



International Pedestrian and Bicycle SCAN


May 8th -24th

Synopsis of observations

by C. Engelhart

Research project sponsored by FHWA/AASHTO/NCHRP

Host Countries and Local Jurisdictions

A scenic view of a canal in Copenhagen, Denmark, with colorful buildings and boats. The canal is lined with multi-story buildings in various colors (red, yellow, white, blue). Several boats are docked along the canal, and a few people are visible on the sidewalk in the foreground. A black metal railing runs across the foreground, and a sign on it reads "Hænderne af cykler forbudt" (Hands off bicycles).

Sweden (Malmo and Lund), Denmark (Copenhagen and Nabsco),
Switzerland (Bern and Winterthur), Germany (Berlin and Potsdam),
United Kingdom (London and Bristol)

- Meetings with Department of Transports at national and local level
- Local towns/cities ranged from around 500 to several million population.



- Around 40 to 50 years ago experienced increasing vehicular usage.
- Population decided to change that trend.

Design Hierarchy

- Pedestrians
- Bicycling
- Public Transport
- Single vehicles and trucks

Engineering Options



There are many solutions to accommodate bikes and peds. No one solution fits everywhere. Note bike lanes in all directions.



Refuge, refuge, refuge
....almost no space is too small!!!!



Interactive Pedestrian Signals

- Wait time feedback
- Passive detection
- Near side position

Roundabouts

- Install speed tables prior to roundabout to lower vehicular speeds
 - Keep bicyclists in traffic instead of on sidewalks for 1 lane roundabouts.





Reduce bus speeds to
use combined lanes in
urban areas



Intersection movements by bikes handled in many ways

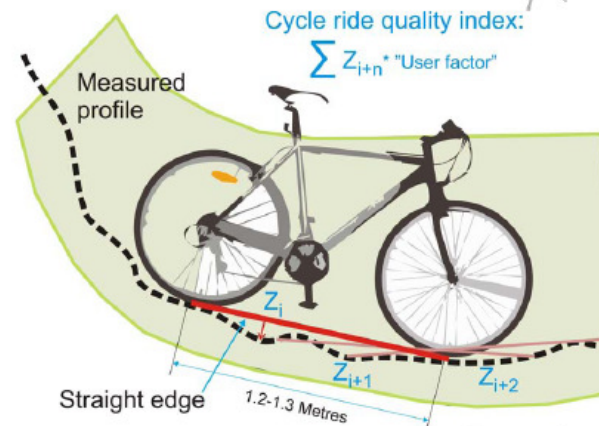
Pavement Structure

- Malmö, Sweden: 2" asphalt over 12" subbase
- Winterthur, Switzerland: 3" asphalt(2 lifts) over 12" subbase

Swedish designer said pavement typically lasts 10 to 15+ years or more actually drying out before it needs replacing.

Ride Quality – Research project

Objective evaluation of cycleway ride quality



In co-operation with Swedish Association of Local Authorities, Swedish Road Administration, Malmö city, and Ramböll RST

Expanded Education



- Age 4 to 16
- Traffic club for parents
- Traffic Garden – Winterthur
- Public Campaigns – more dramatic
- Professional programs - truck drivers, etc.
- Elderly programs