

# The benefits of cycling



Enfield conference 8 april 2016



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Department of Urban Development/Traffic

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# Key Figures

- Population & jobs 2011:
  - 0,5 million (city)
  - 1 million (agglomeration)
  - 7 million (Randstad)
  - 0,26 million jobs (city)
  - 0,5 million jobs (agglomeration)
  
- Randstad is Nr 5 GRP in Europe : € 273 billion



International City of Peace and Justice

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Home to the royal family

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Multi ethnic & expats

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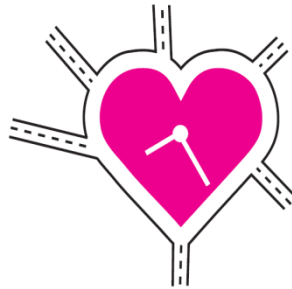
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# The Hague Mobility plan: Key choices

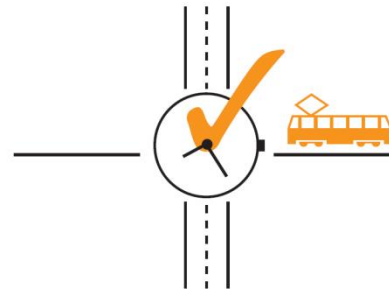
duurzame mobiliteit  
en een gezonde stad



betrouwbare bereikbaarheid



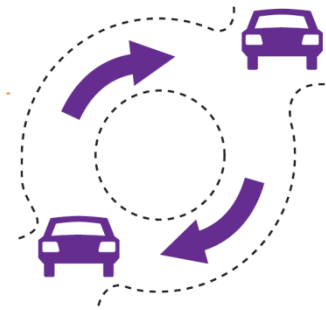
vergroten van het marktaandeel  
openbaar vervoer



stimuleren fietsgebruik



autoverkeer bundelen,  
ordenen en inpassen



meer aandacht  
voor voetgangers

ketenmobiliteit



rust en ruimte in  
woon- en leefgebieden



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Investing in sustainable accessibility  
to make a more attractive city for  
living, working and visiting.

Designing infrastructure; adding  
quality to the city



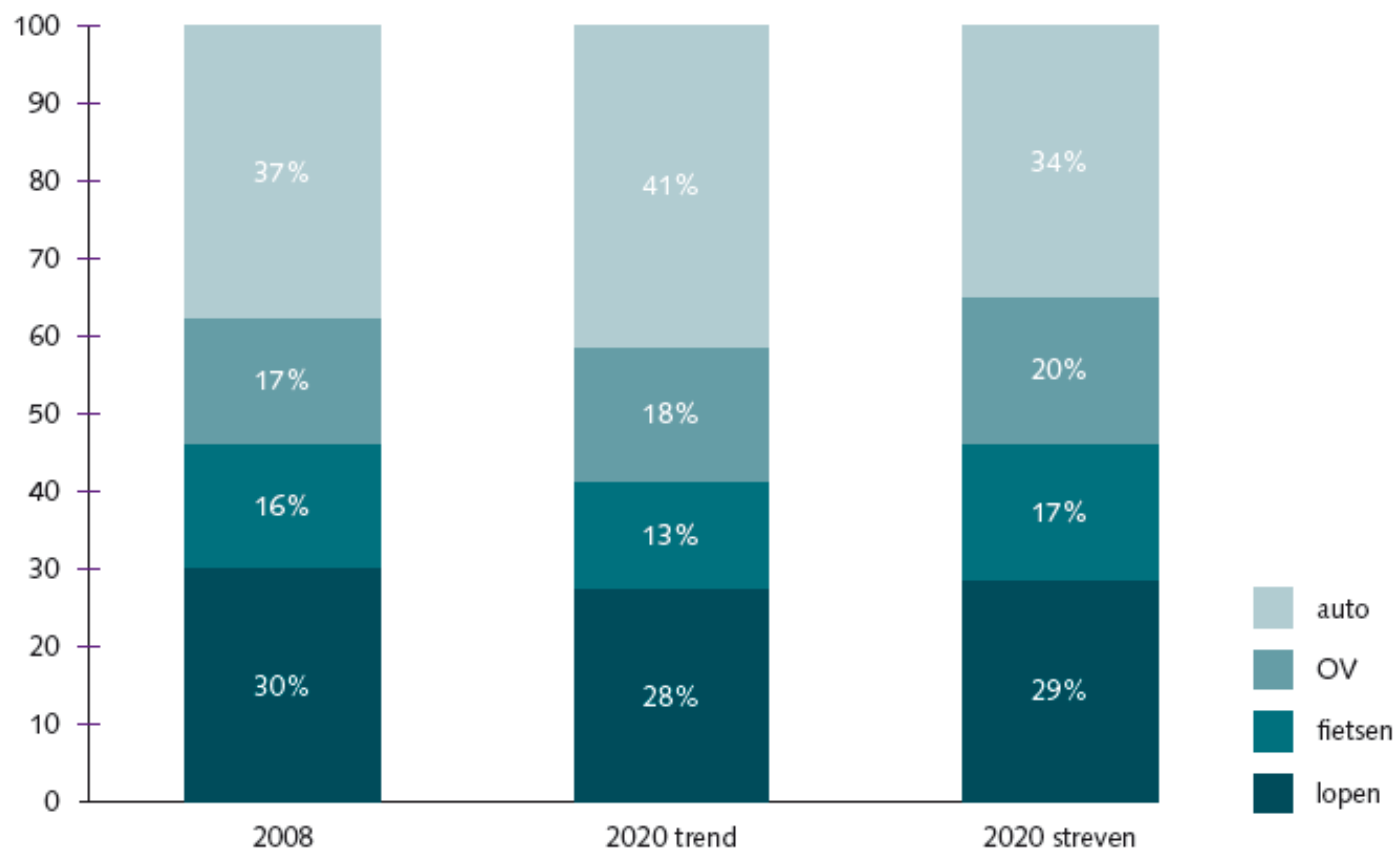
# Sustainable mobility and a healthy city



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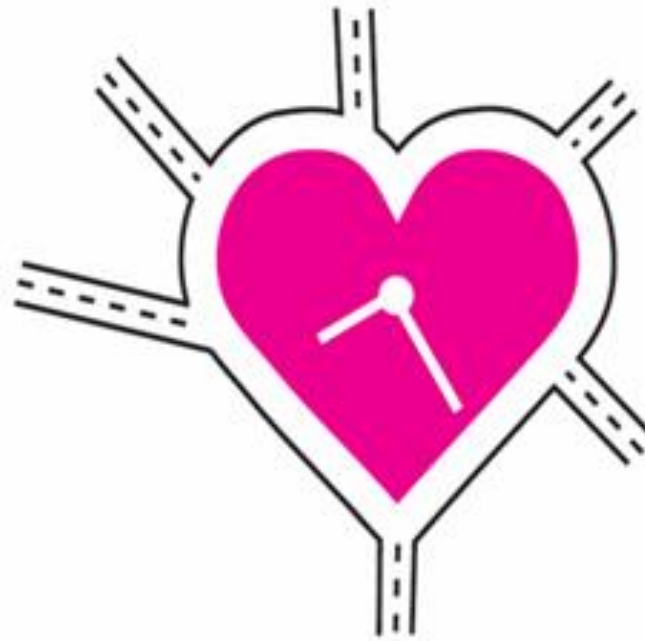
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## ONTWIKKELING VAN VERPLAATSINGEN PER VERVOERWIJZE



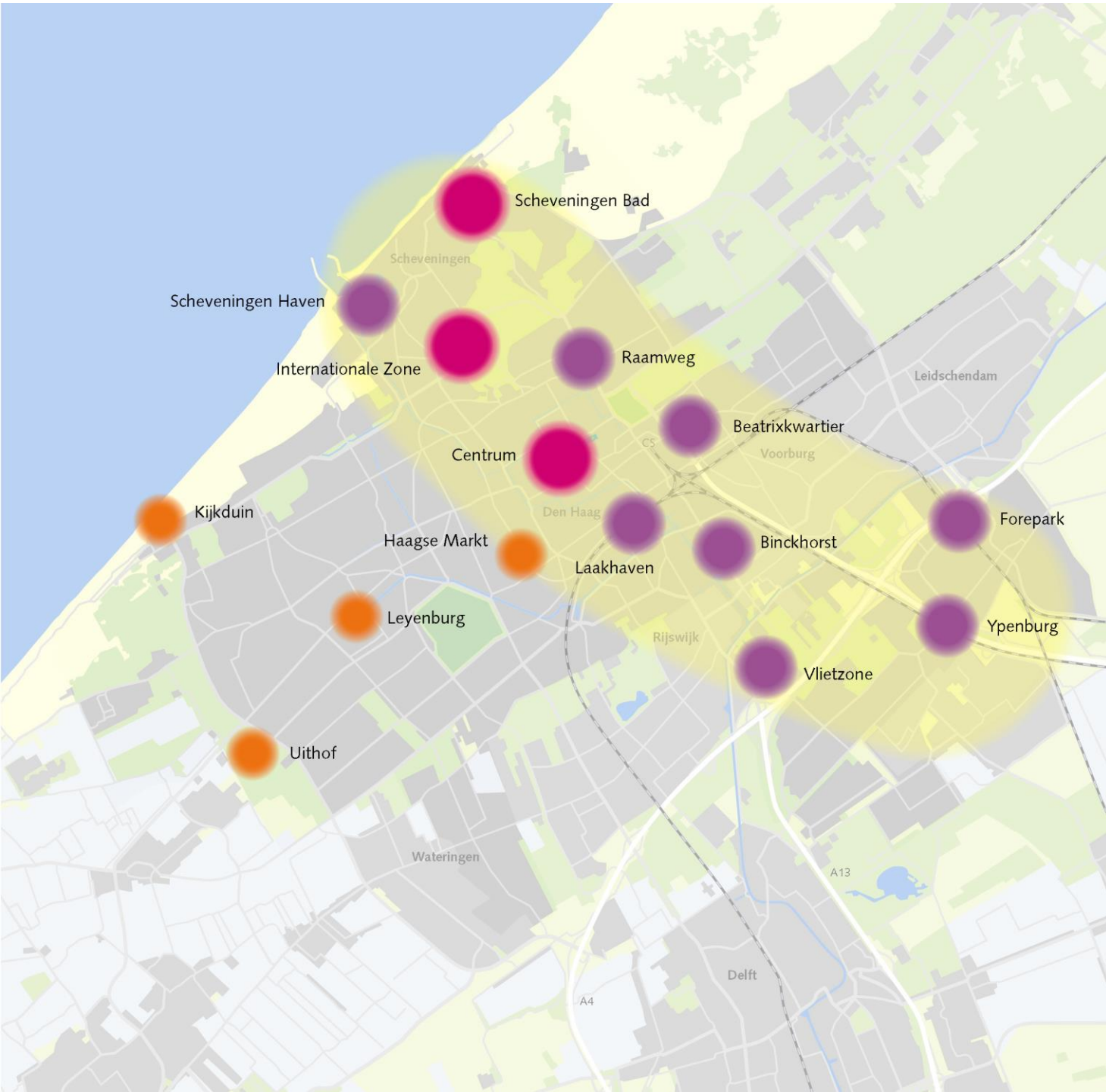
figuur 2.1

# Reliable accesibility



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How the Dutch got their cycle path:  
A film on cycling in The Netherlands ( 6,5 min)

<https://www.youtube.com/watch?v=XuBdf9jYj7o>



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# Stimulating bicycle use



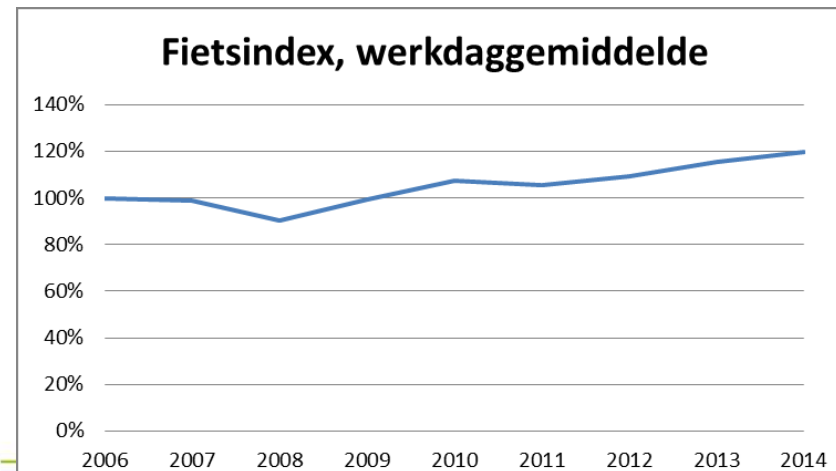
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# Bicycle use in The Hague

Substantial bicycle use and ownerships.

- 30% of trips under 7,5 km
- Ca. 20% of trips to the city centre.
- Ca. 22% of trips to work.
- Ca. 32 of trips to education.
- Approx. 1 bicycle for each inhabitant.



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# The Dutch “Bicycle Culture”

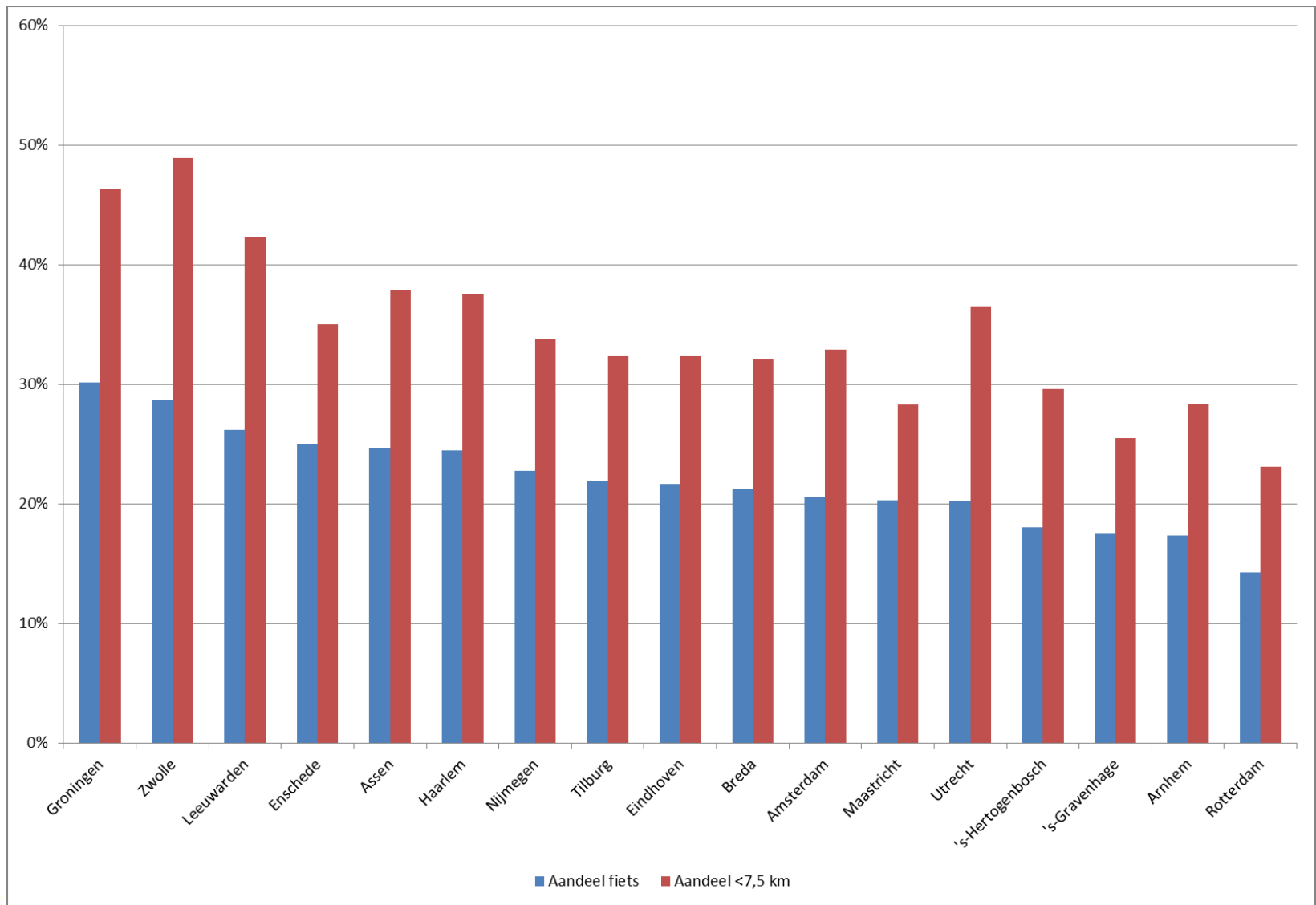
- Learning from an early age.
- Car drivers are aware of cyclists.
- Cyclists are protected by law.
- Cycling is for everyday-use (not only for sport).
- Positive image; healthy & smart.
- Wide political support for cycling.
- Well organised bicycle lobby; Dutch Cyclist Federation
- Strong planning tradition.
- Most efficient & fastest way to move in the city.



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# Modal share of cycling in Dutch cities

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# How to explain the modal share of cycling in Dutch cities (1)

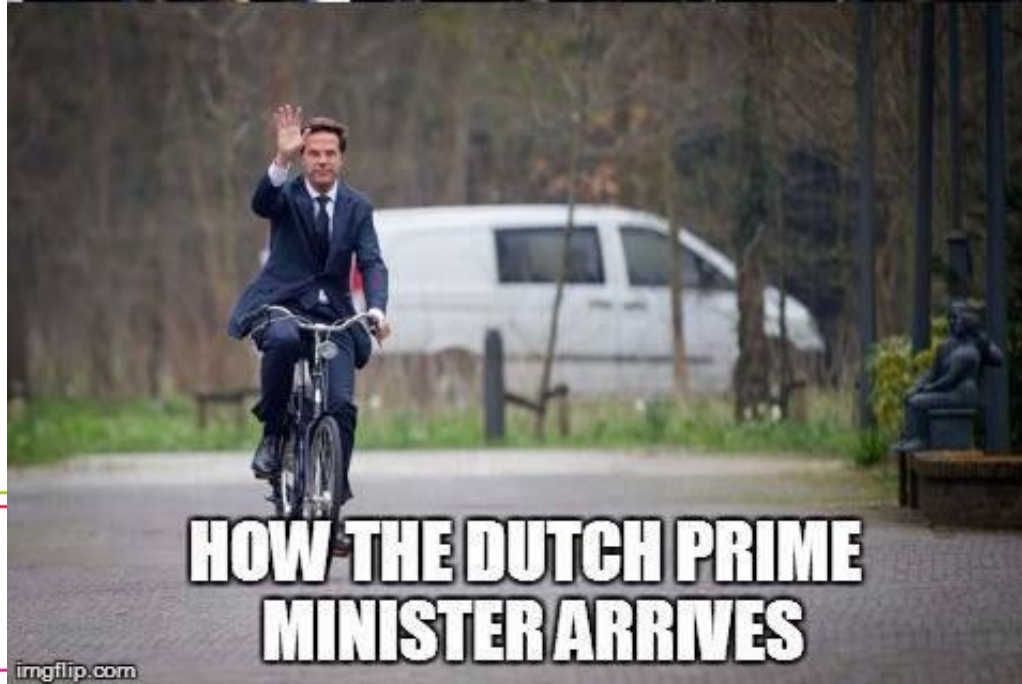
## What factors influence bicycle use?

- Percentage of immigrants (Turkish, Moroccan, Suriname, Antilles)
- Urban density
- Car accessibility of the city (centre)
- Parking tariffs in the city (centre)
- Public transport.
- Mountains/hills.
- Quality of the bicycle network & bicycle parking facilities

# How to explain the modal share of cycling in Dutch cities (2)

## **Bicycle use is highest in:**

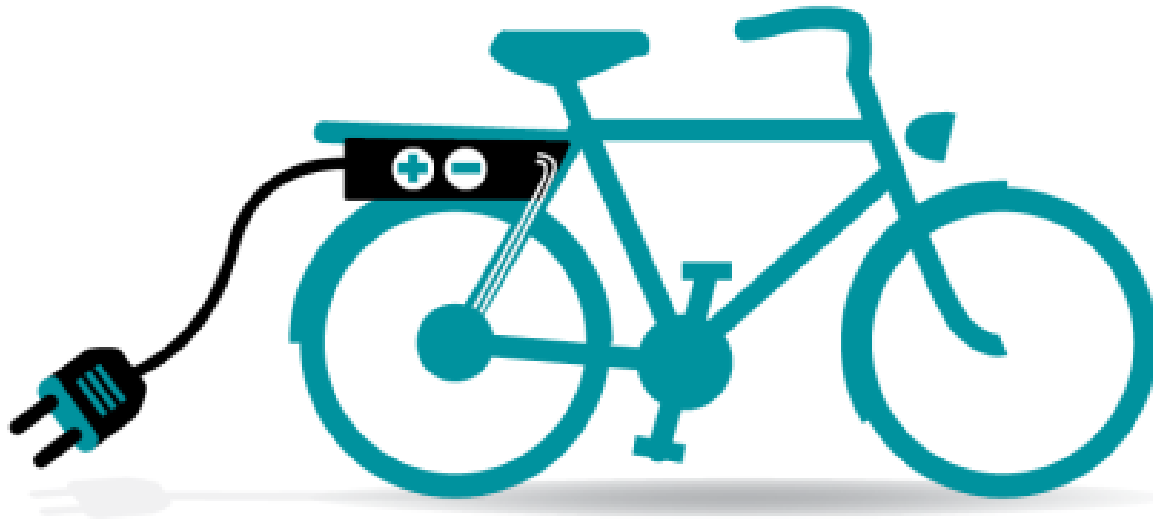
- (Medium) sized, compact historic cities.
- Which have closed down their city centres for car traffic
- Which, over many years, have taken care of the bicycle in urban planning.
- Which a large student population.
- Which don't have a tram or metro PT-network.



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# Trends



**31%**

De elektrische fiets maakt een stijging van de gemiddelde fietsafstand met 31% mogelijk.

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Cycling = lifestyle

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# Why stimulate bicycle use?

- Maintaining good accessibility.
- Stimulating sustainable transport in a liveable city.
- Good health (overweight problems).
- Attractive city for living and recreation.

The use of the bicycle and public transport should grow faster than the use of the car.

# Cycling strategy

## **Invest in hardware:**

1. Comfortable and fast Network; for within the city and the region.
2. Creating and improving bicycle parking facilities.

## **Invest in software**

3. Communication and promotion.
4. Monitoring bicycle use.

## **Invest in Org-ware**

5. Organisation, financing co-operation with stakeholders



# Essential

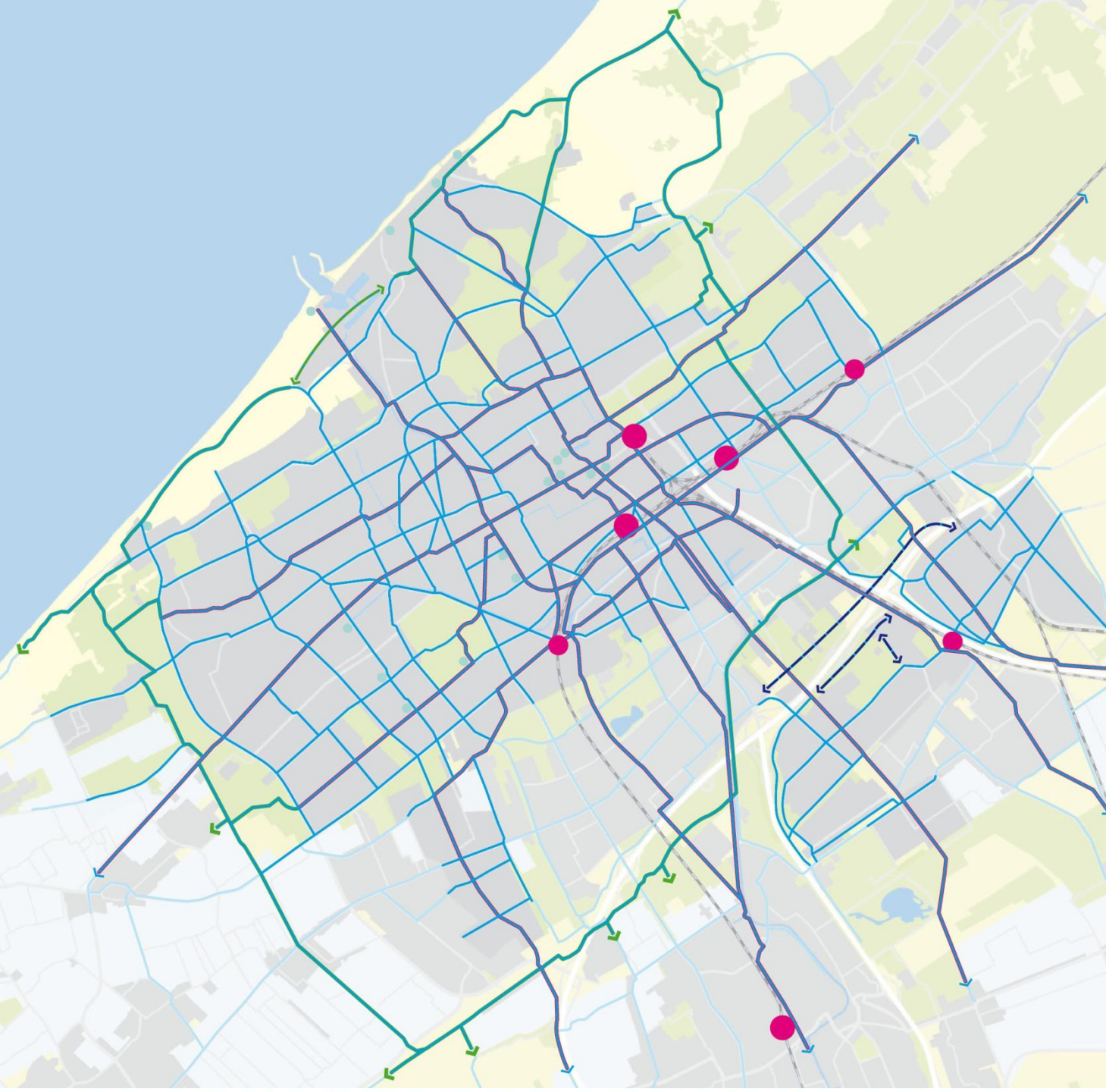
Basic: People only choose for cycling if it feels safe.



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# Hardware: Bicycle network



Bicycle  
network =  
approx. 400 km

Investing in  
the network  
since 1985,  
now (2015)  
approx. 90%  
completed

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Pedestrian priority in the city centre and major PT locations

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## Boulevard Scheveningen (2008)

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# Boulevard Scheveningen 2013

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# Hertoginnelaan 2012

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# Hertoginnelaan 2014

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# Laan van Meerdervoort 2014

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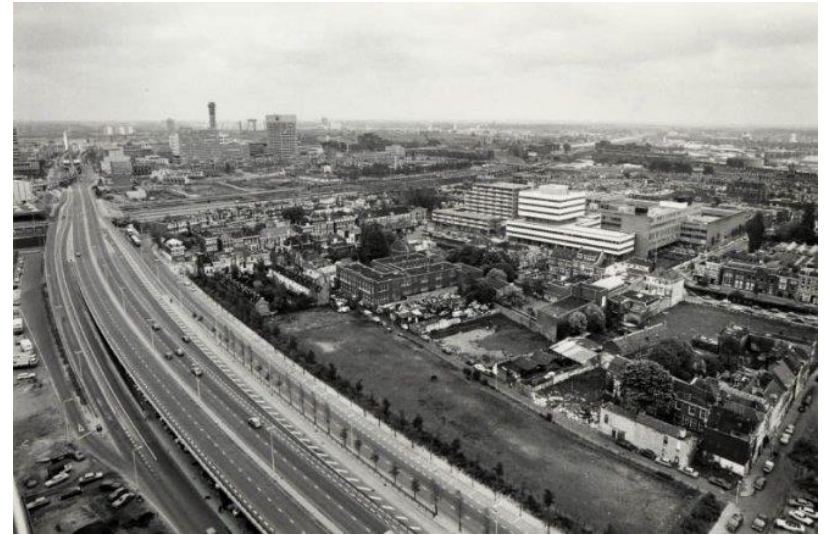
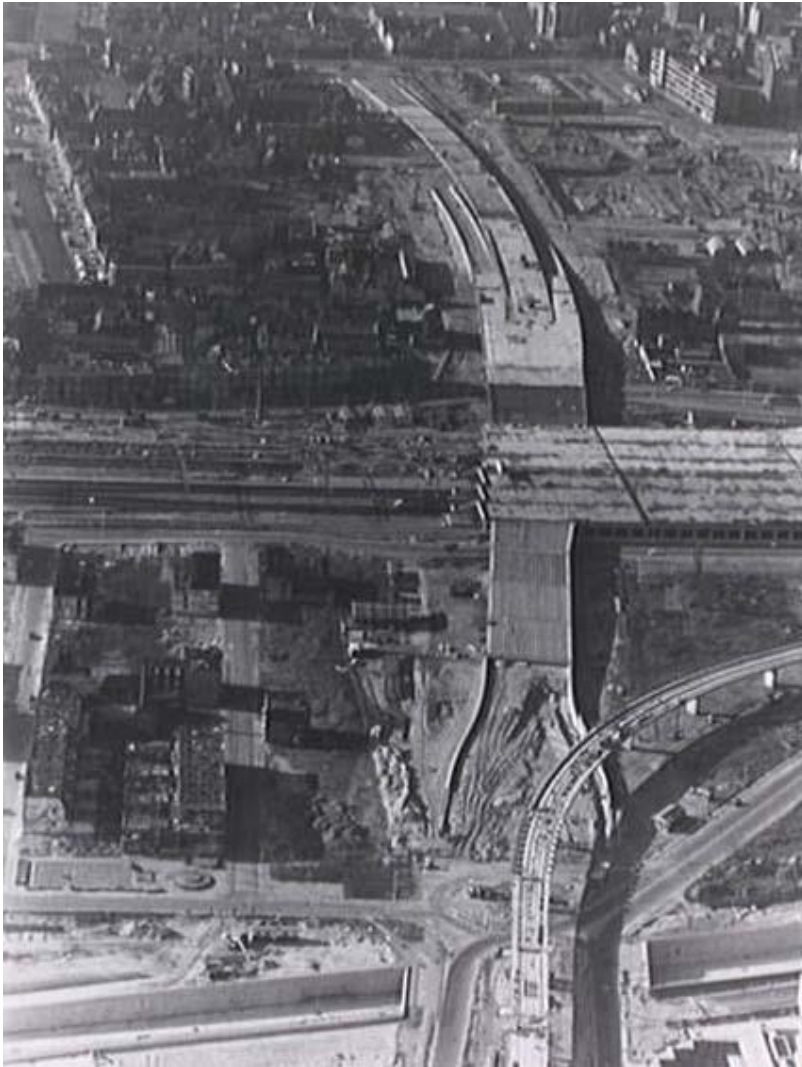
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# Laan van Meerdervoort 2016

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wat voor het verlengde van het PB-viaduct naar het zuiden ook zou hebben moeten wijken

# Prins Bernhardviaduct 1973

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## Grote Marktstraat 1985

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# First ideas voor Grote Marktstraat

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# Grote Marktstraat 2012

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Grote Marktstraat underground:  
investment approx. € 234million

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New developments 2014: Approx 500 million

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City centre: shared space cyclists & pedestrians

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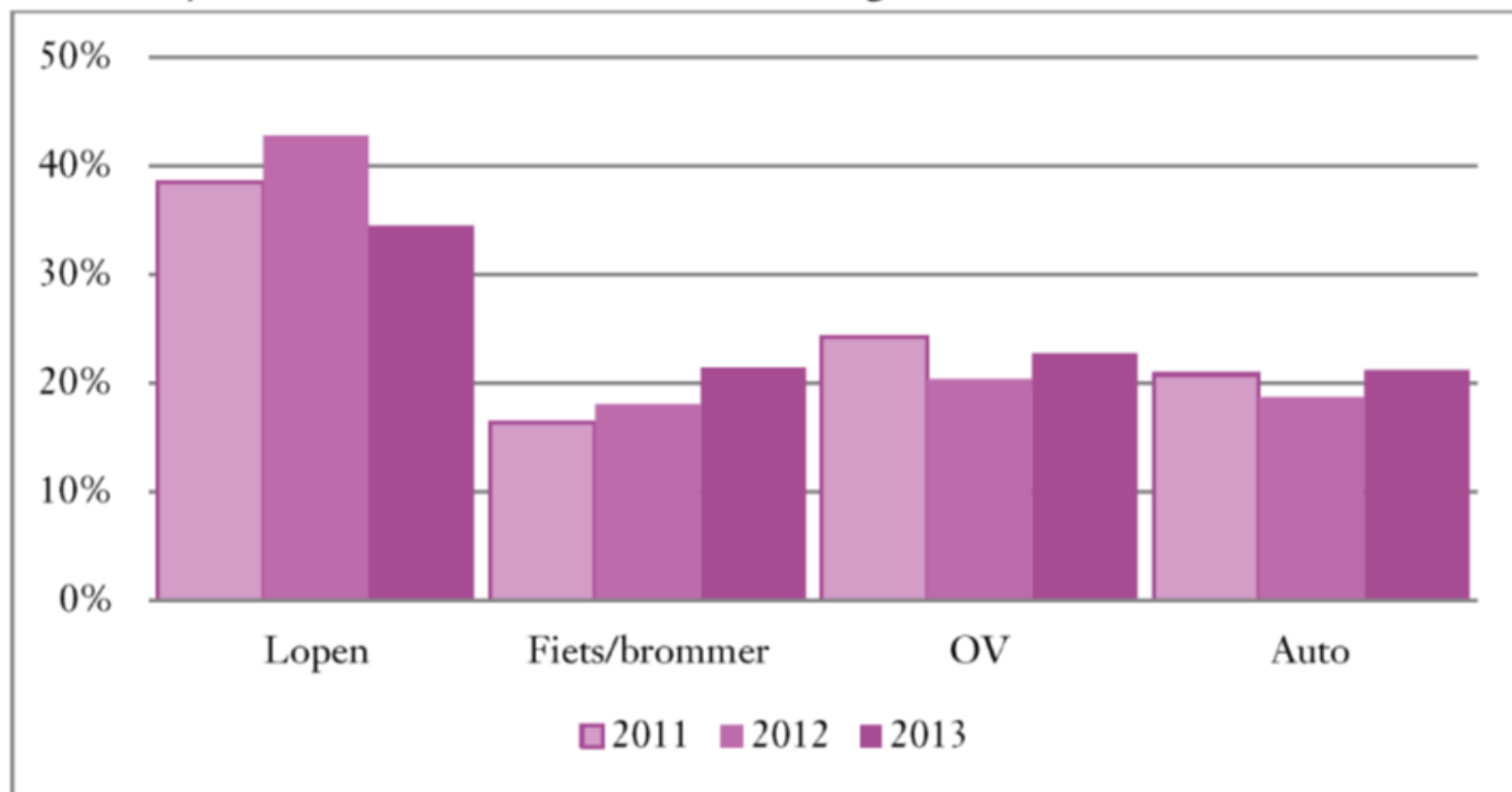


## Bicycle parking city centre

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## Vervoerwijzekeuze naar het centrum van Den Haag 2011-2013



Bron: OViN (Meerwerk)

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# Bike-o-nomic's

- Innercity of The Hague; elected the most attractive innercity in 2014/2015.
- Visitor numbers have increased by approx. 20% since 1997 Investing in cycling infrastructure = investing in an attractive public space.
- A good quality of public space is essential for generating private investments.
- 22% of visitors arrive by bike: cyclist spent less per visit, but the visit more often; total level spending is at least comparable with motorists.
- High occupancy rate of real-estate shops in the innercity. In other shopping



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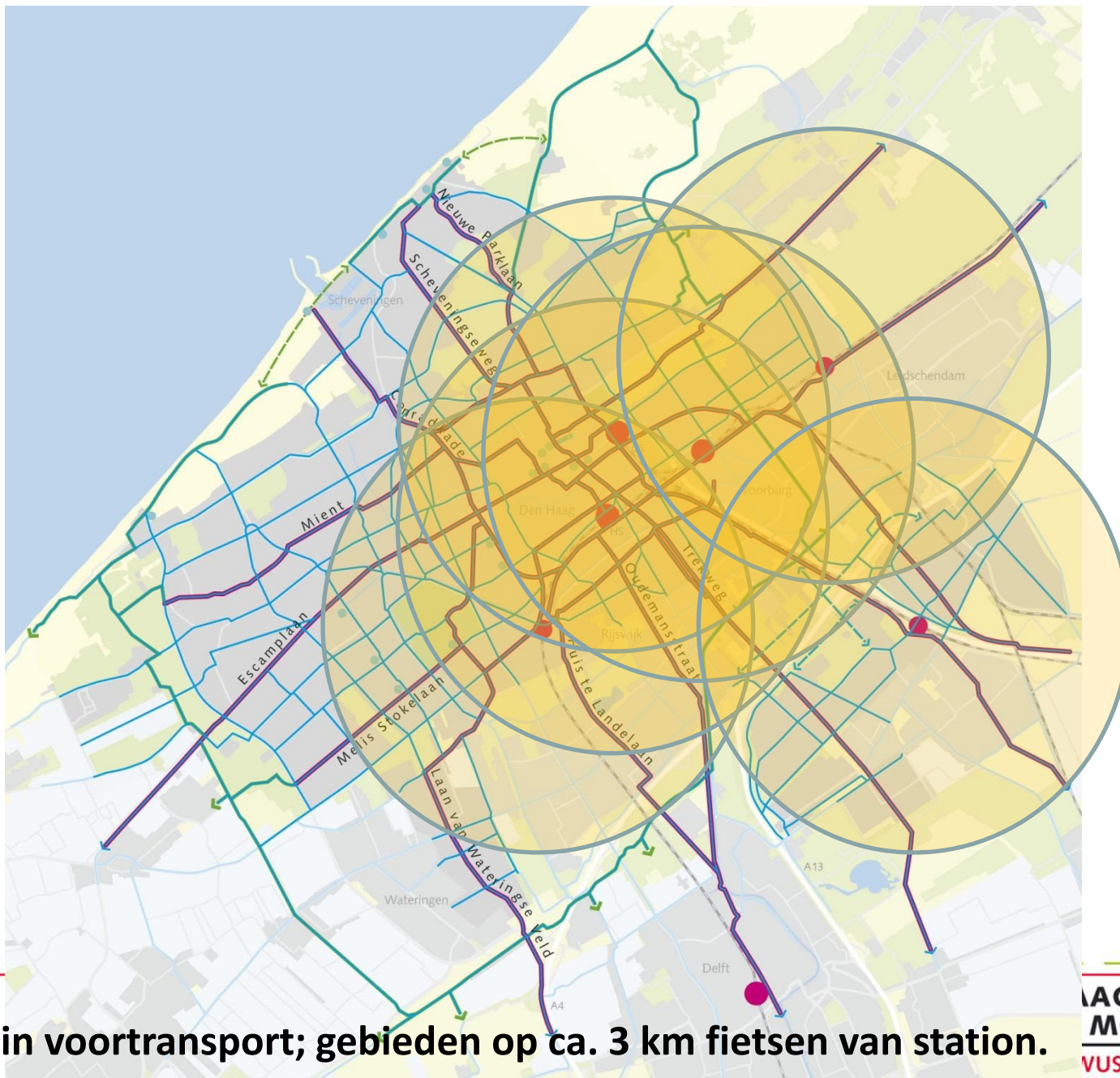
# Cycling in combination with Public Transport

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**Fiets in voortransport; gebieden op ca. 3 km fietsen van station.**

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## Bicycle parking at HS station

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# PT-bicycle

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## Bike-o-nomics

- **A modal shift from car or PT in city makes sense from an economic point of view.**
  - **Social cost benefit analysis shows that, in the context of an urban environment:**
    - A shift from PT to cycling saves approx. € 0,41 per kilometre. (mainly due to public funding of PT-operations, longer life-expectancy )
    - A shift from car to cycling saves approx. € 0,10 per kilometre (mainly due to reduction of congestion, longer life expectancy)
- of cycling infrastructure.

## Langer leven

Een automobilist wint gemiddeld 240 dagen als hij voor de korte ritten voortaan de fiets pakt.  
(Bron: IRAS 2010)



Vervuilde lucht  
-20 dagen



Verkeersongeval  
- 7 dagen



Bewegen  
+ 240 dagen

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# New bridge accros A4-motorway



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## Bike-o-nomics

- Case study A4-motorway bridge.
- Investment costs in bridge: approx. 10 million euro & 5.000 cyclist a day.
- Gains in reduction of traveltime, reduction of congestion, reduction of supplementing PT-cost, increase in life expectancy make for a positive cost-benefit ratio of 1 : 2. (calculated over a 20 year period)

# Promotion, communication and monitoring

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# Education

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# Op de fiets werkt vier keer beter!

**Zeker**  
Fiets pakken én wegwezen

**Betrouwbaar**  
In no time op pad én nooit files

**Flexibel**  
Met de fiets kun je alle kanten op

**Goed doel**  
Fiets geld bij elkaar voor het goede doel

**Doe ook mee!**

Meld je direct aan via [opdefietswerktbeter.nl](http://opdefietswerktbeter.nl)

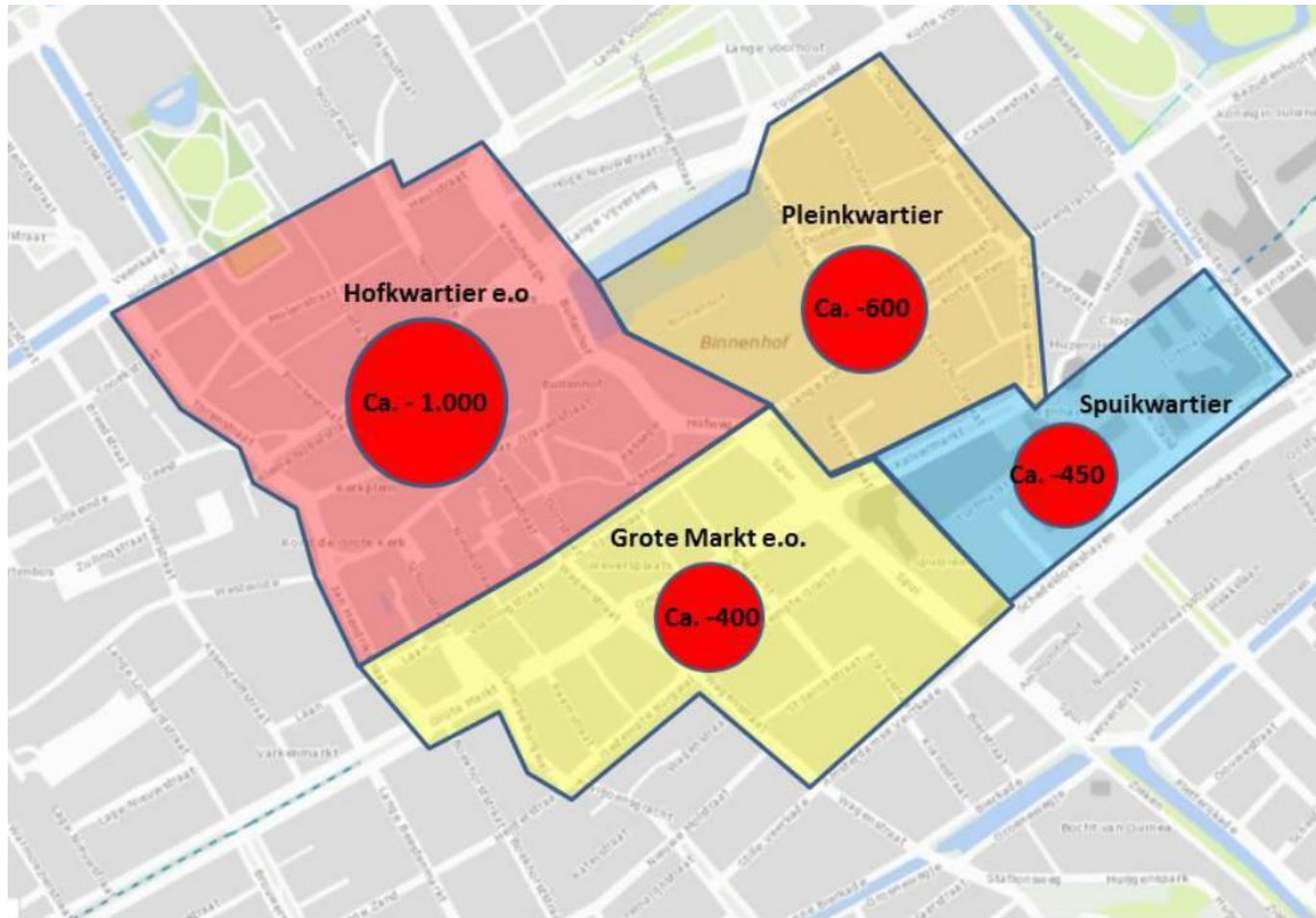



# Mobility management

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# Monitoring bicycle parking

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# Nederland App de Fiets! Het grootste fietsonderzoek ooit

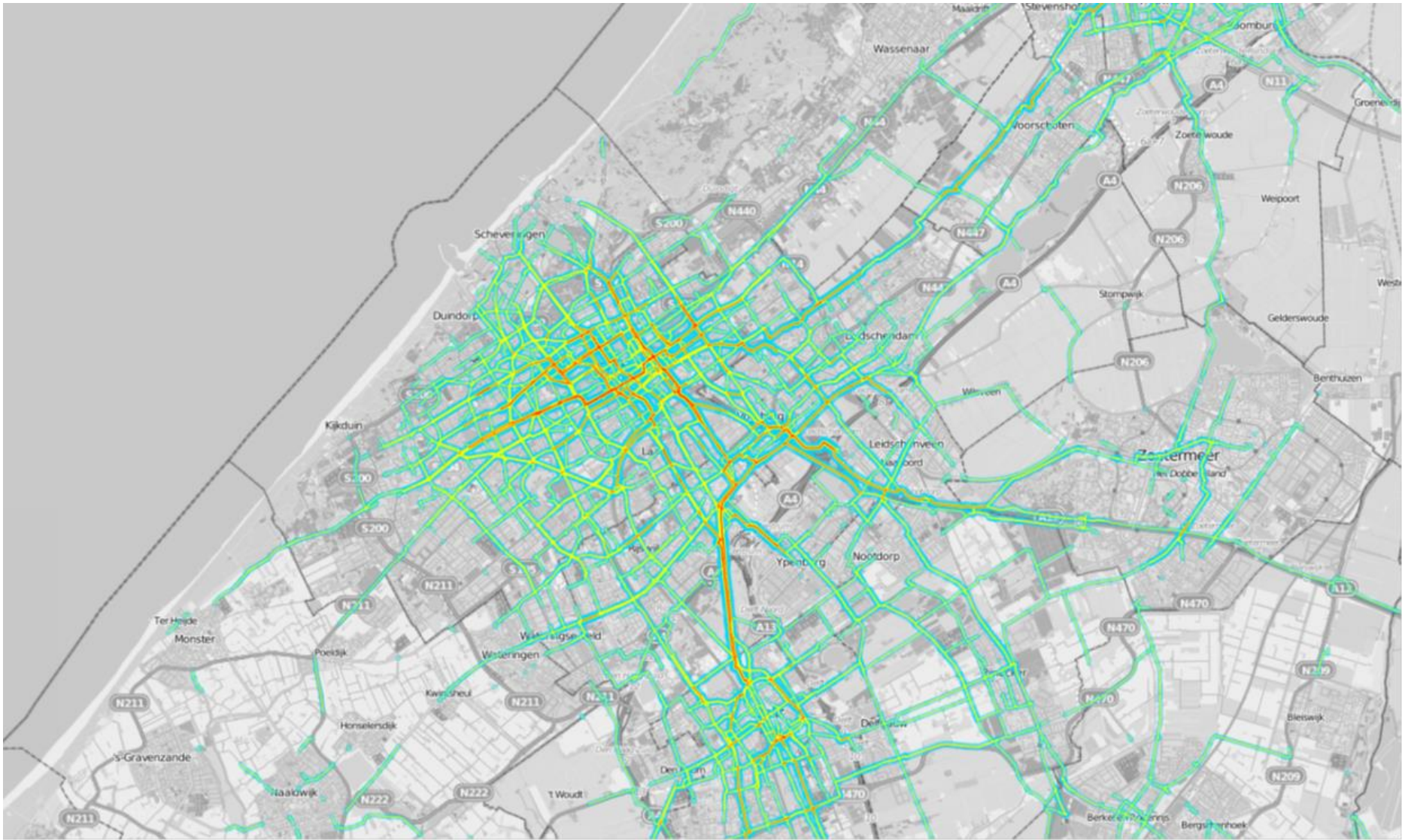
Download de App de Fiets! app en maak kans  
op 1 van de 20 gloednieuwe fietsen!



## Monitoring bicycle routes

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# ORG-ware

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# Orgware: Cooperation

- The Municipality is responsible for design of bicycle infrastructure in the city.
- Working together city region, province and state and other partners for financing. (Dutch Railways)
- Listening to cyclists, working together with the cyclist federation.
- Participation of stakeholders; inhabitants, shopkeepers, employers in the design of public space and the design of bicycle infrastructure etc.

# Orgware: Money

Municipal investment in cycling infrastructure

Jaar	2011	2012	2013	2014	Totaal
Investerings ca.	€ 8 miljoen	€ 7 miljoen	€ 7 miljoen	€ 9½ miljoen	€ 31,5 miljoen

Approx. X 2 by co-funding from the regio, state and province

# Orgware: people

- Approx. 30 people working on cycling infrastructure at the municipality of The Hague. (policy advisors, projectleaders, designers, engineers etc.)