# Accessible Transportation: View of Accessible Samples of Design in Urban/Small Towns from Selected Countries

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## Examples of Accessible Transport and Pathways in Urban Areas

From:

US

Europe

Mexico

India

## Accessibility Into Transport Modes Requires

 Accessible entry into & exit from all forms of public transport modes:

#### In general

Level entryway/ exit —feasible in modes such as light rail /subways/ boarding a vehicle from a platform

Ramped entry / exit allows all passengers to easily access and exit

## Accessibility into Buildings/Transport Mode Requires:

- Entry into and exit from buildings via a ramp
- Ability to maneuver without endangering self and others (width of walkway)
- Accessible space for wheel chair/ mobility device to park inside a public transport mode and/or transfer into a regular seat (Aircraft/Rail)
- Ability to use wash rooms /toilets in long distance transport modes

## Some Examples of Various levels of Accessible Pathways-Europe

## Historic Area, Esslingen, Germany Designed by Architects



Accessible Moveable ramp from the Garage

**Inaccessible Shopping Area** 

### Road and Pavement Design

**Esslingen: Smooth transition** 

from Pavement to road

**Central Stuttgart: Historic Area** 





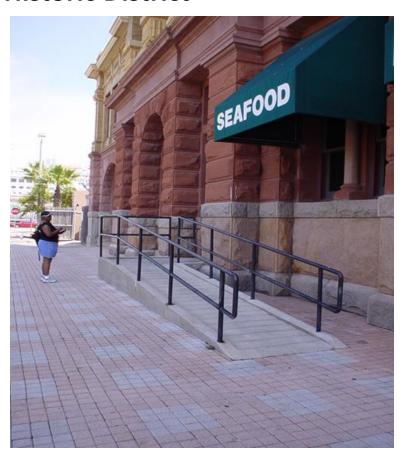
### Safety & Accessibility in US

#### **Achieved through**

- Civil rights Legislations and Financial Incentives
- Enforcements through penalties for non compliance or through law suites (by organizations /individuals)
- American with Disabilities Act 1990
- ISTEA (1991)
- Executive Order 12898 (Clinton) on Environmental Justice (1994)

### **US: Examples of Accessible Design**

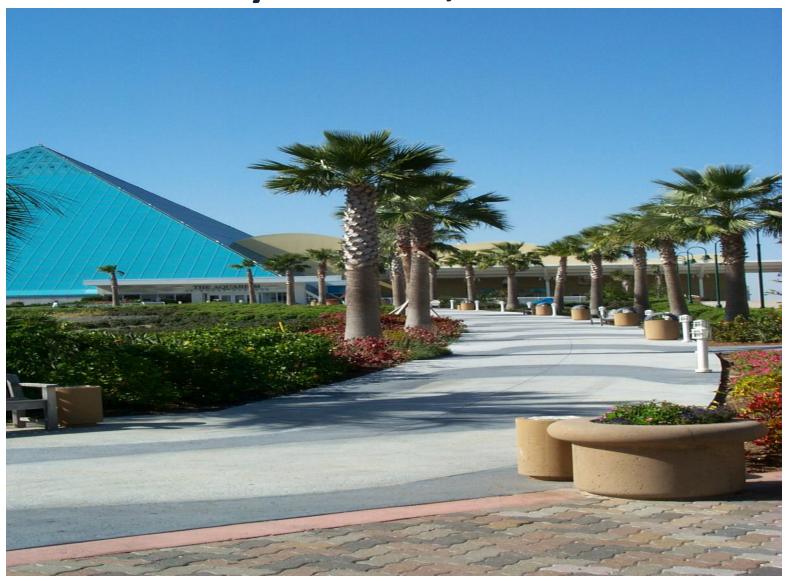
Ramp into Restaurant in the Historic District



Retrofitting Lift to ADA requirements



## Accessible Walkway: The Aquarium Moody Gardens, Galveston



## Transportation Terminals' Compliance with ADA

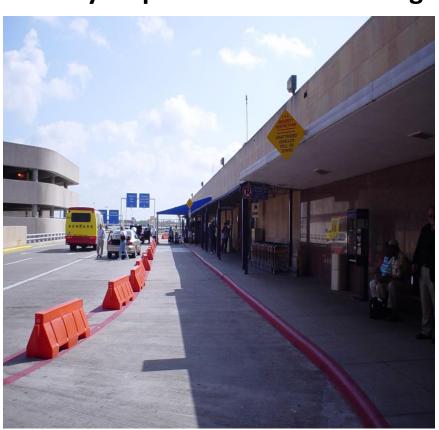
 Airports appear to have the most advanced design features for the disabled/ Seniors/Children

 However there is limited accessibility for the visually impaired (no guide tracks are installed or planned)

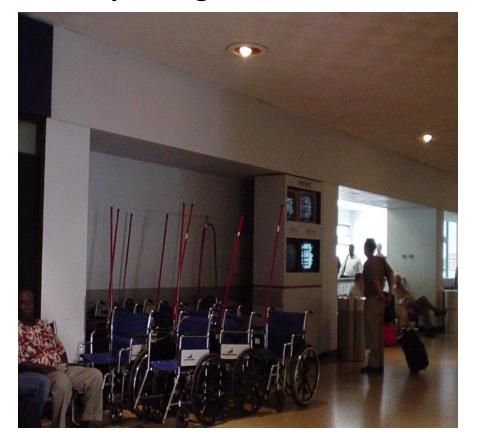
• Although most transportation terminals are subsidized there is significant variation in accessible designs between them

## Accessibility in Major Air Terminals in Houston

**Hobby Airport Curbside Checking** 



**Hobby-Storage of Wheel Chairs** 



## Intercontinental Airport, Houston (IAH) Adjustment of Facilities Curbside

Water Fountain adjusted for height (children/ wheel chair user)

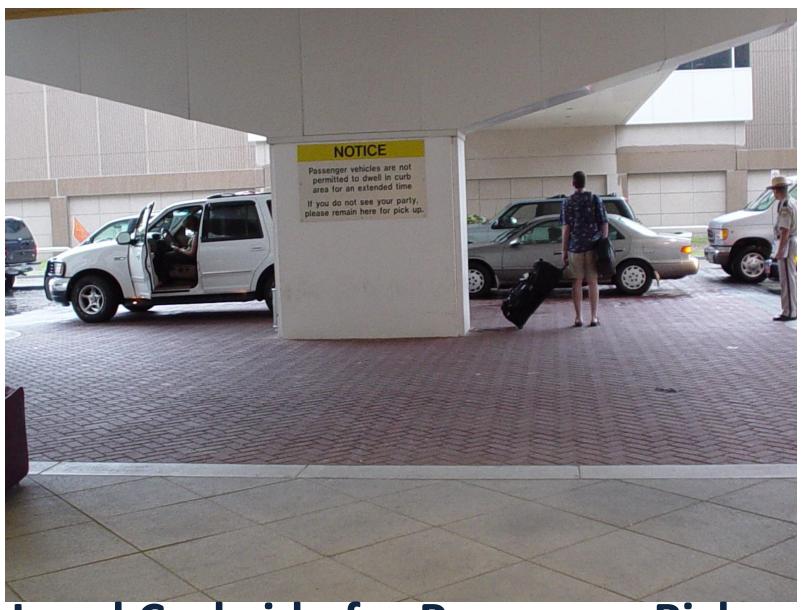


**Visual Pager (hearing impaired)** 



### Intercontinental Airport, Houston-Electric Cart for Mobility Assistance





Level Curbside for Passenger Pickup

# Accessibility Elsewhere: The Example of local and tourist sites in the Yucatan Peninsula, Mexico

## Local Transport in Yucatan Peninsula: Typical in small town





### Ramped Entry ways into Tulum-Yucatan Peninsula





# India-Examples of compliance/ non compliance with the PWD Act of 1995

### Accessible Crossing-Delhi



## New National Highway with high curb—outskirts of Delhi

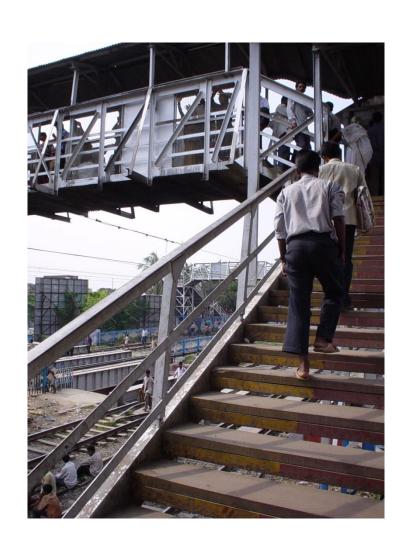


### Walking in a small town, South India

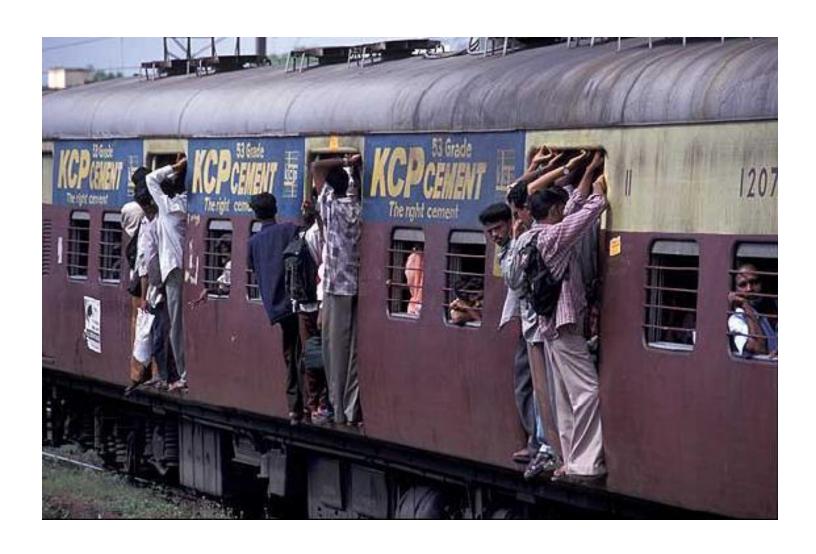


### **Public Transport Vehicles**

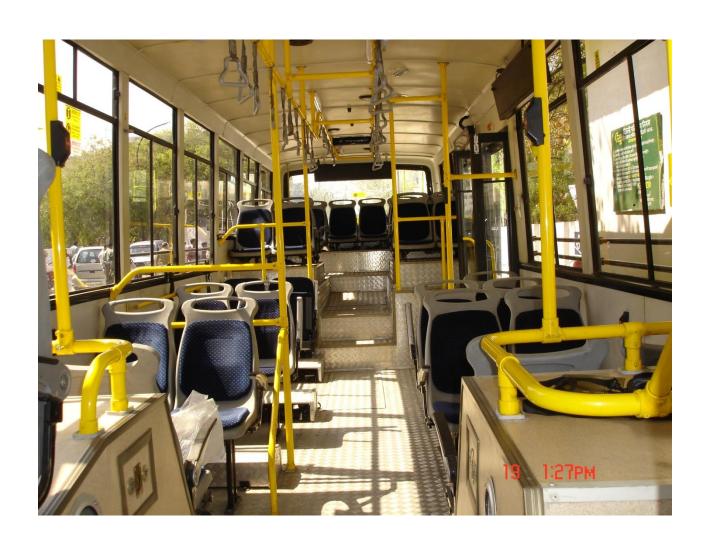
### Train Station Overhead Bridge Crossing



### **Commuter Trains**



### Accessible Bus



### New Low Floor Buses in Mumbai



## Trip Chain-Access to a Transportation Mode-Delhi





### Accessible Bus in New Delhi-2012



### Delhi Metro



#### Scooter/ Autorickshaw



## The Value of Accessible Design for Urban and Transport Infrastructure

- Accessible/ Universal design reflects items that can be used by any one from a child to an adult with or without disability with ease
- This allows for ease of production, and benefits the entire society without requiring any major adjustments to the production unit
- This also allows for readjustment of infra structure to enable uses under altered situations i.e. an accident or the need to move large commodities or a change in environmental conditions etc
- Universal design also allows innovation for reuse of material, commodities allowing reuse, cost savings, and minimize waste

### Essential Challenges Remain

Although the UNCRPD passed on December 16, 2006, accepted by many countries –

- Actions show vary depending on the size of the country, region, city and population density
- Most countries have chosen to improve capital cities, government offices, key tourist sites, and public buildings.
- Most countries have addressed accessibility at airports, bus stations, metro station, and in some cases major train stations
- Some subways and metros if they have been build more recently or expanded, have some accessible stations allowing disabled passengers to independently maneuver without problems- one such example is the DuPont Circle subway station in Washington, DC, in the US

### Why is Accessibility Important?

- In most countries laws have been adopted to provide inclusive transportation / education and opportunities for everyone including those with disabilities
- In every society, every adult is expected to attend training (in schools/colleges) and engage in productive work.
- Even individuals with disabilities are expected to be gainfully employed in some type of work for monetary compensation
- People are living longer, and could develop disability any time in life.
- Hence the need for "Accessible Transport" is imperative for a productive society