

# BASELINE ASSESSMENT REPORT

## INFANT, TODDLER, CAREGIVER CENTRIC URBAN MOBILITY FOR INDIAN CITIES

Bernard van Leer  Foundation



 WRI INDIA



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## Abbreviations

AVL	Automatic Vehicle Location
BRTS	Bus Rapid Transit Systems
CBD	Central Business District
ECD	Early Childhood Development
FoB	Foot over Bridge
GDCI	Global Designing Cities Initiative
GoM	Government of Maharashtra
IPT	Intermediate Public Transport
IRC	Indian Road Congress
ITCs	Infant, Toddlers, and their Caregivers
ITS	Intelligent Transport System
MoHUA	Ministry of Housing and Urban Affairs
MoRTH	Ministry of Road Transport & Highways
NACTO	National Association of City Transportation Officials
NGOs	Non-government Organisations
PMC	Pune Municipal Corporation
PT	Public Transport

## Definitions

ITC	ITC is an abbreviation of Infant, Toddler, and Caregiver. 'ITCs' come in all kinds of combinations of ages and genders. The term refers to a grouping of at least two people, the youngest of whom is under five years old. The caregiver is not necessarily a mother or father- or at least, not only. Caregivers might be a nanny, older sibling, grandparents, aunt or uncle, either alone, or accompanying the mother.
Urban Mobility	Infrastructure and services, provided for moving people from one location to another location within or between urban areas.
ITC-friendly Urban Mobility	Urban mobility that is convenient, resilient, and leading to positive behaviour change towards ITC while catering to the needs and is safe, accessible, inclusive, green, and playful.
ITC-destinations	Land uses, destinations and services in the city that are often visited by infants, toddlers, and caregivers.
ITC priority zone	Mobility infrastructure and services that are frequently used by ITCs to access ITC destinations in the city. These zones are a combination of publicly operated and privately operated mobility services, mobility infrastructure such as streets, public transport stations, bus stops as well as IPT stops including shared auto rickshaw or taxis.
Convenient	With respect to ITC- friendly mobility, the term convenient refers to mobility that is catering to the care-giving needs such as amenities for care-giving, comfortable movement in the city and pleasant spaces during pauses while moving in the city.
Resilient	With respect to ITC-friendly mobility, the term resilience is defined as the ability of a mobility system to move people around in the face of one or more major obstacles to normal function. These obstacles can include extreme events: human-made or natural, and equipment or infrastructure failures.
Behaviour change	A behavioural change can be a temporary or permanent effect that is considered a change in an individual's behaviour when compared to previous behaviour. With respect to ITC- friendly mobility, behaviour change towards ITCs, for enhancing their experience as they commute anywhere and everywhere in the city is considered.

## Definitions

ECD	An integrated concept that cuts across multiple sectors - including health and nutrition, education, and social protection - and refers to the physical, cognitive, linguistic, and socio - emotional development of young children from conception up to age 8 (as per "United Nations")
Anganwadi	The word Anganwadi means "courtyard shelter". They were started by the Indian government in 1975 as part of the Integrated Child Development Services program to combat child hunger and malnutrition.



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## Executive Summary

### State of ITC related Urban Mobility in India

Young children are an indicator species, a city that is planned by considering the accessibility, safety and experiential needs of young children is a city that is inclusive for all age groups and abilities. The visible presence of young children of different age groups and backgrounds, with and without their caregivers, is a sign of healthy, flourishing and thriving urban settings. Hence, for cities to flourish, it is young children of the city that should first flourish.

India is one of the youngest countries in the world. The data suggests that every fifth child in the world lives in India. Children between the ages 0-6 make up 9.7% of the population of India (2011 Census).<sup>1</sup> The data also helps us understand that nearly 138 million children in India are in the age group of 0 to 5, of which 36.6 million children live in urban areas, i.e., the cities.<sup>2</sup> Various scientific studies suggest that the built environment that these young children interact with and the cities that they grow up in play a significant role in their health and educational outcomes.<sup>3,4,5</sup>

However, the on-ground scenario suggests that, traditionally the city planning, and mobility policies have prioritized work related commutes of able-bodied males, and excluded the mobility needs of young children and their primary caregivers, which in the most contexts are women, either mothers, grannies, or nannies. Lack of inclusive, safe, accessible, reliable, convenient, clean, and comfortable urban mobility services and infrastructure make it difficult for young children and their caregivers to move around in the city.

### Ongoing efforts to Retrofit ITC Lens

Examples from various parts of the world as well as from India highlight that urban mobility and thus our cities can be planned to respond to the accessibility and mobility needs of infants, toddlers, and their caregivers (ITCs). Udaipur, for example, has converted encroached parking lots into community chowk which improved neighbourhood mobility. Pune improved access to city parks by providing safe crossing infrastructure for young children.<sup>6</sup> Hubli-Dharwad BRTS in India has introduced a policy of Pram sharing at BRT stations for ease of commute within station areas, and introduced reserved seats for women, senior citizens, and persons with disabilities. Moreover, advance information on bus arrival and safety within the buses were enhanced through technological interventions like Intelligent transport system (ITS) and CCTV surveillance system.<sup>7,8,9</sup>

Further, Nurturing neighbourhood challenge<sup>9</sup> hosted by Smart City Mission, Ministry of Housing and Urban Affairs (MoHUA), Government of India in collaboration with BvLF and WRI, India has introduced planning, design, and co-creation of ITC-friendly neighbourhoods in ten selected cohort Indian cities. While cities are realizing the need for ITC-friendly public spaces and ITC-oriented zones, it is important to understand how young children and their caregivers access all the frequent destinations such as primary healthcare centers, Anganwadi, gardens, and parks.; that are required for the early childhood development.

### Investing in Early childhood related mobility = Investing in sustainable future

Currently, India's economic growth depends on various factors of investments and the types of investments it does for the future generation will drive its future growth. The focus on unobstructed movement of vehicles in urban mobility may not be the best investment for India to achieve its sustainable future goals. Investing in mobility that helps ITCs commute comfortably in the city and access opportunities of growth will enhance their capacities for participating in future economic growth. Caregivers with young children are often seen trip chaining, visiting multiple destinations in one trip as part of their daily routine. Investing to facilitate their travel will save resources in terms of time, cost, human efforts; therefore, ensuring sustainable future for India.

Each investment in improving early childhood development is said to deliver positive results in future generations potentially leading to better economic growth of the country.<sup>10</sup> Therefore, investing in early childhood related mobility will undoubtedly be the best investment for India's sustainable future.

### Structure of the Baseline Assessment Report

This report analyses documents, particularly policies, plans, and guidelines, related to planning, design, development, operation and maintenance of different modes of urban mobility, and the supporting built environment at all four levels of Governance:

- International-level,
- National-level,
- State-level, and
- City-specific

These documents are from the following key areas concerning movements and mobility of all street users in urban settings:

- Public transport planning,
- Mobility planning,
- Street corridor design,
- Women & child development,
- Developmental planning,
- Disaster management,
- Climate action, and
- Urban parking policies

The focus of this project is the **State of Maharashtra** and the **City of Pune**; hence this report primarily focuses on the Maharashtra and Pune specific planning policies and other relevant documents for retrofitting infants, toddlers, and caregivers' lens.

As a part of the baseline assessment, each of the 26 documents are reviewed comprehensive offerings of these documents, their gaps, opportunities, and the way forward addressing the mobility needs of ITCs are presented in this report. The gaps and opportunities are assessed against the objectives of the Infant, Toddler, Caregiver-friendly Neighbourhood (ITCN) framework developed by BvLF in collaboration with the Smart Cities Mission, Ministry of Housing, and Urban Affairs (MoHUA).

The assessment indicators are in line with five ITCN objectives: **Accessible, Safe, Inclusive, Green, and Playful**. The way-forward brings this assessment together in the categories of the programmatic overarching themes: **Convenient, Resilient and Behaviour Change**.

These themes focus on ways to make urban mobility convenient and resilient and can contribute to positive behaviour change towards ITCs. The expected outcome of this report is as follows:

- Analysis of existing policies and guidelines in the domain of urban mobility at various scales- National, state and Pune city
- Scope of improvement in each document from ITC lens, including overarching themes
- Interpretation would help in high-level ITC-friendly mobility policy brief at Maharashtra state level
- Key policy areas for interventions

### Summary of the Assessment

Urban mobility policies assessed in this report are mainly focused on modes of urban mobility, including public transport and street corridors, supporting built environment (urban development plans), and associated direct and indirect impacts of urban mobility issues like air and noise pollution, parking and extreme weather events. International guidelines and policies studied in this report acknowledge needs of young children and caregivers to some extent and therefore, offer certain recommendations towards facilitating their mobility needs. These could be contextualized to further inform India's National, state policies to ensure ITC-inclusive approach.

At present, most National policies are oriented towards mass transit systems such as Metro systems, transit-oriented development. These may need major reforms in the long-term to accommodate needs of ITCs. While certain mandatory guidelines such as IRC cover pedestrian and universal accessibility aspects, they lack specific considerations for this age group and can be retrofitted in the short term to include the same.

Further, the Maharashtra state government and Pune-specific policies act as the steppingstones for the national policies. Inclusivity and accessibility are the strengths of National and state-level policies. However, some aspects of safety, playfulness, green, and convenience in urban mobility can be learned from the international policies such as Access and Babies, Toddlers and Caregivers developed by ITDP and BvLF<sup>11</sup>

Integration of safety measures such as incident management through first respondents, priority accessibility to vulnerable groups at Intermediate Public Transport (IPT) stands and Public Transport (PT) stations, stimulating experiences in mobility for children, active edges on streets, noise mitigation measures, and basic amenities (drinking water, toilets, feeding rooms, street lighting) into mobility are some of the critical gaps in National, Maharashtra, and Pune-specific transport policies. Pune-specific policies could be easily retrofitted in short term to include them. State-level policies may include certain supportive aspects that directly or indirectly impact ITC mobility such as priority measures, safety integration, environmental measures. Addressing these gaps by developing strategic action policies, plans, and audit systems policies at the national, state, and city levels would help achieve children-friendly cities.

Moreover, there is a need to incorporate resiliency for this age group (functioning transport network, services during extreme events) as an integral part of the transport-related policies. Lastly, the fundamental change required in transport-related policies to encourage ITC to shift to public transport by incentivizing, educating, and promoting sustainable transport through communication and outreach programs. These can be achieved through inter-sectoral and inter-departmental agencies, NGOs, and public collaboration.



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## Introduction

### Need for ITC - friendly mobility in Indian cities

India is one of the youngest countries in the world. The data also helps us understand that nearly 138 million children in India are in the age group of 0 to 5, of which 36.6 million children live in urban areas, i.e., the cities.<sup>1</sup> Further, every eighth urban child lives in slums, the hardest hit urban living condition, characterized by a lack of open spaces for play, unsafe housing, pollution, and poor sanitation. Therefore, there is a need to provide a safe, inclusive, green, accessible, stimulating environment and seamless connectivity for young children and their caregivers. Furthermore, young children between the age of 0 to 5 years and caregivers experience the city in unique ways. They need healthy environments and frequent access to critical social services like Anganwadi, primary health centers, parks, and gardens. Access to these social services and associated settings must enable warm interactions with young children and their caregivers and offer a stimulating environment to encourage young children to explore and engage in the safe proximity of their caregivers.

Research suggests that poor air quality affects young children's health and well-being. A toddler takes 40-60 breaths per minute, while an adult takes 20 breaths per minute. Thus, a toddler breathes faster than an adult, making them more vulnerable to adverse effects of the pollution and this negative impact of air pollution starts as early as in the womb. Further, recent evidence states that more than one in four deaths of children under age five are directly or indirectly associated with environmental risk, including ambient air pollution. Additionally, global data suggests that road traffic accidents are the leading cause of fatality among children, where low- to middle-income countries account for more than 93% of child road fatalities.<sup>15</sup> Environmental stressors like air and noise pollution, speeding vehicles, lack of pedestrian facilities, low operationality of city-wide public transport, and inadequate facilities at public transport stops, add to caregivers' anxiety about accessing urban transport with their infants and/or toddlers.

The absence of safe, inclusive, accessible, and comfortable mobility options deprives them of many growth opportunities by limiting their movement. Regularly, caregivers travel with their babies and toddlers to nearby Early Childhood Development (ECD) services such as anganwadis, creches, clinics and parks. Their caregivers are mostly women, elderly people, siblings or pregnant women. Therefore, based on their unique travel characteristics, ITC-friendly urban mobility includes (i) improving access through mobility options and (ii) integrating land use with mobility, which is essential for the growth of babies and toddlers.<sup>11</sup>

Mobility options shall include the needs of caregivers as the young children never travel alone and because of their unique travel characteristics, which include <sup>11</sup>

- Dependent mobility
- Shorter trips
- Slower walking speed
- Trip chaining
- Off-peak travel
- Affordability
- Frequent stopping



Further, improving access through land use integration covers access to services like:

- Water, Sanitation and Hygiene (WASH),
- Open spaces, (Park, green spaces, playgrounds, parklets with diaper changing facilities)
- Health services (Primary health centers, vaccination centers)
- Education (Anganwadis, balwadis, daycare, kindergarten)
- Employment options for caregivers
- Grocery stores, shops, vegetable market
- Religious places (temples, church, mosques)

Streets that are safer for children to walk, play and socially interact are considered safer for all. Unsafe pedestrian infrastructure, high vehicular speeds, inadequate public transport services, no care-giving amenities, poor last mile connectivity challenges their ability to negotiate the streets and transit spaces. A toddler breathes faster than adult, making them more vulnerable to adverse effects of air pollution. Other environmental stressors such as noise pollution, unhygienic spaces, and extreme heat add to caregivers' stress in transit.

There is a need to strengthen their mobility through walkable neighbourhoods, provide reliable public transport along their routes, provide opportunities to explore and play in their surroundings and allow responsive care-giving. Considering their travel patterns in mobility planning is crucial to ensure flexible and convenient options that boost their confidence. The ITC-friendly mobility planning approach could be a unifying lens for sustainable, healthy, safe, inclusive, and equitable cities.

### Vision

**To enable infants, toddlers, and caregivers to move anywhere in the city while enriching their experience through the creation of resilient mobility systems and bringing about positive behaviour change.**

### Objective of the assessment

Following are the objectives of the baseline assessment:

- To assess gaps and understand opportunities in existing plans, policies and guidelines from an ITC lens
- To form a background for High-level ITC-friendly mobility policy brief for the state of Maharashtra
- Identify key policy areas and priority work areas for interventions

This report has put forth three overarching themes pertaining to ITC mobility namely, Convenient, Resilient and Behaviour change and five objectives of ITCN framework for assessment of policies namely, Inclusive, Safe, Accessible, Green, Playful.

### Overarching themes

To percolate this vision to the end-users, the mobility services and infrastructure planning needs to consider specific objectives and parameters. For this, as a preliminary stage was to refer the Infant, Toddler, Caregiver-Friendly Neighbourhood (ITCN) Framework and Guidelines were prepared by the Bernard van Leer Foundation in collaboration with Smart Cities Mission, MoHUA, to support implementation of ITC-friendly neighbourhoods in Indian cities. This framework and guidelines include objectives that neighbourhoods should embrace for healthy mental and physical development of young children. These overarching themes are: Convenient, Resilient and Behaviour Change.

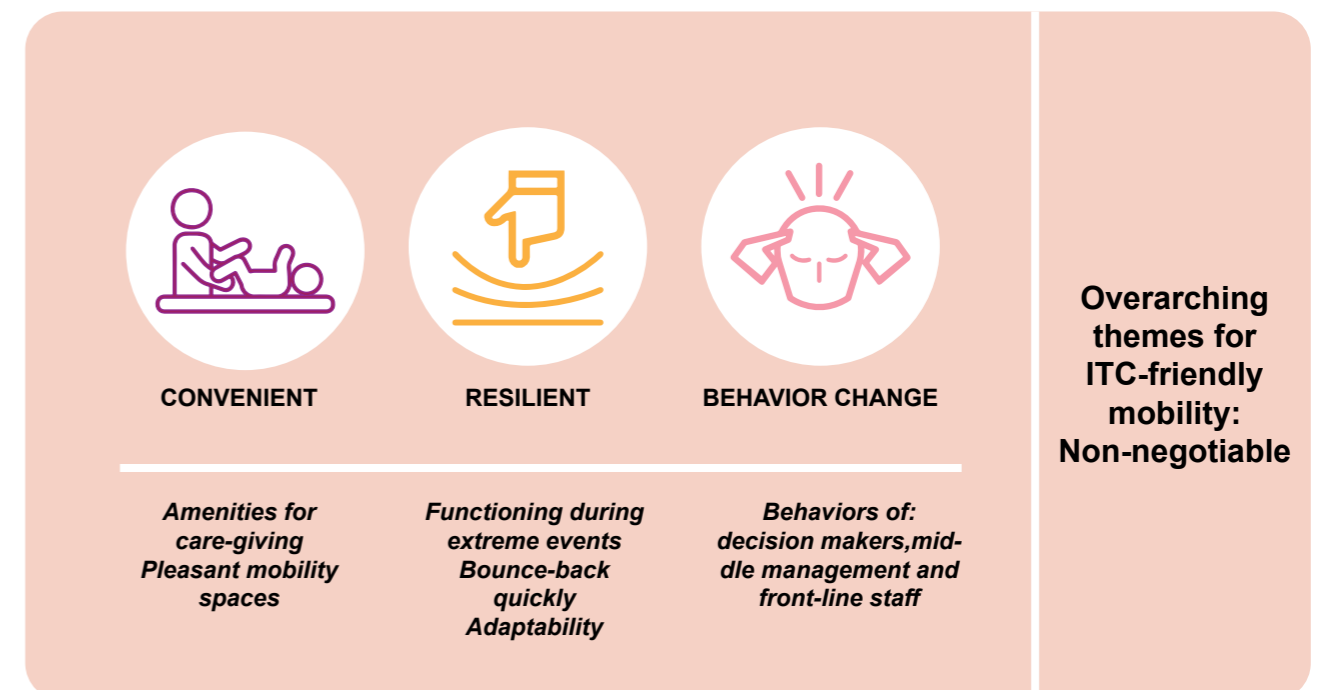


Figure 1: Overarching themes for ITC-friendly mobility

Additionally, in Indian cities there is a need to recognize that mobility of ITCs by way of personal modes of transport (cars and motorized two wheelers) is both limited to a small section of society and may not be optimal for infants and toddlers, who benefit the most from modes which involve physical activity and the ability to engage with their environment. Motorized two wheelers, while emerging as a common mode of transport is not safe, with over a third of all road crash fatalities in India occurring amongst users of this mode. Hence the focus in this report will be on making walking, cycling and public transit modes ITC-friendly. Further, considering the impact that personal motorized modes have on the environment, the implicit understanding will be to consider policies that discourage these modes.

### Convenient

- Many cities in India lack basic transit services and where they do exist they can be inadequate. Meeting minimum prescribed standards for transit services is the first criteria that needs to be considered.
- Caregivers often choose their travel modes based on convenience it offers for them while carrying their child. The transit services in India lack basic care-giving amenities such as feeding booths which affect the comfort and convenience of ITC to travel, especially long-distance trips in the city.
- Elements of street furniture, comfortable seating, height and width of the footpath should be conveniently usable for this group.
- The mobility infrastructure like streets, transit stops should make their commute pleasant and convenient which would encourage them to adopt NMT or public transit modes.

### Resilient

- Major health or environmental disasters such as COVID can restrict ITCs movement due to lack of safe environment to move around. In such cases, having resilient and adaptive mobility options are important, for example, social distancing measures.
- During extreme events- natural or human-made, access to mobility to the last mile is crucial for ITCs to reach essential services, ECD facilities, access neighbourhood streets.



Figure 2: Objectives for ITC-friendliness

- Having mobility alternatives to be resilient is a way to allow them to phase-wise stop functioning during extreme events but be able to bounce back to normalcy as quickly as possible. It is key to allow ITCs to access mobility options under any situations.

### Behaviour Change

- Government authorities, service providers, community and the target users need to create an environment to influence positive behaviour change towards ITCs.
- Government authorities and decision-makers need to be sensitized about the importance of ITCs and the steps that can be taken to improve their mobility so that when any Government policy, plan, project or scheme is envisaged, they include the ITC lens.
- Service providers' behaviours should be improved to help in need of any assistance while moving around in the city, for example, traffic police behaviour towards ITCs crossing the street.
- Community groups spreading awareness towards safety of ITCs in public transit and offering support on ground.
- Caregiver behaviours can be influenced to promote active transport modes such as walking to the park with a child.

Following are the five objectives of ITCN framework which are used to access various policies and plans around mobility.

### Inclusive

- The caregivers should be able to walk with the infants and toddlers with ease and comfort. Especially the pregnant women and elderly who find it difficult to walk due lack of quality infrastructure, insensitive design, and inefficient transit services.
- Young children and caregivers of any age group and ability should be able to commute

comfortably. 0-3 years old children and 3-5 years old children have their own specific needs when it comes to mobility and these needs should be reflected in the mobility policies and services.

- A child with a 95 cm height, an elderly with a walking stick or a wheelchair user should be able to use all the elements of the street, travel conveniently to and on the transit services.
- The focus should not only be on physical infrastructure integration but also social inclusion of ITC from various social backgrounds to make mobility "just" for all users. The factors like affordability enhance the access, usability and reach of the transport systems and help the economically weaker populations to access various opportunities.

### Safe

- Young children while using streets require specific safety measures such as buffers, safe crossings, visibility from all sides and so on. Providing dedicated NMT infrastructure, traffic calming measures, car free streets help to improve safety as the conflicts between the pedestrians, cycles and motorized vehicles is minimized.
- Female caregivers are prone to harassment on roads and in transit services, which hampers their experience and confidence to travel. It is essential to support these caregivers by including gender sensitization of frontline workers, well-lit and active streets (such as with street vending zones which add eyes on the street), improved vigilance on the street and at transit stops and first response systems in case of emergency.

### Accessible

- Lack of access to nearby transit, options of travel modes, suitable infrastructure for the ITC restricts their movement around the city. Therefore, providing accessible, reliable travel mode options and improving first and last mile connectivity to transit services, obstacle-free and legible NMT infrastructure according to the specific needs of the ITC is crucial.
- Co-locating mobility services in proximity of ITC destinations such as hospitals and clinics, anganwadis, markets, parks would make them accessible to ITCs. Incorporating these principles in landuse/zoning, mobility plans, mass transit systems is crucial.

### Green

- Access to green spaces has proven to be beneficial for a child's healthy growth. Green cover, exposure to plants and flowers creates stimulating experience while moving around the city.
- A toddler breathes 40-50 times/minute compared to 20 times/minute for an adult. This makes them more vulnerable to adverse effects of the pollution. Therefore, the focus on non-motorized transport, clean public- transport and low emissions will allow healthy environment for early childhood development.
- Green streets (trees-lined, landscaped) are preferable to highly concretized or paved urban landscapes to meet these requirements.

### Playful

- Young children are always learning from their surroundings. Therefore, design of streets and transit spaces should enable the toddlers to explore and engage safely with the built environment and travel without any fear.
- Interactive elements such as public art, cultural, historical elements enhance the experience of toddlers and stimulates learning while they travel. Inclusion of children in making these arts also brings a feeling of belongingness.
- It is crucial to provide a stress-free environment for the caregivers as they commute with their infants and toddlers on the street as well as on the transit services. The extra effort to walk or to board, travel or alight the transit systems can hamper their experience and adversely affect their mental health.

Beyond the objectives, overall healthy environment with low stress from surroundings noise, hygienic and well-maintained spaces, reduced exposure to pollutants will enhance ITCs experience in while moving around the city.

This report evaluates the best practices, gaps, and opportunities in existing mobility-related documents at the international, national, Maharashtra state, and Pune city levels. The information would help to develop an ITC-friendly mobility policy brief for the state of Maharashtra. It would also help to identify the critical mobility-related documents in Pune city which can be retrofitted with ITC-lens.

The following sections describe:

- Assessment methodology,
- Detailed reviews of documents, and
- Conclusions that defines the next steps towards forming Policy brief for the state of Maharashtra.



## List of Documents Reviewed

S.no	Policy Categories	Name of Document	National / State/ Urban local bodies
1	Public Transport	Metro Rail Policy, 2017	National
2		National Road Transport Policy by ASRTU (BRTS),2016	National
3		Urban Bus Specifications (I and II), 2008, 2013	National
4		Metro, Detail Project Report (DPR), Pune, 2015	Pune
5	Street Corridor	IRC SP 117: Manual on Universal Accessibility for Urban Roads and Streets, 2018	National
6		IRC:103 - Guidelines for Pedestrian Facilities, 2012, 2020 (draft), 2012	National
7		Walk Smart: Policy for Pedestrian Safety and Comfort, 2016	PMC
8		Policy on Public Bicycle Share System for Pune, 2017	PMC
9		Urban Street Design Guidelines Pune, 2016	PMC
10		Global Street Design Guide: Global Designing Cities Initiative, 2016	International
11		Designing Streets for Kids: Global Designing Cities Initiative, 2021	International
12	Women and Child Development	Maharashtra State Policy and Action Plan for Gender Equality and Women's Empowerment 2022	Maharashtra State
13	Urban Development Plan / Master Plan	National Transit Oriented Development (TOD) Policy, 2017	National
14		Transit-Oriented Development Regulations, Pune (2019)	PMC
15		Development Plan for Pune City (Old limit) 2007-2027	PMC
16		Plan for Pune Metropolitan Region 2021-2041	PMC
17	Mobility Plan	Access and Babies, Toddlers, and Their Caregivers, 2022	International
18		National Urban Transport Policy, 2006	National
19		National Mission on Sustainable Habitat, 2011	National
20		National Electric Mobility Plan, 2012	National
21		National Road Safety Policy, 2005	National
22		Maharashtra State Urban Transport Policy, 2017 (draft)	Maharashtra State
23		Comprehensive Mobility Plan for Pune City, 2008	PMC

S.no	Policy Categories	Name of Document	National / State/ Urban local bodies
24	Air Pollution	Air quality plan-Pune, 2020	PMC
25	Disaster Management Plan	Integrated Regional Disaster Management Plan for Pune City and Pune Municipal Councils, 2014	PMC
26	Urban Parking	Public Parking Policy Pune, 2018	PMC

## Assessment Methodology

Cities can achieve ITC-friendly urban mobility by improving access through mobility options and integrating land use with mobility. Policy areas that directly and indirectly cover both access to mobility options and integration of land use with mobility are considered in this report. Overall, eight categories of policy areas are identified based on their relevance and direct and indirect impacts, and the associated built environment in urban settings:

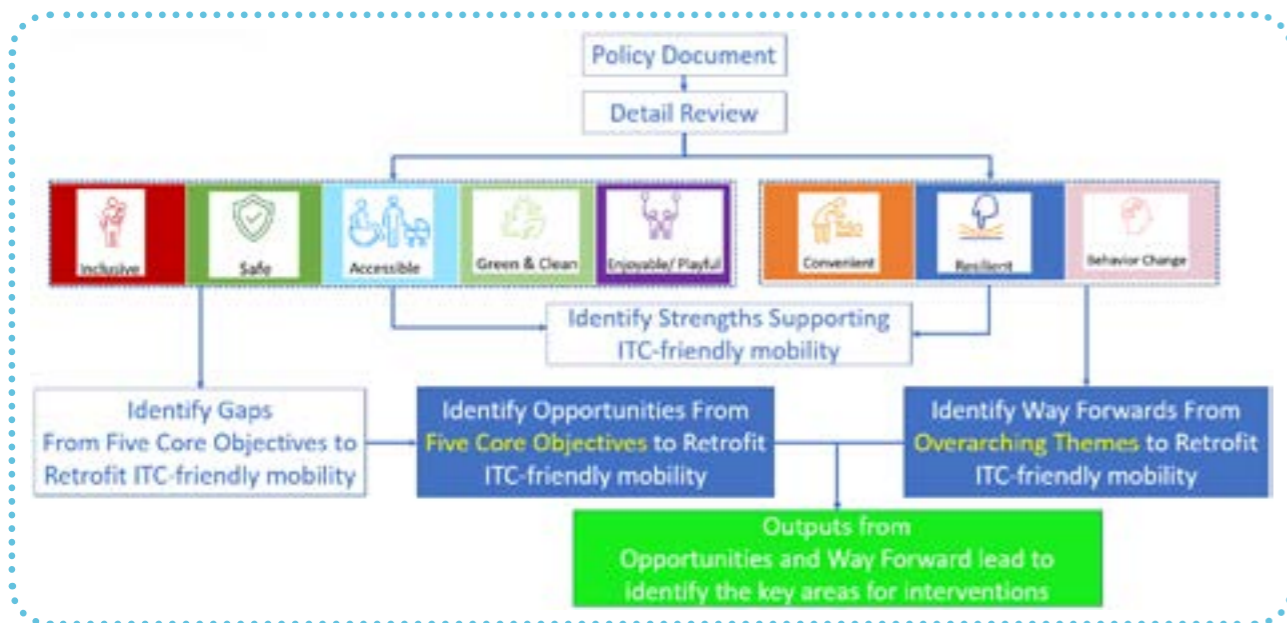
- Public transport planning,
- Mobility planning,
- Street corridor design,
- Women & child development,
- Developmental planning,
- Disaster management,
- Climate action, and
- Urban parking

This project is aimed to develop the ITC-friendly mobility plan for Pune city and a Policy brief for the state of Maharashtra, India. Therefore, plans, policies, and guidelines related to urban mobility at all four levels of governance: International, national, Maharashtra state, and Pune city are identified and assessed. International documents help to understand the best practices, and national documents provide the country's direction in which it is heading. Each of the selected documents is reviewed, interpreted, and retrofitted with the needs of ITCs through the lens of five objectives and three overarching themes.

A total of twenty six documents are identified based on the categories mentioned above. Out of which, three are at the international level, ten are at the national level, two are at the Maharashtra state level, and eleven are at the Pune-city level. This report includes sixteen documents based on their direct relevance to this project, along with comprehending global best practices and ways to contextualize in the Indian context.

Further, the assessment of policies is initiated by an assumption that the cities can achieve ITC-friendly urban mobility through five objectives: inclusive, safe, accessible, green, and playful, along with three overarching themes: convenience, resilience, and behaviour change. Therefore, each document is checked against five objectives and three overarching themes. Following flow diagram shows the step-by-step process followed in reviewing the documents.





**Figure 3: Adopted Methodology for Policy Assessment**

Firstly, the inclusion of ITCs and their needs are checked, along with the overall strengths/offering at the planning, design, development, operation, and maintenance stages. Secondly, gaps are identified based on the five objectives by understanding whether the particular policy has considered the ITC as a user group and their needs through unique travel characteristics. Based on the identified gaps in a specific objective, opportunities are highlighted by which policy can retrofit/consider the needs of ITCs.

Finally, the way forward is underlined by assessing three overarching themes independently and also by connecting with the opportunities in five core objectives. It would lead to identify key policies or plans at Maharashtra state and Pune city level policies or plans that can be updated or revised to include ITC-friendly measures.

For example, if a public transport policy has considered ITCs as a user group. However, the policy has not considered the safety, green, playful, and accessibility components. For that specific policy, inclusivity is the strength; gaps and opportunities will be identified and highlighted against four objectives, respectively. Finally, the way forward is defined by presenting the recommendations by evaluating the policy against three overarching themes and connecting the overall gaps and opportunities.

Overall, the policies related to urban mobility and the associated built environment have been assessed through a systematic step-by-step analysis by reviewing, interpreting, and retrofitting the ITC-lens. Detailed document reviews are presented in the following section.



## International level documents review

This baseline report is primarily targeting National, Maharashtra state and Pune level policies, although, it assesses certain international documents as well to highlight as a reference for best practices.

Two international guidelines are identified: Global Street design guide prepared by NACTO, USA, Designing streets for kids by GDCI, USA. Reviewing these documents would help understand certain principles followed globally towards ITC-friendly mobility and detailed design solutions and tools for making street and transit infrastructure more children and caregiver friendly. These offerings may be modified to suit Indian context.

Likewise, Access and Babies, Toddlers, and their Caregivers report by ITDP and BvLF addresses the inclusion, equity, and access of ITCs in transport mobility. It highlights how ITCs needs are different than an average adult, highlighting their travel patterns, off peak travels, trip chaining and so on.

For this report, three documents are identified to focus on the gaps and opportunity assessment:

**Guidelines:**

- Global Street Design Guide, NACTO, 2016
- Designing Streets for Kids by GDCI, NACTO, 2021

**Policy:**

- Access and Babies, Toddlers, and Their Caregivers, 2022





## Global Street Design Guide, NACTO (2013)

The document provides extensive guidance on designing 'People-oriented streets' and showcases various design elements and strategies for typical typologies of streets in a city. It also demonstrates useful Before-After transformations for envisioning all user-friendly streets for practitioners. It briefly highlights on the needs of children such as low height, slower walking speeds, need for amending signal timings for them as well as slowing down vehicles.

### GAPS

**Inclusive** - The guide includes children as a street user but it lacks to identify caregiver with young child as a unit.

**Safe** - The document does not specify more nuanced safety needs of ITC, such as walking experience of caregivers holding infants in hand

**Accessible** - Visibility of children on streets is crucial for ensuring safe access. The Guide currently does not detail how it can be obtained with correct alignment of street elements. Stroller accessibility around transit spaces needs more emphasis.

**Playful/ Enjoyable** - Before-after transformations should highlight playful street elements for children at corners and plazas for activation of space.

### OPPORTUNITIES

**Inclusive** - It should clearly identify caregiver with a child as a type of user on street and mention their spatial needs, comfort and access.

**Safe** - 0-5 year old child's dependence of caregiver should be considered in safe design of elements such as wider refuge space, ability to maneuver levels.

**Accessible** - Stroller accessibility around bus stops, parkside streets, refuge island can be emphasized.

### Way forwards in Overarching Themes

**Convenience:** Convenience features for caregivers on streets such as restrooms, feeding booths at pause points shall be added in design guidance. Cycles with baby seats and shared pram systems could be introduced for easy and quick movement of caregivers.

**Resilience:** There is an opportunity to highlight how certain street design measures can help in safe refuge or evacuation routes of ITC during extreme events.

**Behaviour Change:** Inclusion of behaviour change public campaigns as a means to generate demand for Street transformations can influence ideas in communities and non-government stakeholders.

## Access and Babies, Toddlers and Caregivers (2022)

The strength of this policy is a clear alignment with the three objectives of ITC-friendly urban mobility: inclusive, safety, and playful.

The policy highlights how enabling accessibility to the care-giving destinations is crucial. It has proposed two concepts of ITC mobility: 15-minute neighbourhood and 10-minute public transport. The 15-minute neighbourhood focuses on providing the daily care-giving needs close to home where caregivers can walk comfortably at slow speeds and have multiple mode options to reach. The 10-minute public transport framework addresses the caregivers' ability to travel long distances within the city.

It focuses on land use and mobility integration, which will create a seamless urban environment for the early childhood development of infants and toddlers and ensure the caregivers' well-being.

### GAPS

**Accessible** - No details around design of street elements from the perspective of a toddler, e.g., street furniture, seating pockets.

**Green/ Clean** - More emphasize on clean transportation modes is required.

### OPPORTUNITIES

**Accessible** - Developing standards/ guidelines street elements such as street furniture, way-finding, signages, footpaths according to the need of the ITCs.

**Green/ Clean** - Inclusion of electric shared mobility modes into the planning and designing of access and egress to Public Transport, clean-fuel vehicles.

### Way forwards in Overarching Themes

**Convenience:** Policy shall comment on the modifications required in certain standard amenities like transit station designs to provide child-friendly toilets, diaper changing rooms, drinking water facilities, adequate seatings, baby chairs, and reserved seatings for toddlers. It shall also include safe pick-up and drop-off spaces in the street, especially near schools, for easy and secure access to the private vans, auto-rickshaws, and school buses.

**Resilience:** Policy shall include strategies to facilitate commute by ITCs to essential care-giving destinations during extreme events like heavy rain, flash floods.

**Behaviour Change:** To ensure toddlers' safety, policy shall include guidelines or capacity-building programs on the responsibilities of various stakeholders like transport planners, police departments, drivers/ private service providers.

**Additional Recommendations:** The policy can explain how to integrate travel behaviour of ITCs in travel demand analysis at the city level. The direct applicability of this concept in the Indian context needs to be evaluated based on the road network, traffic, land use, socio-economic characteristics, and heterogeneous, non-lane based driving behaviour.

## Designing Streets for Kids, Global Designing Cities Initiative (2021)

The fundamental goal of the guideline is to design streets for children with improved and independent mobility and quality of spaces through safe and healthy, comfortable and convenient, inspirational and educational streets.

The document addresses three main aspects in designing and developing the streets for kids in urban area:

- Understanding children's needs, challenges while moving around in the city
- Adopting the street design strategies at city, neighbourhood, block levels, and also based on different modes of transports like walk, cycle and transit.
- Ways to make changes within city by building a plan, working with multiple stakeholders, engagement with children and their caregivers and ultimately, scaling up the programs by updating the policies, integrating land use and mobility, allocating funds and measuring the impacts of programs / initiatives.

### GAPS

**Safe** - Strategies for first response / incident management during extreme events, allowing safe movement to essential services is critical for ITC safety in such situations.

### OPPORTUNITIES

**Safe** - Incorporating the action plan for early detection, verification, response, clearance, and recovery in incident management shall improve road safety and personal safety by collaborating with traffic police, hospitals, and fire departments.

### Way forwards in Overarching Themes

**Convenience:** Policy shall incorporate guidelines to introduce feeding rooms.

**Resilience:** Policy shall include the action plan to evacuate or gather ITCs at safe places during extreme events with the help of the first respondent's department.

**Additional Recommendations:** Adopting the exact design specifications in the Indian context is likely challenging, and incorporating some of the suggestions within IRC, MoRTH, and local street design guidelines would be helpful. For example, children play elements such as visual, solitary, linguistic, social, logical, music, rhythmic, auditory learnings, and learning from nature in this document shall be incorporated into Indian statutory guidelines.

**Inference:** International documents strongly focus on ITC-mobility objectives such as inclusive, safe, accessible, and playful because they have evaluated and incorporated young children's and their caregivers' needs. Incorporating these principles in the Indian context must first be contextualized before implementing on-ground.

On the other hand, international documents miss opportunities to strengthen urban mobility during extreme events.

From the reviewed documents, strategies in the design and connectivity of streets shall be considered as the possible area of intervention to retrofit the ITC-lens in the neighbourhood, zonal, and city-wide mobility.



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## National level documents review

The government of India has developed several transportation-related policies and directives for street corridors, urban development, and mobility plans.

Some policies provide principles that state governments can adopt in their urban transport planning, such as the National Urban Transport Policy. Others are statutory requirements that each agency must adhere to while developing infrastructure related to transportation (footpaths, roads and bridges for example, Indian Road Congress (IRC) guidelines. Relevant government documents are identified that support the development of sustainable modes of urban transport, which also cater to the needs of ITC mobility.

A total of ten policies and guidelines are selected for gaps and opportunity assessment, which are as follows:

### Policies:

- National Urban Transport Policy, 2014
- National Transit Oriented Development (TOD) Policy, 2017
- Metro Rail Policy, 2017

### Guidelines:

- IRC SP 117: Manual on Universal Accessibility for Urban Roads and Streets
- IRC:103 - Guidelines for Pedestrian Facilities, 2012, 2020 (draft)
- Urban Bus Specifications (I and II)

### Remaining national-level documents (listed below) are a part of the annexure:

- National Road Transport Policy by ASRTU (BRTS)
- National Mission on Sustainable Habitat
- National Electric Mobility Plan
- National Road Safety Policy

## National Urban Transport Policy (NUTP), 2006

- The policy encourages public transport (PT), non-motorized transport (cycle, walk), and cleaner fuels and these principles add on to support convenient, cleaner and green mobility of ITCs.
- The priorities include use of public transport, non-motorised transport, including construction of cycle tracks, use of cleaner technologies like CNG, electric buses, which directly support ITC-mobility needs.
- Inclusivity, accessibility, and behaviour change through capacity building are the three major strengths of this policy that form a strong base to work towards ITC-friendly mobility policy.

### GAPS

**Safe** - Strategies for first response/ incident management is missing which is crucial for ITCs safety and emergency response system.

**Green/ Clean** - The policy does not cover the aspects and importance of developing green street spaces that enhance experience of ITC.

**Playful/ Enjoyable** - Not incorporated.

### OPPORTUNITIES

**Safe** - Strategic planning to improve safety of young children, caregivers including pregnant women by monitoring, vigilance, and improving incident management through coordination between first responders (police, ambulance, fire department) shall be introduced.

**Green/ Clean** - Strategies to develop and benchmark green spaces on urban streets, near transit stops and stations, and IPT stands shall be introduced to ensure healthy mobility experience.

**Playful/ Enjoyable** - Guidelines for developing and maintaining active spaces, children play and learning elements on urban streets, at bus stops.

### Way forwards in Overarching Themes

**Convenience:** This policy shall include caregiver-specific amenities as mandates in mobility spaces such as introducing feeding rooms in and around transit spaces.

**Resilience:** Policy shall include action plan for transit services to function (evacuation + operation) during extreme events through incident management system to prioritize safety of ITCs including pregnant women.

**Behaviour change:** Policy shall include training of frontline staff and transit agency officials to uplift their behaviours towards vulnerable users such as pregnant women, caregivers carrying children. Also, encouraging people to use PT through campaigns and awareness programs like PT Day, carpool day, and cycle day shall be introduced. These align well with encouraging caregivers with children to adopt sustainable mobility.

## National Transit Oriented Development (TOD) Policy

- The policy advises state governments to adopt transit-oriented development in their cities to integrate transit network and land uses to make cities more accessible and liveable. To achieve this, managing land uses and improving last-and-first mile connectivity to transit stops through non-motorized friendly infrastructure is key. Even though it does not specifically include ITC-specific transit, it does cover walk-ability aspects, access to public spaces in neighbourhoods.
- It emphasizes on high density mixed land use development around transit, which can be further detailed to accommodate ITC destinations and movement patterns. Principles such as Active frontage along streets, natural surveillance, panic buttons for vulnerable users are useful ideas for ITC-friendly movement.

### GAPS

**Safe** - Safety measures for pedestrians, especially ITCs in TOD zones are not provided, such as gender-inclusive spaces, protection in high volume corridors.

**Green/ Clean** - No guidelines on maintaining footpath standards, noise mitigation strategies, and use of renewable energy in intermediate public transport and mass transit.

**Playful/ Enjoyable** - Not incorporated.

### OPPORTUNITIES

**Safe** - First response systems, gender-sensitive and children-sensitive measures in the proposed high density mixed land use shall be included.

**Green/ Clean** - Policy shall introduce guidelines around green spaces along streets in high density corridors, noise mitigation measures (barriers and low noise zones) near transit stations and use of renewable energy in last-and-first mile connectivity modes.

**Playful/ Enjoyable** - Policy shall incorporate guidelines for introducing active spaces that also enable family-friendly activities and stimulating elements on urban streets, around stations.

### Way forwards in Overarching Themes

**Convenience:** Policy shall incorporate guidelines to introduce pleasant mobility spaces and amenities on stations, platforms and footpaths (drinking water fountains, feeding rooms, toilets, benches, trees, street lightings) for ITCs.

**Resilience:** Policy shall incorporate the guidelines / strategic plans to facilitate the operational and evacuation activities in TOD zones during extreme events

**Behaviour Change:** Policy shall incorporate initiatives to change the behaviour of public and ITCs to opt for sustainable transport through incentivizing, educating, promoting, and understanding their needs.

## Metro Rail Policy, 2017

The policy provides guidelines and implementation strategies of mass transit system in cities with (population > 2 million) through several funding opportunities, different ways to operate, maintain, revenue generation including through first- and-last mile connectivity and TOD through city-specific CMP.

The policy talks about intermodal integration, universal accessibility, adequate walkways and pathways of NMT, stations for public bike sharing, parking lots for cycles and personal vehicles, feeder buses at all metro stations. These principles could be leveraged for seamless movement of ITCs using Metro system.

### GAPS

**Green/Clean** - No policy guidance on green streets component to make access safer and pleasant for caregivers and children. No emphasize on clean transportation modes in last mile access, IPT modes.

**Playful/Enjoyable** - Not covered

### OPPORTUNITIES

**Green/Clean** - The policy should include components of proposing green spaces along streets, noise mitigation around Metro, renewable energy use in last mile access modes.

**Playful/Enjoyable** - It should emphasize on inclusion of stimulating elements, legible wayfinding in access streets and within station areas as well.

### Way forwards in Overarching Themes

**Convenience:** The policy shall incorporate guidelines to introduce pleasant mobility spaces and caregiver amenities at stations, on platforms and footpaths (drinking water fountains, feeding rooms, toilets, benches, trees, street lightings).

**Resilience:** It shall incorporate the guidelines/strategic plans to function during extreme events (for operational + evacuation purposes).

**Behaviour Change:** It shall promote initiatives to change the behaviour of caregivers to encourage use of public transport through incentivizing, educating, promoting, and understanding their needs.

## IRC SP 117: Manual on Universal Accessibility for Urban Roads and Streets, 2018

- It provides mandatory guidelines to be followed to achieve universal accessibility on urban and rural roads by creating obstacle-free environment for all. The manual is an add-on to IRC:103-2012 "Guidelines for Pedestrian Facilities".
- Detailed guidelines about pedestrian infrastructure and services by considering universal access needs could be indirectly supportive for ITC friendly mobility as well. It also suggests safety measures as mandatory.

### GAPS

**Safe** - Within universal access, safety elements for young children are missing.

**Playful/ Enjoyable** - It mentions active street edges in view of 'Eyes on street', however, guidelines on incorporating those are missing.

### OPPORTUNITIES

**Safe** - Strategic planning to improve safety for young children, pregnant women by monitoring, first response through police, traffic departments and hospitals shall be added.

**Playful/ Enjoyable** - Guidelines for developing active street edges for ITCs on urban streets, at bus stops, metro stations, IPT stations shall be included.

### Way forwards in Overarching Themes

**Convenience:** The policy shall incorporate guidelines to introduce pleasant mobility spaces and amenities as street furniture (drinking water fountains, feeding rooms, toilets, benches, trees, street lightings)

**Resiliency:** The policy shall incorporate strategic plans for states to function (NMTs+ PTs) during extreme events (operational + evacuation)

**Behaviour Change:** The policy shall suggest guidelines / strategies (trainings, workshops, incentives) to encourage and educate people for adopting cycling and walking.

## IRC:103 - Guidelines for Pedestrian Facilities, 2012, 2020 (draft)

Currently, IRC:103-2012 is a statutory guide; however, the updated 2020 draft version is available for comments and hence, reviewed for this report. The guidelines are developed based on crucial five principles: safety, security, continuity, comfort, and liveability, which align very well for ITC mobility.

Some of the promising strategies include children's play elements, understanding ITC needs and certain profiles, their play elements along streets, traffic signal planning as per ITCs walking speed (0.5m/s), and mandatory audits such as universal accessibility.

### GAPS

**Safe** - Specific safety for young children's anthropometry is missing, even though it states the need.

**Accessible** - Priority access measures to caregivers with young children at IPT stands and PT stations are not covered.

**Playful/ Enjoyable** - Mentions introducing children's play elements but did not specify the detailed plan about the type of elements and planning of their locations

### OPPORTUNITIES

**Safe** - It shall include child safety-specific elements on streets such as green buffer, pram lanes.

**Accessible** - It shall highlight the gender-based priority to IPTs and PTs through communication and outreach programs or by introducing mandatory guidelines.

**Playful/ Enjoyable** - It shall incorporate detailed design of children's play elements such as visual, solitary, linguistic, social, logical, music, rhythmic, auditory learnings, and learning from nature.

### Way forwards in Overarching Themes

**Convenience:** It shall incorporate guidelines on feeding rooms/nutrition rooms along the street corridor.

**Resilience:** It shall incorporate strategic plans for the use of streets, foot over bridges during extreme events for gathering and evacuation.

**Behaviour Change:** It has highlighted the need for communication and outreach; however, incorporate steps to be followed by municipalities or states to increase the awareness and encouragement to opt for sustainable transport modes.

**Additional recommendation:** It shall introduce rules to be followed by cyclists or pedestrians while using the streets (for example: avoid jaywalking).

## Urban Bus Specifications (I and II)

The specifications highlight the quality of buses within city transport to fulfil the desire of average bus users in terms of quality of service, safety, reliability, efficiency, and comfort.

Key highlights include wider windows, lighting, CCTV cameras, internal signages displaying helpline number, 'foot-operated micro pedal switch for emergency' to communicate to control room, two-way communication with control room, and automatic vehicle location (AVL) system (AVL). Moreover, features like 'manual ramp' & 'exclusive space' for wheelchair, 'buzzer for stop request' can help the needs of passengers with disabilities. Many are useful for ITC traveling via public transport on frequent basis.

### GAPS

**Inclusive** - Specific needs of caregivers carrying infants and toddlers in a bus are missing.

**Green/Clean** - low emissions bus fleet, exhaust locations of buses not emphasized enough.

**Playful/Enjoyable** - No mention of playful experience in transit for young children.

### OPPORTUNITIES

**Inclusive** - shall include provision for reserved seats for pregnant women, and special seats for infants and toddlers.

**Green/ Clean** - Location of emission exhaust may be proposed considering the height of young children, low emission bus fleet to be encouraged.

**Playful/ Enjoyable** - It shall introduce stimulating elements, interactive signages within buses to make ITC journey stress-free and interactive.

### Way forwards in Overarching Themes

**Convenience:** Amenities such as nutrition supplements, storage for strollers shall be incorporated.

**Resilience:** It shall incorporate action plan to evacuate / function in extreme conditions like bus failure, fire, heavy rainfall.

**Behaviour Change:** It shall integrate action plan for capacity building sensitization workshop for PTs middle management + front-line staff management.

**Inference:** National documents have considered a few components of ITC-mobility objectives, such as inclusive and accessible. The needs of young children and their caregivers shall be incorporated in most reviewed documents, except IRC 103:2020 guidelines, which covers it well. In most of the national documents, safe, green and playful principles shall be strengthened through ITC-lens. Lastly, strategies in the design, connectivity, and intermodal integration of metro, buses, and street network shall be considered as the possible area of interventions to retrofit the ITC-lens in the neighbourhood, zonal, and city-wide mobility.

## State level documents review

State governments develop regulations that must be followed by urban local bodies (ULBs), municipal corporations, and grampanchyat.

Two key transportation-related initiatives for Maharashtra state are highlighted and out of them, this evaluation report includes the following two:

**Policy:**

Maharashtra State Urban Transport Policy, 2017

**Plan:**

Maharashtra State Policy and Action Plan for Gender Equality and Women's Empowerment 2022



## Draft Maharashtra State Urban Transport Policy (SUTP), 2017

This policy highlights integration of land use and transport systems that provide safe, reliable, and convenient access for people of all ages, incomes, genders, and abilities and enable the movement of people. It sets a minimum baseline required for supportive environment for ITC-friendly mobility.

SUTP prioritizes on sustainable mode of transport, walking, cycling and public transport in line with ITC urban mobility. Policy also focuses in creating awareness within citizens through programs such as Car-Free Days, Cycle-to-Work Days, and Bus Days which further can be leveraged for ITC

### GAPS

**Safe** - Gender base safety, natural vigilance, and incident management are not addressed in the policy, which can strengthen ITC mobility.

**Green/Clean** - Policy lacks guidance on street design elements such as naturally shaded features and green buffers to mitigate air and noise pollution, all of which are crucial to improving ITCs mobility experience.

**Playful/ Enjoyable** - Aspect has not been incorporated.

### OPPORTUNITIES

**Safe** - Implement strategic monitoring to improve safety through CCTV surveillance, monitoring, vigilance through female staff.

**Green/Clean** - Develop noise mitigation strategies such as noise barriers and green buffer, to create low noise zones near schools, hospitals, playgrounds, anganwadis, and residential areas to promote healthy environment for ITCs.

**Playful/ Enjoyable** - Guidelines to develop interactive spaces, pause points on streets, bus stops, metro stations, and IPT stations which stimulates young children's mind through play and learn elements.

### Way forwards in Overarching Themes

**Convenience:** The policy shall include recommendations for the provision of amenities like as drinking water fountains, lactation rooms, restrooms, benches, trees, and street lighting for ITCs on urban streets.

**Resilience:** It shall mandate provision of priority access for ITC commute to essential services during extreme events along with evacuation measures.

**Behaviour Change:** Policy shall incorporate capacity building programs to encourage all government employees involved in different domains of transportation planning and management to understand ITCs needs and to provide incentives, education, and promotion.

## Policy: Maharashtra State Policy and Action Plan for Gender Equality and Women's Empowerment, 2022

This policy covers the action plans on health, education, gender-based violence, employability, transport, housing, and WASH infrastructures. It includes gender integration (girls, women, transgender, LGBTQ+) in urban and rural transport system.

Policy also highlights the travel needs like concessional fares, reserved seats for vulnerable stakeholders in PT and employment opportunities for women. This generates significant women presence in urban mobility which results in increased safety perception among ITCs.

### GAPS

**Accessible** - There is a lack of multiple trip chaining solutions, especially for pregnant women and caregivers who look after infants and toddlers.

**Green/ Clean** - The policy fails to emphasize on learning from natural green environment, which is crucial to the health of children and pregnant, lactating mothers in initial 1000 days.

### OPPORTUNITIES

**Accessible** - It shall include strategic implementation of reliable multiple mobility options in proximity of Anganwadis, primary health centers, hospitals, and schools. Additionally, it shall include regulations for priority access for ITCs to PT.

**Green/Clean** - It shall include provisions for exposure to green spaces along streets, include policies that reduce carbon footprint by expanding ITCs range of sustainable/clean transport options.

### Way forwards in Overarching Themes

**Convenience:** Policy shall incorporate action plans on operational and maintenance of NMTs and PTs and provide accessibility plan-based on ITCs destinations (Women's college, Anganwadi, workplaces)

**Resilience:** The policy shall incorporate imparting knowledge in response during

extreme events which empowers caregivers resulting in safety and security of young children.

**Behaviour Change:** Policy shall introduce an action plan for capacity building, sensitization work-shop for PTs middle management staff + front-line staff.

**Inference:** Maharashtra state documents are progressive in terms of prioritizing sustainable modes of transport, walking, cycling and public transport in line with ITC-friendly urban mobility and retrofitting the gender lens in health, transportation, and employability. **These policies shall be strengthened through green, safe, playful, and resilient objectives by understanding the young children's and caregivers' needs.** Lastly, sustainable modes of transport at city-wide network shall be considered as the possible area of intervention to retrofit the ITC-lens.



## Pune city specific documents review

Pune city has been a pioneer in many mobility related guidelines and policies. For example, urban street design guidelines (USDG) which encourages detail design guidelines on developing pedestrian and non-motorized friendly streets in Pune city. Parking policy is another example where Pune city has been a lighthouse city. While pioneering at developing and implementing certain mobility guidelines, the city has extensively worked on developing public bicycle plans, pedestrian policies, air quality policies, and disaster management plan.

This report includes following guidelines, plans and policies:

### Policy:

- Walk Smart: Policy for Pedestrian Safety and Comfort, 2016
- Policy on Public Bicycle Sharing (PBS) System for Pune, 2017
- Public Parking Policy Pune, 2018

### Guideline:

- Urban Street Design Guidelines Pune, 2016

### Plan:

- Integrated Regional Disaster Management Plan for Pune City and Pune Municipal Councils, 2014

### Remaining Pune-city specific documents (listed below) are a part of the annexure:

- Comprehensive Mobility Plan for Pune City
- Metro Detail Project Report
- Air quality plan-Pune
- Transit-Oriented Development Regulations, Pune (2019)
- Development Plan for Pune City (Old limit) 2007-2027
- Plan for Pune Metropolitan Region 2021-2041

## Walk Smart: Policy for Pedestrian Safety and Comfort, 2016

The policy highlighted the procedure for deciding the type of pedestrian road crossing at junctions and mid-block locations and considered providing infrastructure and signals based on the needs of all pedestrians irrespective of age, gender, status, and special needs. The facility's design is instructed to be as per IRC 103-2012. Even though the document does not explicitly mention caregivers with babies and infant; however, few of the components it has considered their needs through design principles to access and use at grade and grade separated crossings.

### GAPS

**Safe** - Safety measures for pedestrians, especially ITCs through first response is missing.  
**Accessible** - highlighted only accessibility to BRT bus stops at road median and not considered all the modes of urban mobility.  
**Green/ Clean** - incorporating greener spaces along the pedestrian facilities is missing.  
**Playful/ Enjoyable** - Not included.

### OPPORTUNITIES

**Safe** - Strategic planning to improve incident management through coordination between first responders (police, ambulance, fire department) shall be included along with developing the streets in view of 'Eyes on street' concept, which would improve personal safety of ITCs.  
**Accessible** - It shall include guidelines for improving first and last-mile connectivity to NMTs, IPT stands, and Metro stations, which would integrate land use with mobility and thus, would encourage ITCs to use pedestrian facilities.  
**Green/ Clean** - It shall incorporate guidelines on introducing and maintaining green spaces along the streets.  
**Playful/ Enjoyable** - It shall include guidelines to set up active spaces on footpaths (public art, green spaces), and children's play elements.

### Way forwards in Overarching Themes

**Convenience:** It shall incorporate guidelines to introduce pleasant mobility spaces and amenities such as street furniture (drinking water fountains, lactating rooms, toilets, benches, trees, street lighting).

**Resilience:** It shall incorporate strategic plans for the use of streets, foot over bridges

during extreme events for gathering and evacuation.

**Behaviour Change:** It shall incorporate initiatives to sensitize the public towards ITCs and encourage them to opt for sustainable transport by educating, promoting, communicating through public domain.

## Policy on Public Bicycle Sharing (PBS) System for Pune, 2017

The policy aims to ensure that a PBS system serves the entire city with a good quality of service at affordable rates and is accessible to all segments of society. The policy document outlines a framework for the setup, operation, and expected level of service of a PBS in Pune. However, the inclusion of ITCs, including pregnant women as a group and their needs are missing in this policy.

### GAPS

**Inclusive** - The policy does not address the needs of vulnerable groups like infants, toddlers, pregnant women, senior citizens  
**Safe** - It does not propose strategies for incorporating safety measures for ITCs in the design of PBS.  
**Green/ Clean** - Provision of green spaces along the bicycle routes is missing.  
**Playful / Enjoyable** - Not mentioned.

### OPPORTUNITIES

**Inclusive** - The policy can mention the need and mandate operators to be sensitive and include the facilities based on the needs of all vulnerable groups in the design of the bicycle and the stations.  
**Safe** - It shall incorporate vigilance, security through CCTV cameras, panic buttons at stands and on bicycles. It shall also include police presence during off-peak hours and late-night hours.  
**Green** - It shall incorporate guidelines on introducing and maintaining green spaces along the bicycle routes to encourage caregivers to opt for bicycle.  
**Playful** - It shall include active, stress-free, and cultural learning spaces as a part of children learning and playing experiences.

### Way forwards in Overarching Themes

**Convenience:** The policy shall consider the destinations that caregivers often travel to while designing the city's bicycle zones and also include seats for kids.

**Resilience:** The policy shall include PBS for gathering/evacuation during extreme events. (For example, free, unlocked cycles and direction information to be followed during extreme events)

**Behaviour Change:** Outreach program shall highlight majority of the key stakeholders and proposals to increase awareness. It shall propose capacity-building programs for the PBS operators and front-line staff to sensitize towards the needs of ITCs.

**Additional recommendations:** The PMC shall introduce substantial penalties for the operators/users when cycles are parked outside the cycle zones.

## Urban Street Design Guidelines Pune, 2016

The document discusses the design consideration of pedestrians, cycles, roadside, and intersections through street elements, safety elements, and multiutility zones by considering universal accessibility; however, the needs of ITCs including pregnant women are missing.

### GAPS

**Inclusive** - Needs of ITCs, pregnant women are not highlighted

**Safe** - It does not incorporate first respondent system to improve safety.

**Accessible** - Priority access to vulnerable group at IPT stands and PT stations is missing

**Playful/ Enjoyable** - Not mentioned

### OPPORTUNITIES

**Inclusive** - It shall incorporate the needs of ITCs, including pregnant women in infrastructure and services, and shall incorporate gender safety audits.

**Safe** - Strategic planning to improve safety and incident management through monitoring and first responder department (police, ambulance, and fire department).

**Accessible** - Shall highlight the gender-based priority to IPTs and PTs at stands and stations, respectively, either through communication and outreach programs or by introducing mandatory guidelines.

**Playful/ Enjoyable** - Shall incorporate detailed discussion on children's play elements such as visual, solitary, linguistic, social, logical, music, rhythmic, auditory learnings, and learning from nature.

### Way forwards in Overarching Themes

**Convenience:** It shall incorporate guidelines to introduce ITC-friendly amenities like feeding rooms to incorporate their needs.

**Resilience:** It shall incorporate strategic plans for the use of streets, foot over bridges during extreme events for gathering and evacuation during extreme events.

**Behaviour Change:** The policy has highlighted the need for communication and outreach; however, it shall incorporate steps to be followed by municipalities to increase

awareness through communications and outreach programs that will bring positive change to opt for sustainable transport modes.

**Additional recommendations:** It shall include the specific walking speed of caregivers with infants and toddlers either in pram / in-hand as per the new IRC 103:2020 guidelines for designing pedestrian signal timings.

## Integrated Regional Disaster Management Plan for Pune City and Pune Municipal Councils, 2014

The document provides risk analysis for Pune city regarding earthquakes, floods and flash floods, bio disasters, fire, riots, chemical-industrial hazards, building collapse, air/road/water/air accidents, terrorism, and communal riots and stampedes. These extreme events are directly linked to the panic experiences for young children and could be disastrous for their early childhood development. Inclusivity, Clean and playful components are not applicable during the extreme events and hence, are not reflected in gaps and opportunities.

### GAPS

**Safe** - First response activities, surveillance and security during extreme particularly in evacuation or mitigation strategies are missing.

**Accessible** - Priority access to vulnerable group during evacuation are missing.

### OPPORTUNITIES

**Safe** - It shall incorporate gender-based priority access in planning and execution strategies during extreme events.

**Accessible** - It shall incorporate action plan to provide priority access to ITCs including pregnant women during evacuation.

### Way forwards in Overarching Themes

**Resilience:** Strategic incident management plan shall be developed by considering ITC needs. Planning for evacuation between one ward to another or from urban to rural shall be formulated by Pune Municipal Corporation (PMC) for better incident/emergency management with the presence of basic amenities, along with priority access to vulnerable group.

**Behaviour Change:** It shall suggest guidelines/strategies (training, workshops, incentives) to encourage and educate people about ways to use PT, NMT during extreme events.

**Additional recommendations:** Stringent prevention plans/laws shall be enforced, particularly for illegal construction and mining activities, to avoid emergencies such as flash floods, accidents, and building collapse.

## Public Parking Policy Pune, 2018

The document provides guidelines for on-street, off-street parking, rates associated with it, and parking management based on congestion level. The document also highlights designated/ reserved parking near hospitals, medical establishments, special areas, railway stations, bus stations, and PMPML bus terminals. Inclusivity of babies and toddlers are not directly linked to public parking as they are dependent on caregivers; however, the needs of caregivers, including pregnant women is important to address for rest and pause spaces or feeding or for changing the diapers.

### GAPS

**Inclusive** - Gender lens for reserved parking is missing in the policy

**Safe** - Security, surveillance, vigilance at off-street parking is missing.

**Accessible** - Priority access for caregivers along with pregnant women is missing.

**Clean and playful** - Green spaces near parking spots and stress free environment are missing.

### OPPORTUNITIES

**Inclusive** - Strategic plan on allotting reserved spots for disabled, pregnant women, women with infants and toddlers shall be incorporated.

**Safe** - It shall incorporate gender-specific guidelines on improving security at parking spots in collaboration with traffic police and parking spot owners.

**Accessible** - Priority parking for vulnerable group shall be incorporated within the policy.

**Clean and playful** - It shall introduce guidelines on green spaces near off-and-on-street parking spots, aesthetic arts, pleasant spaces to introduce stress-free environment for young children and their caregivers.

### Way forwards in Overarching Themes

**Convenience:** It shall incorporate guidelines to introduce amenities like drinking water fountains, feeding rooms, toilets, benches, trees, lightings at off-and-on-street parking locations.

**Resilience:** It shall incorporate guidelines to use off-street parking locations (buildings + lots) for gathering purposes during extreme events.

**Behaviour Change:** Sensitization towards vulnerable groups (Caregivers, pregnant women, senior citizens) by offering the parking slots can be achieved through the communication and outreach programs and hence shall be included in the policy.

**Inference:** Pune has been a pioneer in many mobility related policies and sets a good foundation for pedestrian-oriented mobility. However, there is a need to incorporate ITC lens to most of the documents to make them inclusive. In short term, **Pedestrian policy, Urban street design guidelines (USDG), Parking and bicycle sharing** policies shall be strengthened through safe, access, playful and resilient objectives by incorporating the recommendations through young children and caregivers' need.

## Conclusion and Way Forward

**Based on the detailed review, overall identified gaps, key takeaways and way forward are discussed in this section.**

### Identifying gaps

In India, national transport-related policies encourage state and local bodies to invest in public transport and non-motorized transport modes to improve mobility and reduce the disastrous climate impact. Also, national policies envision that Metro systems, transit-oriented development, and well-functional first-and last-mile connectivity would encourage people to shift to public transport. Maharashtra state and Pune-specific policies are supposed to act as the steppingstones for the national policies creating local support systems to realise the vision. Most of the existing mobility policies developed in the past have not considered the needs of ITCs in transport and mobility planning. These policies primarily cover various aspects of inclusivity and accessibility; however, other ITC-centric objectives of safety, green, convenience and playful mobility are not sufficiently covered.

Pune-specific policies and guidelines have adopted more pedestrian-oriented approach though further specific guidance on ITC needs is a gap that needs to be filled to make them inclusive and robust. Draft IRC guideline 103:2020 at national level have recently been modified to recognize and address ITCs needs on streets but they remain at conceptual or provisional level. Design requirements for types of ITC profiles, needs in various city contexts, additional measures for the overall healthy environment on streets are some of the major gaps that require attention.

Integration of safety measures such as incident management through first respondents, priority accessibility to vulnerable groups at IPT stands and PT stations, stimulating experiences for children, active edges on streets, opportunities for frequent pauses, and basic amenities (drinking water, toilets, feeding rooms, street lighting), noise mitigation measures within mobility are some of the critical gaps in National, Maharashtra, and Pune-specific transport policies. Moreover, resilience measures required in mobility planning are not explicitly provided in national policies which is critical for functioning of transport network and services during and after extreme events.

Lastly, the State level and Pune level policies need to offer stronger framework around implementation mechanisms such as institutional setups, incentive systems, awareness and outreach programs. At the same, deeper guidance around building the resource capacity, and training systems needs to be incorporated.

### Key takeaways and Way forward

To address the above-mentioned gaps, firstly certain international references have been suggested for reference. Furthermore, short, medium, and long-term reforms needed at different governance levels and a multi-sectoral approach have been proposed as a way forward.



### Referring Best Practices from the Globe

National, State and Pune-specific policies can take a cue from certain international policies to include comfort and convenience aspects of ITC mobility. However, their offerings may not directly relevant to Indian context, thus will require contextualizing.

The 'Access and Babies, Toddlers, and their caregivers' policy identifies the unique travel characteristics of ITC mobility like dependent mobility, trip chaining, off-peak travel to non-commercial destinations and affordability. It also proposes a 15 minutes and 10 minutes neighbourhood idea to include ITCs access to the city at large and details the needs and possible interventions cities can do to implement them. However certain implementation-oriented process such as funding, maintenance, and monitoring of the interventions are not a focus of this policy. These may be included based on local administrative structures.

Priority measures, healthy and playful environment, planning first and last mile connectivity, clean transport options are some of the key learning from international policies that can be adopted to focus on ITC-oriented mobility. Measures within built environment such as shaded and green access, playful and stimulating surroundings, exposure to natural elements, legible wayfinding need to be added as well.

### Strengthening key guidelines in the short term

The readiness of certain guidelines may allow modifications in the short term to retrofit ITC lens since they already cover most aspects of accessibility and have enough focus on pedestrian-oriented mobility. For example, 'IRC 103:2020 Pedestrian facilities' as a mandate does cover universal accessibility and also recognizes children and caregiver as users. Further specific considerations for this age group can be retrofitted in the short term to make it ITC-inclusive.

Maharashtra State Urban Transport policy is currently in the draft stage and therefore in short term, can be retrofitted with ITC-friendly recommendations such as introducing gender-lens safety, noise pollution mitigation strategies, and learning and play elements in the document.

**Pune-specific policies, like urban street design guidelines, parking, bicycle sharing, and Pedestrian policy**, can be retrofitted with ITC-lens in the short term to incorporate certain neighbourhood-level ITC-oriented measures such as safety of design, priority zones, NMT infrastructure around destinations and encouraging incentives.

### Systemic approach in the medium term

To address above-mentioned gaps, it requires systemic approach of developing strategic action plans, step-by-step tools, and audit system policies at the national, state, and city levels that would help to establish ITC-friendly mobility as a priority. International guidelines and policies stated in this report do acknowledge needs of young children and caregivers to some extent and therefore, offer useful recommendations towards facilitating their mobility. These could be contextualized to inform India's national, state policies to ensure ITC-inclusive approach.

Therefore, beyond the assessment done in this report, a detailed review may be required for each policy to outline scope and level of modifications, additions from ITC lens.

**The latest policy, Maharashtra State Policy and Action Plan for Gender Equality and Women's Empowerment 2022**, gender and disabled - friendly actions plans have been proposed. It covers

aspects of caregiving amenities, adequate fleet, reserved seats to concessional fares, connectivity options for women and transgenders. This policy can be easily enhanced to include the understanding of ITC travel patterns and how to correlate them while planning mobility.

### Major reforms in the long term

At present, most National policies are oriented towards mass transit systems such as Metro systems, transit-oriented development. These may need major reforms possible over a period to move away from vehicle-oriented planning and instead accommodate needs of pedestrians, including ITC groups. For example, **NUTP 2006**, and **Metro rail policy** may be enhanced to emphasize on the convenient travel options for caregivers travelling with children and their travel patterns such as off-peak travel, caregiving destinations, low-traffic routes as shortcuts. Moreover, resilient measures need to be explored and evolved to allow functioning of transport services and mobility infrastructure during and after extreme events.

### Multi-sectoral approach

ITC choose travel modes based on how convenient, seamless they are even while interchanging from one mode to other. Thus, it is of utmost importance to highlight the need for multi-sectoral, inter-departmental, coordinated efforts in implementing mobility in the city so that seamless mobility is ensured. Maharashtra level and Pune specific policies need to include this aspect to achieve comprehensive, wholesome realization of their planning. Stating key agencies, their probable roles and coordination requirements can be some of the short-term additions. These can be achieved through multi-stakeholder discussions between various departments and agencies, NGOs, and caregiver/citizen groups.

This approach should be extended to include communication and outreach programs that emphasize on the needs of ITC to keep the momentum in the long term. Educating, promoting, incentivizing ITC to use NMT modes could be a starting point for this.

### Direction for ITC - friendly mobility in the State of Maharashtra

As a way forward, three broad areas are identified to retrofit the ITC lens in urban mobility. These will form the basis of ITC-friendly mobility policy brief for the state of Maharashtra

- **Neighbourhood level mobility**
- **Zonal level transit stops**
- **City level public transit networks**

The policy brief will explore these three main areas and put forth strategies for retrofitting ITC lens.

## Annexure

S.no	Document Name (Policy, Guidelines, Plans)	(i) Key offering, (ii) Opportunities from ITC-mobility objectives (iii) Way forward from Overarching themes
1	National Road Transport Policy by ASRTU, 2016	<p>i) The policy promotes modern, energy-efficient, and environment-friendly road transport. Specifically mentioned the installation of feeding rooms on highways, which aligns with the needs of ITC. Also, highlighted the provision of feeding rooms on highways.</p> <p>ii) It shall include learning and play elements embedded in wayside amenities for ITCs.</p> <p>iii) It shall include an action plan to be followed during extreme events.</p>
2	National Mission on Sustainable Habitat	<p>i) The document addresses the strategies to reduce greenhouse gas emissions from the transport sector by promoting non-motorised and public transportation, improving access and use of alternative fuels, battery operated and hybrid vehicles, which will support the needs of ITCs and reduce the impacts of air pollution.</p> <p>ii) It shall incorporate the needs of ITCs, and provide guidelines to improve gender safety, learning, and play elements in urban transport.</p> <p>iii) It shall include guidelines to introduce pleasant amenities embedded within street furniture, for example, feed rooms, toilets, and benches for all modes of transport, particularly for NMT, buses, BRTS, and metro. It shall also include an incident management system during extreme events along with facilitating post-trauma centers.</p>
3	National Electric Mobility Plan	<p>i) The plan addresses the opportunities, recent development, development plan, and supply incentives for the automobile industry (considering all modes of motorised transport).</p> <p>ii) This policy is related to e-vehicle infrastructure from the automobile industry perspective. The scope of this policy through all five objectives are limited.</p> <p>iii) This policy is related to urban transport mobility, however its applicability and relevance for ITC friendly urban mobility is limited.</p>
4	National Road Safety Policy	<p>i) The document highlights key areas to improve road safety through awareness, driver training, safer vehicles, the safety of vulnerable road users, emergency services, enforcement, research, and strengthening legal, institutional, and implementation strategies, which align with improving road safety of ITCs. ii) As the document specifically focused only on road safety, reviewing through other ITC-mobility objectives is limited.</p> <p>iii) It shall include mitigation strategies like the golden hour rule, post-trauma centers, and a high penalty system through automated enforcement, communication, and outreach programs for awareness, which will support ITC-mobility.</p>

S.no	Document Name (Policy, Guidelines, Plans)	(i) Key offering, (ii) Opportunities from ITC-mobility objectives (iii) Way forward from Overarching themes
5	Comprehensive Mobility Plan for Pune City	<p>i) It has emphasized improving the share of public transport through capacity and quality, along with enhancing walkability within Pune, which supports the needs of young children and their caregivers.</p> <p>ii) It shall include the needs of ITCs, identifying the ITC-priority zones through detail data collection, analysis, and incorporate the ITC-friendly mobility recommendations through all the five objectives.</p> <p>iii) It shall retrofit the ITC needs through all three overarching themes : Convenience, Behavioural change and Resilience.</p>
6	Metro Detailed Project Report, Pune	<p>i) The document provides detailed analysis of proposed metro corridors and possible measures to be incorporated to make a metro system inclusive, safe, accessible, and resilient.</p> <p>ii) It shall include incorporating pleasant and basic amenities to create stress-free commute experience for ITCs, which shall include feeding rooms, learn and play elements at stations or at platforms</p> <p>iii) It shall include public awareness campaigns, communication, and outreach programs to encourage people to shift to Metro and be sensitive toward ITCs need.</p>
7	Air quality plan-Pune	<p>i) The document provides a plan to mitigate air quality concerns in the Pune city and region, which directly support the needs of ITC-mobility by enhancing green / clean environment in Pune.</p> <p>ii) It has included developing green buffers along the traffic corridor, renewable energy for autorickshaws and public transport, promoting the use of non-motorized transport and public transport, dust mitigation measures and water fountains at major intersections to reduce air pollution, which would help to create ITC-friendly mobility. However, due to the specificity of the topic, reviewing through other ITC-objectives is limited.</p> <p>iii) It shall include guidelines for public awareness campaigns for cleaner air and healthy environment in Pune by addressing the short and long-term impacts of air pollution on young children, including pregnant women.</p>

S.no	Document Name (Policy, Guidelines, Plans)	(i) Key offering, (ii) Opportunities from ITC-mobility objectives (iii) Way forward from Overarching themes
8	Transit-Oriented Development (TOD) Regulations, Pune (2019)	<p>i) The document addresses the regulations that need to be adopted to ensure pedestrianization and execution of complete street design in TOD zones for easy movement of pedestrians to and from transit stations, strengthening the seamless connectivity for ITCs.</p> <p>ii) It shall include the provision of green spaces, placemaking for promoting play, learning, health, and well-being of ITCs in TOD zones</p> <p>iii) It shall include an action plan to be followed in TOD zones during extreme events such as flood, fire, heavy rainfall.</p>
9	Development Plan for Pune City (Old limit) 2007-2027	<p>i) The plan provides desired structured development of the city for 2007-2027, which becomes a baseline to develop the built environment. It has covered most aspects of supporting the ITC-mobility; however, the needs of ITCs shall be included.</p> <p>ii) It has promoted access to education, health, and recreation facilities, which directly support ITCs. For example, PMC primary schools have been located so that student's travel time will not be more than 10 to 12 mins by walk OR distance-wise not more than 0.6kms. Likewise, access to health facilities (PMC and privately run) is ensured to be located so the sites for dispensaries (run by private institutes or PMC) shall be available to the people within an influence zone of radius of 0.6 km to 0.8 km and for maternity home and hospitals shall be about 1.6 km. Lastly, access to playgrounds has been provided by ensuring that the playground sites are within 5 to 10 minutes walking distance or 0.2 to 0.3 km.</p> <p>iii) It shall incorporate strategies to develop resilient infrastructures embedded within social amenities and utility services. For example, evacuation routes and dedicated spaces to gather during extreme events.</p>

S.no	Document Name (Policy, Guidelines, Plans)	(i) Key offering, (ii) Opportunities from ITC-mobility objectives (iii) Way forward from Overarching themes
10	Plan for Pune Metropolitan Region 2021-2041	<p>i) The document comprised two documents. Volume 1 proposes a vision to develop the Pune Metropolitan Region (outside Pune municipal corporation and Pimpri Chinchwad municipal corporation) to become liveable habitat by achieving five goals, which include: Convenient (Mobility), Prudent (Economy), Resilient (Environment), Efficient (Infrastructure), Self-sufficient (Housing and Amenities). It has highlighted key findings, challenges in housing, traffic, transport, social infrastructure, public utility, tourism, and urbanisation potential assessment. Volume 2 has identified growth centers such as Chakan, Loni Kalbhor, Malavali, Yewat highlighted their current situation and proposed role and strategic projects related to zoning, development, transport which need to retrofit the ITC needs in projects and planning strategies.</p> <p>ii) This plan shall include the needs of ITCs, formalise a process of collecting ITC relevant data, and identify ITC-priority zones. Lastly, it shall incorporate the ITC-friendly mobility recommendations through all five objectives and three overarching themes.</p>
11	Infant, Toddler, Caregiver-Friendly Neighbourhood. Policy Framework, 2019	<p>The framework is a set of 5 documents ranging from Policy framework, workbook, ITCN guidelines, M&amp;E and best practices. They offer specific ITC lens into development of all types of spaces – streets, public spaces, transit zones as well as ECD services. They introduce 5 ITCN objectives which has formed the basis of this Baseline assessment as well. Although guidelines document covers street design quite in detail, design of transit spaces can be explored further from ITC lens.</p> <p>ii) Guidelines and best practices document can include more guidance from Indian context around design of access streets of ECD services and bus stops. Since these areas see high footfall of ITC frequently. Playfulness during mobility can be explored further from the point of engaging elements during transit such as interactive route maps, playful trails outside ECD services, play and learn elements integrated in design of bus stops.</p> <p>iii) Resilience in mobility needs more emphasize, especially operating transit services during extreme events to allow evacuation of ITC. Convenient scheduling, frequency, last mile connect can encourage them to use public transit and NMT modes. Educational centres, ECD services can play a crucial role in influencing positive behaviours among frontline staff and caregivers accessing the services daily.</p>



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### ABOUT THE TEAM

WRI India and Parisar (Under Urban95 Programme)

Sreekumar Kumaraswamy, Anushree Patil, Ajinkya Mane and Nikita Pal are associated with the Sustainable Cities and Transport program at WRI India Ross Center.

Ranjit Gadgil and Aditya Chawande are associated with PARISAR Pune.

Sruthi Javdekar, ECD expert

### BERNARD VAN LEER FOUNDATION (BVLf)

Founded in 1949, the Bernard van Leer Foundation (BvLF) is a private foundation focused on developing and sharing knowledge about what works in early childhood development. It provides financial support and expertise to partners in government, civil society and business to help test and scale effective services for young children and families. Urban95 is the Bernard van Leer Foundation's 30 million euro initiative to make lasting change in the landscapes and opportunities that shape the crucial first five years of children's lives. BvLF has supported programs in India since 1992. <https://bernardvanleer.org/>

### Urban95

Urban95 is the Bernard van Leer Foundation's initiative to incorporate a focus on the needs of young children and those who care for them into city design, planning, and management. It asks a simple but bold question: "If you could experience a city from 95cm - the height of a 3 year old - what would you change?"

### WRI INDIA

World Resources Institute (WRI) is a global research organization that spans more than 60 countries, with international offices in Brazil, China, India, Indonesia, Mexico, and the United States, Regional offices in Ethiopia (for Africa) and the Netherlands (for Europe), and program offices in the Democratic Republic of Congo, Turkey, and the United Kingdom. Our more than 1,000 experts and staff turn big ideas into action at the nexus of environment, economic opportunity, and human wellbeing. <https://wri-india.org/>

### PARISAR

Parisar is a Pune based civil society organisation, working on the broad spectrum of issues under sustainable urban development over the past three decades. The approach for bringing about sustainable, effective changes in these areas is through research, policy advocacy and public engagement. Our focus areas include urban mobility, road safety, air quality, urban planning and natural and built heritage conservation. <https://parisar.org/>

