

TRANSPORT STRATEGY TO IMPROVE ACCESSIBILITY IN DEVELOPING COUNTRIES

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SUMMARY

In developing countries disabled people and the elderly are more likely to be among the poor. Moreover, exclusion increases the costs associated with disability to constrain disabled people from breaking out of poverty. Improved access and mobility are important factors in reducing poverty and can facilitate the participation of people with disabilities in economic, social and political processes. Many countries have legislation requiring that these challenges be addressed but effective responses are generally very limited. Action to improve the situation is constrained by the serious shortage of data on the access and mobility needs of disabled and elderly people as well as by resource constraints.

This paper outlines guidance for addressing the access and mobility needs of disabled and elderly people in the context of the World Bank's mission to reduce poverty and discusses the main challenges for providing inclusive transport. It draws attention to opportunities to learn from transport interventions and to current research. The paper describes the main activities being fostered by the Transport Sector in the World Bank. These aim to raise awareness of proven good practice in setting policies and strategies. We also contribute to a community of practice which draws on current and new experience to improve planning, design and implementation for inclusive transport in developing countries.

DISABILITY, POVERTY AND TRANSPORT

The United Nations estimates that between 6 and 10% of the population in developing countries has a disability – some 400 million people world wide. The challenges faced by these people vary considerably but the shortage of reliable data makes it difficult to form a useful picture of the scale and nature of their needs. Indications are that, generally in low-income countries, 40 to 50% of all disabled people have sensory disabilities (including blindness, low vision, deafness, poor hearing and impaired speech); while 20 to 50% people have various physical disabilities, and in the order of 7 to 15% have cognitive disabilities (Venter et al., 2002).

In low-income countries disabled people are more likely to be poor than is the rest of the population. Case studies in a number of countries show that higher disability rates are associated with higher illiteracy, poor nutritional status, lower inoculation and immunization coverage, higher unemployment rates, and lower occupational mobility, among other characteristics (Elwan, 1999).

The livelihoods and economic opportunities of disabled people in developing countries are often worse because they are more likely to be excluded from services, social contact and community activities. This exclusion in turn leads to reduced social, cultural, educational and economic opportunities; thereby increasing the risk that people with disability will further fall into poverty. Such exclusion also imposes direct costs on society by reducing the economic and social output, not only of those with disabilities but also of those who care for them and whose productive employment may be reduced as a result (Metts, 2000).

Disabled and elderly people in low-income countries around the world have starkly emphasized the constraints which they suffer:

"Disabled people are not seen as human beings; they are isolated at home and not sent to school" -- Kabale focus group, Uganda 1998.

"... the disabled remain isolated. Lack of special transport confines them to a single neighborhood, special school, small church, local polyclinic, and small shop." -- Armenia 1995

These quotations are part of the extensive testimony given in 'Voices of the Poor' – a major international consultation carried out at the turn of the Millennium to inform the international development agenda (Narayan, 2000).

Inclusive transport systems are all the more critical in reducing the isolation, vulnerability and dependency of people with disability – thereby helping to improve the lives of many of the world's poorest. However, the lack of basic data is a serious impediment to estimating the proper nature of demand for more inclusive transport, so as to respond to the actual needs of all people whose access and mobility are severely constrained. It also inhibits measurement of the impact of so doing (Rickert, 2001).

CHALLENGES FOR INCLUSIVE TRANSPORT

A study (Venter et al., 2003) funded by the United Kingdom Department for International Development (DFID) examined approaches to meeting access needs in several developing countries in Africa, Asia and Latin America. Three main types of (interrelated) barrier for people with disabilities were identified:

- social (including high cost, lack of disability awareness, and communication difficulties);
- psychological (such as fear for personal safety); and
- structural (including infrastructure, operations and information).

Globally there has been progress in reducing barriers in the transport environment over the last four decades, particularly in the U.S. and some European countries in response to strong advocacy. Even in these high income countries implementation has spread slowly and the overall impact often remains disappointing. The majority of low and middle-income countries now also have disability policies that reflect reasonably advanced concepts of disability, based on the UN 1982 World Program of Action Concerning Disabled Persons (WPA) and 1994 Standard Rules on the Equalization of Opportunities for Persons with Disabilities (Standard Rules) (Metts, 2000). However, the reality is that meeting the needs of people with disability is still largely seen as a welfare issue in most countries and even basic good practice in meeting those needs is rarely recognized, let alone implemented. As a result, inclusive transport systems have generally not been given significant priority in planning, design and construction in developing countries.

Putting Policies into Practice

Major obstacles remain to translate accessibility policies into the provision of inclusive transport. Inadequate monitoring and enforcement of compliance with existing accessibility legislation is widely cited as the key impediment to providing inclusive transport in developing countries. The legislation has rarely been matched by adequately detailed regulatory frameworks and has therefore generated a very limited response on the ground. For example, legislation in Mozambique, Malawi and India requires that there should be seats in urban public transport and trains reserved for passengers with disabilities and that these passengers should be granted fare concessions of up to 100%. However, experience shows that only occasionally are these measures implemented or enforced (Maunder, 2004).

Another important reason given for the lack of effectiveness of access policies and legislation is the lack of resources for implementation. Governments often find it difficult to allocate funding for this in the face of pressure to meet other priorities. The private sector may not have sufficient incentives to implement provisions for people with disabilities. In most cases, applying Western disability standards and facilities to deliver access solutions and ensure universal access in transport systems is not affordable or

realistic for the provider or for the users in low-income countries -as most of them are too poor to pay the costs of such standards

Making Implementation effective

Lack of data makes it impossible to provide a meaningful overall cost estimate for the interventions required to meet the accessibility needs of disabled people in developing countries. It is clear that the marginal costs of providing ‘access for all’ features are generally much less when these are incorporated in the original design and build as compared with being retro-fitted to existing vehicles or infrastructure . One suggested approach is that about one percent of the combined annual operating and capital costs of a typical transport system would suffice to provide more accessible transport, assuming that regulatory and enforcement mechanisms are in place (Meriläinen and Helaakoski, 2001). However, poor countries face huge demands for their limited resources, both within transport and in other priority sectors. Accordingly, the allocation of even rather modest portions of the budget must be justified in relation to alternatives ways of meeting the need under local circumstances, and in comparison with competing priorities for public resources.

Mobility and access requirements of people with disabilities should be understood in the wider context when planning and designing barrier-free transport systems. This implies an understanding and identification of the circumstances that create barriers for people with disabilities (Meriläinen and Helaakoski, 2001). An inclusive transport environment policy should be implemented using a combination of different practical access approaches based on different cost features and development stages. In many situations low cost improvements such as kerb insets at street corners, ramps to public buildings, and larger letters on bus destination signs (Rickert, 2000) can bring disproportionate benefits. Most interesting are those interventions which bring benefits to all passengers, creating a “win-win” opportunity (Table 1, below).

A recent aspect of focus for World Bank encouragement of inclusive transport has been in the context of new and expanding Bus Rapid Transit systems for major cities in Latin America, such as Bogota, Quito and Lima. These show that for such high use systems, even when the vehicles are wholly owned and operated by private enterprise, it is possible to ensure that there are suitable provisions to accommodate disabled and elderly passengers. The experience of these systems offers comparison of some alternative practices. It also underlines the importance of the accessible street environment for the whole system to be inclusive (Menckhoff, 2004).

The interventions mentioned in Table 1 relate mainly to the urban environment where the demand for services is high and the marginal costs of improved design and special facilities tend to be low. In the rural context it is often very difficult to establish basic transport services to be sustainable because of the low population densities and limited economic activity. Inevitably, making these services accessible to all will be an even greater challenge in such rural areas.

Table 1. **Interventions for more accessible transport system: indicative priority**

marginal		typical intervention	probable priority
cost	benefit		
none	mostly broad	visual contrast, colour coding clear/intuitive signs,	essential – these should be established design practice
low	broad	basic sidewalk and crossing design, hazard markings, minimize steps and other hazards,	very high - should be established design practice
high	broad	Raised pedestrian crossings, raise boarding platforms or low-floor vehicles, general training of operational staff	high – should be considered practice for safe street environment, subject to resources
low	specific	user awareness, priority seating, additional training of operational staff, tactile surfaces, kerb insets	very high – subject to policy for resource allocation
high	specific	Elevators, illuminated and audible signals, wheelchair location, special transport services	high – subject to policy for resource allocation

WORLD BANK ACTION

The World Bank Group's mission is to fight poverty and improve the living standards of people in the developing world. In this context it is recognized as important to address the needs of disabled people and the aged in developing countries. The World Bank finances development projects involving disability issues - such as improving education services and health care - and also works in a wide variety of disability-related fields, such as data collection and technical analysis. In 2002, the Bank appointed a Disability Advisor to broaden our engagement and to better incorporate issues affecting disabled people into our development mission. It also commissioned a report to assess its current efforts to integrate people with disabilities and offer information and recommendation from World Bank headquarters, in the field, and from other related institutions, on how to improve the amount and quality of Bank development assistance that includes people with disabilities (Stienstra, 2002).

Transport Sector Role

The Transport Sector plays an important part in the Bank strategy by strengthening focus on accessible environments and inclusive transport systems. A technical note prepared for the Poverty Reduction Sourcebook (World Bank, 2002) - a guide to assist countries in the development and strengthening of poverty reduction strategies- stresses the importance of good guidelines for policy and planning decisions to create and maintain accessible

environments for all people including different disability groups (Meriläinen and Helaakoski, 2001).

The same note also highlights the significance of personal *mobility* and *access* (the possibility of all people to reach all places within their environment) and the complementary importance of *accessibility* (the possibility of all people to maneuver readily within and make use of the built environment). In practical terms it is not sufficient to ensure that everyone can enter and use basic transport services; it is equally important to apply the principles of 'access for all' to the street environment and to the design of the buildings and other facilities that people use. These principles are echoed in the World Bank's latest review of Urban Transport Strategy (*Cities on the Move*, 2001), which recognizes the need to address more systematically access issues, especially for those who are mobility impaired.

The World Bank recognizes the importance of working with national and international agencies to strengthen the data available on the scale and nature of challenges which are faced by disabled and elderly people. This data should not address access and mobility needs alone but would provide the framework for planning how the transport sector should respond to the priorities of disabled and elderly people.

Community of Practice

Within the Transport Sector in the Bank we are active in the following agenda to improve the effectiveness of the sector's response to those priorities.

- ***Key indicators for the transport sector.*** We have initiated a collaborative process to strengthen collection and analysis of key data on transport sector performance and impact in the countries with which the Bank works. This data will include indicators of each country's legislation for inclusive access and of the availability of population data as a basis for planning implementation.
- ***Multi-sectoral community of practice.*** A newly established thematic group for Transport and Social Responsibility is providing a focus for sharing experience between transport specialists and other disciplines, both within the Bank and more widely. Issues for disabled and elderly people will be covered in the context of inclusive transport.
- ***Good design and practice.*** A main purpose of the thematic group is to encourage good practice in planning, design and implementation for response to policies to improve access for all with disability and limited mobility. Guidance on and examples of good practice in transport are being identified and will be shared broadly within the Bank and with the organizations with which we work.
- ***Training and awareness.*** The current good practice guidance and case studies will be material to be used in raising awareness and training for the transport sector within the Bank as well in client governments. Resources will be allocated for the latter primarily on the basis of agreements with the governments.
- ***Informing policies for inclusive transport.*** Good practice cases will help to inform client governments (national and sub-national) in developing access for all

policies and formulating the supporting legislation and other mechanisms necessary to put those policies into effect.

We are ready to enlarge the Transport and Social Responsibility community of practice described above. If you would like to participate in it please send an email to proberts@worldbank.org stating briefly how you would hope to benefit from your participation and what you would expect to contribute.

References

- Elwan, Ann. (1999). *Poverty and disability: A survey of the literature*. Social Protection Discussion Paper Series No. 9932. Social Protection Unit. Human Development Network. Washington, DC, U.S.A: The World Bank.
- Grieco, Margaret and Fiona Raje. (2004). *Inclusive Transport: An Emerging Agenda*. Note prepared for the World Bank Transport Forum (Table Discussion 3), Washington DC.
- Maunder, D.A.C., Venter, C.J., Rickert, T. and J. Sentinella. (2004). *Improving transport access and mobility for people with disabilities*. London, United Kingdom: Department for International Development (DFID).
- Menckhoff, G. and P. Roberts. (2004). *Inclusive Design of Bus Rapid Transit: Experience from Latin America*. Presentation prepared for 10th International Conference on Transport and Mobility for Elderly and Disabled People TRANSED 2004. Available on line at http://www.worldbank.org/transport/rural_tr/accessibility.htm
- Meriläinen, A. and R. Helaakoski. (2001). *Transport, Poverty and Disability in Developing Countries*. Technical note prepared for the Poverty Reduction Sourcebook. Washington, DC, U.S.A: The World Bank.
- Metts, Robert. (2000). *Disability issues, trends, and recommendations for the World Bank*. Washington, DC, U.S.A: The World Bank.
- Narayan, Deepa with Raj Patel, Kai Schafft, Anne Rademacher and Sarah Koch-Schulte. (2000). *Voices of the Poor: Can Anyone Hear Us?* New York, N.Y.: Published for the World Bank, Oxford University Press.
- Rickert, Thomas. (2001). *Mobility for the Disabled Poor*. San Francisco, U.S.A: Access Exchange International.
- Rickert, Tom. (2000). *Mobility for all: Accessible Transportation Around the World*. San Francisco, U.S.A: Access Exchange International.
- Stienstra, Deborah, Fricke, Yutta, D'Aubin, April and Research Team. (2002). *Baseline Assessment: Inclusion and Disability in World Bank Activities*. Winnipeg, Canada: Canadian Center on Disability Studies.
- Venter, C., Savill, T., Rickert T., Bogopane, H., Venkatesh, A., Camba J., Mulikita, J., Khaula, C., Stone, J. and D. Maunder. (2002). *Enhanced Accessibility for People with Disabilities Living in Urban Areas*. PR/INT/248/02. Engineering Knowledge and Research: Project R8016. London, United Kingdom: Department for International Development (DFID). Unpublished Project Report.

Venter, C.J., T. Rickert and D. Maunder. (2003). *From basic rights to full access*. Paper presented at Transportation Research Board Annual Conference, Washington, DC, USA.

World Bank (2001). *Cities on the Move: A World Bank Urban Transport Strategy Review*. Private Sector Development and Infrastructure Transport. Washington, DC, U.S.A: The World Bank.

World Bank (2002). *A Sourcebook for Poverty Reduction Strategies – volume 2: Macroeconomic and Sectoral Approaches*. Washington, DC, U.S.A: The World Bank.