
Walk Urban



Macro-Scale Indicators for the Urban Pedestrian Environment

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July 31, 2006



Overview

- What is walkability and why is it important?
- Measuring the urban pedestrian environment
- World Bank's role in addressing the walking mode
- Key caveats



What is *walkability*?

“overall support for pedestrian travel in an area”

“Walkability takes into account the quality of pedestrian facilities, roadway conditions, land use patterns, community support, security, and comfort for walking.”

Todd Litman, Victoria Transport Policy Institute



Pedestrians: So what?

- Walkable cities **SAVE LIVES**
- High demand for walkable cities
- Better pedestrian environment → poverty reduction
- Walking is sustainable



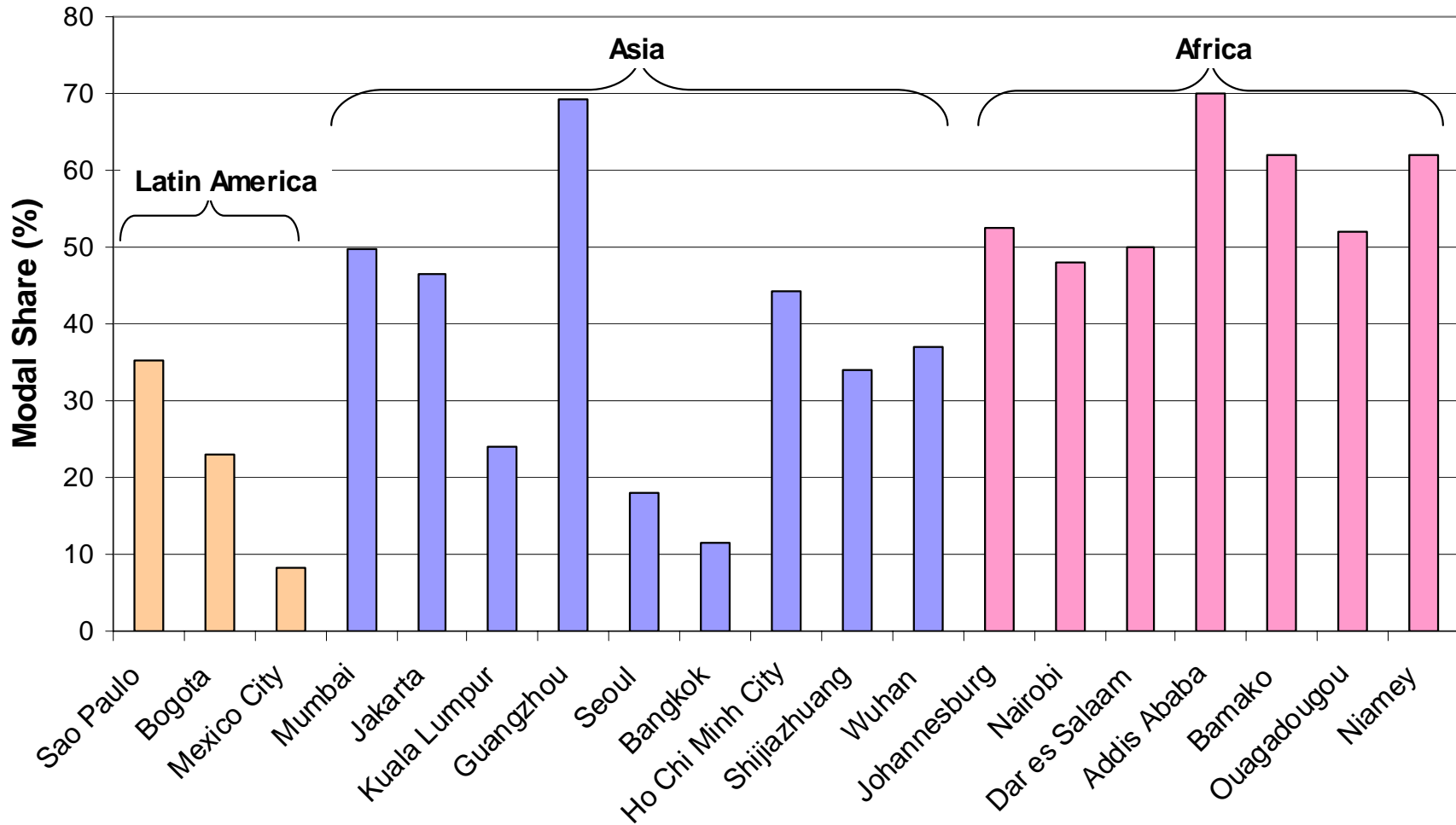
Walkable Cities **SAVE LIVES**

- $\frac{3}{4}$ of US ped crashes are in places without traffic controls
- Record levels of investment →
London's Child Fatalities ↓ 62% in 10 years



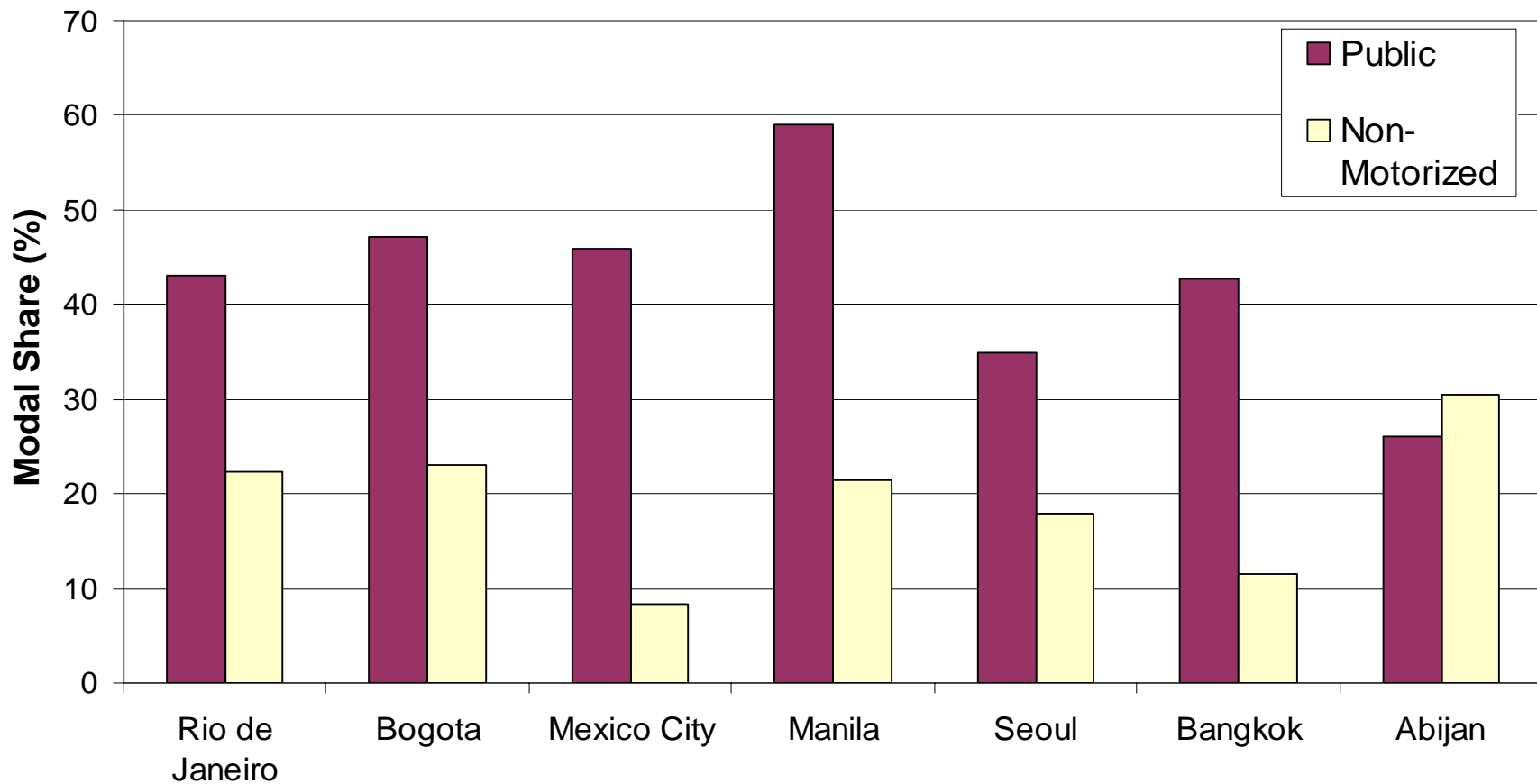
Demand for Walkable Cities

Developing Cities Walking Modal Share



Demand for Walkable Cities

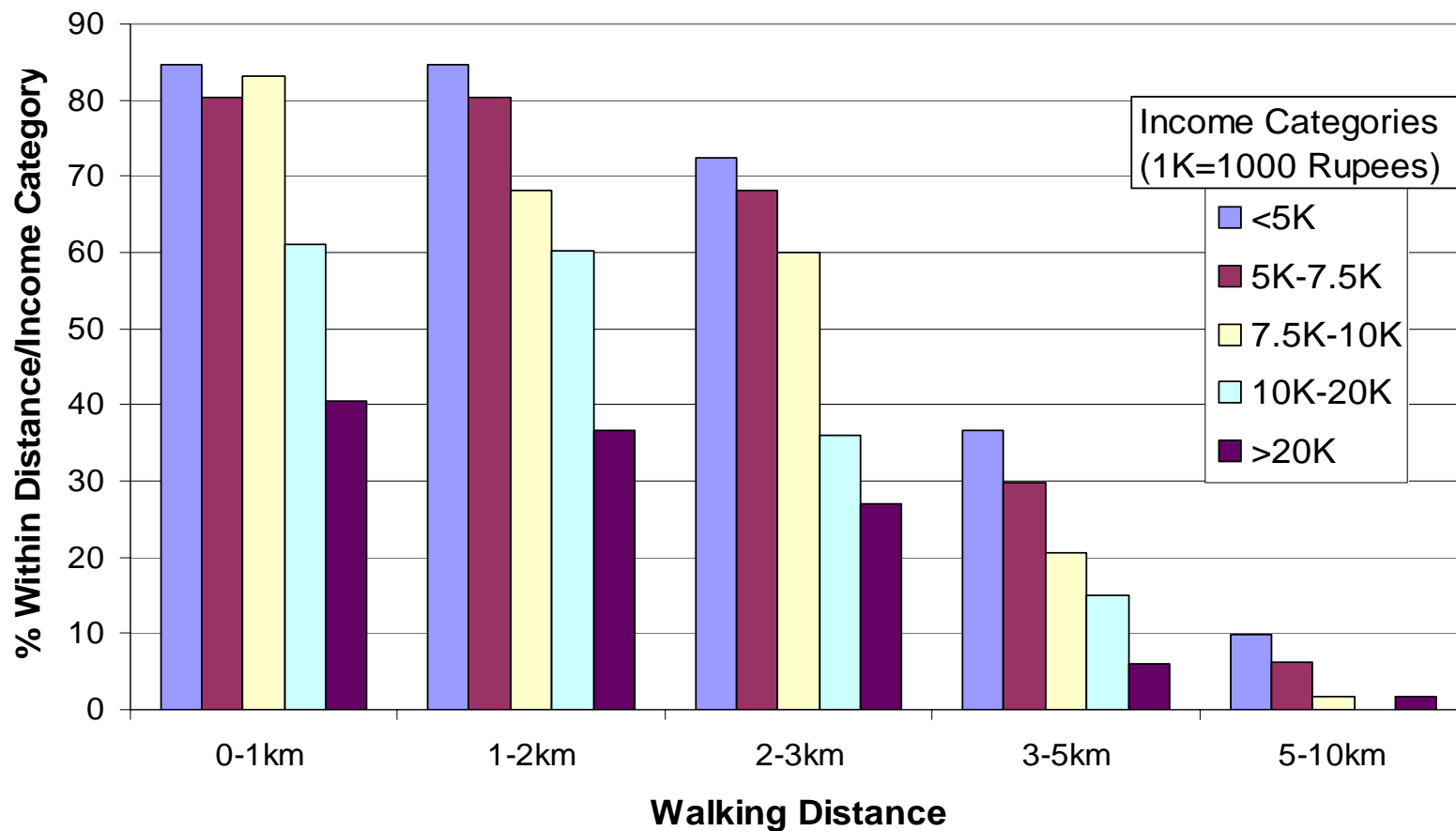
Developing Cities Non-Motorized and Public Transport Modal Share



Walkability → Poverty Reduction

Who walks?

Walking Commute Distance by Income in Mumbai



Walkability → Poverty Reduction

- Opportunity
 - MDGs #2, 3, 4, and 5
- Empowerment
- Security



Walking is a Sustainable Mode

- MDG #7
- Air quality
- Health



Measuring Walkability

- Macro vs. Micro
- Micro-level walkability assessment tools
 - Checklists
 - L.O.S.
 - PERS



APPENDIX B: Checklist for the local walking environment*

Is the local walking environment connected?

- How well is walking integrated with public transport? Are there, for instance, partnerships with public transport operators to develop local walking networks?
- Are routes to key destinations continuous, that is without barriers such as major roads that are difficult to cross?
- Are walking networks designed to give good access to key destinations?



Walkability Checklist

How walkable is your community?

Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.

Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go.

The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change.



1. Did you have room to walk?

- Yes Some problems:
- Sidewalks or paths started and stopped
 - Sidewalks were broken or cracked
 - Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
 - No sidewalks, paths, or shoulders
 - Too much traffic
 - Something else _____

Locations of problems: _____

Rating: (circle one)

1 2 3 4 5 6

How walkable is your community?



Macro-Level Measurement

- Goals:
 - Identify to what degree the pedestrian environment needs improvement
 - Compare between cities of similar characteristics

Macro Pedestrian Environment Dimensions

- Accessibility/Mobility
- Safety
- Security
- Legal Provision
- Public Expenditure



Potential Indicators Accessibility/Mobility

- Average walking travel time per trip



Potential Indicators Safety

- Pedestrian fatalities/population

“fear of fatal road accidents has curtailed walking along the major corridors because of difficulties associated with crossing the road at various intersections”

SSATP Non-Motorized Transport in African Cities



Potential Indicators Security

- Pedestrian crime rate (muggings, etc.)

“Women were keenly aware of security issues; they feel vulnerable to theft and assault, especially at night because street lighting is poor”

A Lifetime of Walking: Wuhan



Potential Indicators

Legal Provision for Pedestrians

- Pedestrian rights
 - Functional Road Hierarchy



Potential Indicators

Public Expenditure for Pedestrians

- Percent (%) of total urban infrastructure & maintenance funds spent on walking mode



Potential Indicators Summary

Walkability Dimension	Potential Indicator	Simplicity of Measurement	Data Accuracy	Current Data Availability	Collection Frequency
Accessibility /Mobility	Avg. walking trip time	Difficult	Fair / under-reported		3, 5, or 10 years
Safety	Pedestrian fatalities/ population	Simple	Fair / under-reported		Annual
Security	Pedestrian crimes/ population	Moderate	Poor / under-reported		Annual
Legal Provision	Pedestrian Rights	Simple	High		Annual
Public Expenditure	% infra. & maint. funds spent on pedestrians	Moderate	Fair		Annual



City “Typing”/Classification

- Purpose
- Various methods
 - Population groups
 - Modal split/
motorization
characteristics

Additional Data Needed
Modal Split
Motorization (vehicles/population)
Population
Metro Land Area
Income

What has the Bank done?

INPUT NEEDED!



What can the Bank do?

- Encourage data collection
- Benchmark indicators
- Urban agency direction
- Policy guidance – Functional Road Hierarchy
- Pedestrian project funding



Key Caveats

- Holistic approach
- Social responsibility
- Best sense of environment with least data

