BUILDING
15-MINUTE
NEIGHBOURHOODS

At the Intersection of Sustainable Mobility, Public Spaces, and Climate Action

Implementation Toolkit

Jana Urban Space works towards transforming the quality of life in urban India through the streams of urban planning and design, across both policy and practice. Placing community and environmental sustainability at the heart of design, Jana Urban Space works on policies on land titling, spatial reforms, and street design guidelines, as well as regional plans, masterplans, and neighbourhood-level plans. The organization also focuses on the improvement of road infrastructure (Tender S.U.R.E.), rejuvenation of public spaces (markets, bus stands, lakes, parks, heritage and community centres), and the architecture of affordable housing.

Mercedes-Benz Research and Development India (MBRDI) is the largest research and development centre for Mercedes-Benz Group AG outside of Germany. Established in 1996, MBRDI plays a prominent role in the development of technologies like connected, autonomous, and electric in the world of mobility. With offices in Bengaluru and Pune, MBRDI currently employs over 8,500 professionals engaged in digital product development, interior component design, IT engineering and services.

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June 2024

EXECUTIVE SUMMARY

Assessing quality of life in Indian cities

Growing cities need robust planning in order to provide everyone with quality services and infrastructure, in a sustainable manner. With more than half of the country's population expected to live in cities by 2050, it is crucial to relook at spatial planning practices in India to provide them good quality of life.

The 15-minute neighbourhood is a method to ensure this: quality of life in neighbourhoods is enhanced by the availability, accessibility, and quality of amenities reachable within a 15-minute walk from one's residence.

Catalyst for change

In response to these challenges, the project **Building 15-Minute Neighbourhoods - at the Intersection of Sustainable Mobility, Public Spaces, and Climate Action** emerges as a catalyst for change.

It is an initiative by Jana Urban Space Foundation and Mercedes-Benz Research and Development India (MBRDI) with a vision to enable a model for people-centric, low-carbon cities with sustainable neighbourhoods at

their core. The mission seeks to break away from piecemeal development, emphasising a framework for neighbourhoods that integrates sustainable mobility, public transit networks, and a network of open/ recreational spaces.

To address the need of 15-minute neighbourhoods in urbanised and densely populated urban areas, Jana Urban Space developed a set of design guidelines tailored to guide infrastructure initiatives at a neighbourhood level.

The vision for these guidelines was conceptualized through the **Move-Play-Sustain-Include framework**. Move emphasizes sustainable active mobility, Play focuses on safe and vibrant public spaces, Sustain prioritises sustainable markets, and Include promotes inclusive social spaces.

The approach taken in the guidelines goes beyond conventional planning processes, offering a flexible and complementary approach. They offer cities an option to focus on projects that are quick wins, addressing contextual planning gaps, and avoiding siloed developments with neighbourhood-specific proposals.

Answering the question, **"How do 15-minute neighbourhoods get created?"** took the form of a 3P approach: Policy, Plan, and Project.

Existing policies were reviewed, and new ones were proposed for development, transportation, and sustainability. Ideas for neighbourhood specific plans and projects were formulated, taking into account their distinct characteristics with the aim of improving life in these neighbourhoods.

WHY THIS TOOLKIT?

This toolkit is an extension of the main guidelines, deriving its concepts directly from the principles outlined within. It serves as a **practical tool for translating these principles into actionable steps**, providing stakeholders with a clear pathway to implement the 15-minute neighbourhood concept in urban areas.

It has been designed to support administrative leaders and decision-makers in implementing these concepts in their cities, especially those already facing urban challenges. The toolkit offers comprehensive guidance on institutionalizing this concept through a structured programme equipped with essential tools and readiness needed for successful implementation.
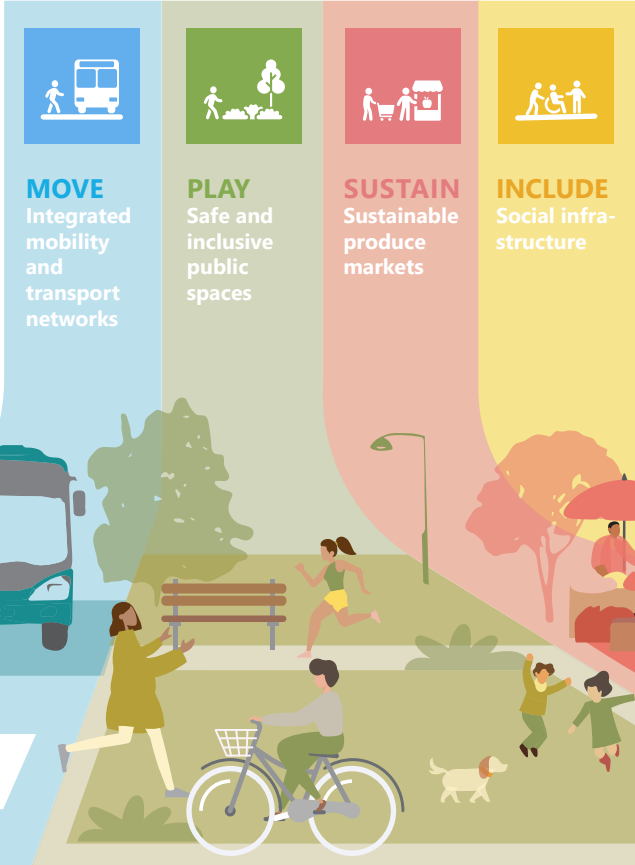
VISION

FOR A 15-MINUTE NEIGHBOURHOOD

A 15-minute neighbourhood focuses on **enhancing residents' quality of life by helping them meet most of their daily needs within 15-minutes of their homes** by sustainable modes of transport like walking and cycling.

These neighbourhoods have been given different names by different geographies, however, they essentially promote the same idea – **compact and walkable neighbourhoods where residents have easy access to good-quality amenities through multiple modes of transport**.

A 15-minute neighbourhood is **walkable, vibrant, and inclusive.**

MOVE
Integrated mobility and transport networks

PLAY
Safe and inclusive public spaces

SUSTAIN
Sustainable produce markets

INCLUDE
Social infra-structure

Accessibility for 'everyone at all times' is the core principle of the 15-minute neighbourhood concept. The *Building 15-Minute Neighbourhood Guidelines* propose four founding principles to create a neighbourhood accessible to all. These envision that **residents can move, play, eat, and be included within the urban fabric**. This vision encourages a citizen-centered design approach of inclusive neighbourhoods.

CONVENIENCE STORE

Improved mobility, accessibility and connectivity through a network of non-motorised and public transport

Access to sustainable public spaces such as parks, playgrounds, and water bodies that improve environmental sustainability, climate responsiveness and increase civic pride

Access to local produce markets that promote sustainable farming and consumption patterns, reduce farm-to-table distances, and increase economic opportunities

Integrate social infrastructure for the vulnerable and urban poor by creating community halls, anganwandis and safe spaces for girls

IMPACT
OF 15-MINUTE NEIGHBOURHOODS

Indian cities' urbanisation is exceeding the efforts put in by policy and decision-makers. This is resulting in persisting or rising challenges in the quality of life.

Cities that are healthy, equitable, sustainably managed, and economically thriving must have **strong spatial planning**. It is **crucial to integrate plans at several geographic scales**, such as regional, municipal or city, neighbourhood or ward, in order to convey the region's vision to each particular urban settlement and, ultimately, to the neighbourhood's quality of life for its citizens.

This is where the 15-minute neighbourhood concept can **support the overall vision by facilitating place-based development through organised dialogue and collaboration.**

CLIMATE

Focus on decarbonisation through public transport, pedestrian-friendly streets and increasing green cover in urban areas. In the longer run, they ease urban heat-island effects, reduce flood risk and improve biodiversity.

PUBLIC HEALTH

There are numerous physical and mental health benefits to active travelling, cleaner air, access to healthy food, and quality green spaces. Well-planned neighbourhoods combat the spread of communicable diseases and prevent non-communicable ones such as diabetes, hypertension etc.

GENDER

By reducing commute times and improving access to essential services, the burden on the citizens is reduced, especially women who are juggling between work and personal life. They also create safe public spaces for women living alone, single mothers, and those from marginalized communities.

INCLUSIVITY

A 15-minute city strategy works in close collaboration with local people, supporting and designing streets and active travel schemes while keeping in mind underserved areas and the most vulnerable users.

WALKABLE NEIGHBOURHOODS
ACROSS THE WORLD

Research shows there are **multiple and interrelated environmental, heath, social, and economic benefits** associated with walkable neighbourhoods, that have positive impacts on residents and their quality of life.

1 Denmark

The WHO estimates that the health benefits resulting from active transport, such as walking and cycling, can outweigh the costs of implementing pedestrian-friendly infrastructure by a ratio of 5:1.
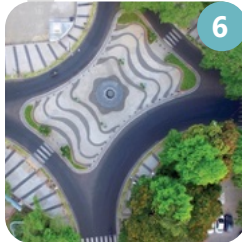

2 Paris, France

With the introduction of pedestrian friendly streets under the Paris Breathe program, the smog reduced by 40% in a single day in 2015.

3 Shanghai, China

Pedestrian-friendly streets, widened sidewalks, bike lanes improved walkability in Shanghai, and boosted local economy and tourism.

Global Recommendations on Physical Activity for Health: WHO

Walkable and bike-friendly (built) environments encourage people to incorporate physical activity into their daily routines, which in turn can help prevent chronic diseases such as obesity, cardiovascular diseases, and diabetes.

4 Dublin, Ireland

A redesigned neighbourhood in Dublin, Ireland that promotes walking and non-motorised transport for commute, led to a 300% increase in employment due to ease of first and last mile connectivity.

5 Barcelona, Spain

Studies estimate that Barcelona's Superblocks have reduced nitrogen dioxide pollution by 25% in some areas, by encouraging active mobility for short trips.

6 Bengaluru, India

Redeveloped roads with walkable footpaths had a positive impact with significant increase (30% in residential and 50% in commercial) in property values in neighbourhoods in Bengaluru.

Why we need to rethink development strategies for Indian cities

Indian cities are expected to host over 800 million people by 2050, which is about half of the country's population. If this growth is not addressed efficiently, it will further burden the already stretched city infrastructure and services. There is an **urgent need to address quality of life, sustainable development and equitable access to urban infrastructure** in Indian cities.

PROPOSED ACTION
FOR 15-MINUTE NEIGHBOURHOODS IN YOUR CITY

Considering India's rapid urbanisation, policy experts, decision-makers and planning authorities have to **plan cities that respond to emerging urban challenges while delivering vibrant and inclusive neighbourhoods**.

The 15-minute neighbourhood concept is a significant step forward from the current planning approach – retrofitting an uncontrolled urban sprawl. Therefore, the implementation must be **supported across different levels of urban governance and development** to improve residents' quality of life.

Policy experts can adopt any approach from the **3P framework of Policies, Plans, and Projects** to enable contextual development of neighbourhoods. These principles would enable **place-based and contextual development** of neighbourhoods through laws and regulations, spatial plans and surgical urban interventions.

- Land Utilization Policy
- Transit Oriented Development
- Traffic Management Policy
- Accessible streets
- Safety policy
- Sustainability Policies

POLICIES
Laws and regulation

After analysing the current policy landscape, innovative policies in the realm of development, mobility, and sustainability can be formulated.

PLANS
Spatial plans

Spatial plans can build on the context, constraints, and aspirations of an area in order to create a vision for development and a unique identity for

- Local Area Plan
- Mobility Plan
- Special Purpose Plan
- Open Space Plan

MOVE: Non-motorised transport (NMT) infrastructure, Road redevelopment, Intersection redesign and junction improvement, Improved and connected public transit nodes

PLAY: Parks and playgrounds, waterfronts, Spaces left over after planning (SLOAP), Places of worship, Shared streets

SUSTAIN: Neighbourhood level markets

INCLUDE: Safe schools, Community infrastructure

PROJECTS
Urban interventions

Within these spatial plans, surgical interventions can be developed to mitigate local challenges and improve immediate surroundings to provide better quality of life in neighbourhoods.

PREPARING
YOUR CITY FOR 15-MINUTE NEIGHBOURHOODS

The **readiness of a city** to develop 15-minute neighbourhoods can be determined by four main characteristics:

1. **Willingness** – A champion within the government to advocate, a buy-in from state and city government representatives and community-based programs to engage with citizens

2. **Capacities** – In-house technical capacity to implement and maintain 15-minute neighbourhoods

3. **Resources** – Local budgeting mechanisms or a funding system with capital, operational and maintenance expenses to run the program

4. **Mandate** – Readiness to implement necessary legal and regulatory provisions

Gathering information regarding these **readiness factors will help assess the feasibility** of developing neighbourhoods.

*This Toolkit and the **Building 15-Minute Neighbourhoods Design Guidelines** must be referred to as guiding documents by policy and decision-makers to arrive at the best possible outcomes after **considering the city's skill, will, and money**.*

Here's what different stakeholders can do for the 15-Minute Neighbourhood Program.

" *As an administrative representative, I can advocate for the 15-minute neighbourhood concept to be incorporated into state and city-level policies and plans.*

" *As the Chief engineer of a development agency I will coordinate with other municipal departments and technical experts to deliver high-quality infrastructure projects.*

" *I can design underutilised spaces in neighbourhoods as an urban development practitioner, to create vibrant and safe neighbourhoods.*
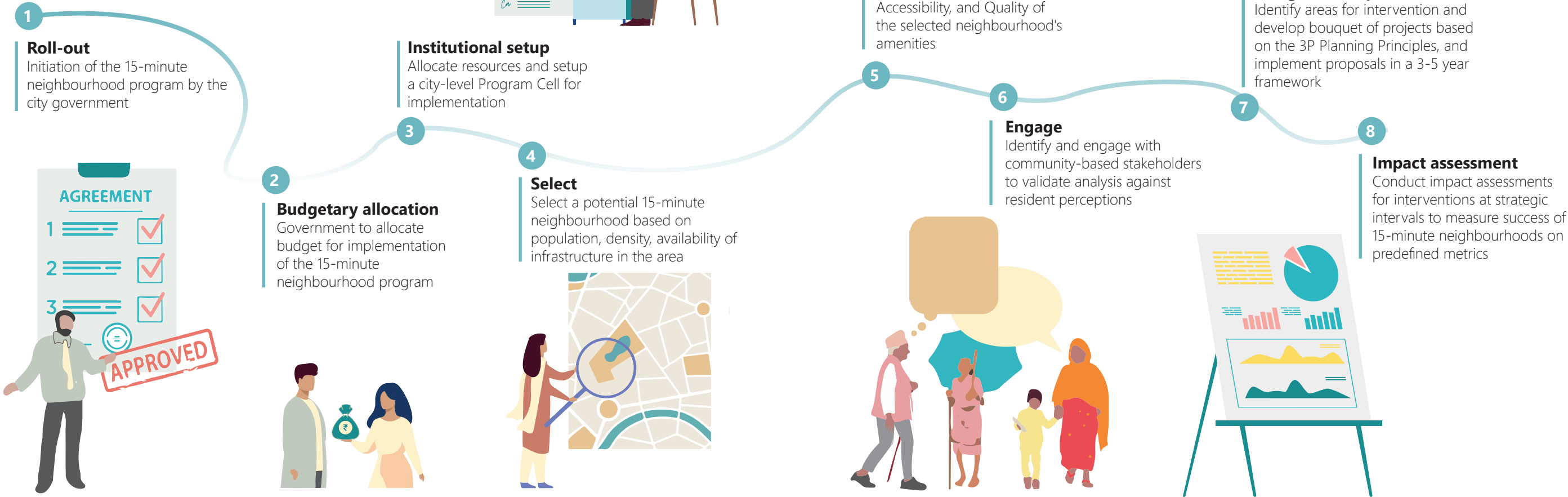
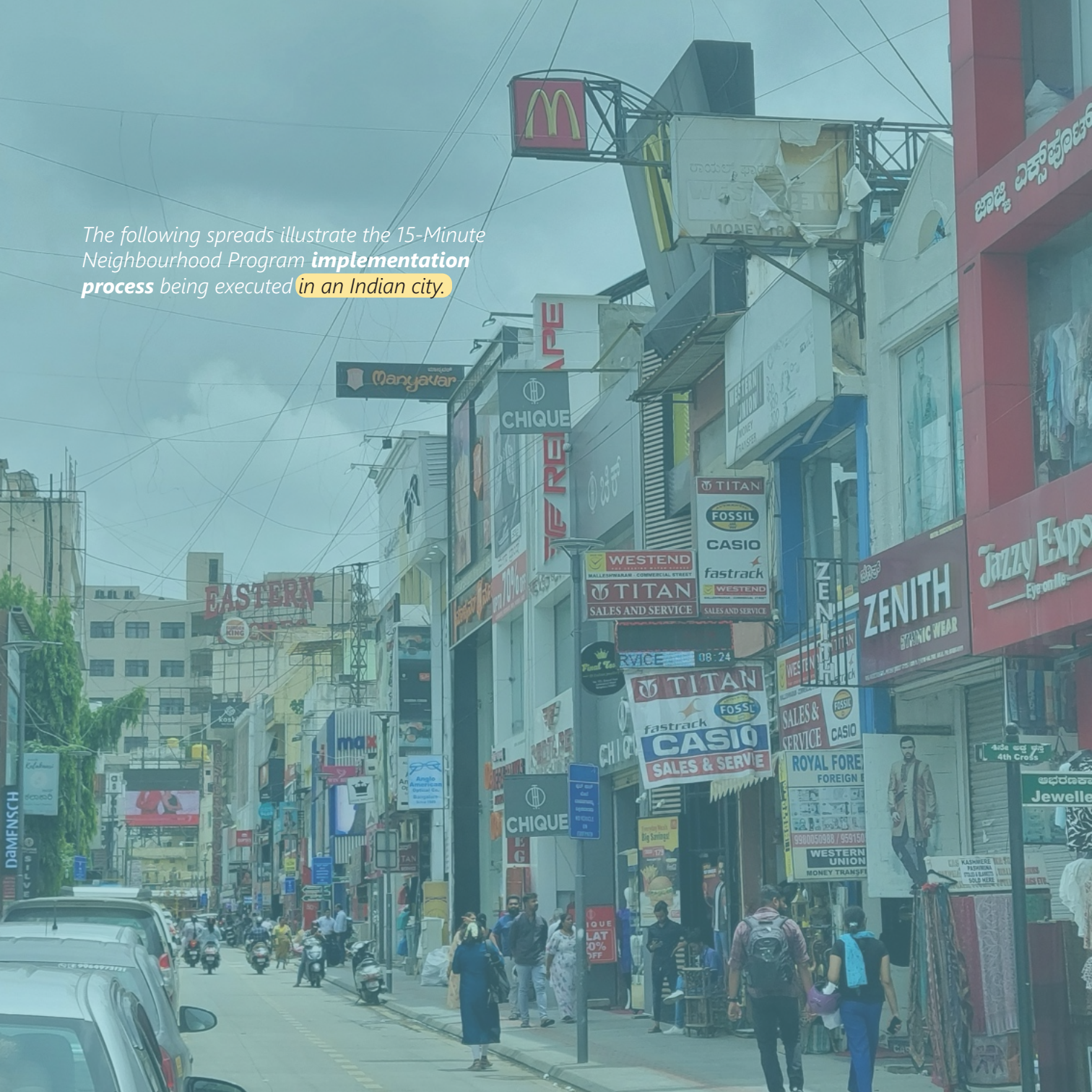" *As a resident, I look forward to seeing the proposals for my area.*

THE "HOW-TO"

ON DEVELOPING 15-MINUTE NEIGHBOURHOODS IN YOUR CITY

An 8-step implementation process has been envisioned to equip you with the knowledge of delivering a 15-minute neighbourhood through a **15-Minute Neighbourhood Program**.

1

Roll-out
Initiation of the 15-minute neighbourhood program by the city government

2

Budgetary allocation
Government to allocate budget for implementation of the 15-minute neighbourhood program

3

Institutional setup
Allocate resources and setup a city-level Program Cell for implementation

4

Select
Select a potential 15-minute neighbourhood based on population, density, availability of infrastructure in the area

5

Analyse
Analyse the Availability, Accessibility, and Quality of the selected neighbourhood's amenities

6

Engage
Identify and engage with community-based stakeholders to validate analysis against resident perceptions

7

Design and implement
Identify areas for intervention and develop bouquet of projects based on the 3P Planning Principles, and implement proposals in a 3-5 year framework

8

Impact assessment
Conduct impact assessments for interventions at strategic intervals to measure success of 15-minute neighbourhoods on predefined metrics

AGREEMENT

APPROVED

*The following spreads illustrate the 15-Minute Neighbourhood Program **implementation process** being executed in an Indian city.*

1 ROLL-OUT

The city will start the 15-Minute Neighbourhood Program and will help with coordination, decision-making, and getting government approvals for the program.

2 BUDGETARY ALLOCATIONS

The city will set aside the required funds to implement the initiatives in the 15-Minute Neighbourhood Program. These funds include capital expenses, operation expenses, and maintenance expenses to ensure the program runs smoothly. Additionally, the city has the option to explore relevant schemes funded by the Union or State government in areas such as mobility, urban development, smart cities, urban water, and greening.

CITY MUNICIPAL CORPORATION

City Municipal Corporation
invites you to the
launch of
15 Minute Neighbourhood Program
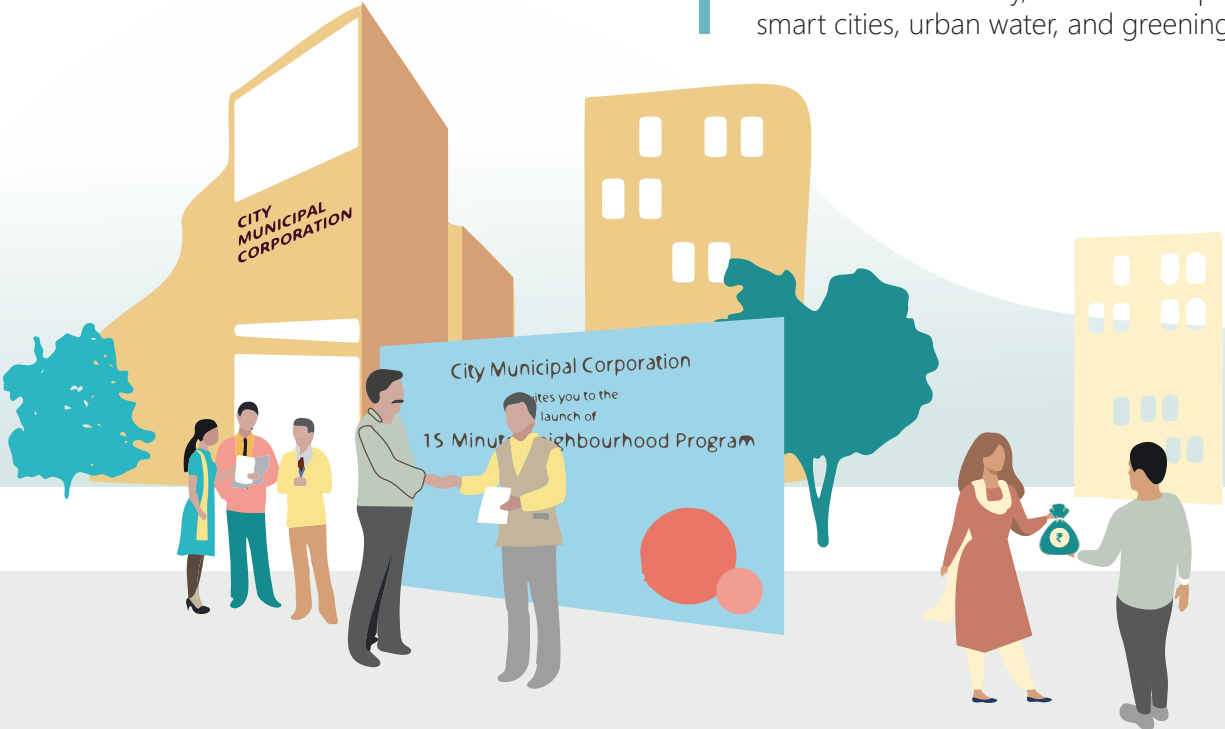
3 INSTITUTIONAL SETUP

While a steering committee constituted of city ULB representatives will be the apex body of the 15-Minute Neighbourhood Program, they will constitute a **city-level 15-Minute Neighbourhood Program Cell which will oversee the program implementation**. This cell must consist of architects, urban designers, urban planners and engineers, as well as consultants and subject matter experts as required, along with the city Mayor. Ward committees may also be included as implementation partners for the Program Cell at the neighbourhood-level.

The Program Cell will be **responsible for policy analysis and recommendations, inputs into the program design, and operationalising key reforms for the program**. Other responsibilities of the Program Cell will include goal-setting, role clarity and research. The cell will also aid in the training and knowledge dissemination of the program basis the Building 15-Minute Neighbourhoods Guidelines.

Refer Building 15-Minute Neighbourhood Guidelines - Chapter 3 Pathways for implementation

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Working groups in the institutional setup

Steering Committee (at the State Level)

Principal Secretary, UDD Secretary, other Department representatives

Steering Committee (at the City Level)

Municipal Commissioner, Vice Chairman

15-Minute Neighbourhood Program Cell

Mayor, corporator, bureaucrat & urban designers, urban planners, engineers

Municipal departments

Planning commission, transport corporation, utility agencies

External consultants

Climate, disaster management, gender, health

Community-based organisations

Ward committees, RWAs, SDAs, CSOs, NGOs, and SHGs

Proposed design for the institutional setup, with roles and responsibilities

Steering Committee

- Overall coordination, direction-setting and decision-making
- Allocating resources for interventions and proposals

15-Minute Neighbourhood Program Cell

- Research, knowledge dissemination and guidance
- Conducting assessments, gathering and analysing data
- Policy analysis and recommendations
- Proposing interventions and design solutions
- Input into program design
- Monitoring and evaluation

Municipal departments

- Specific program design
- Implementation support

External consultants

- Knowledge dissemination
- Input into program design
- Implementation support as needed

Community-based organisations

- Providing feedback and perceptions of neighbourhood and surrounding environment
- Validating proposed designs
- Implementation support as needed

4 NEIGHBOURHOOD SELECTION

The Program Cell, along with relevant government stakeholders, will **select one high-impact neighbourhood for development within the available funding**, or neighbourhoods that require redevelopment on priority. This neighbourhood may be chosen based on the selection criteria provided in the *Building 15-Minute Neighbourhood Guidelines*.

Administrative factors
Administrative boundaries such as municipal wards and planning norms such as land use and population distribution across the city

Transport infrastructure availability
Transport infrastructure for seamless movement of citizens within and beyond their neighbourhood

Environmental factors
Developments must be attuned to the natural ecosystem of the city

Socio-economic factors
Diverse socio-economic landscapes capture needs and aspirations of multiple sections of society

Refer Building 15-Minute Neighbourhood Guidelines - Chapter 4 Identifying a potential 15-minute neighbourhood

5 NEIGHBOURHOOD ANALYSIS

After selection, the Program Cell must **conduct in-depth analysis of the existing conditions of the neighbourhood's amenities** as per the Availability, Accessibility, and Quality methodology, including inputs from citizens. This analysis must inform their proposals to help deliver context-based and impactful solutions.

1 AVAILABILITY

Create a baseline study of the neighbourhood to assess whether the recommended amenities are available within a 15-minute walking distance.

Refer Building 15-Minute Neighbourhood Guidelines Chapter 5 - Baseline assessment

CITIZEN GENERAL STORES

2 ACCESSIBILITY

Gather data on access to the aforementioned amenities by sustainable modes of transport.

3 QUALITY

Engage with local communities to capture valuable information of their spatial perceptions and needs.

6 CITIZEN ENGAGEMENT

In order to deliver impact and context-based solutions in the selected neighbourhood, the Program Cell must **identify community stakeholders and engage with them**. These stakeholders may be identified based on the Stakeholder Influence vs. Impact Matrix recommended in the *Guidelines*.

Refer Building 15-Minute Neighbourhood Guidelines Chapter 6 - Citizen engagement

The cell must present their analysis through **focus-group discussions (FGDs) and events with the community**, as they will provide critical insights and understanding of the local context. All feedback and suggestions from them must be recorded and incorporated into proposals as relevant.

Welcome to the neighbourhood fair

7 DESIGN AND IMPLEMENTATION

After reflecting on the results of neighbourhood analysis and community engagement feedback, the Program Cell is to **develop proposal(s) for the selected neighbourhood**. The proposal must be as per the Policy, Plan, Project approach of the *Guidelines*. Relevant surveys and studies must be conducted to develop the proposals.

Refer Building 15-Minute Neighbourhood Guidelines Chapter 2 Developing a 15-minute neighbourhood and Chapter 7 Project identification

Before

After

The **ULB representatives (Steering Committee) is to provide feedback on the proposal(s) and release funds after approval**. Post approval, the Program Cell will prepare necessary documents such as detailed project reports (DPRs) and/or tender drawings, which will be reviewed and approved for implementation.

The Program Cell must **ensure quality standards and practices are followed to execute the project(s)**. They must ensure all necessary training and capacity building is undertaken for contractors, labourers and other personnel.
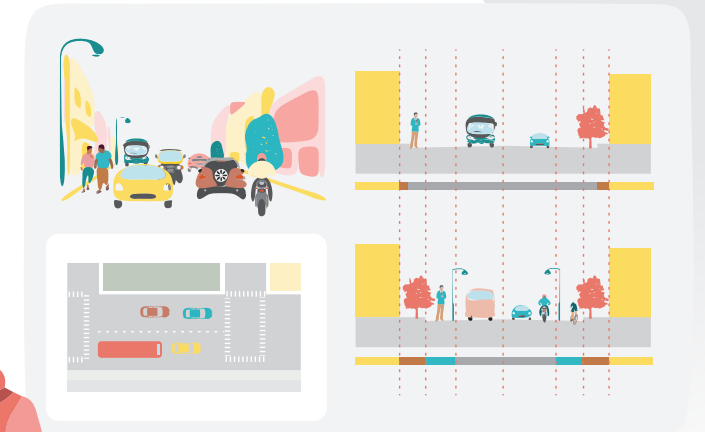
8 IMPACT ASSESSMENT

The Program Cell will **conduct impact assessment studies to understand the compliance and impact of the executed project(s)** in the selected neighbourhood. These will be conducted at strategic intervals on predefined metrics such as climate, gender, public health, etc. They will further present these findings to the Steering Committee and other ULB representatives to advocate for scale-up of the 15-Minute Neighbourhood Program across other neighbourhoods in the city.

The results from impact assessment studies may also be incorporated into the Building 15-Minute Neighbourhood Guidelines.

NEXT STEPS

After the execution of proposal(s) for the selected neighbourhood(s) and basis the impact assessment, the Program Cell may suggest 3-5 neighbourhoods for development under the 15-Minute Neighbourhood Program to the ULB.

Post approval for scale-up, the Program Cell will follow steps 4 to 8 to redevelop the newly selected neighbourhoods. The impact assessment from all these neighbourhoods can be taken to ULBs of other cities in the state to advocate for the adoption of the 15-Minute Neighbourhood Program.

BUILDING 15-MINUTE NEIGHBOURHOODS GUIDELINES

*The frameworks and processes mentioned in this Toolkit have been further elaborated in the **Building 15-Minute Neighbourhoods Guidelines.** These Guidelines provide principles to **plan and design a 15-minute neighbourhood in a developed city**. It delves into the need for walkable neighbourhoods, and highlights the features and benefits of such a neighbourhood. These Guidelines envision an **evidence-based and collaborative approach to urban transformations**. Therefore, they also provide an entry point to **identify urban development strategies**, while facilitating an inclusive and participatory approach for planning them.*
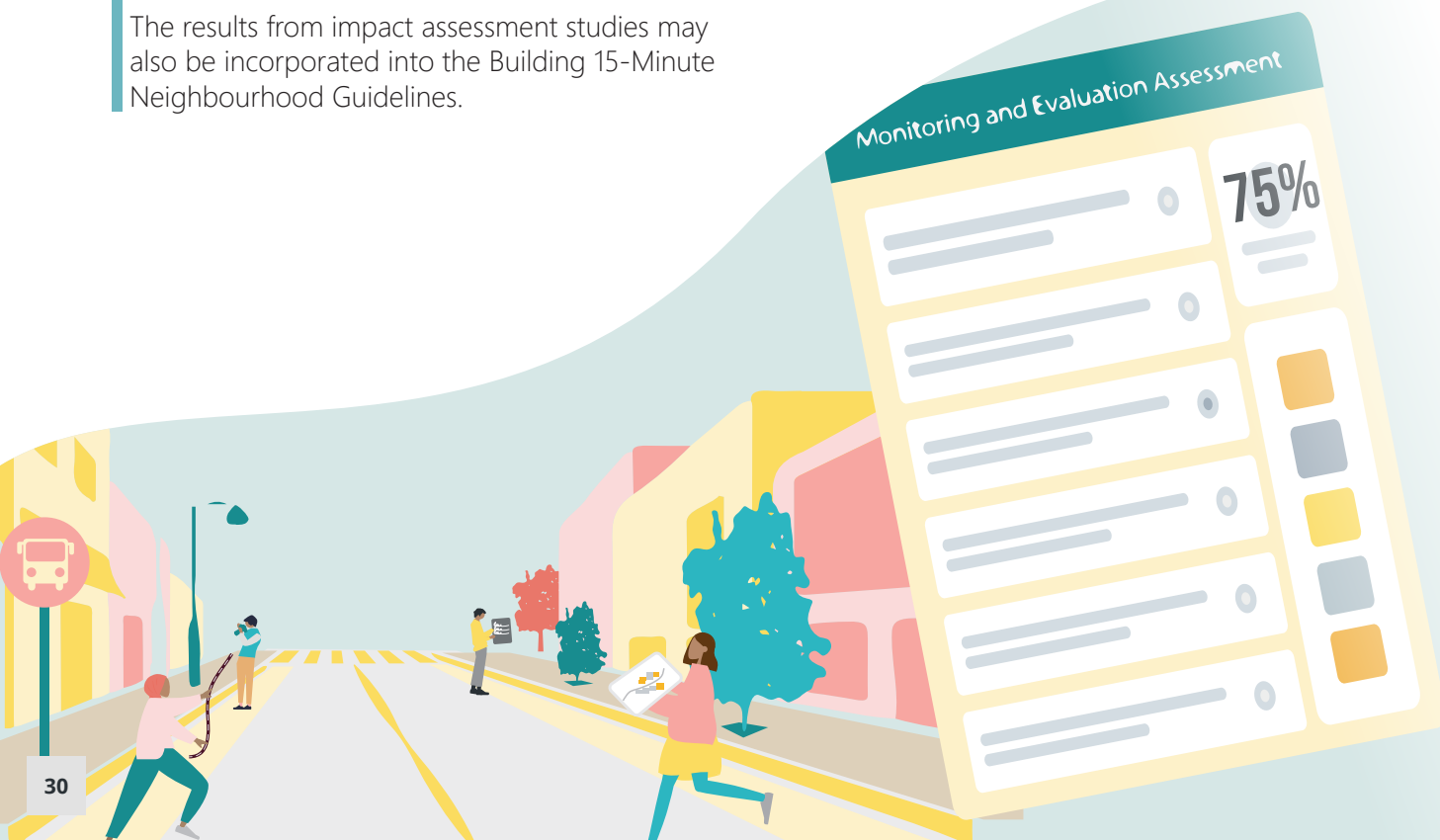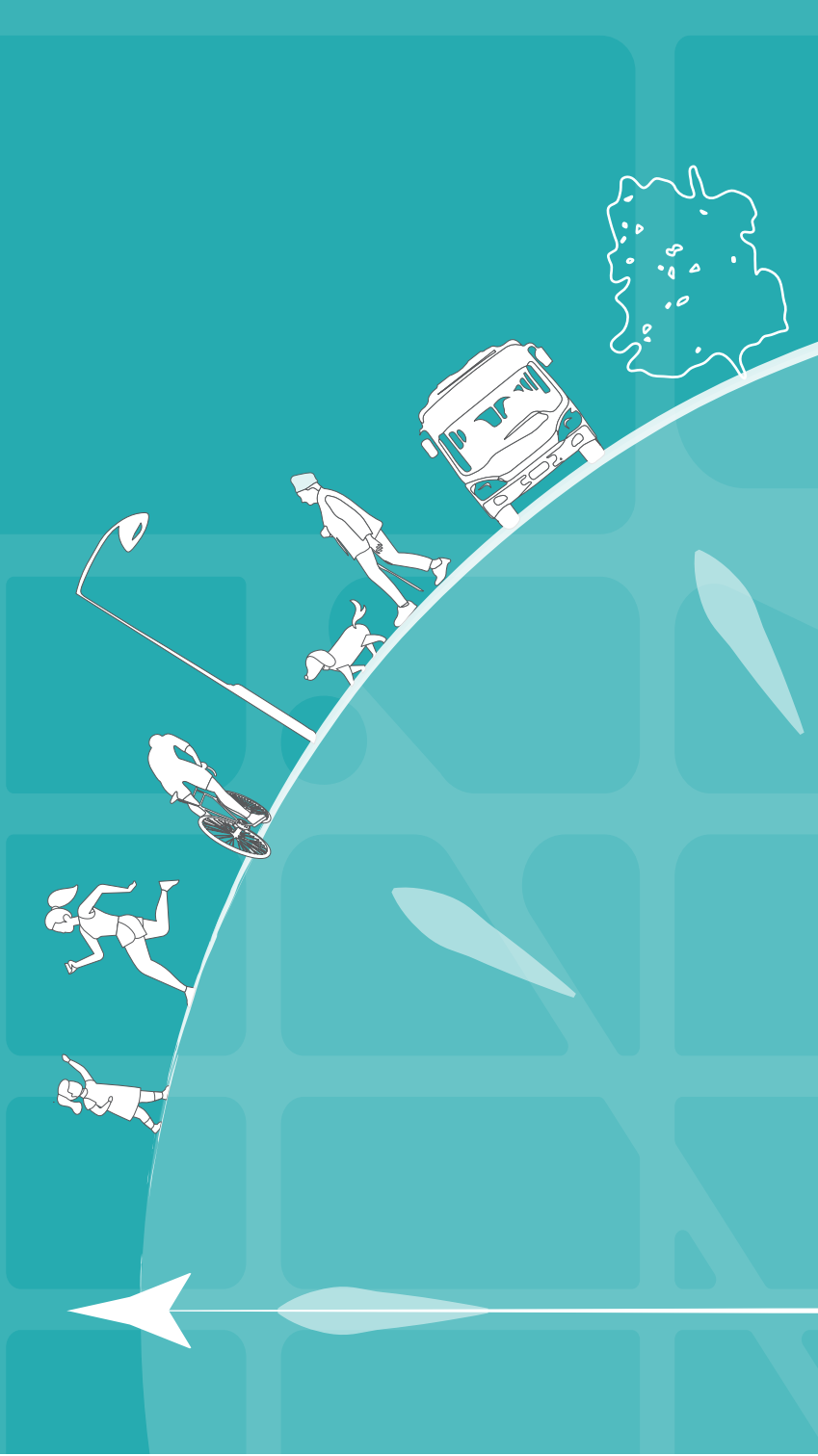
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