

INCLUSIVE DESIGN FOR PEDESTRIANS

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Some basic facts

- 0–14 years
 - 31.2% (male 190,075,426/female 172,799,553) (2009 est.)
- 15–64 years
 - 63.6% (male 381,446,079/female 359,802,209) (2009 est.)
- 65 and over
 - 5.3% (male 29,364,920/female 32,591,030) (2009 est.)

Some basic facts

2014

Population density (people per sq. km) in India	435.7
Population in largest city in India	2.49 Cr.
Population in the largest city (% of urban population) in India	6.1 %
Population in urban agglomerations of more than 1 million in India	18.33 Cr.
Population in urban agglomerations of more than 1 million (% of total population) in India	14.5 %
Urban population growth (annual %) in India	2.4 %
Urban population in India	41.92 Cr.

Issues in Inclusivity

- Lack of proper Parking. Roadside car parking reduces walking space.



Issues in Inclusivity

- Lack of proper Maintain the Footpaths, clean it so that it's a smooth walk.



Issues in Inclusivity

- Lack of Disabled Friendly Infrastructure



Issues in Inclusivity

- Encroachments of footpaths



Issues in Inclusivity

- Encroachments of footpaths



Issues in Inclusivity

- Crossing the road with knowledge



Issues in Inclusivity

- Security and Lighting



Most pedestrian friendly Cities of the world

- Florence
 - Given that much traffic in Florence's historic center is restricted to permit-bearing residents, buses, and taxis, it's a city that begs to be explored on foot.



Most pedestrian friendly Cities of the world

- New York City
 - New York City is the most walkable city in the USA. Manhattan's easily navigable numbered streets and city government plans such as the pedestrianized Times Square undoubtedly play a part in New York's walkability stakes.



New York Experience



Most pedestrian friendly Cities of the world

- Marrakech

- With its UNESCO World Heritage Site–listed Medina home to many of its most historical monuments, the must-see sights of Marrakech are easily explored by foot. The labyrinthine alleyways of Marrakech’s souks, a hodgepodge of rug weavers, brightly colored babouches, and exotic spices, may be bewildering, but they are a Marrakech must-see.



Most pedestrian friendly Cities of the world

- Buenos Aires

- Often called the ‘Paris of South America,’ Argentina’s capital, Buenos Aires, is known for its beautiful, European-style architecture, diverse neighborhoods, and lively cultural scene. A walk through the barrio of La Boca is a must for arts lovers which boasts highlights like Caminito, a little street of vibrantly painted houses enlivened by the talents of local artist Quinquela Martín, and the contemporary art gallery, Fundación Proa.



Solutions

- Car free initiatives
 - Temporarily removing cars from a city can transform roads into public spaces, while raising awareness around car dependency and also immediately reduce air pollution. But more importantly, it reveals the potential opportunities created by having more – and safer – spaces for people. Car-free days have been trialled across the globe – from Bogota to Bangalore.

Solutions

- Pedestrian and health campaigns
 - Governments, schools and businesses may initiate programmes aimed at improving health through walking, Marathon. Governmental roles include evaluating health impacts, setting out goals, monitoring progress and gaining support from local organisations.

Solutions

- Local champions
 - Celebrities, local heroes and champions can be powerful advocates of healthy living, and campaigners for pedestrians' right. With their money, power and image, they are able to get the wheels turning, and set examples for others to follow, promoting walking as an attractive option.

Solutions

- Economic incentives
 - Financial incentives and disincentives, including subsidies and taxes like congestion charges, can be used to encourage behaviour change. Businesses can play a major role in incentivising walking by providing economic incentives to encourage healthy choices. Using modern technology, pedestrians can be rewarded for their active lifestyle with points or actual money, which can be redeemed for goods or services.

Solutions

- Density and mixed functions
 - Location of homes, places of work and facilities are the most structural determinants of transport demands and transport mode choice. The compactness of a city – especially whether or not different land-uses are within walking distance of each other – is the most decisive attribute that gets people walking, or choosing alternative modes of transport. TOD could be a good option to adopt by most cities.

Solutions

- Walkable connectivity
 - Crossings of pedestrian networks with other transport networks and natural barriers such as rivers are often the biggest barriers to overcome on foot. Preferably, these are crossed with minimal disruption to the most direct walking route, to maintain the fastest, most understandable path, while still maintaining a safe connection.

Solutions

- Road share
 - Shared-space, where there is little segregation between pedestrians, cyclists and drivers, is a holistic approach towards traffic calming and space activation. In shared spaces, the uncertainty or a lack of traffic rules encourages drivers to slow down, creating a pedestrian-oriented environment where people are aware of fellow road users.

Solutions

- Integration with public transport
 - Integrating public transport into a pedestrian network contributes to developing a more sustainable, efficient and healthy city. Improving factors such as the distance between transit stations and walking routes, or improving the legibility of the network, fosters a pedestrian-friendly environment, and reduces the general need for cars.

Solutions

- Safe crosswalks and intersections
 - Implementing audio or visual aids to crossings and intersections can reduce the boundaries posed by roads on pedestrian mobility. They are able to increase the safety and ease of travel for those on foot, while also raising the awareness of drivers. They also make it possible for people with mobility issues or impairments to manoeuvre junctions independently.

Solutions

- Traffic calming measures
 - Measures including speed bumps, restrictions or methods of filtered permeability directly slows traffic and improves safety on the street, while also redefining space for alternative use. These can also be integrated with Road share and achieve desired results.

Solutions

- Improved signage
 - Because pedestrians travel relatively slowly, they have greater travel navigation needs to avoid lengthy detours. Increased and improved pedestrian information street signs can reduce dependency on additional devices such as mobile phones and hugely help pedestrians understand the network, increasing ease of navigation and permeability in public space. Furthermore, luminous signage can also affect traffic safety and street security.

Solutions

- Innovative public spaces
 - Walking is a great way to discover new spaces or areas, and inventing new public spaces in previously inaccessible areas, such as underground or on water, is an attractive way to get people exploring on foot.

Solutions

- Street design and furniture
 - Citizens moving around at street-level will experience space most intensively. Therefore, creating attractive and accommodating spaces through thoughtful street design will result in improved functionality and often stimulate individuals to walk more.

Solutions

- Inclusive design
 - Design can remove barriers between physical space and communities. The elderly, people with a disability and those with mobility issues often need more help than others to conquer physical barriers in cities. By providing public services such as public elevators or wayfinding aids, barriers can be overcome for people with different needs, allowing or assisting with walking and personal mobility.

Copenhagen Model

- CONVERT STREETS INTO PEDESTRIAN THOROUGHFARES
- REDUCE TRAFFIC AND PARKING GRADUALLY
- TURN PARKING LOTS INTO PUBLIC SQUARES

Copenhagen Model

- KEEP SCALE DENSE AND LOW
- HONOR THE HUMAN SCALE
- POPULATE THE CORE

Copenhagen Model

- ENCOURAGE STUDENT LIVING
- ADAPT THE CITYSCAPE TO CHANGING SEASONS
- PROMOTE CYCLING AS A MAJOR MODE OF TRANSPORTATION
- MAKE BICYCLES AVAILABLE

Solutions



Solutions



Thank-you

Credits : ARUP, CEPT, JAN HEL, COPENHAGAN, NEW YORK, WIKIPEDIA