey mapping approach .
- » Regulate or advocate for accessible private transport options.
- » Consult with persons with disabilities when planning active travel solutions such as cycling routes and car-free zones.
- » Design inclusive and safe pedestrian environments, applying accessibility standards.
- » Facilitate and advocate for awareness on the use of AT for transport users.
- » Ensure inclusive last mile transport is not forgotten.
- » Low emission zones should consider diverse mobility needs and not penalise persons with disabilities who may be unable to use public transport.
- » Ensure micromobility and e-mobility solutions are developed in consultation with persons with disabilities.
- » Provide adequate and inclusive transport links between the city and informal settlements.

“Being a crutch user, I could take a taxi or any other public transport, but public transport does not come inside the settlement because the paths are too narrow for motorized vehicles. I would need to get to the main road to take suitable transport, but my crutches are too old and too fragile to be used on the steep, uneven, and narrow paths in the settlement.”

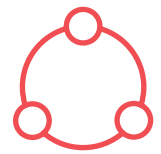
Participant in Freetown

Access chain Methodology in practice – Delhi Metro

The ‘trip chain test’ method is often used to assess the accessibility of user journeys from start to finish. One weak link or break in the chain causes the whole journey to fail. An example from India is the Delhi Metro. While great efforts were made to provide an accessible metro network, the feeder buses that took passengers to and from the metro stations remained inaccessible. This meant, regardless of how accessible the new metro system was, the journey still proved impossible for many people. Some projects may limit themselves to the confines of their ‘red line boundary’. However, the reality is, we must consider how users move from their front door to their final destination in order to deliver effective solutions.



Transport inaccessibility in Ulaanbaatar.



Action area

Data, knowledge and evaluation

Why: Data on the impact of inclusive city interventions is vital to build a case for progressive transformation, long-term support and eventually demonstrate the value of a more inclusive city. Equally vital, is disaggregated data on disability and accessibility barriers in cities so that we know what interventions to prioritise. Learning what works, and lessons learned, through evaluation helps us to improve as an inclusive city must continually evolve. Knowledge sharing between stakeholders, and from city to city, will support a global movement for more inclusive cities.

✓ Actions

To support the creation of an inclusive city, **regional and local governments must:**

- » Share examples and case studies of good inclusive design.
- » Conduct regular accessibility audits.
- » Monitoring and evaluate the implementation and impact of the city's disability inclusion strategy.
- » Monitor and evaluate impact of established legal frameworks.
- » Support initiative and research that will generate good quality disability disaggregated data to help inform the development of legislation, policy, regulations and standards.
- » International cooperation agencies and national and regional governments to encourage and enable platforms for knowledge exchange and collaboration between cities.

From data to action: inclusive cities action plan tool, GDI Hub and Kota Kita

As has been presented in this report, between 2020-2023 GDI Hub and partners conducted four years of research on the state of inclusive and accessible cities. One of the major findings was the importance of action and creating the environments to deliver change. To look at how the gap from knowledge to action can be bridged, GDI Hub and Kota Kita have developed an inclusive cities assessment tool to aid cities to create action plans through a rapid assessment, leading to inclusive city pilots. Each methodology incorporated in the tool delivers a tangible output, and the tool gathers data to support piloting from visioning through to evaluation.

Inclusive Cities Action Plan Tool:

- Stakeholder mapping
- Survey
- Consultations
- Identification of pilots and spaces
- Participatory workshops
- Budgeting tools
- Monitoring and Evaluation

Taking Actions Forward

The action areas highlighted in this report are derived from 4 years of research across 6 global cities in lower-and-middle-income countries. They are intended to help city governments identify their own areas for improvement, working with local persons with disabilities, to develop an action plan, unique to them and their city. The action areas apply to diverse urban sectors, as the research validates that a cohesive and collaborative approach is needed to deliver inclusive cities. This means that good initiatives cannot exist in siloes, stakeholders need to work together, learn from and support each other.

To work with the recommendations and actions in this report, we have developed a rapid assessment tool (forthcoming) that cities can use to benchmark where they are in terms of accessibility and disability inclusion. This can then support a more targeted and prioritised approach, identifying key stakeholders and key action areas in specific cities to develop an action plan for piloting.

While this report signifies the end of this research phase, it is only the mid-point in our programme to support the creation of more inclusive cities. In the next phase, we plan to pilot the findings of this report with cities to test the recommendations and learn how to translate these into action and implementation on the ground.

An inclusive city will always be a work in progress, requiring continued commitment and action to maintain or continue to improve liveability.

If you or your city are interested in working with us in this next phase, please do get in touch.



Appendix

Definitions

Inclusive Design: Can help all human beings experience the world around them in a fair and equal way by creating safe and accessible environments, services and products for all members of the community. Inclusive design is a mindset and a methodology that embraces diversity to create a world that is more intuitive, elegant and usable for all of us.

Infrastructure: Is the physical and organisational structures, services and facilities that support society. Good infrastructure should contribute to inclusive prosperity, including health and wellbeing. The term often refers to; transport, water and waste-water systems, energy and telecommunications industries, and social welfare structures such as health, education and social support systems. ² For the purpose of this report all structures (whether physical, institutional or digital) that contribute to the participation of persons with disabilities in daily life and society fall under the remit of infrastructure.

Inclusive and Accessible Infrastructure and Environments: Promote access, opportunity, participation and equity in society. They take into account the principles of inclusive design, embracing diversity and acknowledging that designing with people who experience the least equity in the built environment, such as persons with disabilities, has the potential to benefit all of us.

Persons with Disabilities: Throughout this report the term 'persons with disabilities' is used as it is more commonly used internationally including in the UNCRPD. However, we acknowledge that in the UK the term 'disabled people' is preferred. At GDI Hub we prefer to use 'disabled people'.

Participants: Local persons with disabilities who took part in the research study.

Stakeholders: Other stakeholders who took part in the research study such as local government representatives, policy makers and practitioners in the urban and built environment sectors.

Accessibility: Refers to enabling access to infrastructure, products, services, and facilities for all people including persons with disabilities. Accessibility is driven by technical standards or design guidelines for the physical and digital infrastructure.

Inclusive: Refers to environments, products, services, facilities and experiences that address the needs of all users irrespective of their age, gender or abilities.

Resilience: The UNDRR define resilience as the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management. ³

Implementation: For this report, implementation is the stage that follows the city planning process for creating an inclusive built environment. It is the stage where planning and policy commitments are executed on the ground.

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