



Non-motorized Transport

LCMPs in Indian cities, Udaipur
Manfred Breithaupt, GIZ





In most cities, **mobility** is dominated by **personal motorized transport**.
Many people choose **cars** to move around...





10-25% of urban areas are taken by **road** transportation infrastructure -
A lot of space for cars but...





...where is the **space** for people?

the **silent** pedestrian, the **invisible** cyclist must be **seen**... and **heard**





Provision of **Cycling Infrastructure**

- (1) **Coherence:**
 - Connect all important origins and destinations
 - Integration with public transport
- (2) **Directness:**
 - Direct routes and avoidance of detours
- (3) **Safety:**
 - Segregated bicycle lanes
- (4) **Comfort:**
 - Smooth pavement
- (5) **Attractiveness:**
 - Avoid deserted and isolated routes





Mayor Peñalosa of Bogotá proved its not just for the rich.
300km of bike lanes built from 1998 to 2002

For cars



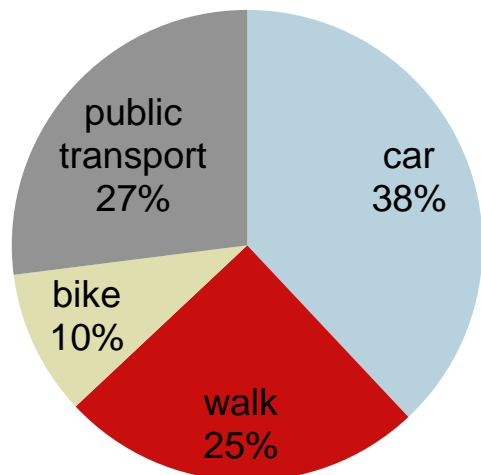
For people





International Experiences

Modal-split¹



Examples: Berlin – Cycling

- Dense cycling network: segregated and non-segregated bicycle lanes, cycling on bus lanes, cycling streets, cycling share contin. on rise (now at 13%)
- 12 radial routes from the city centre to the outskirts and 8 connecting tangential routes
- Public bikes and Bike taxis

¹Modal share of bike in Germany:
12 % on average, Münster highest with 37 %





■ International Experiences

Examples: Copenhagen – Car-free Development

- Until 1962 all streets in the city centre were used by cars; all squares were used as car parks
- In November 1962 Copenhagen's main street, Strøget has been pedestrianized
- Today:
 - 96 000 m² car free space (33% streets, 67% squares)
 - **Today 37% of all trips by bicycle**
 - Vibrant city centre that attracts visitors throughout the year



Strøget, Copenhagen

Source: Wikimedia, Olga Itenberg, 2009,
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▶ S = Safety



SPACE: Safety (3)



**“I bet I can
cross the
road alive”**



P = Priority



From Michael King study
developed with SUTP
January 2004

SPACE: Priority (2)



Lloyd Wright

Question:
Where is the footpath?
and
Whose is the footpath?

SPACE: Priority (2)



Senior citizens are often deterred from walking



A = Accessible



SPACE: Accessible (2)

Basic principles of NMT Design are not Rocket Science.

Which do you prefer to cross?





C = Comfort



SPACE: Comfort (2)



**Pedestrian overpasses
uncomfortable
and people seldom use
them.**

SPACE: Comfort (3)





E = Enjoyable



**Do you think a person
would enjoy walking
on this “footpath”**

SPACE : Enjoyable (2)





**It is a
footpath not
a stair case**

What if they have what they want?



- ▶ Give them **S.P.A.C.E** and how will the city change..



**Strasbourg
(F)**



■ For the rich (data 1995)

Country	Percentage of the trips in bicycle	Order in EU (+ Switzerland)	Income per capita	Order in EU (+ Switzerland)
Netherlands	27	1	EUR 25.000	7
Denmark	18	2	EUR 32.000	3
Switzerland	15	3	EUR 38.000	2
Spain	1	14	EUR 15.000	14
Greece	<1	15	EUR 12.000	15
Portugal	<1	16	EUR 11.000	16

- Only in some developing countries the idea exists that the bicycle is for the poor



- For men and women:

- Netherlands: 55% of trips by women
- Germany: 49% of trips
- United States: 25% of trips
- Australia: 21% of trips

- For all ages:

- Netherlands 65+ 24% of trips by bicycle



Cycling is for everyone

- For all kinds of people





SUTP Website (Engl.,CN, Span.)

- Active since 2002
- GIZ SUTP Publications
- Multimedia (gallery, videos)
- 35,000 visitors (per month)
- Almost 50,000 registered users
- Approx. 35,000 downloads (per month)

www.sutp.org

The screenshot shows the homepage of the Sustainable Urban Transport Project (SUTP) website. At the top, there is a blue header with the text "Sustainable Urban Transport Project (SUTP)" and a "Login/Register" button. Below the header is a large image of a young girl looking out of a bus window. A navigation menu includes links for Home, Sourcebook, Projects, Upcoming Events, News, Gallery, Weblinks, CAPSUT, About Us, and Contact Us, along with a search bar. The main content area features a "Welcome to the Sustainable Urban Transport Project (SUTP)" section with a sub-header, a small image of a red bus, and text explaining the project's goals. Below this is a "Central MeetBike" section with a sub-header and text about promoting sustainable transport in Central European cities. On the right side, there is a "Thematic Downloads" sidebar with a list of categories such as "Institutional and Policy Orientation" and "Land Use Planning and Demand Management". At the bottom right, there is a "Photo of the Week" section with a small image.



Recent publications

Information	Stockholm	Oslo	Helsinki	Copenhagen	Geneva
Easy to get the info needed when planning a trip	74%	74%	81%	73%	71%
The info is good when traffic problems occur	22%	21%	28%	31%	49%
The information is good in stops and terminals	37%	61%	46%	43%	81%

Measuring Public Transport Performance
 Lessons for Developing Cities
 Sustainable Urban Transport Technical Document # 9

Division 44
Water, Energy, Transport

Rising Automobile Dependency
 How to break the trend?
 Sustainable Urban Transport Technical Document # 8

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

BMZ On behalf of Federal Ministry for Economic Cooperation and Development

BMZ Federal Ministry for Economic Cooperation and Development

Urban Transport and Energy Efficiency
 Module 5h
 Sustainable Transport:
 A Sourcebook for Policy-makers in Developing Cities

Published by: giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



Training courses and Training manuals

- Bus Rapid Transit
- Public Awareness and Behavioural Change
- Non-motorised Transport
- Transport Demand Management
- Bus Regulation and Planning
- Financing Urban Transport
- Transport and Climate





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