Non-Motorised Transport

Definitions

Non-Motorised Transport (NMT) comprises trips on foot, by bicycle or tricycle including the use of handcarts and wheelchairs.

Context and Policies

Nearly everybody walks and many people cycle and virtually every trip begins and ends by walking or cycling. NMT improvements therefore benefit almost everyone. Lower-income and transportation-disadvantaged people often rely heavily on NMT, and so benefit significantly from NMT improvements. NMT is an integral element of urban mobility although its significance and function vary by city and by country. The development of NMT is a key element in successfully encouraging sustainable and clean urban mobility. Policies to encourage NMT usually form part of Mobility Management and Transport Demand Management measures.

Issues

- Although, NMT is the dominant means of transport in the developing world (because the majority of citizens cannot afford access to motorised transport), there is a widespread lack of respect for non-motorised users.
- Non-Motorised Transport tends to be stigmatised. Some people consider walking and cycling outdated, unsophisticated and unexciting compared with motorised modes, or even as symbols of poverty and failure.
- In many cities, traffic systems have been designed to increase motor vehicle speeds, at the expense of Non-Motorised Transport.
- Non-Motorised Transport often fares badly when constructing new roads or widening existing roads. Areas formerly used for NMT movement are frequently allocated to motor traffic.
- Limited access roads and busy streets with few pedestrian crossings and traffic lights create particular hardships for non-motorised, short distance travel.
- Walking and cycling are relatively slow means of transport (around three kilometres per hour). This means that having to walk an extra kilometre adds 20 minutes to a trip.
- Road safety is a critical issue. The speed and volume of cars, trucks and buses are particularly threatening to cyclists and pedestrians.
- Travel surveys and traffic counts usually under-record non-motorised trips, because they ignore or undercount short trips, non-work travel, travel by children, recreational travel, and non-motorised links. One study found that the actual number of non-motorised trips is six times greater than what conventional surveys indicate.
- Finally, in most cities there is a lack of technical staff and expertise to plan and design NMT facilities.

Photo credits: Bikeway in Bogotá © Institute of Urban Development, City of Bogotá

Resources

Documents

- **A proposed strategic plan for non-motorised transport (NMT) for Cape Town**, 2004, L. Pretorius and C.J. Bester, City of Cape Town (South Africa)
- **Africa on the Move**, 2005, United Nations Environment Programme (Kenya)
- **Improving Conditions for Non Motorized Transport in Surabaya, Indonesia: A Pilot Project in Two Neighborhoods**, 2000, Walter Hook, GTZ, Eschborn (Germany)
- **Making the African cities mobile: Non-motorized transport solutions in African Cities: The case of Jinja/Uganda**, 2006, Jürgen Heyen-Perschon, ITDP Europe (Germany)
- **Non-Motorized Transport in African Cities: Lessons from Experience in Kenya and Tanzania**, 2005, Setty Pendakur, SSATP Program, World Bank (USA)
- **Preserving and Expanding the Role of Non-motorised Transport, Sustainable Transport: A Sourcebook for Policy-makers in Developing Cities, Module 3d**, 2003, Walter Hook, GTZ, Eschborn (Germany)
- **Productive and Liveable Cities: Guidelines for pedestrian and bicycle traffic in African cities**, 2000, Rustica Tembele, University of Dar es Salaam (Tanzania)
- **Sustainable intermediate transport in West African secondary cities**, 2006, Bryan Dorsey, Department of Geography, Weber State University, UT (USA)
- **The Characteristics of Paratransit and Non-Motorized Transport in Bandung, Indonesia**, 2005, Tri Basuki Joewono and Hisashi Kubota, Saitama University (Japan)
- **The Significance of Non-Motorised Transport for Developing Countries: Strategies for Policy Development**, 2000, Maurits Servaas, I-ce (Interface for Cycling Expertise), Utrecht (The Netherlands)

Actions

There are many specific ways to improve NMT. The following suggestions are listed in the TDM Encyclopedia, published by the Victoria Transport Policy Institute:

- Improve pavements (sidewalks), crossings (crosswalks), paths, bicycle lanes, and correct specific road hazards (sometimes called "spot improvement" programmes).
- Improve the management and maintenance of NMT facilities, including reducing conflicts between users and maintaining cleanliness.
- Accommodate people with disabilities and other special needs (Universal Design).
- Develop pedestrian-oriented land use and building design (New Urbanism) and increase road and path connectivity, with special NMT shortcuts, such as paths between cul-de-sacs and mid-block pedestrian links.
- Introduce and maintain NMT related street furniture (e.g., benches) and design features (e.g., human-scale streetlights).
- Use Traffic Calming, Speed Reductions, Vehicle Restrictions and Road Space Reallocation.
- Introduce safety education, law enforcement and encouragement programs.
- Integrate NMT and public transport facilities (Bike/Transit Integration and Transit Oriented Development).
- Provide adequate and secure bicycle parking and address security concerns of pedestrians and cyclists.
- Create multi-modal access guides, including maps and other information on how to walk and cycle to particular destinations.

- **Urban non-motorised transport (NMT): A Critical look at the development of Urban NMT Policy and planning mechanisms in South Africa from 1996 - 2006**, 2007, Sabelo Gwala, Department of Transport (South Africa)
- **Walking and cycling: an action plan**, 2004, Dept for Transport (UK)

Presentations

- **Creating a Pedestrian Environment by Integrating NMT Facilities in the Urban Transport System in Jakarta**, 2003, Andi Rahmah, Pelangi (Indonesia)
- **NMT Infrastructure Design in Mexico**, 2008, ITDP (Mexico)
- **The Socio-economic Impact of Non-motorised Transport in Africa**, 2006, Dr. Jürgen Heyen-Perschon, ITDP Europe, Velo Mondial Conference 2006, Cape Town (South Africa)

Recommended Links

- **Forum on Improving Pedestrian Facilities and Bikeways in Metro Manila** (Philippines)
- **Global Alliance for EcoMobility** (Germany)
- **National Center for Bicycling & Walking** (USA)
- **Nonmotorized Transportation Planning** (Canada)
- **Selected Elements of Korea's Non-Motorized (Bicycle, Pedestrian & Inline Skate) Infrastructure and Facilities Engineering** (Korea)

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