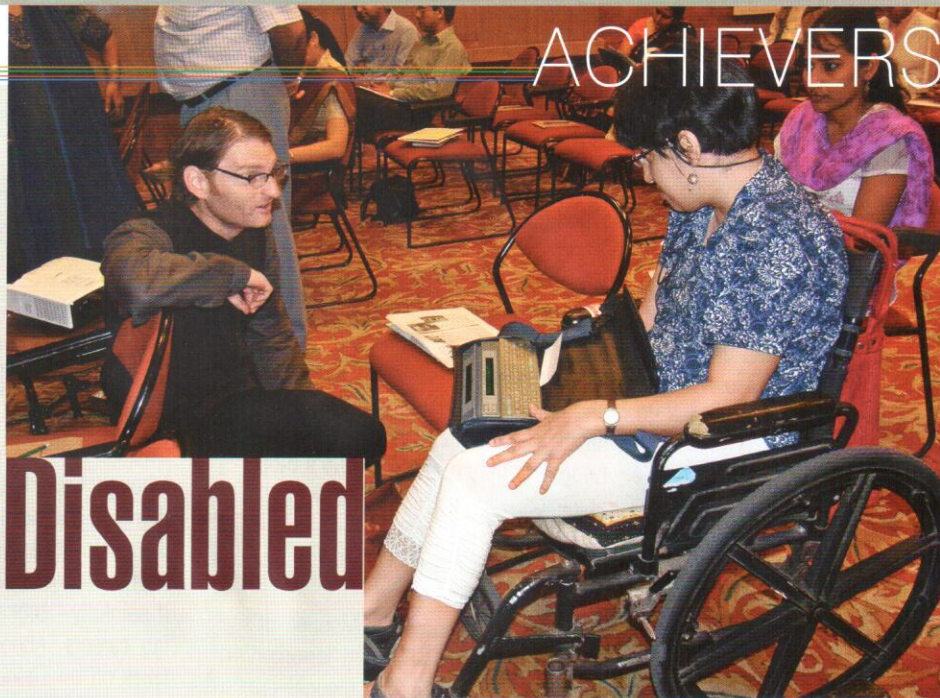


Jamie Osborne (left) interacts with Malini Chib, who uses the computer in her lap to make her speech audible.

## Jamie Osborne Designing for the Disabled

Text and photographs by  
KUMUD MOHAN



Photographs by KUMUD MOHAN

Simple changes can make huge differences to the lives of people with disabilities," says Jamie Osborne. A transit planner and accessibility coordinator with the San Francisco Municipal Transportation Agency in California, Osborne says that providing accessibility for senior citizens and the disabled is not rocket science, but these issues must be considered from the start of any project. "Also, people with disabilities and seniors must be made partners at the planning stage because retroactive improvements would be costly and less effective...."

At a recent conference in New Delhi, Osborne gave presentations on how San Francisco provides accessible transit and on obstacles in India seen through the eyes of a visitor. He told the conference organized by the NGO Svayam, the Delhi Government's Transport Ministry and the Indian Tourism Ministry sustainable solutions are never driven from the outside; they are a result of the adaptation of the local population to their specific needs.

"The autorickshaw, because of its size and maneuverability, can easily work as a feeder service for public transport systems like buses, rail-

*Qutub Minar in New Delhi became disabled friendly in 2008.*



### India's first completely accessible world heritage site

• In consultation with Svayam, the Archaeological Survey of India (ASI) has made the Qutub Minar complex completely accessible.

• As a result, there is an accessible ticket window, parking bay, signages, unisex accessible toilets and 5 ramps placed strategically in the Qutub Minar Complex.



way stations and the Metro," Osborne said. Attaching a belt or bar at the entrance could make it more secure.

"I feel that phase one of the Delhi Metro is a stunning success for senior and disabled transit users. The system has accessibility features like lifts and wheelchair-accessible fare gates at all stations, audible and visual announcements of stops and system announcements, as well as tactile guiding paths for visually impaired people. Few other systems in the world can claim all these...."

"However, I am concerned about the way that some Metro stations are integrated to the surrounding communities. There are often significant barriers to accessing the station. Lack of curb ramps, unusable pavements and dangerous pedestrian paths all prevent a person from entering or exiting the accessible Metro station," he said.

Osborne's India connection began six years ago when he was invited by Michele Friedner, a hearing impaired student from the University of California at Berkeley. Friedner was researching how deaf young adults in India envision their futures for her Ph.D. in medical anthropology.

Osborne ended up marrying Friedner and spending more time in India. He is currently using his extended leave to study Indian transportation networks, infrastructure planning and public participation.

Osborne completed his Bachelor of Electrical Engineering and a Certificate in Bioengineering course at the Georgia Institute of Technology in the mid-1990s. "I did not want to use my knowledge just for commercial purposes," he recounts. "I wanted to directly benefit society and not just encourage others to consume more products." He became a rehabilitation engineer at the Center for Accessible Technology in Berkeley, California, after graduation.

Rehabilitation engineering involves developing

technical solutions for people based on their specific needs and abilities. "For instance...there was a young woman who could only make small movements with her foot, so I developed an adjustable pressure-sensitive switch that, with other technology, helped her access educational games on the computer or communicate with her family.... I also devised a vibrating timer for a deaf wheelchair user who needed a reminder for medication and for changing his position."

Barely one-fifth of India's 10 million disabled people have access to assistive devices. Can some of Osborne's ideas be cheap and useful enough for Indian counterparts?

"The devices I developed were appropriate to a specific set of environmental factors," says Osborne. "They cannot always be helpful in other environments/cultures. Besides, many more devices are now available with advances in technology. India has a growing number of talented rehabilitation engineers and therapists...and I'm sure Indian rehabilitation engineers could come up with effective solutions."

Osborne noted that India has made great advances in technology and infrastructure. "I have come across some fine examples of pockets of accessibility at Dilli Haat and the Garden of Five Senses in New Delhi, and Coles Park and APD Horticulture Training Centre at Bangalore," he said.

In India, where pedestrians greatly outnumber drivers, arterial roads and highways are not designed with pedestrian needs in mind, Osborne said. "Ideally, the size of streets would be limited to ensure safe pedestrian crossings and the arterials would be designed so that the pedestrian crossings would be at grade, with elevated or underground arterials."

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