THE ECONOMIC AND SOCIAL BENEFITS OF ACCESSIBILITY: A DECISION SUPPORT FRAMEWORK FOR SOUTH ASIA

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SUMMARY

The principle of reasonable accommodation and the recognition of financial capacity can sharply limit the reach of a nation’s policies regarding the extent of physical accessibility for people with disabilities. This is the case even where accessibility is protected by constitutionally and legislatively enshrined human rights: The principle of cost-benefit balancing is also consistent with existing mandates, however. Yet, because the costs of accessibility are much easier to identify and quantify than the benefits, even cost-benefit balancing brings with it a material risk of erroneously limiting the degree of accessibility introduced into a nation’s transportation systems and built environment. This paper presents a framework within which the economic and social benefits of accessibility policies, programs and investments can be comprehensively identified and assessed alongside the costs.

Key Words: Cost-benefit balancing; Economic benefits; Poverty reduction.

INTRODUCTION

India, Canada and the United States, the European Union, Australia and the United Nations have either established or are considering constitutional, legislative and regulatory protections for people with disabilities against physical barriers to participating in the activities of daily life. Many of these mandates are formulated as human rights and non-discrimination directives. Adopted in 2006, the Convention on the Rights of Persons with Disabilities (CRPD) is a United Nations instrument that provides guidance to countries on how to meet the human rights of persons with disabilities, including access to transportation and the built environment. India’s Persons with Disabilities Act of 1995 is sub-titled, “Equal Opportunities, Protection of Rights and Full Participation” and “An Act to give effect to the Proclamation on the Full Participation and Equality of the People with Disabilities in the Asian and Pacific Region.” In the United States, the Americans with Disabilities Act is crafted as an anti-discrimination law, not unlike America’s civil rights laws of the 1960s that prohibit discrimination on the basis of race, and not dissimilar from the U.S. Constitution’s First Amendment protections against discrimination on the basis of religion. Similarly, the Supreme Court of Canada has confirmed that accessible transportation provisions of the Canadian Transportation Act are, in essence, human rights protections that invoke the antidiscrimination principles of the Canadian Charter of Human Rights [Council of Canadians with Disabilities v. Via Rail Canada Inc., 2007].

Despite the fact that they establish accessibility as a human right, literally every existing accessibility-related mandate acknowledge cost as a legitimate and necessary consideration in their execution. This is very different from the treatment of other human rights, such as voting rights and protections against cruel and unusual punishment, wherein cost is not a valid consideration in effecting them.

**How Societies Treat the Costs of Accessibility**

The similarity regarding the legitimization of costs in accessibility mandates around the world is evident in Table 1. Thus, while India’s “Persons with Disabilities Act” stipulates that transport providers are to take measures to adapt facilities and equipment to the benefit of people with disabilities “within the limits of their (the providers) economic capacity” the consideration of financial capacity also appears in the United Nations Convention on the Rights of Persons with Disabilities (CRPD). Article 4 of the CRPD states the following:

> “Reasonable accommodation” means necessary and appropriate modification and adjustments **not imposing a disproportionate or undue burden** (emphasis added), where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.

Similarly, the Canadian Human Rights Act stipulates that providers of service to the public (such as public transportation) must show that, reasonable accommodation has been provided **up to the point of undue [financial] hardship**. Almost identically, the Australian Disability Discrimination Act stipulates that accessible accommodation is required unless doing so would impose an **unjustifiable hardship in relation to the financial circumstances and estimated amount of expenditure required of the entity making the adjustments**. The Americans with Disabilities Act in the United States (ADA) invokes the term **undue hardship** which it defines as an “action requiring significant difficulty or expense” [Emens 2008, p. 871].

What makes accessible accommodation “reasonable” and not an “undue burden” is, in the words of legal scholar Elizabeth Emens, “a murky business” [2008, p. 877]. Emens speculates on possible reasons for acknowledging cost as a legitimate constraint on the scope of rights to accessibility, including legal and cultural factors. From a legal perspective, she notes that disability-related laws differ from other human rights legislation because they define discrimination in terms of design change and accommodation: Under the Americans with Disabilities Act and other similar mandates, the term ‘discriminate’ includes … not making reasonable accommodations to the known physical or mental limitations of an otherwise qualified individual with a disability …” [Emens 2008, p. 877]. Because of the explicit accommodation requirement, the UN’s CRPD, India’s Persons with
Disabilities Act, the ADA and other mandates around the world are all understood as imposing costs.

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<tr>
<th>Country or Multi-State Organization</th>
<th>Laws/Rule Regarding Access and Prohibiting Discrimination on Basis of Disability</th>
<th>Limits on Accommodation Requirements</th>
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<tr>
<td>India</td>
<td>Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 [An Act to give effect to the Proclamation on the Full Participation and Equality of the People with Disabilities in the Asian and Pacific Region].</td>
<td>Establishments in the transport sector shall, within the limits of their economic capacity and development for the benefit of persons with disabilities, take special measures to (a) Adapt rail compartments, buses. Vessels and aircrafts in such a way as to permit easy access to such persons; (b) Adapt toilets in rail compartments, vessels, aircrafts and waiting rooms in such a way as to permit the wheel chair users to use them conveniently. [Chapter VIII, Non-Discrimination, Part 44]</td>
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<td>Canada</td>
<td>Covered by the Canadian Charter of Rights, Freedoms and the Canada Transportation Act</td>
<td>Service providers must make provision for accessible transport up the point of undue hardship [Canada Transportation Act and Council of Canadians with Disabilities v. Via Rail Canada Inc., 2007]</td>
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<tr>
<td>United States</td>
<td>Under the Americans with Disabilities Act, entities must to make ‘reasonable accommodation’</td>
<td>‘Reasonable accommodation’ required “unless such covered entity can demonstrate that the accommodation would impose an undue hardship . . .” [Americans With Disabilities Act Of 1990, Sec. 12111]</td>
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Table 1: Legislative Limits on Undue Financial Burden
### Country Laws/Rule Regarding Access and Prohibiting Discrimination on Basis of Disability Limits on Accommodation Requirements

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**Table 1: Legislative Limits on Undue Financial Burden (Cont’d)**

From a cultural perspective, Emens [2008, p882] speculates that society’s ideas about disability make costs more visible than benefits:

“A prevailing assumption about disability is that it means loss or lack. Indeed, the etymology of ‘disability’ suggests that something is missing that needs to be made up for, filled in, supplied. Disability is thus often understood as something lesser that requires the distribution of resources toward it to compensate. For this reason, disability may be generally associated with imposing costs on some for the benefits of others.”

Emens [2008, p882] also says that despite efforts by advocates and scholars to promote a “social” model of disability, the “medical” model\(^1\) prevails in the broader culture, as does the sense that a disability is a lack that requires costly filling.

“It seems plausible that this understanding of disability primes courts, commentators and others to see the accommodations made for disability as beneficial to those for whom they are designed and costly for all others, particularly for those others who are not disabled.”

### Balancing Costs with Benefits

Although society tends to give more weight to the costs of accessibility than to the benefits, there are two channels through which attempts are being made to take benefits into account as well. One is through judicial proceedings; the other regulatory analysis.

A number of influential court cases provide foundations for the way societies tend to think about the benefits of accessibility. The U.S. case of *Zande v. Wisconsin Department of Administration* [1995, 44 F.3d 538 (7th Circuit)] is pivotal. Two matters of accessibility and accommodation were at issue, (i) an employer’s refusal to allow a disabled employee to telecommute and to provide computer equipment to enable

\(^1\) Whereas the medical model of disability views disability as a medical problem requiring a medical solution, the social model says that someone is disabled by the interaction between her body or mind and the disabling environment that is built for one kind of body or mind rather than another.
her to do so; and (ii) the employer's refusal, on the basis of cost, to alter the design of a kitchenette on the employees floor at work -- the employer refused to make the kitchen counter two inches lower so that the employee could use it from her wheelchair rather than using the bathroom sink for activities such as washing out her coffee cup).

The Court's decision in the Vande Zande case set two key precedents, one positive one negative. On the plus side, the Court ruled that benefits matter as well as costs in making a determination of what constitutes undue financial burden. On the down side, the Court employed a very narrow definition of what constitutes a benefit. Noting that the underlying legislation (the Americans with Disabilities Act) defines “an action requiring significant difficulty or expense” but offers incomplete guidance on its application, the Court ruled that the “financial condition of the employer is only one consideration” and concluded that “undue” must be interpreted to mean that the expense is undue in relation to the resulting benefit, as well as the employer’s financial capacity. On the other hand, the Vande Zande case established a very narrow definition of benefit: it ruled that the telecommuting accommodation was not reasonable because it would interfere with teamwork and direct supervision, yet without acknowledging that telecommuting would also benefit many workers, whether or not they have disabilities and lead potentially to lower corporate overhead expenses: and it ruled that the harm involved in using the different sink was “merely stigmatic” and therefore too insignificant to warrant mandatory accommodation.

Although the Vande Zande case defined benefits narrowly, it did open the door to the idea that benefits as well as financial capacity are germane to policy. A 2007 Canadian Supreme Court decision went further and took a broader perspective on benefits. In *Council of Canadians with Disabilities v. VIA Rail* (a ruling against the use of passenger rail cars that do not meet a stated standard of accessibility) the Court states as follows:

“A factor relied on to justify the continuity of a discriminatory barrier in almost every case is the cost of reducing or eliminating it to accommodate the needs of the person seeking access. This is a legitimate factor to consider […] But, **tribunals must be wary of putting too low a value on accommodating the disabled** (emphasis added).”

A subsequent Canadian case goes further still in broadening the scope of benefits deemed legitimate in balancing judgments about of reasonable accommodation and undue hardship. In a 2007 decision, upheld by the Supreme Court in 2008 [*Council of Canadians with Disabilities v. Air Canada*], the Canadian Transportation Agency ruled against the legality of charging personal assistants of passengers with disabilities for a second seat. In its decision [Norman and Neubauer v Air Canada, 2008] the Agency explicitly “recognized the evidence presented by the applicants’ expert of the following positive social impact” of ‘cross-sector benefits’ from reduced pressure on social welfare systems and fiscal burdens ‘insurance value’ of potential future need of persons currently without disabilities, and ‘existence value’ of ensuring a protection deemed an aspect of civil society. On this basis the Agency found that the benefits were sufficient to justify the estimated cost of accommodating personal assistants and that the costs of such a policy were reasonable in light of the improved access to the transportation network for persons with disabilities.
In nations with broad constitutional and legal mandates for accessibility, the mandates are given operational meaning through the process of government regulation. In so doing, governments employ in one form or another, a process called Regulatory Impact Analysis, or “RIA”. The role of RIA is to provide a detailed and systematic appraisal of the potential impacts of a new regulation in order to assess whether the regulation is likely to achieve the desired objectives. The philosophy of RIA underlines the need to ensure value for money and to guard against the risk that regulatory costs will exceed benefits. From this perspective, the central purpose of RIA is to ensure that regulation will be “welfare-enhancing” from the societal viewpoint – that is, that benefits will exceed costs.

Since regulatory impact analysis is generally conducted in a comparative context, with differently scoped alternatives for achieving stated objectives, the breadth of benefits considered will go far in determining the degree of accessibility to be mandated by regulation. A notable example is Australia’s 1999 regulatory analysis designed “to assist decisions regarding the provision of transportation services to people with disabilities under the Australian Disability Discrimination Act” [Attorney General’s Department, Government of Australia, 1999]. The Australian RIA cites as its objective,

“To promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.”

The RIA also states, however, that,

“The Disability Discrimination Act also recognizes that these rights do not mean access at any cost; there must be a balance between benefit and cost.”

Since the RIA compares the costs and benefits of mandating alternative degrees of accessibility, the scope and definition of benefits counted in the Cost-Benefit Analysis matters greatly. Typical of many such analyses, the Australian study quantifies two categories of benefit, (i) those associated with projected additional transportation trip-making; and (ii) “cross-sector” benefits. Cross-sector benefits, resource savings that accessible transportation facilitates through the substitution of distributed services for more fiscally costly home-based services, arise across a broad spectrum, including services like chiropody, meals, and home care.

Notwithstanding the seemingly wide range of benefits it considered, the Australian study found that the costs of the selected option would exceed the benefits by fully Aus$1.1 billion. Indeed, higher accessibility standards than those in the selected option were rejected as, “not being consistent with the concept of unjustifiable hardship as set out in the DDA.”

A more recent Regulatory Impact Analysis, this one in the United States concerning the establishment of architectural accessibility requirements for commercial and state and local government buildings, recognizes a wider range of benefits. The RIA [US Department of Justice, 2004] picks up on Canadian themes outlined above in stating that:
“Benefits are primarily represented by the creation of social value, and can be divided into three categories. “Use value” is the value that people both with and without disabilities derive from the use of accessible facilities. “Option value” is the value that people both with and without disabilities derive from the opportunity to obtain the benefit of accessible facilities. Finally, “existence value” is the value that people both with and without disabilities derive from the guarantees of equal protection and non-discrimination that are accorded through the provision of accessible facilities.”

ACCOUNTING COMPREHENSIVELY FOR THE BENEFITS OF ACCESSIBILITY: AN ANALYSIS FRAMEWORK FOR SOUTH ASIA

Even the most forceful, human right-oriented mandates around the world, including the UN CRPD, recognize the cost of accommodating as a legitimate limiting factor as to how far society must go in making facilities and equipment accessible to people with disabilities. India’s Persons with Disabilities Act of 1995 is neither alone nor exceptional in this respect. However, the judicial and regulatory record indicates that the mandates permit costs to be compared with benefits in deciding what constitutes reasonable accommodation, and that benefits should be considered comprehensively.

The author’s recommended framework for defining benefits in the South Asian context is presented in Figure 1. Drawing on a review of worldwide judicial and regulatory interpretations of reasonable accommodation (as well as the state-of-practice in micro-economics) the framework recognizes the user and non-user related benefits of accessibility; it recognizes benefits to people both with and without disabilities; it identifies reduced stigmatic harms and humiliation as distinct, separate and quantifiable benefits of accessibility; and recognizes a direct link between accessible transportation and the reduction in poverty.

The Linkage Between Accessibility, Poverty and Social Exclusion

According to transport scholar Martin Wachs, mobility and access to transportation are two of the most important global economic forces for the alleviation of poverty, inequality and social exclusion [Wachs, 2010]. Most investigators agree that poverty, inequality and social exclusion are tied to personal mobility and to the accessibility of goods and services. Wachs notes that people with disabilities, women and girls and other disadvantaged people suffer from measurable deficits in nutrition, health care, employment and education. While such deficits reflect an array of simultaneously occurring causes (from poor housing to weak governance), problems traveling ranks highly among them.

A link between improved transport and diminished regional disparities in income and well-being is evident in emerging and developed economies alike -- mobility and transport have a role to play in diminishing economic and social gaps between rich and poor in literally all the world’s economies. In coordination with other sectoral policies, accessible transport represents an important policy instrument for reducing poverty and diminishing social exclusion.
Studies on transport and social exclusion identify a linkage between accessibility and economic disadvantage. The term accessibility goes to whether people can get to key services at reasonable cost, in reasonable time, with reasonable ease. Accessibility is shown to depend on whether transport exists between people and the services they require; whether people know about all available transport service; whether they find it reliable and feel safe using it; and whether people are physically and financially able to access it. Based on surveys undertaken in a U.K. study, six distinct transport-related problems are associated with low income and social exclusion:

- **Access to work.** Two out of five jobseekers say lack of transport is a barrier to getting a job. One in four jobseekers say that the cost of transport is a problem getting to interviews. One in four young people have not applied for a particular job in the last 12 months because of transport problems.
- **Access to learning.** 16-18 year old students spend on average £370 a year (in 2002) on education-related transport, and nearly half of them experience difficulty with the cost. Six percent of all 16-24 year-olds turn down training or further education opportunities because of problems with transport.
- **Access to healthcare.** 31 percent of people without a car have difficulties traveling to their local hospital, compared to 17 percent of people with a car. Over 1.4 million people say they have missed, turned down, or chosen not to seek medical help over the last 12 months because of transport problems.
- **Access to food shops.** 16 percent of people without cars find access to supermarkets difficult, compared with 6 percent of the population as a whole.
- **Access to social, cultural, and sporting activities.** 18 percent of people without a car find seeing friends and family difficult because of transport problems, compared with 8 percent for car owners. People without cars are also twice as likely to find it difficult getting to leisure centres (9 percent) and libraries (7 percent).
- **Impact of traffic on deprived communities.** Children from lowest social class are five times more likely to die in road accidents than those in the highest social class. More than a quarter of child pedestrian casualties were found to occur in the most deprived 10 percent of wards.

**CONCLUSION**

Even the most forceful, human rights-oriented mandates around the world, including the UN CRPD, recognize cost as a legitimate factor in considering how far society must go in making facilities and equipment accessible to people with disabilities. India’s Persons with Disabilities Act of 1995 is neither alone nor exceptional in this respect. However, the judicial and regulatory records indicate that the mandates also permit costs to be compared with benefits in deciding what constitutes reasonable accommodation. Because the costs of accessibility are much easier to identify and quantify than the benefits, cost-benefit balancing requires a deep understanding and correspondingly comprehensive framework for identifying and measuring benefits. This paper presents such a framework.
Figure 1: Standardized Accounting Framework for Measuring the Benefits of Accessibility in South Asia
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