



---

# **Cycling for Sustainable Development**

Sharing Dutch expertise with the world

---

Roelof Wittink, director Dutch Cycling Embassy, EST forum, Delhi, dec 2011

---

# *Taking care has a value*



Sustainability  
A sustainable city  
Create a cycling city



By public and private efforts  
Serving cyclists from door to door  
Mobility and traffic management  
Risk prevention  
Accessibility for all  
Serious emission reductions



---

# *Contribution* <sup>by</sup> *Cycling* <sup>to the</sup> *City Climate*

What is the city, people want? A liveable, social, clean city. Cycling is traditionally important mode for accessibility. Now it is becoming a trend and trendy, a symbol for easy access and a good feeling, becoming chic and serving different lifestyles.



---

## *Public private partnership*

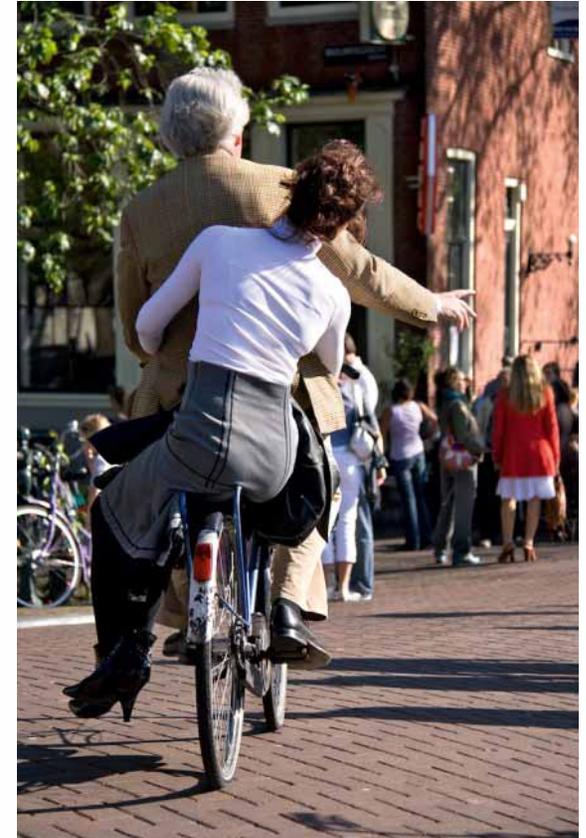
The Dutch Cycling Embassy is a network of local governments, three national ministries, bicycle factories, producers of bike parking provisions, consultancy agencies, engineering companies, research institutes, and civil society organisations.

**Together they create the Dutch cycling culture.**

The Embassy is the entrance to the Dutch if you search for exchange, assistance, capacity building, transfer of knowledge and technology, partnerships

---

# *The Dutch sky has no limit*



---

# *The Americans are in process*



---

Roelof Wittink Dutch Cycling Embassy, EST forum Delhi dec 2011

Dutch Cycling Embassy

---

# *India has an interesting tradition*



---

# *Cyclists are just road users, to be served from door to door*

A proper bicycle with accessories and a routeplanner, a coherent network of safe, direct, comfortable, attractive routes and priority in traffic management, parking & chain mobility facilities.



---

# *City bikes and parking sheds*



---

# *Wide variety of accessories*



---

# *Cycling inclusive approach*

Bicycle paths, public bike systems are great but just a component.

We need mobility management, traffic management, inclusive planning and design of our roads and streets and also urban planning and management allowing short trips to be the majority



---

# *Avoid road widening*

Wider roads lead to higher speeds & more accidents

Wider roads & elevated highways attract more  
motorised traffic (into the city) & discourage cycling

Wide roads lead to delays at junctions

Wider roads are difficult to cross



---

# *Cycling & pedestrian inclusive planning*

Construct a continuous network of cycle tracks

Provide cycle parking facilities

Make car-free streets and zones in city-centre

Make city-centre and residential areas 30 km/h zones

Provide at grade pedestrian crossings at all arms

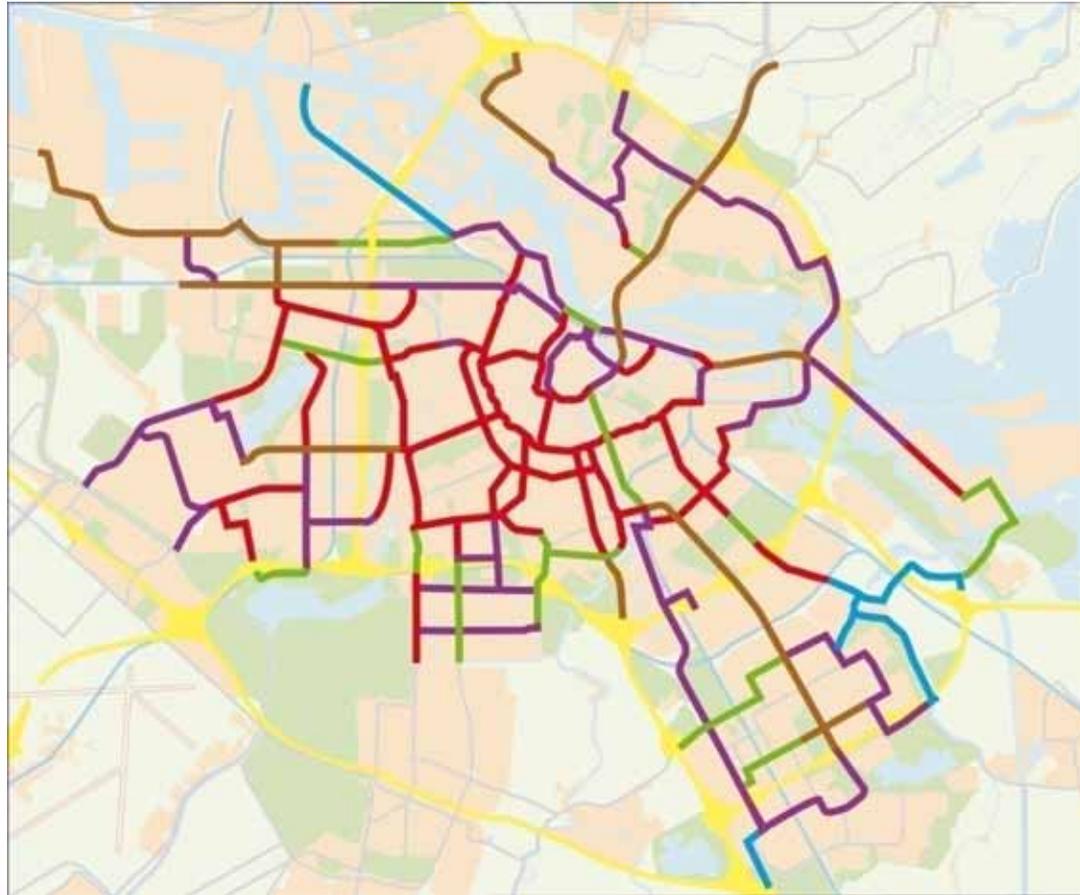
Redesign junctions where traffic can turn with high speeds

Provide short-cuts for cyclists and pedestrians

---

# *Amsterdam Roadprofiles 2005*

Yellow = 2 x 4 100 km/h, Brown = 2x2 70 km/h, Green = 2x2 no parking.  
Blue = 2x1 70 km/h, Purple = 2x1 no parking, Red = 2x1 with parking



---

Only very few roads have more than 2 lanes (2 x 1)

---

# *Equilibrium: Space for all modes*



---

# *Road safety is about risk prevention*

Minimise conflicts;

> High speeds & volumes: **segregation**

Minimise outcome of conflicts

> No segregation: **traffic calming**

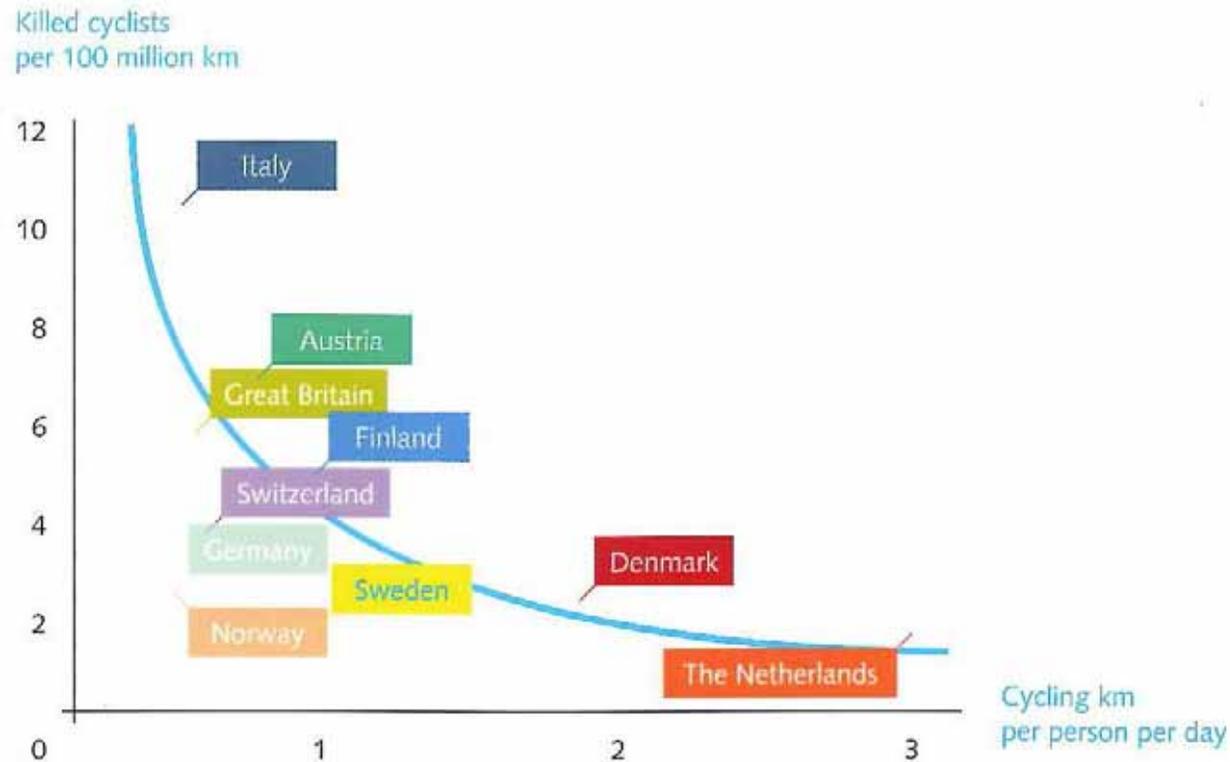


Allow for interaction between road users

> Make sure they see each other, **eye contact**

> Avoid complexity

# Road safety cycling in Europe compared with cycling use



---

# *Impact assessment*

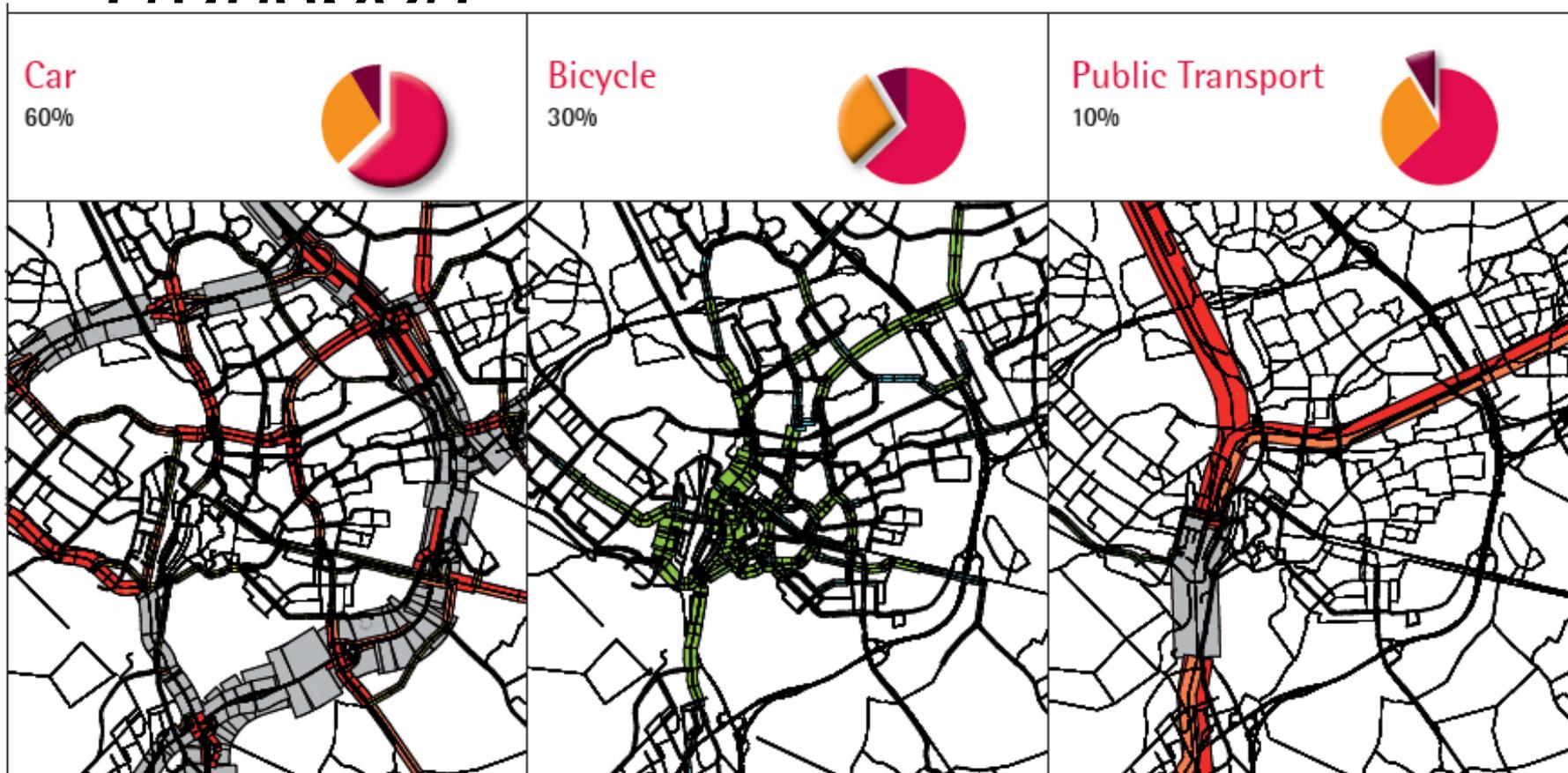
Omnitrans is a truly multi-modal system to model the interactions between car, bike and transit in an urban context and calculate the impact of modal shifts on accessibility, safety and the environment.

Unique in its approach to multi-modal trips, such as travelling to the station by bike, continuing on a transit system and walking to a destination.

---

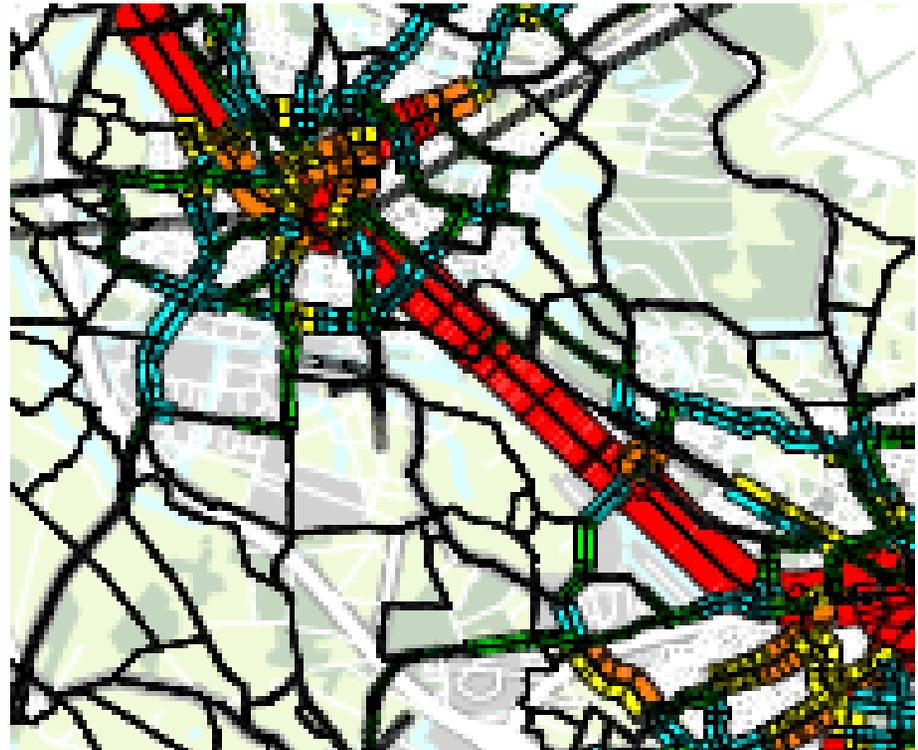
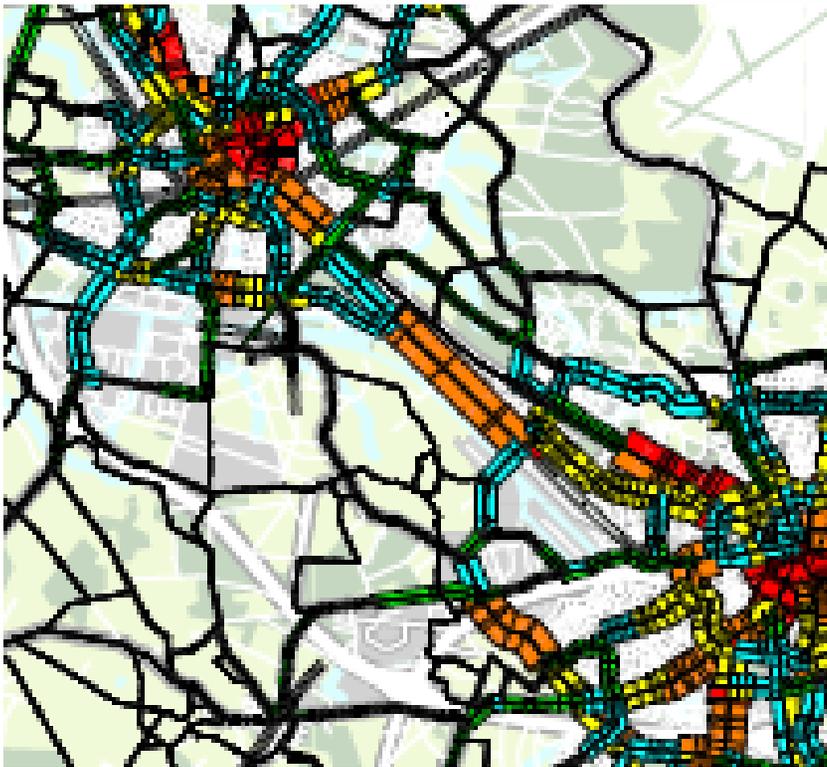
# Multi-trafficmodel OmniTRANS

## Car – Bicycle – Public Transport



---

*Number of bicycles with or without bicycle-highway in 2020*



# 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

---

# *Dutch Rio+20 agenda includes cycling*

The Dutch Cycling Embassy has been asked to support the Dutch Rio+20 agenda and mobilise public and private partners in an international alliance

*UNEP is partner with,*

*Cities planning for cycling*

*Cities searching for impact assessment of cycling*

*National and international bodies that make urban transport policies cycling and walking inclusive.*

---

# *The future*

Cycling main mode urban transport

City bikes conquered the world

Efficient bike parking systems

More people change between a car and bike than are car driver or cyclist

Cities are build for accessibility for all people and do have an attractive social and economic climate

Cycling and public transport have reduced transport related emissions in cities by more than 50%



---

# *Investments in a sustainable future*

The Dutch, 18 million people, still invest 700 million  
Usdollar per year on cycling facilities, on purpose!



---

*Thank you*

