

Accessible Transportation Around the World

The Newsletter of
Access Exchange International
June 2010



Colombia nears its goal of becoming the world's first country with accessible Bus Rapid Transit service in every major city



Bucaramanga, a city of nearly one million people, started accessible Bus Rapid Transit service in March, joining Bogotá, Cali, and Pereira. Barranquilla has also gone "on line" and Cartagena and Medellín will soon follow.

If the world's megacities are to be livable places in years to come, the Colombian approach to public transit is likely to be a big part of the solution. Access to Bus Rapid Transit by passengers with disabilities, which means better access for *everybody*, is a cutting edge feature of this solution.

Tom Rickert of Access Exchange International was able to see the situation at first hand during visits to Colombia in March to view the opening of Bucaramanga's Metrolínea Bus Rapid Transit project as well as tour the rapidly expanding BRT system in Cali. Features include:

- Level boarding, from enclosed stations with doors that open in tandem with the doors of high-capacity articulated buses, permits wheelchair users and everyone else to safely board from a protected and well-lit environment.
- Audio and text announcements now being installed in buses and stations assist all passengers and especially those who are blind, or who are deaf, deafened, or hard-of-hearing.
- High-tech proximity debit cards allow easy fare payment at ticket machines as passengers

enter the stations, a feature that assists those with cognitive impairments, including tourists, visitors, and other first time users of the system.

- Exclusive bus lanes (see photo above) help all passengers with faster and more reliable travel.

(continued on pages 2 and 3)



Level boarding for passengers in Bucaramanga assists everyone, including this wheelchair user.

- Photos for this article by Tom Rickert

INSIDE: TRANSED in Hong Kong, New Delhi, and Berlin (4); Research (5); Donors (6); News and Notes (8)



Boarding at an *El MIO* station in Cali is assisted by signage at the door opposite the securement area.

Colombia *(continued from page 1)*

The visit to Bucaramanga was part of a larger World Bank project. Meetings were also held in Bogotá with the national Transport Ministry and the city Department of Mobility, as well as with officials from Pereira and Medellín. The meetings in Cali were sponsored by the Universidad Autónoma de Occidente in Cali, where Tom Rickert of AEI presented accessible public transit trends and practices to more than 100 participants in a student-led international seminar on biomechanics and rehabilitation engineering. Conference sponsors are also working closely on a variety of projects with MetroCali, the agency in charge of Cali's large and expanding Bus Rapid Transit network that now includes three rapid transit corridors with four more in planning stages. The system, called *El MIO* in Spanish ("my system" in English translation), includes a major emphasis on community outreach that could serve as a model for other countries. *El MIO* also has innovations such as feeder buses with



Art from local museums embellishes *El Mio* stations.

doors on both sides so that they can enter the trunk line corridors and dock at their center island stations.

Progress continues around the world

Recent reports of new BRT projects are encouraging.

- Guadalajara, Mexico's, Macrobus BRT system has scored well in public opinion polls of users of the recently opened accessible system. A second accessible BRT corridor, Eje 4, has opened in Mexico City. Lima, Peru's, system is now opening (see photo on page 8 and the report in our January 2010 *Newsletter*). BRT systems are operating or planned in most of Latin America's largest cities.

- Ahmedabad, India, recently opened an accessible BRT system and plans are moving ahead in Bangalore and Pimpri-chinchwad.

- Hanoi, Vietnam, is planning construction of seven kilometers of its first BRT corridor.

- In South Africa, Johannesburg's Rea Vaya system (photo below) opened in August of 2009. Cape Town's system is under construction.

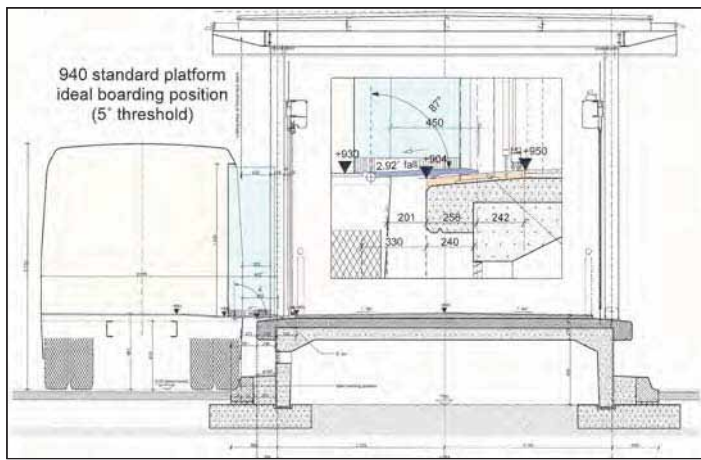
- In Tanzania, construction is scheduled to begin in September on Dar es Salaam's "DART" BRT line and the system should begin operation in 2012.

However, while Bus Rapid Transit systems lend themselves to accessible design and provide greater access than traditional bus lines, mistakes in design and operation can limit their usefulness for persons with different types of disabilities (see next page). The work of Access Exchange International needs to include a focus on taking full advantage of this historic opportunity to promote inclusive design and access for all in major cities around the world.

(Contributors of information for this section include the ITDP, CTS Mexico, and Gerhard Menckhoff and Dieter Schelling of the World Bank.)



Passengers on a Rea Vaya BRT bus in Johannesburg - Photo courtesy of Lloyd Wright



Cape Town, South Africa, intends to eliminate the gap between station and bus floor by using special “Kassel curbs” to align the bus with the platform, in combination with bus-mounted bridges (see detail) that will be lowered for all passengers (drawing by City of Cape Town – HHO Africa & ARG Design). Cali, Colombia, minimizes the gap with the corrugated gap filler shown in the photo at right taken by AEI. These and other practices will be presented in the publication now in process: *Technical & operational challenges to inclusive BRT*.

Taking advantage of a historic opportunity . . .

New publication to address key BRT access issues

Everyone is familiar with the saying, “If something can go wrong, it will.” Good practices in countries around the world need to be shared to eliminate what “can go wrong” before it is literally fixed in concrete. Examples of common concerns include:

- Eliminating excessive platform-to-bus gaps at Bus Rapid Transit (BRT) stations. Large gaps can make it difficult for wheelchair users and others to board.
- Reducing reliance on pedestrian overpasses to BRT stations. Pedestrian bridges can fatigue older persons and many others in spite of accessible design. More emphasis may be needed on grade level crossings, or on pedestrian underpasses when they reduce the level change that people must deal with (photo below of pedestrian tunnel in Cali, by AEI).
- Improving access to pedestrian pathways and to feeder buses serving Bus Rapid Transit corridors.

- Addressing problems with seating, floor design, and interior steps as well as other concerns that may occur with the use of low-floor buses on Bus Rapid Transit lines, where such buses may be less helpful than in other types of bus services.

The World Bank has commissioned Tom Rickert of AEI to compile a guide to practices that seek to address these and other challenges to inclusive Bus Rapid Transit. The guide will be available in English and Spanish versions and will take its place alongside two companion documents compiled for the World Bank: *Bus Rapid Transit Accessibility Guidelines* and the *Transit Access Training Toolkit*. The publication will be available free of charge later this year at <http://go.worldbank.org/MQUMICL1W1>, or write to tom@globalride-sf.org to request a print copy.



R E R C

APT

Support for this issue provided by the Rehabilitation Engineering Research Center on Accessible Public Transportation (RERC-APT), a partnership between the Robotics Institute at Carnegie Mellon University and the IDEa Center at SUNY Buffalo.

For more information about the RERC-APT visit
<http://www.rercapt.org>

“Sustainable transport and travel for all”
TRANSED 2010 in Hong Kong



We congratulate the Hong Kong Society for Rehabilitation for their sponsorship of the 12th International Conference on Mobility and Transport for Elderly and Disabled Persons on June 2-4. Access

Exchange International is proud to participate in this conference and to serve on its International Steering Committee.

With a fleet of more than 100 accessible paratransit vehicles (photo at bottom), The Hong Kong Society for Rehabilitation is one of Asia’s leading providers of accessible door-to-door transportation. And Hong Kong’s accessible bus, rail, ferry, and air services make it one of Asia’s most inclusive cities.

AEI promotes TRANSED scholarship fund

In order to assist low-income persons to participate in the conference, Access Exchange International gathered scholarship donations from members of the Committee on Accessible Transportation and Mobility of the USA’s Transportation Research Board (TRB). We wish to express appreciation for donations from Russell H. Thatcher, C.G.B. (Kit) Mitchell, John Schoon, Lalita Sen, David Lewis, Harry P. Wolfe, Campbell McKee, and Tom & Susan Rickert. A total of US\$1,200 was forwarded by AEI to the TRANSED Secretariat in Hong Kong.



Sminu Jindal, Chairperson and Founder of Svayam

Sept. 17-21, 2012 in New Delhi & June 2-6, 2014 in Berlin

TRANSED 2012 goes to India

TRANSED 2012 will be sponsored by Svayam, a non-profit initiative of Jindal Saw Ltd., a major corporation in India. Sminu Jindal is the Managing Director of Jindal Saw and also the Founder and Chairperson of Svayam. “I am confident that this conference will open up avenues to not only make India accessible, but will also be a step closer to (making) the manmade built environment inclusive and enabling,” noted Ms. Jindal. The conference theme is “Seamless access for all: Universal design of transport systems and public space as a key element in the creation of livable cities.”

The conference is strongly supported by the Delhi Ministry of Transport and India’s Ministry of Tourism. Dr. Geetam Tiwari, professor of Transportation Research at the Indian Institute of Technology, heads up the conference Scientific Committee. Pre-conference meetings and workshops are planned for September 17, 2012, with the main conference September 18-20 and post-conference tours on September 21. For further information, go to www.Transed2012.in.

TRANSED 2014 is scheduled for June 2-6, 2014 in Berlin, with the theme of “Multimodal and intermodal integration for seamless travel,” reports Dr. Manfred Rentzsch of the IAS Foundation.

Both proposals were approved by the International section of TRB’s Committee on Accessible Transportation and Mobility at its meeting in January in Washington, DC. The process to disseminate and review the proposals for TRANSED venues was overseen by international co-chairs Ann Frye of the United Kingdom and Tom Rickert of AEI.

Access Exchange International

112 San Pablo Avenue, San Francisco, CA 94127
Telephone 1-415-661-6355
Fax 1-415-661-1543
E-mail: tom@globalride-sf.org
Web: www.globalride-sf.org



The workshop venue at the World Bank provided an ideal location. -- Photo by AEI

Int'l Transport Forum & the World Bank hold transit access workshop

A major workshop in January in Washington DC, co-sponsored by the International Transport Forum (ITF) and the World Bank, focused on innovating solutions to the mobility and transport needs of disabled and older people in both developed and less developed countries. The results of the workshop were to be reported at a May 26-28 ITF forum on Transport and Innovation held in Leipzig, Germany. The ITF is the result of a restructuring of what was the European Conference of Ministers of Transport.

AEI assisted in suggesting the World Bank as the venue for the event and joined colleagues in Europe and North America in defining content. Presentations addressed policy issues, including the major role of the UN Convention on the Rights of Persons with Disabilities, as well as innovations in finance, design and technology, planning, research, and other key areas that will determine the future of accessible transit in years to come.

The workshop replaced an annual roundtable co-sponsored by AEI and the Intl. Centre for Accessible Transportation during the past ten years. AEI plans to return to its venue at APTA (the American Public Transportation Assn.) on January 27, 2011, for next year's roundtable in Washington. We thank Bill Millar, the President of APTA, for his participation at the ITF/World Bank event, where he joined Tom Rickert and Shomik Mehndiratta in presentations on promoting partnership and collaboration at international, national, and local levels.

Around 650 million people live with a disability. 80% of persons with disabilities live in developing countries. 90% of children with disabilities in developing countries do not attend school. More at www.un.org.

Show me the data!

New research project will test bus access features

Research just *seems* dry to the average layperson. In fact, research provides the bedrock of data upon which accessible design of public transit must be based. Good research defines "what works" and can make the difference between a transit system that only *looks* accessible and a transit system that *is* accessible. We are privileged to collaborate with colleagues in the USA's Transportation Research Board to encourage research to improve access for all.

Edward Steinfeld and his colleagues at the IDEA Center of the School of Architecture and Planning at the University at Buffalo, SUNY, recently initiated an especially promising series of research projects. Their research platform (photo at bottom) will handle multiple projects to measure the results when passengers with different needs board buses with access features of different widths and slopes. AEI looks forward to reporting on the results of this work in future newsletters.

We also hope that inclusive design will be high on the agenda of a newly announced Bus Rapid Transit research center involving researchers at four universities and the WRI Center for Sustainable Transport (EMBARQ).

Meanwhile, we are hoping to interest researchers in other countries in investigating how to provide improved low-cost bus stops along unpaved roads and also improved bus entrances for use by older passengers. We hope that recent discussions with students and staff at the Universidad Autónoma de Occidente in Cali, Colombia, will lead to practical research projects at this and other institutions.



Test stand at SUNY Buffalo includes a mockup of a bus stop and a bus interior.

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Special gifts received in recent months

- Carol Bloom, in honor of Richard Weiner
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- Sigismund Mo & Margaret Roach, in honor of Peggy's sister, Cheryl Rumbaugh
- Grant Ute, in honor of Angelo Figone
- Tom & Sue Rickert, in memory of John DeBeers and SueAnne Salmon

Our thanks to friends who provide the donated services to keep us going

Tom Rickert works full-time as our Executive Director. Based on our records over the past ten years, he works more than 80% of his time as a volunteer. . . . And for the past four years **Maureen Blumenthal** has contributed up to a half day a week of volunteer office work on our behalf. Her specialty is keeping our mailing list in good order. . . . And our donors can feel confident in our record keeping thanks to annual *pro bono* audits of our finances performed by **Tanya Slesnick, CPA**, of Slesnick & Slesnick, a certified public accounting firm. . . . We thank **Rachel Ede** of Nelson/Nygaard for her volunteer help posting our work on our website and to **Nicolas Finck** for help editing our Newsletters.

Meet our Board of Directors

- President: Richard Weiner, *Principal, Nelson/Nygaard Consulting Associates*
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- Tom Rickert, *our Executive Director*
- Peter Straus, *recently retired Director of Service Planning for the SFMTA*
- Kate Toran, *SFMTA Paratransit Coordinator*

After twenty years, a farewell to AEI Board member Dorothy Skylor



Board members congratulate Dorothy Skylor for twenty years of service. From left: Ike Nnaji, Kate Toran, Peter Straus, Tom and Sue Rickert, Richard Weiner, Dorothy Skylor, and Mark Soto. Seated: Cheryl Damico.

Dorothy Skylor was one of the five founding Board members of Access Exchange International, participating in meetings in 1990 prior to our incorporation, helping to host dozens of visitors from the then Soviet Union, and serving as President, Secretary, and Treasurer of our Board over the past twenty years. Board members thanked her for all this and more at a celebration in her honor in January.

Ramped low-floor buses for Uruguay's capital Montevideo moves to accessible buses

In a major step forward, the City of Montevideo has announced plans to progressively replace its current fleet of some 1,500 buses with new low-floor ramped units equipped with securement areas for wheelchair users and new cleaner engines to address air quality concerns. The new buses will be phased in progressively over a period of several years until all buses include the new features.

The reports come from Eduardo Alvarez and Nicolás Li Calzi, Uruguayan architects who have actively promoted accessible transportation in the South American republic for many years. See page 8 for additional news from Uruguay.



News and Notes from Around the World



• **Peru:** Gerhard Menckhoff sends this photo of test runs of Lima's new accessible BRT line, opening soon.

• **Japan:** The ECOMO Foundation in Tokyo is



providing two-day driver training workshops for bus and railway staff (photo), notes Daisuke Sawada. Persons with disabilities assist in presenting the course material.

• **Sri Lanka:** The World Bank's *Transit Access Training Toolkit* is in the final stages of translation by Practical Action into the Sinhala language. A transit access workshop was recently held for Sri Lanka's Central Transport Board by staff of the Sri Lankan Ministry of Social Services and Social Welfare with the assistance of the Lanka Forum on Rural Transport Development and the Development with Disability Network. A workshop is also planned for the Sri Lanka Railways, reports Ranjith de Silva.

• **Singapore:** Revisions to the Barrier-free Accessibility Code are under way to assure user-friendly design of new buildings, notes Disability News Asia, citing www.channelnewsasia.com.

• **Vietnam:** Disability News Asia also reports that an Independent Living Center will open in Ho Chi Minh City. A similar center in Hanoi is already in operation. Japan's burgeoning independent living center movement has served as a source for the movement in Vietnam.

• **Portugal:** Lisbon is developing a City Pedestrian Accessibility Plan with the goal of "preventing new barriers, eliminating existing ones, and mobilizing the community towards a more inclusive city," reports Pedro Homem de Gouveia.

• **United Kingdom:** Readers may Google "'Accessible bus stop design guidance' Transport for London" to download a free copy of this helpful

document. . . Improvements are planned to upgrade access to train stations in Wales, reports the BBC.

• **USA:** A standard on Audible Pedestrian Signals was recently completed by the International Standards Organization and will soon be available at www.iso.org. Our colleague Bill Crandall also notes that work is going forward on a standard for Tactile Walking Surface Indicators, the yellow visual and tactile markings used to identify hazards or for pathfinding by people who are blind or have low vision. . . Go to www.vpgautos.com for information about the new MV-1 mobility vehicle, stated to be "the first and only vehicle that is purpose-built to meet or exceed the USA's ADA guidelines without any . . . conversions or retrofits."

• **Jordan:** *The New York Times* reports that Amman has a master pedestrian plan for pedestrian walkways with trees and benches. With the motto "A livable city is an organized city, with a soul," Amman takes its place alongside New York and a host of other cities moving toward improved access to public space. (Article forwarded by Chris Hart.)

• **United Arab Emirates:** New guidelines will mandate accessible design for new buildings in Abu Dhabi starting this year. And the Dubai Roads and Transport Authority is working on proposals to upgrade service to persons with different types of disabilities. (Information from Chris Hart from *Gulf News*, and from Disability News Asia.)

• **Uruguay:** Juan Carlos Pineda of Colombia recently met with Eduardo Alvarez, another champion of accessible transit, in Montevideo (photo right). Alvarez also reports that access to public transport was a major agenda item for participants from eight Latin American nations plus Spain who gathered in Montevideo in March for a seminar organized by Spain's Real Patronato sobre Discapacidad, Spain's international aid agency, and other sponsors (below).

