

Accessible Transportation Around the World

The Newsletter of

Access Exchange International

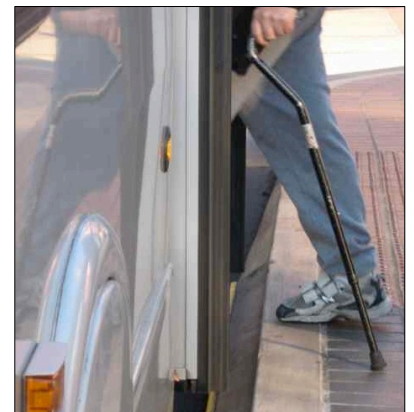
January 2012



Can autorickshaws lower the cost of paratransit service for disabled persons in the world's growing megacities? See Page 2



Some Bus Rapid Transit lines are more inclusive than others. The bus on the left has a large gap between the stop and the entrance, while the bus on the right does a better job. More



on Page 5 about what we are doing to promote accessible BRT around the world, and why everyone benefits when inclusive public transportation is on the agenda.



Europe's largest-ever metro expansion will take place in Paris, enhancing mobility for all. Their accessibility guide on the left explains access features for different transit modes. See news and notes from around the world on Pages 7 & 8.

It is not too early to register for the International Conference on Mobility and Transport for Elderly and Disabled Persons, to be held in New Delhi, India, September 17-21, 2012. In many ways this conference is a "first" in the field of inclusive transport. Go to Page 4 to find out more.

Test session in New Delhi illustrates the potential of autorickshaws for low-cost door-to-door transportation for persons with disabilities



Manish Gupta of New Delhi illustrates the relative ease of entering a motorized low-floor autorickshaw, using existing vertical and horizontal handholds at a test session.

– Photos by Tom Rickert

Three-wheeled motorized autorickshaws are a major public transport mode in Asia, Africa, and other regions. For example, a recent study by EMBARQ reported that six Indian cities with a combined population of 45 million persons were served by some 330,000 autorickshaws. New Delhi alone has more than 55,000 autorickshaws, with an additional 25,000 in its suburbs. An 8 km (5 mile) trip by autorickshaw in New Delhi costs 58 rupees (=US\$1.32) while even the least-expensive taxi service would be almost twice as much. For persons with disabilities, often among the poorest of the poor in cities such as New

Delhi, any method of improving travel by this mode is important.

Agencies in India have shown increasing interest in autorickshaws. Svayam, the sponsor of next September's TRANSED conference in New Delhi, is promoting the potential of autorickshaws to provide lower-cost door-to-door services for persons with mobility and sensory impairments. A test session was organized by Svayam on September 22 at GNB Motors Ltd. in Faridabad, a suburb of New Delhi, at the suggestion of Access Exchange International. The test session provided

an opportunity to more rigorously demonstrate the potential of this mode. Two models of autorickshaws were tested by volunteers with disabilities, one of whom is semi-ambulatory (using a crutch) and the other who uses a wheelchair. Not surprisingly, the larger model proved easier to use by disabled passengers.

Autorickshaws have rather low floors and the photos show that existing hand rails provide significant help to a disabled person boarding the vehicle. Work is needed to test different low-cost modifications, including the value of one or more simple two-point "airline style" seat belts or a more expensive three point retractable seat belt to supplement hand grasps which have been added to recent model vehicles. Possible changes in the bulkhead behind the driver could provide more room to enter the vehicle. Added padding to protect the knees and legs of passengers could be considered, as well as a device to help secure crutches or walkers. These or other modifications are part of the larger context relating to autorickshaw safety. Autorickshaws may be safer than bicycles or motorcycles, but offer less safety than automobiles or vans or minibuses. Fortunately, autorickshaws have a top speed of only 50 km/hr (30 mph) and a cruising speed of 35 km/hr (22 mph).

Driver behavior also is a concern. Training and other support for drivers is needed. In turn, strategies and models are needed to scale up these and other paratransit services for disabled persons in less-wealthy countries. One approach would be to modify all autorickshaws with low-cost changes. Another approach would address the complexities of a "sub-fleet" of adapted autorickshaws with better-trained drivers and an operational model that addressed scheduling, dispatching, and the use of call centers to request services. This approach would also lend itself to the possible use of subsidies in some cities to enable all qualified disabled persons to use the service when most needed. In all events, other alternatives are needed for those disabled persons who cannot transfer to a passenger seat.

The use of autorickshaws must also focus on creating an environmentally sustainable service, for example with the use of less-polluting 4-stroke engines instead of the 2-stroke engines used in some cities, as well as the use of CNG (compressed natural gas) as an alternative to diesel fuel. Much remains to be done, but it is

clear that auto-rickshaws are an important low-cost transport mode for disabled persons.

The potential of autorickshaws in New Delhi will be one of several case studies to be included in AEI's guide to implementing door-to-door services using smaller vehicles, now in preparation for kickoff at TRANSED 2012 in New Delhi (see next page). AEI requests readers to consider a donation to help us with the costs of guide preparation. Contact our office for details.



A wheelchair belonging to Alok Sikka, another person with a disability in the test session, is readily stored in the larger of the two models of autorickshaws. However, the stored chair would not fit in the smaller model. - Photo by Tom Rickert



Autorickshaws line up at a Bus Rapid Transit station in Ahmedabad, India, forming an important link in the trip chain between where passengers live and BRT trunk lines. - Photo courtesy of Jamie Osborne

- AEI thanks the personnel of Svayam, of GNB Motors Ltd., disabled volunteers, & Dr. Kit Mitchell of the UK, all of whom contributed to the success of the test session.
- Photos on page 1 top are by AEI, guide cover page 1 bottom courtesy of Maryvonne Dejeammes.

Coming next September: An event unlike any other



Photo by Dr. CGB “Kit” Mitchell

Colleagues from around the world, including Tom Rickert of AEI, met a few weeks ago in New Delhi to help plan the 13th International Conference on Mobility and Transport for Elderly and Disabled Persons (TRANSED 2012) to be held in India next September 17-21. This will be the first TRANSED to be held in a megacity in the developing world. The conference is headed up by Sminu Jindal, making it also the first TRANSED under the leadership of a person with a disability. Ms. Jindal (seated second from left in the first row) heads up the host agency, Svayam, an initiative of the S.J. Charitable Trust. Ms. Jindal is also the Managing Director of Jindal Saw, a major manufacturer of pipe products in India. She is shown with members of the TRANSED International Steering Committee and the staff of the host agency, Svayam, which has a long history of effective promotion of access to public transportation, public buildings, and monuments in India (see article on Pages 2 and 3). TRANSED 2012 is co-sponsored by the USA’s Transportation Research Board. The conference is co-hosted by the Delhi Government and the Transport Ministry of Delhi, while the Ministry of Tourism of the Government of India is a principal supporting organization.

Access Exchange International urges you to take advantage of the low early-bird registration fee – go to www.transed2012.in to register and find more information. This will be a unique experience, with presentations from more than forty countries in a dynamic nation with a billion people travelling on the long road to the goal of “mobility for all.” Join us in making this goal a reality, not only for India, but for all of us in a world where we must learn from each other as we together face the daunting challenges of the 21st Century.



Bogota, Colombia's, TransMilenio BRT system believes in mobility for all. This Embera indigenous group, recently arrived from an isolated area in the northwestern part of the country, benefits both from accessible design and from station agents trained to orient all passengers. Visitors, newcomers, and tourists, as well as seniors, women, and children, all benefit from inclusive transit design and operation.
 – Photo courtesy of Assoc. Prof. Pedro Javier Jaramillo Cruz of the Universidad de Bogotá Jorge Tadeo Lozano.

What is “inclusion” and what does it mean for Bus Rapid Transit systems?

As we look over the complex panorama of Bus Rapid Transit planning and construction in cities in every region of the world, there is a tendency to equate “accessibility” primarily with persons with visible disabilities, and especially with those using wheelchairs. Yes, public transit that is “wheelchair accessible” is *probably* accessible for most other persons with disabilities as well. After all, frail seniors and lots of other passengers cannot use a bus if their access is blocked by stairs or by a large gap between the station platform and the bus floor! But it is not accessible for a tourist if there are no route maps. It may not be accessible for people arriving from rural areas, or others new to the city, unless access features include travel information in order to navigate the system. And it is not inclusive for someone with low vision if there are no audio announcements, nor for a passenger who is deaf, deafened, or hard of hearing unless there is text signage.

To illustrate this point, in October we sent out a series of composite case studies of typical BRT passengers, titled *Universal Access to Bus Rapid Transit: Design, operation, and working with the community*, based on input we have received from BRT passengers in many countries. Responses from Africa, Asia, Europe and the Americas have been positive. This study can be downloaded at http://townsandcities.designforall.org/publico/index.php?opc=articulo&article=1014&idioma_article=en or contact us if you desire a print copy. AEI also has prepared two guides to inclusive BRT design for the World Bank, available without charge at <http://go.worldbank.org/MQUMJCL1W1>.

Fortunately, large institutions are taking more notice of the importance of inclusive design and operation of Bus Rapid Transit systems. One major player in BRT planning in cities around the world is the Institute for Transportation and Development Policy (ITDP). Their upcoming “BRT Standard 2012” will provide a scoring system to rate how well such systems combine efficiency with passenger comfort and convenience. The criteria will include universal access, platform-level boarding, safe and attractive pedestrian access, good passenger information, and safe weather-protected stations.



This low-floor trolley bus in Castellón, Spain, is carefully aligned with the adjacent platform and uses an optical guidance system to nearly eliminate the bus-to-platform gap. However, Bus Rapid Transit trunk lines using low-floor vehicles sometimes have larger gaps between the platform and the bus than do systems using high-floor vehicles. Poor station design and poor driver training may keep the buses from “docking” close to the platform. Excessive gaps will slow down the service, make the vehicles less accessible and less safe for all passengers, and make it impossible for some seniors and persons with disabilities to get on board. Attention to detail is needed to make sure that BRT construction funds are wisely spent and to assure that no one is left behind when it comes to access to public transit. – Photo courtesy of Lloyd Wright

News from AEI

We thank **Jeff Johnson** for a major upgrade of our website at www.globalride-sf.org. Our site now completely meets the universal W3C standards for accessibility, thanks to Jeff's pro bono assistance. Go to www.WiserUsability.com for more information.

In memoriam: Friends of Access Exchange International mourn the passing of Griffith Humphrey, a key advisor of San Francisco's accessible bus, rail, and door-to-door van and taxi services. Griffith was an outstanding friend of AEI and of the cause of mobility for all around the world. He is greatly missed.

AEI welcomes **Susan Worts** as an addition to our Board of Directors. . . . Board member **Ike Nnaji**, heading up accessibility for San Francisco's Bay Area Rapid Transit (BART), is currently visiting Africa with a special interest in learning more about the challenges facing the inclusive design of rail systems in Nigeria. . . We thank **Annette Williams** of the San Francisco Muni for helping to set up a meeting for our colleague **Gerhard Menckhoff** with Bus Rapid Transit and rail officials during his visit to San Francisco from Washington DC.

We thank all those who are helping with preparation of our guide to implementing door-to-door services for disabled persons in less-wealthy countries, including **Unwin Safety Systems** of the United Kingdom for a donation of \$2,500, with an equal amount pledged for 2012, and **Vehicle Technical Consultants** for a donation of \$1,000. Volunteers are hard at work on our guide. Special thanks to **Richard Schultze** for working on aspects of the publication, and for work on case studies performed during visits to Cape Town by Board member **Richard Weiner**, and to Istanbul by **Tulay Atalay**.

Please send address changes and news from your country to Access Exchange International

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AEI is tax-exempt under Article 501(c)(3) of the IRS Code

Also much appreciation to **Tanya Slesnick**, CPA, of the firm of Slesnick & Slesnick for once again providing pro bono auditing services for our finances, helping to assure donors that their assistance to our work is used exactly as intended. And we continue to thank **Susan Rickert** for her volunteer staff assistance, **Maureen Blumenthal** for her part-time help in our office, and **Nicolas Finck** for editorial assistance with our newsletters.

Доступный транспорт по всему миру



Газета

Access Exchange International

Июнь 2011

Special thanks to **Elena Goubenko** and **Eduard Karyuhin**, for the translation and broad dissemination of our newsletter in Russian in both Russia and Belorussia.

Friends of Access Exchange International should note that they can now donate to our work through **PayPal**, going to the "Donate to AEI" page on our website.

Announcing "Lograr el Acceso," the Spanish version of AEI's English-language guide "Making Access Happen: Promoting and Planning Transport for All."

A total of \$1,100 for the translation work was

Lograr el Acceso

Una guía para activistas y planificadores

Cómo promover y planear la accesibilidad para personas con discapacidad y adultos mayores a autobuses, trenes, taxis y otros medios de transporte



provided by the Board of Church and Society of the **California-Nevada Annual Conference** of the United Meth-

odist Church and by **Temple United Methodist Church** of San Francisco, California. The 30-page publication can be downloaded from the "Spanish/Español" section of our website at www.globalride-sf.org.

Recent donations in memoriam

- Diane Moore, and Lori & Mark Horne, in memory of George Moore
- Adrienne Humphrey, in memory of Griffith Humphrey
- Martin Huff, in memory of Anne Huff
- Ann Lubeck Silverberg, in memory of Rose Mallardo
- Tom & Susan Rickert, in memory of Griffith Humphrey, Donna Decker, Rob Barnes, and Anne Milburn Huff

All donations are listed annually in our June Newsletter

News and Notes from Around the World

AMERICAS

• **Argentina:** Metrobús, Argentina's first BRT system, has initiated service in Buenos Aires (*ITDP News*). María Nélica Galloni reports a range of inclusive design features. . . . Our Spanish-speaking readers can download Argentina's national legislation on accessibility and transport by going to <http://www.redi.org.ar>. See also "Spain" on page 8.

• **Brazil:** Portuguese-speaking readers can go to <http://www.direitoshumanos.gov.br/pessoas-com-deficiencia-1/normas-da-abnt/normas-tecnicas> for Brazil's accessibility norms, notes Angela Werneck. . . . Sixteen new Metro lines are under construction in Brazil, according to a UITP report. While we assume these lines are fully inclusive according to these norms, we have no direct confirmation at this time.

• **Canada:** The Global Alliance on Accessible Technologies & Environments (GAATES) seeks country representatives to participate in their work. Info at www.gaates.org.

• **Mexico:** Line 4 of Mexico City's rapidly expanding and inclusive BRT system is under construction to connect its historic center with the airport. The BRT system continues to learn from experience and in consultation with disabled passengers. . . . However, Mexico's Libre Acceso organization reports that the state of Morelos is notably lacking in access features, citing an article in *Diario de Morelos*.

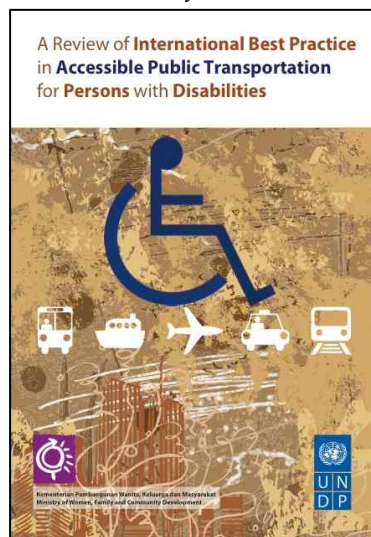
• **Paraguay:** Diana Elizeche Saraki invites our Spanish-speaking readers to provide materials on accessible transport to the Fundación Saraki in Paraguay at proyectos@saraki.org. They promote norms and a national policy framework in this field.

• **USA:** We congratulate William Millar upon his retirement from a successful tenure as President of the American Public Transportation Assn. (APTA), marked by his strong support for accessible public transit. . . . A "purpose built" accessible paratransit vehicle is now available in the USA, information at <http://www.vpgautos.com/>. . . . The US-gov't-funded Global Disability Rights Library is up and running in several countries, most recently in Tanzania, info at <http://www.widernet.org/egranary/gdrl>. . . . The results of a workshop on technology and accessible transport are available at a US gov't site at <http://www.fhwa.dot.gov/advancedresearch/pubs/11041/11041.pdf>. . . . New Spanish- and English-language materials on accessible transportation are available from Project ACTION in Washington at www.projectaction.org. We highly recommend this key USA site to our readers. . . . Go to

<http://www.pacrim.hawaii.edu/pacriminfo/pacrim2011/> for information on the 28th Annual Pacific Rim International Conference on Disability & Diversity to be held in March in Honolulu.

ASIA-PACIFIC/MIDEAST

• **Malaysia:** Maniam Sinnasamy reports completion of *A Review of International Best Practice in Accessible*



Public Transportation for Persons with Disabilities, available by clicking "Publications" at

<http://www.undp.org.my/>

The guide was prepared by Dr. Christopher (Kit) Mitchell, with Access Exchange International's participation as a reviewer, and is published by UNDP Malaysia under the United Nations Development Programme. . . . Malaysia's Transport

Ministry is preparing guidelines on universal access to public transport. . . . As this newsletter goes to press, the Beautiful Gate Foundation for the Disabled is coordinating with several other agencies to hold a major event promoting Accessible Tourism for All in Malaysia. Results will be reported at www.beautifulgate.org.my/pro-icat.

• **Australia:** Not all wheelchair-accessible taxis are created equal, a court has decided in Australia. Diagrams for revised standards are found at www.transport.nsw.gov.au/taxi. . . . Go to <http://www.vdd.com.au/> for a "universal mobility index" prepared by Visionary Design Development and piloted in Melbourne.

• **China:** Shanghai has taken the lead in constructing more than 44,000 curb ramps and 2,000 kilometers of sidewalks with special features for blind pedestrians. In 2010, the city procured an initial eighty low-floor buses. Barrier-free entrances, exits and check-in services have been installed in the two international airports. Many public buildings and facilities are now reported to be increasingly accessible.

• **India:** Ahmedabad's largely accessible Bus Rapid Transit system plans to double its trunk lines from 45 km to 95 km by the end of 2012. . . . Go to http://samarthyam.org/universal_design_india.html for a document on universal design principles in an Indian context. . . . Representatives of 17 (to Page 8)

News and Notes

(continued from Page 7)

disability NGOs met with Union Railway Ministry officials in September to express concerns about the slow development of access features within India's huge railway system. Much has been done, and far more remains to be done, reports Aqeel Qureshi.

- **Jerusalem:** A new light rail line has just opened with 23 stops "with the train floor ... exactly in line with the platform, making boarding easy for wheelchair users and parents with strollers..." (21 Oct. 2011 *Forward*)

EUROPE

- **Germany:** Gerhard Menckhoff reports excellent practice in Dresden, with buses and trams seen to dock at stations and stops with minimal gaps which can readily be crossed by all passengers. . . . Carlos Pardo of Colombia sends us the photo below of a best practice in Stuttgart's Degerloch rail station, where a station model for blind passengers is located adjacent to a wall map for sighted passengers –



- **Russia:** Enhanced access to public transport in Kazan, a city of over a million residents some 500 km west of Moscow, is reported by Elena Goubenko. Access features at all seven underground Metro stations are planned for wheelchair users and passengers with sensory impairments. 125 low-floor buses and 75 low-floor trolley buses are also in operation. Russian info at <http://www.tatar-inform.ru/news/2011/10/10/288724/>

- **France:** Access Exchange International salutes Jack Short upon his retirement from the International Transport Forum and greets Carole Coune as she takes over the leadership of the ITF. . . . Maryvonne Dejeammes has provided AEI with helpful materials on the development of paratransit services in France, which are also relevant to less-wealthy nations. For example, these services are being developed even in the complete absence of fixed-route bus or rail services in rural areas, going beyond the requirements of the Americans with

Disabilities Act in the USA, yet addressing needs in a cost-effective manner. AEI hopes to incorporate the French experience into our guide on this topic, now in preparation.

200 km of new subway lines . . .

Paris Metro expansion will enhance accessibility for all passengers

Cities with century-old subway systems often have a difficult time phasing in accessibility features in their underground stations. Paris' 111-year old system is no exception when it comes to the 300 stations on its 133 miles of subway lines. Access to buses on surface lines helps, and newer subway lines provide far more accessibility. (See the cover on Page 1 of a guide to access features of different modes of transport in Paris.)

Fortunately for the eleven million inhabitants of the metropolitan area, a major expansion of the Paris Metro has been announced and will hopefully increase the ability of disabled persons and seniors to navigate the system.

The planned Metro expansion will include 200 kilometers (125 miles) of new rapid transit lines, adding 57 stations by 2025 at a cost of approximately US\$30 billion. Upon completion, this would be the largest Metro expansion ever in Europe, and one of the largest transport projects in world history. (We thank Maryvonne Dejeammes and Chris Hart for input into this story.)

National legislation passed in France in 2005 requires that all modes of public transit be accessible to disabled persons by February 2015. Bus systems in Paris, Rouen, Nantes, Lorient, Douai, and Grenoble all have a spectrum of access features.

Announcing our 13th Annual Roundtable on Accessible Transport in the Developing World

Contact AEI to pre-register for this event, to be held on Thursday, January 26, 9 a.m. to 12 noon at facilities donated by the American Public Transportation Assn. (APTA) at 1666 "K" Street, NW, in downtown Washington, DC. The Roundtable is co-sponsored by AEI and the International Centre for Accessible Transportation (ICAT) of Montreal, Canada. The event provides a venue for informal reports and dialogue for practitioners around the world following the conclusion of the annual meetings of the USA's Transportation Research Board.