

### Sharing expertise with the world A Public Private Partnership Roelof Wittink, Director

# Dutch Cycling Embassy

A public-private partnership between governments, agencies, unions, traffic planners, manufacturers and universities. Due to additional capacities, a strong alliance.

Partnership at national level:
Holland Branding
Export promotion
Support to worldwide sustainable development



## Paper on Public Bikes India context

Anvita Arora, I-Trans New Delhi Tonm Godefrooij, Dutch Cycling Embassy Roelof Wittink, Dutch Cycling Embassy

Public bikes in the context of :

### **Promoting Active Transport**

## EST conf: National bicycle schemes

1.National cycling policies

2.Local cycling policies

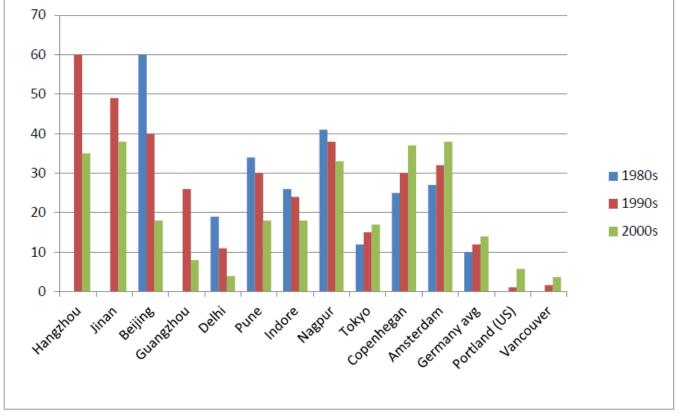
3. How do Public Bikes fit in



To improve

### Cycling inclusive planning?

## Rich countries take up responsibility



Sources : (Tiwari and Jain 2008, Pucher and Buehler 2008, J. Pucher 2007, Pucher, Buehler and Seinen 2011, Pan 2011, Katia and Kagaya 2011, Pucher and Dijkstra 2000). Note that: (i) values may not be comparable across cities due to differences in data collection methodologies and definitions, (ii) the 1980s data are not available for some cities.

### THE MAYOR'S VISION FOR CYCLING IN LONDON



# The Mayor: cycling will create better

.....places for everyone. It means less traffic, more trees, more places to sit and eat a sandwich. It means new life, new vitality and lower crime on underused streets. It means more seats on the tube, less competition for a parking place and fewer cars in front of yours at the lights

### The Mayor: Timid half-hearted is out "Road space will be taken from cars and given over to bicycles. Timid half-hearted improvements are out. We will install Dutch-style full segregation on several streets. There will be mini-Hollands: three outer boroughs will be chosen for very high spending concentrated in relatively small areas for the greatest possible impact. We will deliver a massive Dutch-style 'bike superhub' at a mainline rail station, with space for thousands of bikes and 'very good cycle routes radiating from it'.

### Social agenda, equity



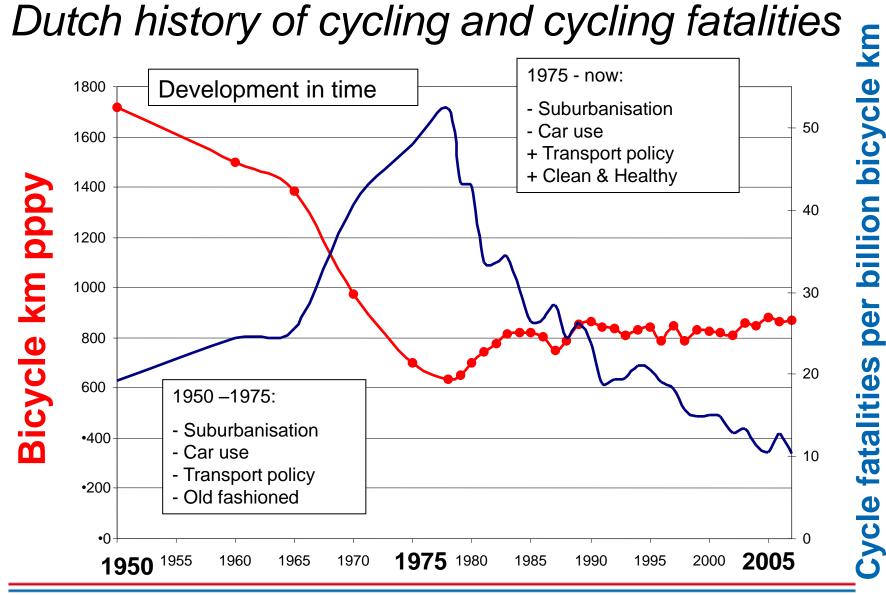
## Dutch Road Safety Design

### > Traffic flow comes with segregation

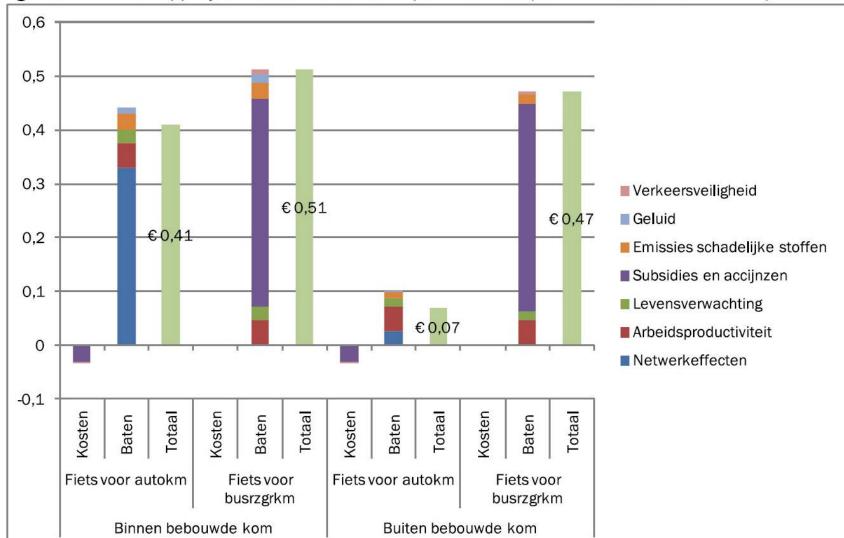
> Urban traffic distribution with traffic calming



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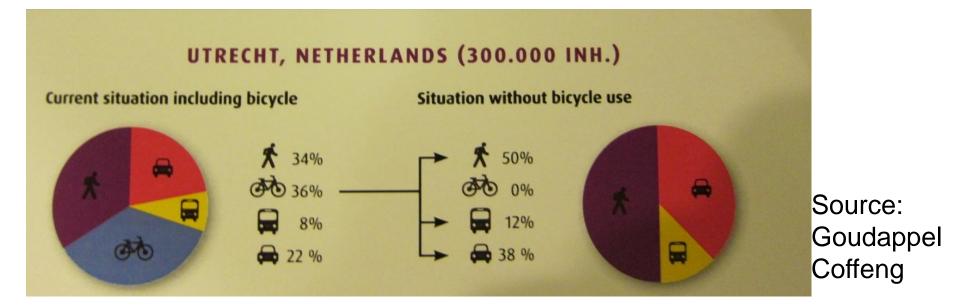


# Optimal cycling most cost-beneficial



Figuur S2 Maatschappelijke effecten modal shift per kilometer (netwerkeffecten cf Alkmaar)

# 70% more CO2 without cycling



If Utrecht with 36% share of cycling would have to care for transport without bicycles, the city would have to face: 75% more car kilometers and 70% more CO2 emissions

# National cycling policy needed

- 1. Vision on city life and universal access
- 2. Objectives and the way to reach targets
- 3. Participatory policy development
- 4. Projects; pilots, demonstrations, research
- 5. Instruments for planning & design

### 6. Information sharing

# The gap between preach & practice

Lack of use mobility data in planning no door-to-door services QUITO

Lack of coherence road safety problems, stand alone policies

Lack of policy planning opportunism



# Local cycling policies

- Data analyses: Traffic & safety data, mobility needs
- Categorization of roads: flow, distribution, access
- ➢Network planning, safe, direct door-to-door routes
- Priority for sust.modes in traffic management
- ➢ Reallocate urban and road space
- ➢Bike parking in city centres, stations etc.etc.
- ➢Public bikes, chain mobility, mobility management
- Education, training, police enforcement
- ➢Social marketing

### Data analyses



India: DELHI 55-90% vehicular trips < 5 km 7<u>-21% of all trips by bike</u>



#### UTRECHT, NETH, 34% BIKE

## Categorization of roads

### Minimize urban roads with flow function for cars Create also a core network of main routes for cycling

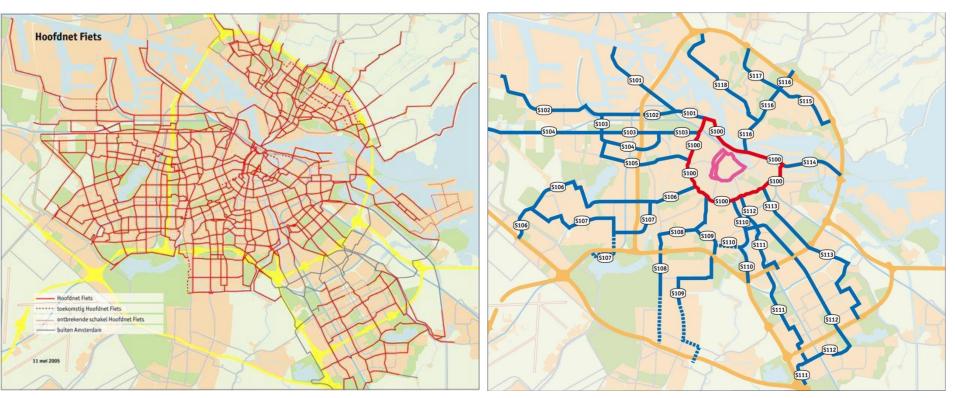


BOGOTA

NIJMEGEN, NETH

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### Networkplanning,Amsterdam



### A fine meshed network for cycling and a smal number of roads with a flow function for cars

### Priority in traffic management



#### Priority at roundabouts

#### Seamless link to train station

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### Reallocate urban and road space



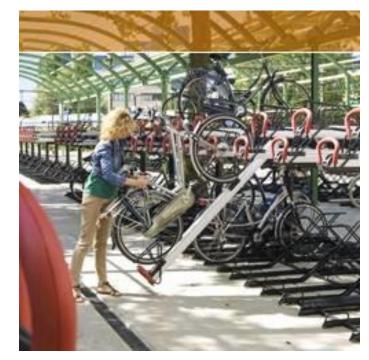
#### AMSTERDAM

**NEW YORK** 

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### Bike parking in the Netherlands





### 50% PTbike riders use PT more, 10% left car behind

### > 50% PT users India walk > 500 meter to bus station

## Education, training and enforcement



### SOCIAL MARKETING

da vrij 18m GODUTCH MAYORAL ELECTION 2012

# India national policies

**NUTP:** Equitable allocation of road space With priority to public and active transport National Mission on Sustainable Habitats: Segregated right of way for bikes and pedestrians Crowded areas change into no-vehicle zones Improving bicycle technology, safe bike parking Public bike program Organising cycle rickshaws through PPP Promoting cycling and walking as healthy

## But:

Who has ownership of planning for cycling and walking in cities; how will planners and police officers take cyclists and pedestrians as serious as car drivers: Instruments? Re-education?

There is a need for a Masterplan approach in setting targets and strategic planning, and a need for a vision on how to create road safety

## Best practices in India

Make cycling inclusive planning instrumental:

National mission on Sustainable Habitat has Parameters how to deal with walking and cycling

Delhi developed and so created ownership for Street design guidelines, to incorporate facilities for walking and cycling

# Public bikes national policy India

Bikes available for shared use for those without bike **Toolkit:** Improve the status of the cycling Incl. informal cycle bases systems in national policy Institutional structure for planning & implementation Protocols incl service level benchmarks **Product design:** bikes, locking system, parking stations, integration of IT, information, research *Financing mechanisms:* model for concessions, sources, incentives, financing road-map 3 years

## Where do public bikes fit in?

How to position public bikes in strategies to promote cycling and sustainable urban transport?

What do they add to mobility options? Who might be the target groups?

How to integrate with bike parking strategies

## Public transport

Public transport has become much more modern Car sharing is upcoming market Chain mobility: Park and bike, Train and bike

Public bikes are showcase of a 'cycling' city, a catalyst for change: changes in mobility policy with the opportunities for city branding, and changes in the perception of cycling related to changes in life style

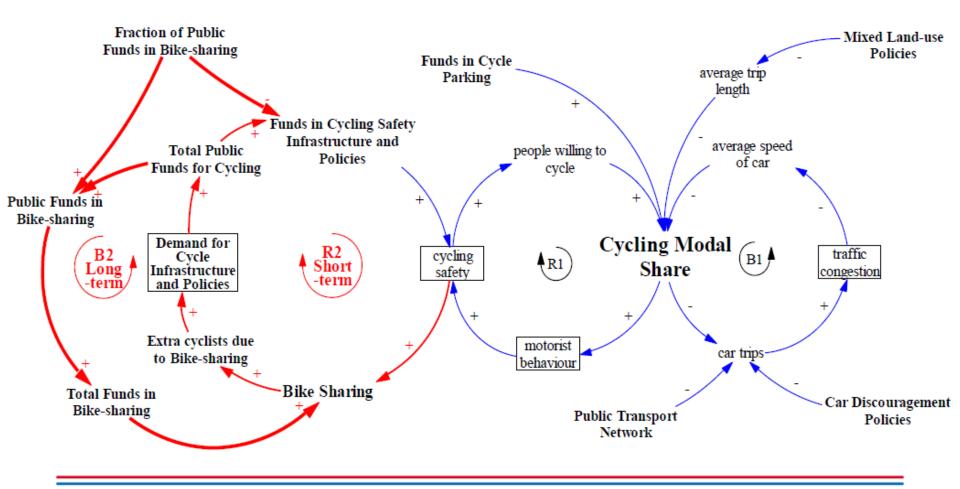
# Combination with mobility policies

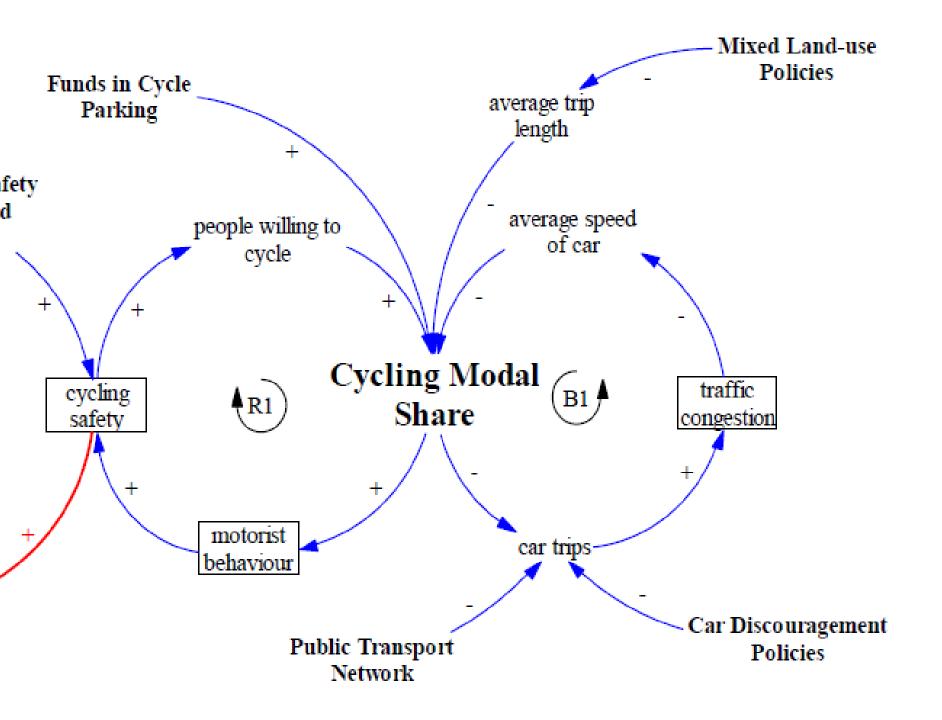
Optimal mix of transport modes should be the aim

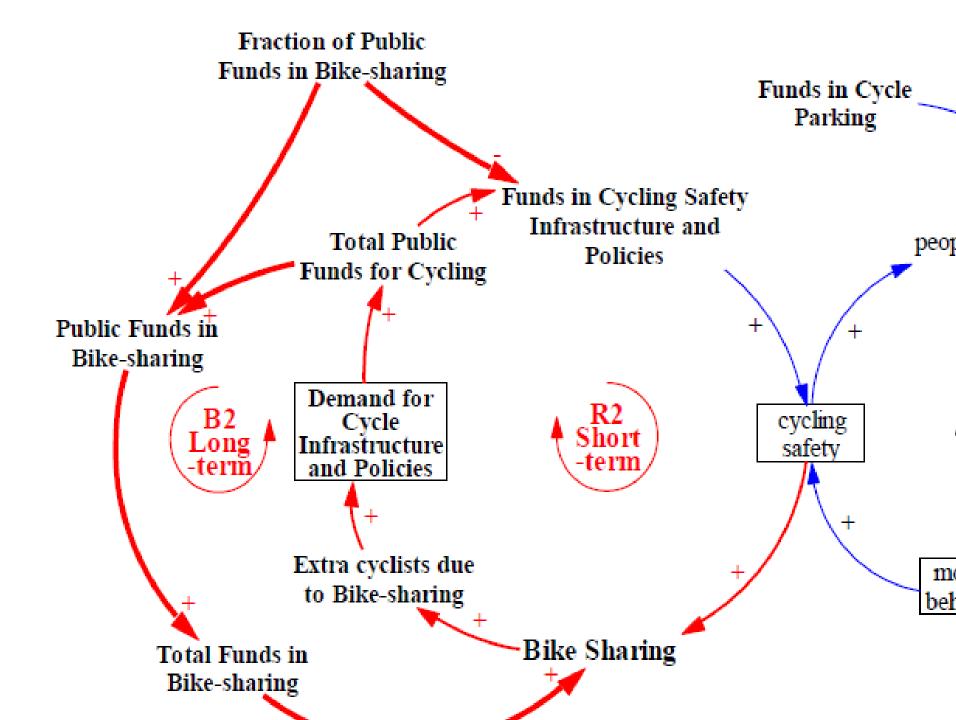
Every trip by bike has benefits for the person and for society, compared to the use of any other mode. When cycling becomes as convenient, safe and efficient as other modes, it is a mode for all people

Public bikes are important catalyst in transformation although share is low when cycling levels are high

# Long term Implications Public bikes







## Technical aspects

Manned or full automatic? Manned demands less technology, creates more services and more jobs

Dutch system connected to trains is manned and combined with parking private bikes; their costs per bike are less than with full automatic systems in lower income countries

### Dutch OV Fiets, PT Bike



## Scanning

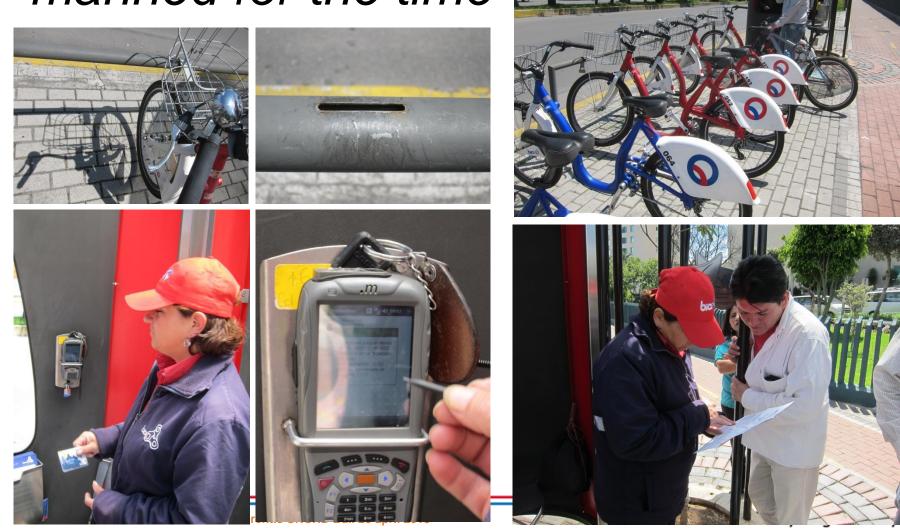


...With a handheld scanner with chipreader we read the cards and the keys of the bikes and we register which customer receives which bike...





### Ecuador, Quito, manned for the time



## Technical there is no problem

Anyway, which system you choose, there is no technical problem to install a system. There is huge opportunity for local functional systems and no need for a "one size fits all" approach





STOCKHOLM

**RIO DE JANEIRO** 

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