

Pedestrians and Walking

Definitions

A pedestrian is a person travelling on foot, whether walking or running. Walking is the most basic and common mode of transportation. Walking has the least external environmental impacts of all forms of travel.

Context and Policies

Walking is accessible to all social groups, ages, religions and cultures. It is a free means of travel that can provide access to most facilities and financial status does not limit opportunity. Walking promotes equality and reduces social exclusion. Everyone should be able to choose to walk as part of a journey, or in preference to any other form of transport. Pedestrian traffic averages about 4.5 kilometres per hour and the pedestrian environment provides public space where people can meet and interact. Pedestrian space requirements range from less than one square metre to several square metres for people with a cart, a pet on a leash, or a group. Creating an attractive and safe pedestrian environment is a critical part of developing more liveable communities.

Issues

Pedestrians generally travel more slowly than any other mode and they are vulnerable to injury if hit by a vehicle. They may be difficult for drivers to see, particularly when traffic speeds are moderate or high. Pedestrians are often pushed aside by efforts to ease congestion: traffic signals timed for high-speed traffic, multi-lane high-speed motorways, and other schemes for motor vehicle priority leave pedestrians behind. Pedestrian overpasses or dimly lit and expensive underpasses are not the answer. Pedestrians are particularly sensitive to traffic congestion, detours, roadway conditions, street aesthetics, and perception of street crime. Steps, steep inclines, and surface irregularities can present significant obstacles to children, seniors, people with disabilities, and people using strollers or handcarts. People often do not walk because of the fear of crime and worries about personal security. Women in particular feel vulnerable to theft and assault, especially at night because street lighting is often inadequate or non-existent. Many cities lack walking routes that link daily destinations. In most places, current levels of information are inadequate to support the encouragement and promotion of walking as an attractive and convenient mode of travel. The needs of pedestrians can be summarised as follows:

- Appropriate walking network enabling pedestrians to reach all their destinations.
- Shortest possible routes between two destinations, except in areas mainly devoted to leisure, commercial or cultural activities
- Choice between alternative routes for trips with different purposes (leisure and work trips for example).
- Continuity of routes (avoiding abrupt changes in the way they are planned and the amount of attention required from the pedestrians; remove obstacles).
- Adequate location of crossings (zebras, traffic light



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Resources

Documents

- **Development of Qualitative Evaluation Methodology for Sidewalks in Delhi**, 2007, Purnima Parida et al., CRRI, New Delhi (India)
- **Economic Value of Walkability**, 2007, Todd Alexander Litman, Victoria Transport Policy Institute (Canada)
- **Encouraging walking: advice to local authorities**, 2000, Department of the Environment, Transport and the Regions (UK)
- **Evaluation of the pedestrian environment – A Qualitative approach - Case study of Theagaraya Nagar - the commercial hub of Chennai city**, 2007, K.S. Rakesh, Sathyabama University, Chennai (India)
- **Footfalls: Obstacle Course to Livable Cities**, 2009, Anumita Roychowdhury, Centre for Science and Environment, New Delhi (India)
- **Improving walkability: Good practice guidance on improving pedestrian conditions as part of development opportunities**, 2005, Transport for London, Greater London Authority (UK)
- **Making London a walkable city: The Walking Plan for London**, 2004, Transport for London, Greater London Authority (UK)
- **Pedestrians at Crossroads: A Case Study of Bangalore**, 2008, Sudhir and Sameera Kumar, Seccon Pvt. Ltd. (India)
- **Street Space Sustainability in Asia: The Role of the Asian Pedestrian and Street Culture**, 2007, Iderlina Mateo-Babiano and Hitoshi Ieda, Association for Planning and Transportation Studies, Tokyo (Japan)
- **The Global Walkability Index**, 2006, Holly Krambeck and Jitendra Shah, World Bank (USA)
- **Towards Implementing a National Pedestrian Strategy for South Africa**, 2002, H Ribbens and J Raborifi, Department of Transport (South Africa)

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crossings, underpasses or bridges) in order to satisfy the two requirements: shortest route, continuity.

- Reduction of friction between motor or bicycle traffic and pedestrians wherever possible (segregated or separated pedestrian routes, or speed reduction).
- Good surface of pavement; wide enough to accommodate the volume/flow of pedestrians; shelters for bad weather or for waiting; adequate lighting; specific direction signs for pedestrians; resting facilities.

Actions

Experience shows that pedestrian improvements are not fully effective when randomly planned. They need to be part of a comprehensive approach linked to urban planning and traffic strategies (and interventions for other modes of transport). Within this context, there are many ways to improve facilities depending on the appropriateness of pedestrian facilities in any given city.

This can be determined by undertaking a "Walkability Assessment" that takes into account the quality of pedestrian facilities, roadway conditions, land use patterns, community support, security and comfort for walking. Factors that are commonly part of walkability indices include:

- land use mix;
- street connectivity;
- residential density (residential units per area of residential use);
- orientation and placement of homes and buildings to watch over the street;
- scale and nature of places to go to near the majority of homes;
- street designs that work for people; and
- retail floor area ratio.

Other factors that affect walkability include access to public transport, the availability and quality of sidewalks, the degree of separation from moving traffic (barriers, fences, planter strips, on-street parking or bike lanes), pedestrian crossings, aesthetics, nearby local destinations, air quality, street furniture, and traffic flow. Walkability can be evaluated at various scales:

- At a site scale, walkability is affected by the quality of pathways, access to buildings and related facilities.
- At a street or neighbourhood level, it is affected by the existence of footpaths (pavements or sidewalks) and pedestrian crossings (crosswalks) as well as roadway conditions (road widths, traffic volumes and speeds).
- At the community level, it is also affected by accessibility, such as the relative location of common destinations and the quality of connections between them.

Media

- **Jaime Lerner on Making Curitiba's First Pedestrian Street**, 2009, Elizabeth Press, StreetFilms.org (USA)
- **Melbourne: A Pedestrian Paradise**, 2008, Clarence Eckerson, Jr, StreetFilms.org (USA)
- **People Friendly Design in London**, 2009, Alice Shay, StreetFilms.org (USA)
- **The Street Life of Havana**, 2008, Nick Whitaker, StreetFilms.org (USA)

Presentations

- **Creating a Pedestrian Environment by Integrating NMT Facilities in the Urban Transport System in Jakarta**, 2003, Andi Rahmah, Pelangi (Indonesia)
- **Modeling Qualitative Level of Service for Sidewalks in Delhi**, 2009, Purnima Parida et al. CRRI, New Delhi (India)
- **Pedestrian Safety and Urban Infrastructure**, 2009, Geetam Tiwari, Indian Institute of Technology, Delhi (India)
- **Walk Urban: Macro-Scale Indicators for the Urban Pedestrian Environment**, 2006, Brittany Montgomery, World Bank (USA)
- **WALKABILITY: Improving Pedestrian Infrastructure and Services In Bangkok**, 2009, Jitendra Shah, World Bank (USA)

Recommended Links

- **International Federation of Pedestrians** (Switzerland)
- **Walk21** (UK)
- **Walkability Improvements: Strategies to Make Walking Convenient, Safe and Pleasant** (Canada)
- **Walking Info: Pedestrian and Bicycle Information Center** (USA)
- **Walking, Pedestrian Strategies and Pedestrianisation** (UK)
- **Right to Walk Foundation** (India)

For further information

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