

Inclusive urban mobility and getting to work safely in developing countries¹

HI aspires to a world of solidarity and inclusion, enriched by our differences, where everyone can live in dignity, including persons with disabilities and the most vulnerable.

Current global trends suggest that by 2050, cities will be home to two third of humanity⁽²⁾, including 15% of persons with disabilities. Places of prosperity and opportunity throughout history, rapidly growing cities now concentrate and exacerbate overwhelming challenges in terms of poverty, inequalities, safety and pollution. These factors engender additional exclusion of the most marginalised and vulnerable members of communities, including persons with disabilities; all the more in developing countries.

Considering these global trends, we believe that the global commitment to leave no one behind cannot be achieved without empowering and mobilising all development actors, from local to international level, to address inclusion and safety issues in the urban context.

1. The study was implemented by HI with the support of Andreas Beavor, Urban Emerge, Federico Batista Poitier and Dr. Victor Pineda, World Enabled. The editorial committee consisted of HI representatives, along with Jean-François Gaillet and Julie Delzenne, Institut VIAS, and Abner Manlapaz, Life Haven Center for Independent Living. The conclusions are based on literature review, lessons learnt from programmes of HI, CBM and Light for the World, as well as focus groups with persons with disabilities and their representative organisations, in several countries (Burkina Faso, Cambodia, Democratic Republic of Congo, Haiti, Kenya, Laos, Nepal, Senegal and Vietnam).

2. UNDESA (2014) World Urbanization Prospects.

Through appropriate measures to improve safety and accessibility, cities in developing countries have the transformative potential and the leverage to reduce inequalities in society and contribute to the realisation of human rights for all. This can make a significant difference in the well-being of the most vulnerable, including persons with disabilities.

Why is it important?

Access to decent work is essential not only for an individual's economic security, but also for their personal wellbeing and social inclusion. Access to meaningful livelihoods allows an individual to develop skills, knowledge, self-esteem, and to be empowered as an equal member of the community.

According to global estimates, persons with disabilities comprise approximately 15% of the world's population, with 85% living in developing countries.⁽³⁾ They present differing needs across a wide spectrum of impairments, including physical disabilities, visual or hearing impairments and cognitive impairments. Their access to employment continues to be greatly hindered by a variety of social, physical and institutional barriers. The difficulty (or impossibility) of travelling safely around the city, from the place they live to the place they would like to work, is one of these major barriers.

3. WHO (2011) World Report on Disability.

In the UN Convention on the Rights of Persons with Disabilities (CRPD), article 27, States Parties recognise the **right of persons with disabilities to work**, on an equal basis with others, and agree to take all necessary measures to facilitate the realisation of this right. Again as part of the Agenda 2030, all countries have committed to leave no-one behind in working towards reaching Sustainable Development Goal (SDG) 8,⁽⁴⁾ to achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities.

Yet, in developing countries, up to 80% of persons with disabilities of working age and that are willing to work are unemployed.⁽⁵⁾ Hidden away and/or overprotected by their families, confronted by widespread misperception and discrimination, denied a basic education from childhood, adults with disabilities are often unaware of their rights. They face considerable barriers when searching for or trying to retain employment: support employment services are often not accessible or simply unavailable, non-discrimination provisions in employment law are not enforced when they exist, employers are not incentivised or supported in creating accessible workplaces and appropriate positions. As a result, they are more likely to work in low-skilled, precarious and informal jobs, or to be denied employment opportunities.⁽⁶⁾ In developing countries, 80% of people with disabilities who are working are self-employed, almost entirely in the informal sector,⁽⁷⁾ adding to their vulnerability.

Amongst other constraining factors, **the lack of safe and accessible roads in many cities in developing countries impacts negatively on employment opportunities for persons with disabilities**. As expressed during focus group discussions held in Ouagadougou in 2018, persons with disabilities confirmed that once road

4. SDG 8, target 8.5: 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

5. International Labour Organisation (2007) *The Employment Situation of People with Disabilities: towards improved statistical information*.

6. HI (2016) *Situation of Wage Employment of People with Disabilities: Ten Developing Countries in Focus*.

7. HI (2006) *Good practices for the economic inclusion of people with disabilities in developing countries: funding mechanisms for self-employment*.

safety and accessible pedestrian and transport routes are in place, they can concentrate more on their employment, without distractions or delays. Every year, around 1.25 million people worldwide are killed in road crashes; half of them being aged 15 to 44 years. Road crashes are also the cause of non-fatal injuries for 20 to 50 million people every year.⁽⁸⁾ And the risk of sustaining non-fatal injuries from road traffic crashes is higher for persons with disabilities.⁽⁹⁾ Road crashes cuts in the productive workforce and adds a huge burden onto the health and social protection systems.

The CRPD requires countries to identify and eliminate obstacles and barriers and ensure that persons with disabilities can access their environment, transportation, public facilities and services, as well as information and communications technologies. **When interpreting this requirement, it is crucial to link accessibility and safety in order to improve safe mobility⁽¹⁰⁾** for all in the city. Without road safety for all, cities are not inclusive and accessible. Through SDG Target 11.2, all countries committed to providing access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

While improving road safety and enabling accessibility alone will not break down all disability barriers to employment, it is a central factor that can have a domino effect **towards enhancing an inclusive, peaceful and prosperous society that leaves no-one behind**. Indeed, safe mobility ensures that, from an earlier age, all components of our diverse societies, including persons with disabilities meet in ordinary life activities in the public sphere from which they are currently excluded, such as schools, transport, work. This is extremely beneficial in reducing discriminations and reinforcing social cohesion.

Persons with disabilities whose access to

8. WHO (2015) *Global status report on road safety*.

9. WHO (2011) *World Report on Disability* "People with disabilities are at higher risk of nonfatal unintentional injury from road traffic crashes".

10. Humanity & Inclusion defines "safe mobility" as the ability for a person to safely and reliably access preferred destination by navigating an environment considerate of his or her needs and preferences.

employment has been facilitated thanks to safe mobility generate revenue and taxes and enhance the city's economic activity, for the benefit of all. Beyond the benefit for the city and local economy, there is ample evidence for the private sector that high-performing businesses are more likely to emphasise diversity and inclusion in their hiring practices.⁽¹¹⁾ Such economic empowerment has an even greater positive impact on **women with disabilities** who face multiple discriminations, in countries where gender and ability are both barriers to generating income and attaining financial independence. In addition to facing multiple barriers to access employment, women and girls are usually the primary care providers for a family member with disabilities, which eventually limits their own opportunities for education and employment.⁽¹²⁾ But when the person with disabilities they care for gains more independence through employment, this in turn affects the perspectives and perceived economic opportunities for caregivers; which in turn contributes to improve gender equality and poverty reduction.

Furthermore, in situations of unemployment, the entire family suffers the consequences of the lack of revenue, with a high risk to drain all family members down into the spiral of poverty. Unemployed disabled workers represent also high long-term costs for governments which can affect labour productivity, social assistance and tax revenue of a country,⁽¹³⁾ as they will be more inclined to rely on government social safety nets and benefits rather than fulfilling their potential, earning an income and contributing to society. The ILO estimates that the exclusion of people with disabilities from the workplace deprives societies of an estimated US\$ 1.37-1.94 trillion in annual loss in GDP.⁽¹⁴⁾

Clearly, the resources needed to make urban environments, especially transportation, safe

11. <https://www.aapd.com/5-reasons-hiring-people-disabilities-good-business-rest-us/>

12. OECD Development Center (2014) *Unpaid care work: The missing link in the analysis of gender gaps in labour outcomes*.

13. Lena Morgon Banks & Sarah Polack - London School of Hygiene & Tropical Medicine, ICED, CBM (2014) *The Economic Costs of Exclusion and Gains of Inclusion of People with Disabilities: evidence from Low and Middle Income countries*.

14. Robert L. Metts (2000) *Disability issues, trends and recommendations for the World Bank*.

and inclusive for everyone are relatively modest compared to the enormous cost of persons with disabilities of working-age being excluded from employment and life opportunities.

All stakeholders involved in the SDG implementation, especially States and local authorities must not fail to address the needs of working-age persons with disabilities to enjoy their right to employment, and economic empowerment, via safe and inclusive mobility.

By acting now to improve safe and inclusive urban mobility will ensure that inequalities and discriminations do not become further locked into poor urban design and inaccessible transport systems. A key solution lies in inclusive urban planning, i.e. to plan city development with respect to the diversity of its inhabitants, including the needs of those with disabilities to fully participate in city life.

What are the urban mobility and road safety challenges?

For persons with disabilities, the difficulties of getting to work in urban areas of developing countries are often overwhelming.

Sidewalks are either non-existent or in poor condition. There are very **few safe crossing points** over roads and where they have been installed, they are often blocked by raised kerbs, they are rarely traffic light controlled and the majority of vehicles do not readily stop for pedestrians, leading to many casualties. Self-employed or working in the informal sector, persons with disabilities are more likely to make the streets or sidewalks their place of work, exposing them to occupational accidents and injuries.

Signage and information to help pedestrians, including those with disabilities, to get around cities is also lacking. Pedestrians without disabilities, who face less environmental barriers in their mobility and transport, already find these urban environments challenging to navigate, and these factors make walking or using a wheelchair beside and across roads extremely difficult for those with physical disabilities. For those with visual impairments, walking along trusted routes with the aid of tactile paving or audible crossing

« There are often huge traffic jams, so the driver decides to stop half-way. All passengers must get off and continue on foot to reach the next bus stop. But I have to stay in the same place because of my reduced mobility, then I arrive at work several hours late. »

Martin, participant to the focus group in DRC.

points is not usually an option in cities of low and middle income countries, as these environmental accommodations are not developed.

Accessing buildings such as offices or retail is also extremely challenging. Humanity & Inclusion previously worked with local authorities in Vietnam to develop and carry out accessibility surveys of the urban environment, including shops, hotels and other points of service. Awareness of the need for inclusion had to be fostered before accessibility issues could be addressed meaningfully.

Collective transport is often the primary mode of transportation to reach the workplace in low and middle income countries, especially for the poorest who cannot afford private transport means. However, it often provides further challenges for persons with disabilities, who often struggle to get onto buses, particularly with wheelchairs. They have to rely on being carried by friends or fellow passengers and often pay additional fare for the space necessary to accommodate their wheelchairs. Where on-board spaces for wheelchairs or those with other impairments are provided, public awareness and understanding are often a barrier to their proper use. In developing countries, public transport usually comprises privately owned buses, with little incentive to stop for passengers with disabilities as this can result in fewer passengers, delays and less income. Private bus companies view additional time stopped as lost profit, and do not leave enough time for disabled passengers to get on and off, or they do not stop at all.

There are often no specific locations for bus stops, so those with limited mobility are unable to wait in a known place, further reducing their chances of boarding a bus. Less visible disabilities such as being deaf or having an intellectual disability such as autism are usually not recognised by the passengers or staff operating public transport, often leading to misunderstanding and abuse.

The difficulty of getting onto a bus often leads to those with disabilities travelling outside of peak hours, leading to being late for work and increasing vulnerability to **crime and sexual harassment** when travelling late at night after the evening rush hour. These challenging experiences often turn persons with disabilities away from public transport, further constraining them and their opportunities for employment and engagement in public life. Even if it is possible to travel on public transport, those in wheelchairs or with visual impairments face a difficult journey along rough paths and roads to where they need to go.

Driving with a disability is also usually non-existent in developing countries. Many countries do not have the systems in place to test the ability and award a driving license to persons with disabilities. When they are used, modified disability vehicles such as motorised tricycles are often stopped by the police as unauthorised vehicles. There is a lack of awareness among traffic police in many cities about the urban mobility needs of persons with disabilities and acceptable solutions to mobility challenges. It is also very difficult to find dedicated parking spaces; persons with physical disabilities travelling in private vehicles will usually find that parking spaces where they wish to park and exit vehicles are too narrow. This further increases the dependence of those with disabilities on their family, friends and caregivers.

Road design and layout, poor road markings or signposts and the lack of street lighting are all a cause of unsafe driving and hazards to those with disabilities, as well as other pedestrians. The concept of a Safe Systems Approach⁽¹⁵⁾ remains largely unknown. This approach involves three

15. Cable, R. (2013) *Challenges for Planning Safe Cities for Vulnerable Road Users: Cape Town Freeway Management System Experiences*. Presentation at the GRSP Africa Road Safety Seminar – Moving People Safely in Cities, Addis Ababa, Ethiopia.

interactive elements: improving the attitudes and behaviour of road users, designing and constructing road environments to reduce crash risks, encouraging manufacturers to produce and consumers to buy safer vehicles. It emphasises that those involved in the design of the road transport system need to accept and share responsibility for the safety of the system, and those who use the system need to accept responsibility for complying with the rules and constraints of the system.⁽¹⁶⁾

All these examples account for gaps and failures in safety and accessibility that break the mobility chain. Within this context, it is not surprising that, as a group, persons with disabilities have higher rates of unemployment than the general population.

Insights from countries

Accessible transport as part of an inclusive jobs program in Senegal

Dakar, the capital city of Senegal has a population of 2.5 million and a proportion of disabled inhabitants similar to other sub-Saharan cities, at around 15% of the population. With a national median age of just 19, similar to many other countries in the region, the race is on to create the jobs needed to give Senegalese youth a better future.

An HI program running since 2014 has been working to increase access to employment for persons with disabilities, including connecting them to job agencies, placing them in apprenticeships and training them to learn skills to become more employable. Support is also given to train entrepreneurs with disabilities as they start their own businesses. The programme is also concerned with **improving physical access into the workplace and safe urban mobility** that allows a greater number of workers with disabilities to travel from home to work. Many companies have signed on to an inclusive workplace policy that commits them to improving access into and around the office building, as well as accessible toilets and other facilities.

Thanks to successful advocacy carried out by HI in collaboration with local DPOs, **public bus transport has been gradually improved**. With stronger political leadership, **the national policy on accessible transport was improved**. Dakar's largest bus operator agreed to increase the number of buses that have ramps and priority seats for those with disabilities, and to train bus operator staff in the different needs of passengers with a range of disabilities. Noticeably, **the bus company went further and hired 25 persons with disabilities to sell tickets**.

As a result of the programme, persons with disabilities have a wider choice of transport options in Dakar, which has contributed to reducing their barriers to employment. And **now, over 700 persons with disabilities have been registered as available to work on two national recruitment portals and several hundred others have either been employed directly in permanent roles, or gained an apprenticeship or training that will improve their employment prospects or ability to run their own small businesses**.



16. HI (2016) Policy Paper: Road Safety.

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Other initiatives for safer and accessible transport in Dakar include plans to phase out the ‘cars rapides’ (rapid buses), the colourful but old and dangerous minibuses from the 1960s and 70s and replace them with a safer and more accessible fleet of buses.⁽¹⁷⁾ This offers another opportunity to address the mobility needs to those with disabilities such as access from bus stops onto buses, prioritised seats and audio and visual information on the route.

Modified vehicles and driving licenses for drivers with disabilities in Vietnam

Vietnam has urbanised rapidly in the last few decades and its two major cities of Ho Chi Min City (7.8 million people) and Hanoi (5.6 million people) are among the South East Asian region’s largest. These and other cities in the country are plagued by traffic congestion, road safety and urban mobility challenges.

For several years, HI worked in Vietnam on a mobility related program to help **the government implement the necessary systems whereby persons with physical disabilities can legally drive modified vehicles and are able to take a test to obtain a driving license.** This is a rare initiative in a developing country, emerging from a strong demand from persons with disabilities, especially working-age adults.

This was a complex decade-long process, which required close collaboration with many different stakeholders including government, vehicle maintenance companies, insurance companies, DPOs and many others. A set of national technical standards were developed for modified vehicles. This in turn has allowed persons with disabilities to purchase and modify vehicles, which are in turn recognised as being legitimate by insurance companies and the traffic police.

These combined efforts have had a positive impact in terms of allowing a significant number of persons with disabilities to move freely around cities, allowing them to get to work, school, shops, hospitals, etc, more easily.

17. Source: <https://edition.cnn.com/travel/article/car-rapides-senegal/index.html>

Recommendations for improvements in policies and actions

1. Strengthening the policy and financial framework for safe and inclusive mobility, based on evidence, and through participative processes

- **Place people at the centre of city development strategies** with a focus on improving the safety, accessibility, and sustainability of mobility infrastructures to guarantee the enjoyment of the city for everyone and foster greater inclusion and participation in all spheres of society.

- Urgently **step up efforts and investments** to implement concrete actions aligned with the five pillars of the Global Plan for the Decade of Action for Road Safety,⁽¹⁸⁾ involving the different stakeholders, including road traffic victims associations and Disabled People Organisations.

- Acknowledging the fact that the objective to reduce by half global road traffic fatalities by 2020 will not be achieved, make it a priority to increase efforts and **extend the deadline of the SDG road traffic injury target 3.6 to 2030**, in line with most of other SDG targets and the WHO 2030 Voluntary Road Safety Targets.

- **Support actions for road safety implemented by Civil Society Organisations**, including road traffic victims associations, NGOs and Disabled People Organisations, recognising them as key actors for change and ensuring their access to funding mechanisms such as the new UN Global Road Safety Trust Fund.

- Promote an **integrated approach to safe and inclusive mobility** that considers road safety and accessibility as mutually reinforcing elements and essential components of a broader strategy to ensure equal opportunities and achieve sustainable, inclusive development.

- Ensure that the **inclusion of persons with disabilities** is a systematic, cross-cutting objective in all policy frameworks and international cooperation strategies relating to urban planning, road safety and mobility. **Systematically both mainstream disability and integrate specific measures targeting persons with disabilities and**

18. In relation to improving road safety management, safety of road infrastructures, transports and vehicles, as well as improving road users’ behavior and post-crash care.

other vulnerable road users, namely by adopting a rights-based approach to disability, that moves beyond considering persons with disabilities solely as victims of road fatalities, to take into account the diverse range of needs of persons with disabilities and the importance of safe mobility towards enhanced participation in society.

- Use a **gender lens**, and pay special attention to the specific and diverse mobility needs of women and girls, including women and girls with disabilities, emphasising the importance of safe and inclusive mobility towards equal participation of women and girls in society.

- **Facilitate the participation of all groups** represented in the city, including persons with disabilities, their representative organisations, in the design, implementation and monitoring of local and national policies and projects on urban mobility, in line with article 33 of the CRPD. Participatory planning is the only way to achieve universal mobility at the city scale. The earlier the consultation can start the better; DPOs should also be invited to test the finished product and help to improve the user experience.

- In order to develop evidence-based policies to improve urban mobility for vulnerable road users, **strengthen data collection methods** at local and national levels, including road crash data records.⁽¹⁹⁾ Data must be disaggregated by age, disability, gender, income and geography. Use the framework of the Washington Group Short Set of Questions to adequately understand the diversity of disability in communities in developing countries.

- **Support research and the production of evidence in general on barriers** to and the cost/gains of accessibility, safety, inclusion, with a focus on girls, boys, women and men with disabilities, and the effects that mobility and transportation infrastructure have on the access of marginalised groups to services, and other opportunities, like employment.

- **Effectively monitor and report on the impact of national and local policies** relating to safe

19. The Road Crash and Victim Information System (RCVIS) enables the distribution of road crash and casualty reports to all local and international stakeholders involved or with an interest in road safety issues. See: <https://www.handicap-international-road-safety.org/en/sections-3-intervention-methods-and-operational-tools/pillar-1-road-safety-management-increasing>

and inclusive mobility. Utilise the **targets and indicators on mobility** set out in Sustainable Development Goals, the New Urban Agenda, and the UN Decade on Road Safety through the lens of the Convention of the Rights of Persons with Disabilities, to create synergies between the different reporting processes and to ensure contextualised policies and implementation strategies that guarantee safe and inclusive mobility for all, including persons with disabilities.

- **Engage in multi-stakeholders dialogue** and share knowledge and experiences on safe and inclusive urban mobility at all levels, and **bring these issues further up on the global agenda**, in different policy sectors, and as part of international cooperation strategies.

2. Removing the barriers to safe and accessible mobility, focusing on:

2.1 – The built environment

- Promote a safe and accessible urban environment based on **Universal Design Principles**, providing accessible features for a wide range of impairments,⁽²⁰⁾ which represent cost-effective⁽²¹⁾ and efficient measures to enhance rapidly safety and inclusion.

- Ensure **public procurement** include mandatory standards on both safety and accessibility for any projects relating to mobility infrastructure or technology, including for international cooperation infrastructure projects, and ensure ex-ante and ex-post assessments of both safety and accessibility for these projects.

- Conduct **safety and accessibility audits** to identify, and eventually eliminate, the situations that are not compliant with accessibility standards. Audits must be based on a participatory approach involving all stakeholders concerned and must consider the mobility chain as a whole, from the private space to the public space, from the residential areas to the workplace.

20. See for example:

- CBM and World Enabled (2016) *The Inclusion Imperative: Towards Disability-inclusive and Accessible Urban Development*;
- HI (2016) *Policy Paper: Road Safety*.

21. When planned into new developments or infrastructure projects, a safe and accessible environment can be included from the start at very little additional cost.

- In consultation with a wide range of stakeholders, including with DPOs, develop the use of traffic-calming measures such as speed bumps, and ensure respect and enforcement through public awareness campaigns and strengthened capacity of traffic police.

2.2 – Transport and vehicles

- Plan for **multimodal transportation system** to allow people to choose from a variety of transportation modes. Multimodal transportation system increases the safe mobility of those who are unable to drive (e.g. children, persons with disabilities, older people). This generates also health benefits by encouraging walking and cycling and reducing pollution.
- Among the transportation mix in cities, promote in priority **affordable, safe, accessible and reliable formal public transport** that meet the diverse range of needs required by persons with disabilities, including women and girls with disabilities.
- In order to **increase the offer of accessible transport services**, organise **trainings and information sharing** for all public, private, formal, informal transport operators on how to cater for the needs of passengers with disabilities, including those with less visible impairments; and put in place of a system of accreditation based on vehicle specifications and driver training.
- Encourage the **development of ICT solutions** to accessibility challenges, such as disabled passengers being able to send pick-up requests to informal bus operators via SMS or an app, in the context where there are no designated bus stops.
- **Reduce import duties for imported accessible vehicles** as well as mobility equipment and assistive devices.

- Encourage the independence of people with disabilities, through the permission of accredited modified vehicles and a system for taking a driving test and proving sufficient ability, in order to get a **driving licence**; and make it mandatory for all infrastructure and buildings to reserve parking spaces for those with disabilities, close to safe access.

2.3. People

- Promote **road safety awareness campaigns for all road users**, and a special focus on vulnerable road users, including persons with disabilities, children, pedestrians, etc.
- With the view **to increase the demand for safe and inclusive mobility**, promote disability rights awareness campaigns and capacity building programmes for road traffic victims associations, DPOs, and other vulnerable road users groups.
- Provide **training in road safety and universal accessibility** for government staff, urban planners and engineers, public transport operators, traffic police and business associations.
- Encourage employers to draw up and commit to enforcing **their internal road safety and accessibility policies and standards**, building on national and local policies. Encourage those with greater resources to **provide transport options for employees with disabilities**, to help enable their participation in the workplace.
- Encourage employers, particularly transport organisations such as bus and train companies, to **employ persons with disabilities** where appropriate, helping to raise awareness and promote employment of those with disabilities.
- Develop **university curricula** in urban planning and design that include training on road safety and disability inclusion principles, especially Universal Design concepts.

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