

Mobility Plan 2040



WHY DO THE DUTCH KEEP ON CYCLING?

Index

- The Netherlands.
- The City of Utrecht

Part I:

- How did they get started?
- How to encourage people to go cycling?
- 8 Reasons why we should go cycling

Part II:

- So how to achieve people start cycling?
 - ① Hardware: bicycle infrastructure
 - ② Hardware: bicycle parking
 - ③ Software: behavior & education

Part III:

- Traffic education for children (of all ages)
- So youngsters keep on cycling





The Netherlands





Europe



The Netherlands







The City of Utrecht

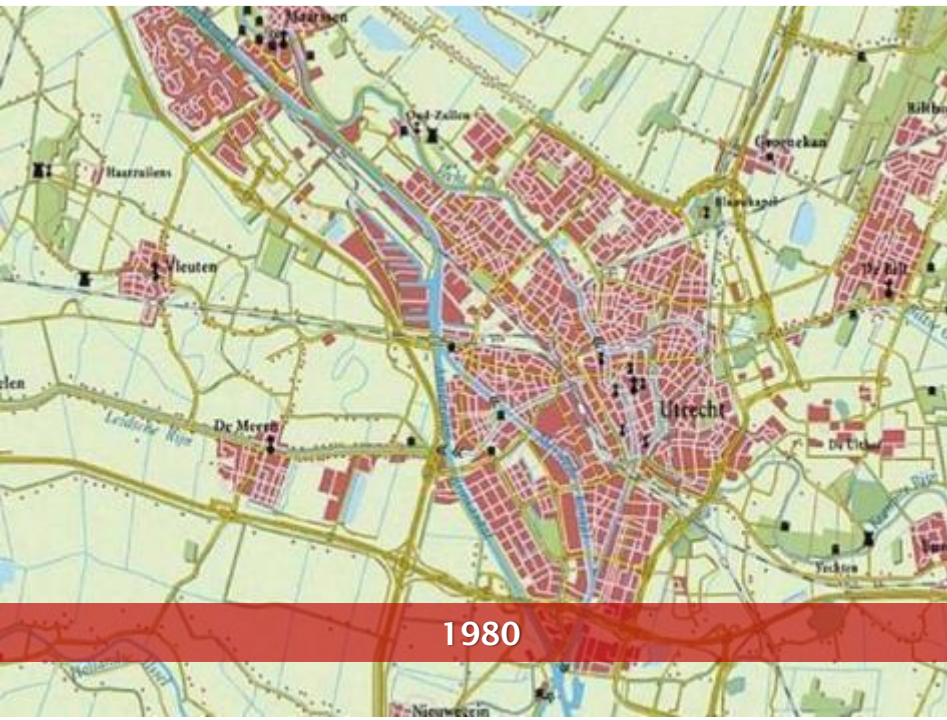
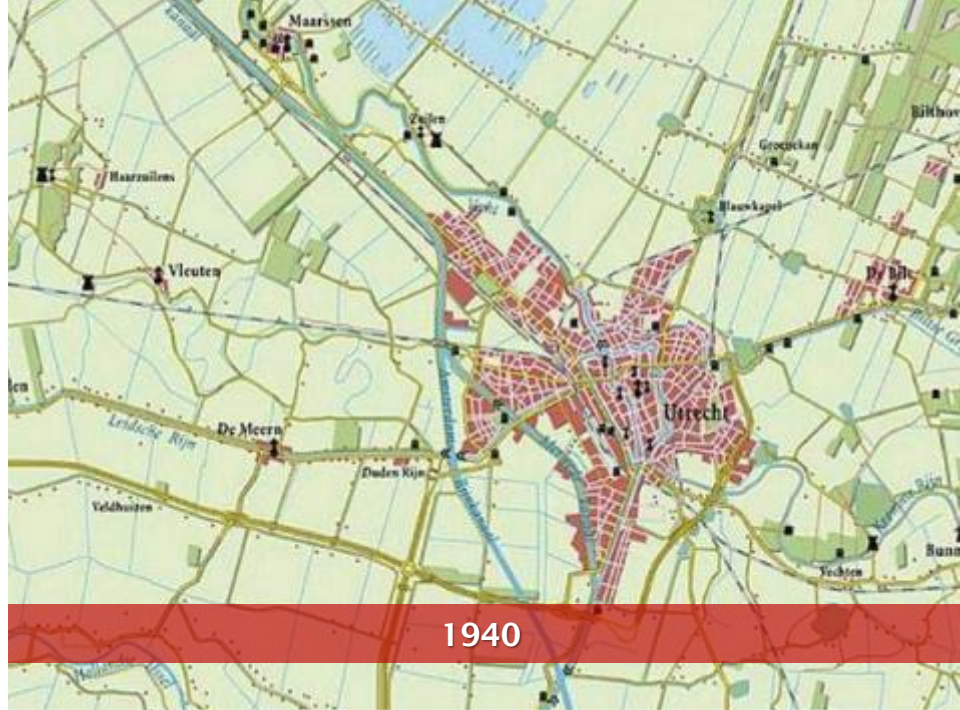




A city founded by the Romans (around 70 AD)



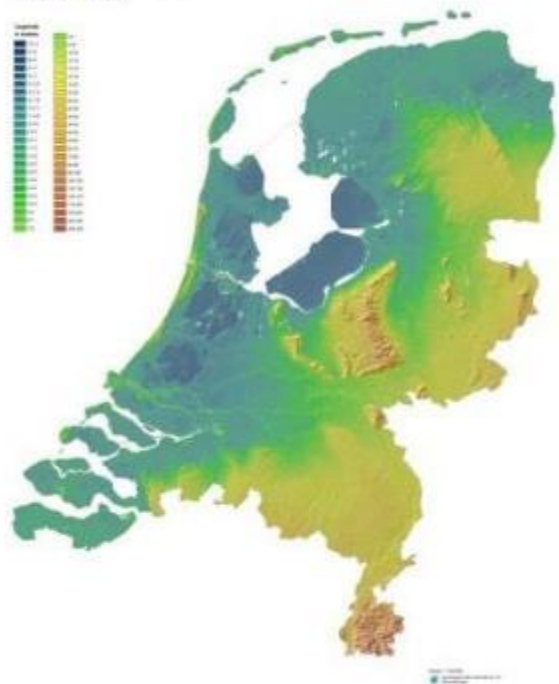
A medieval bishop city (in the 14th -17th century)



Demographic facts	Germany	Dortmund	The Netherlands	Utrecht
Founded	1870	882 AD	1579	70 AD
Inhabitants (city)	83,2 mln	590.000	17,6 mln	370.000
<i>Inhabitants (region)</i>	---	≈ 5.300.000	---	≈ 710.000
Area (km ²)	357.121	281	41.543 ⁽¹⁾	99
Inhabitants / km ²	233,0	2099,6	423,7	3636,4

(1) The Netherlands is 0,12x Germany

Aankomst Hengelo-binnenland (1996)
met 100% schiedoverlapping



The city nowadays (some facts)

- Some 35 km and 30 minutes south of Amsterdam and Schiphol airport.
- Fourth largest city of the country.
- Over 250.000 jobs (University Medical Center Utrecht, Banking and Utrecht University).
- Largest and best university of the country (Shanghai Ranking 2021 (#50)).
- Busiest railway station of the country (More pass. / year than Amsterdam Airport).
- Over 51% of the cities population cycle to work or school.



Modal split (%)	<7.5 km	7.5 - 15 km	>15 km	In general
Pedestrians	30,5	00,0	00,0	17,2
Bicycles	43,1	16,4	01,7	26,3
Public transport	03,9	15,1	29,7	13,7
Motor vehicles	21,3	64,6	66,8	41,3
Others	01,2	04,0	01,8	01,5





The first one to host all three (2010, 2015 and 2022)



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How did they get started?





70's: 'Stop de kindermoord'



1973: oil crisis



1973-1977: Joop den Uyl administration



80's: first results visible



How to encourage people to go cycling?





Q: What do you need for driving?



① A car



② Fuel



③ Roads



④ Parking space



⑤ SKILLS !!!

A group of four people are cycling on a city street. In the foreground, a silver car with license plate 45-GZH-3 is visible. The background shows buildings, a traffic light, and other pedestrians. The text "8 Reasons why we should go cycling" is overlaid in red on a semi-transparent white banner.

8 Reasons why we should go cycling



① Reducing traffic congestion

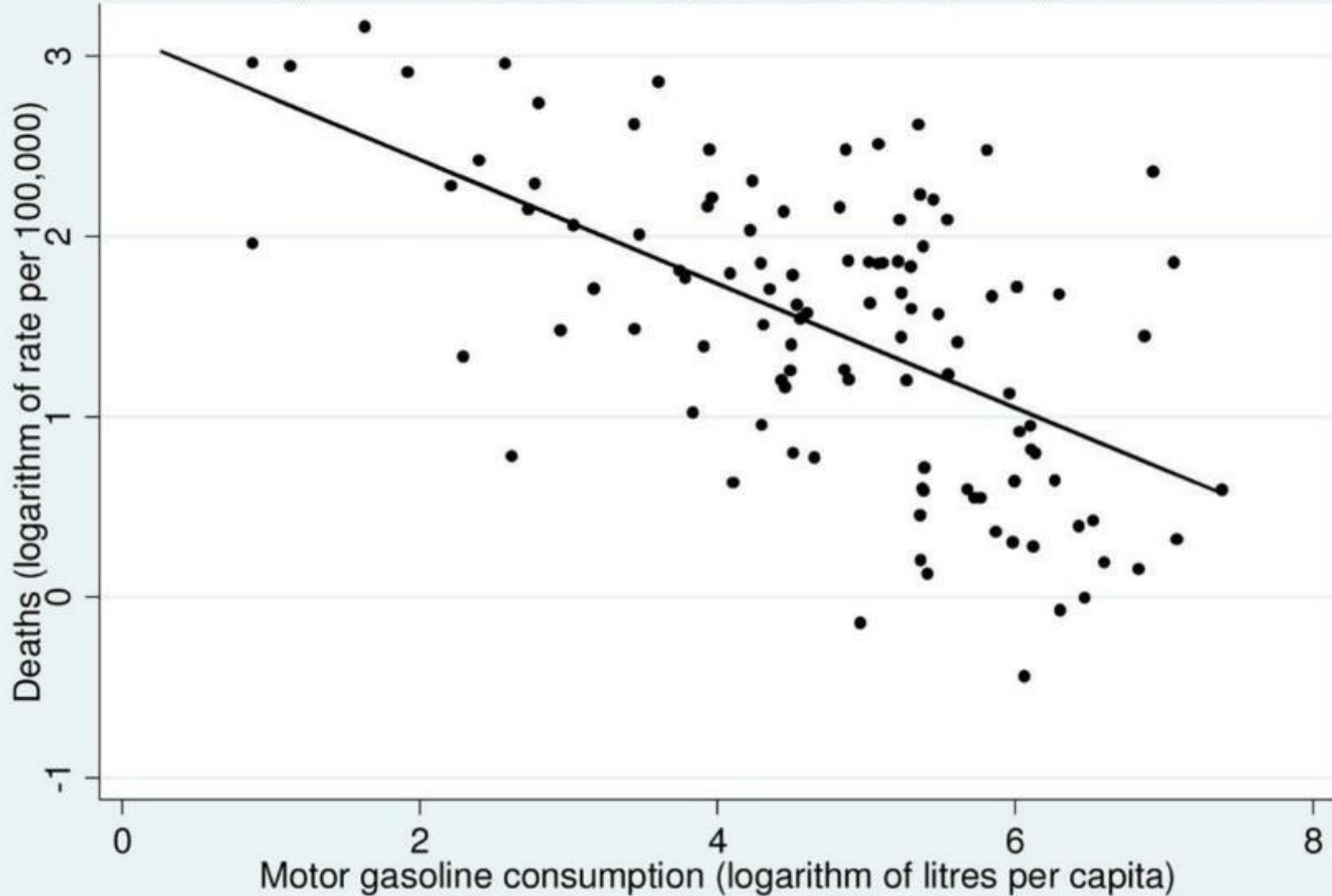


② Reducing air and noise pollution



③ Saving natural energy sources

Pedestrian & cyclist deaths and motor gasoline consumption (107 countries, 2008)

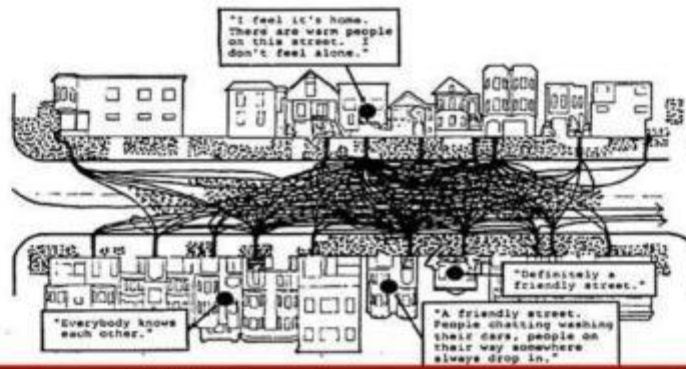


④ Saving human lives



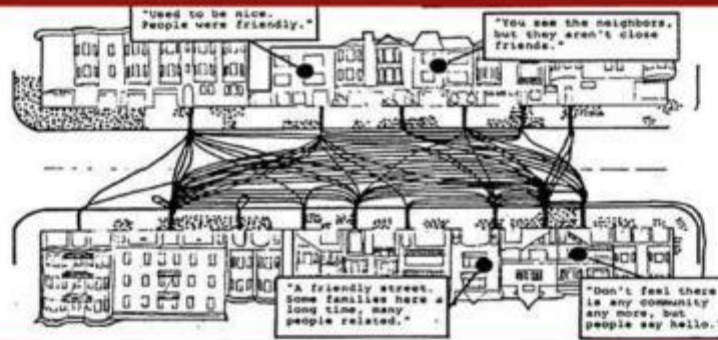
⑤ Saving human lives

LIGHT TRAFFIC
2,000 vehicles per day



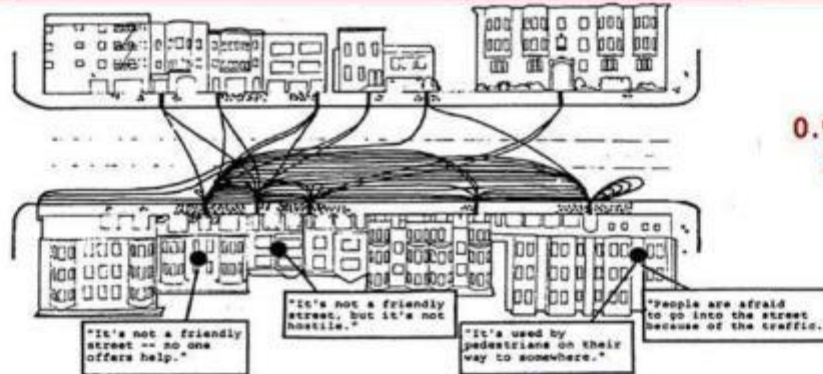
3.0 friends per person
6.3 acquaintances

MODERATE TRAFFIC
8,000 vehicles per day



1.3 friends per person
4.1 acquaintances

HEAVY TRAFFIC
16,000 vehicles per day



0.9 friends per person
3.1 acquaintances

⑥ Creating livable cities



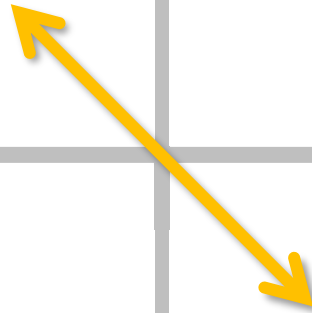
⑦ Space needed for mobility



⑧ Encourage socializing



So ... let's promote cycling 😊



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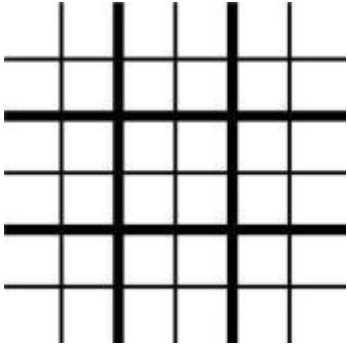
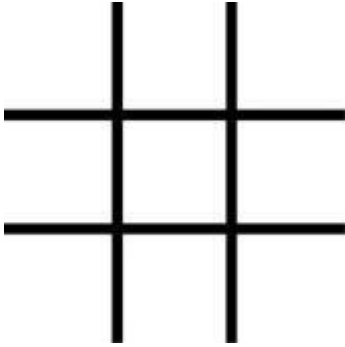


So how to achieve people start cycling?



① Hardware: bicycle infrastructure

Create a dense network of bicycle infrastructure

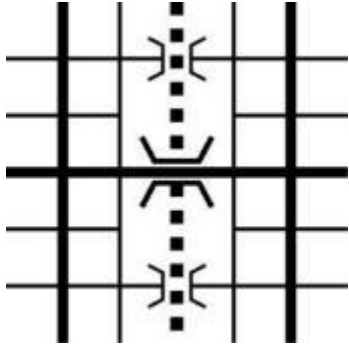
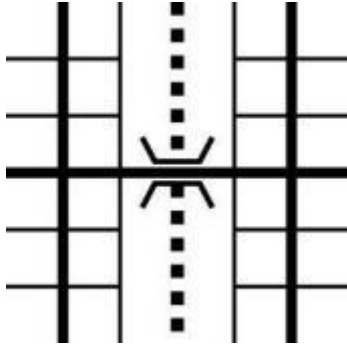


Main road



Dedicated bicycle route

Create dedicated bicycle bridges and tunnels

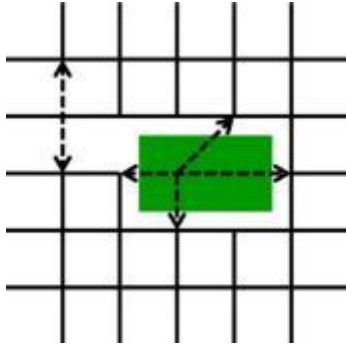
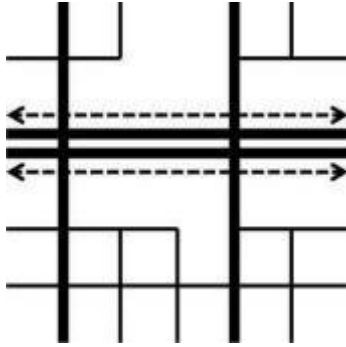


Main bridge for car + bicycle



Dedicated bicycle tunnel

Create bi-directional cycle paths and short cuts

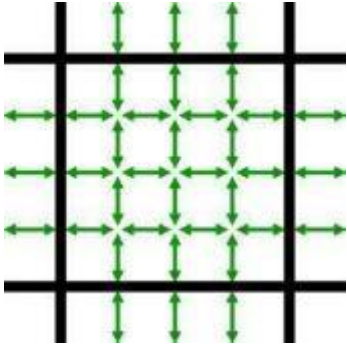
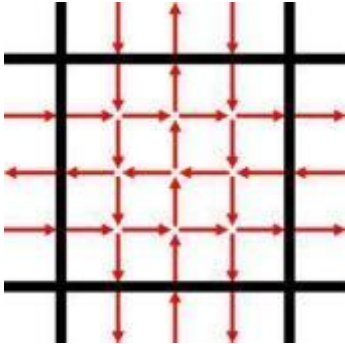


Bi-directional cycle path



Typical short cut

Create bi-directional cycle paths and short cuts



(Bi-directional) housing street



Bicycle street



② Hardware: bicycle parking



Create good bicycle parking ...



... around the house



... at schools



... near offices



... near local shops



... and as Pop Up in the city center (shops, leisure, ...)



Finally integrate cycling with public transport



But do not only invest in 'hardware'



Also invest in ...



③ Software: behavior & education

Behavior

- Show children the correct behavior when participating in traffic.
- So make parents walk and cycle with their children together.

Children are the car drivers of the next generation. Make them walk and cycle at an early age. This will enlarge the chance that these future car drivers will remain cyclists as well!

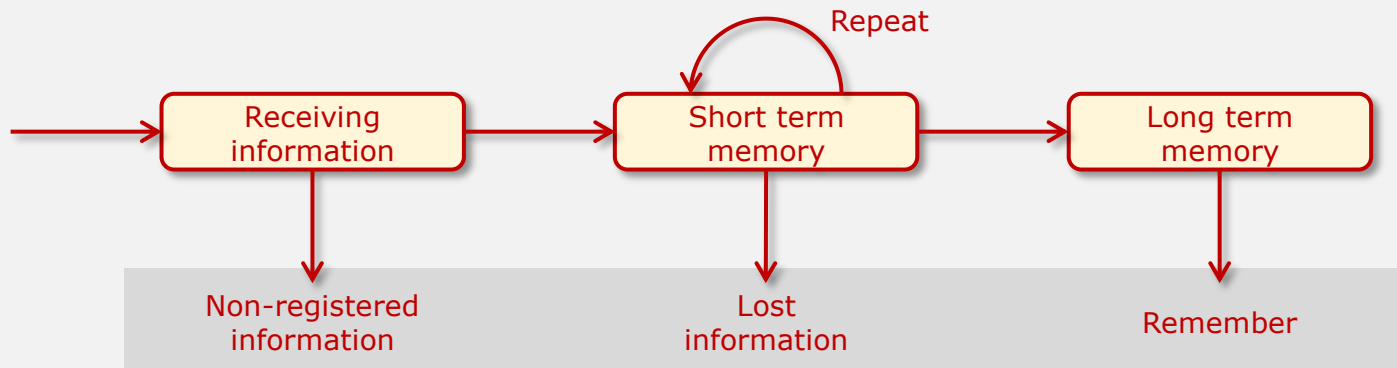
Children 'copy' the behavior of adults, so it is important to show them the preferred attitude.



What is a mental model?

Some facts:

- A mental model is an explanation of someone's thought process about how something works in the real world.
- Mental models can help shape behavior and set an approach to solve problems and do tasks.
- People have more attention for things that fit their own schedule.
- A change of the schedule is seen as an exception, therefore it takes time for people to adjust.



Myth: “Watch out and pay attention”

Some facts:

- The human eye has its limits.
- We only see a maximum of 3 points per second.
- When driving a car among those 3 points are trucks, busses and blinking signals.
- Only as the 4th or 5th point we notice are little children crossing the street.



Young children and traffic



Some facts:

- Young children can't locate the sound of an approaching car like adults do.
- The front of a car looks like a smiling face.
- Because of their length you can't see young children between parked cars.
- When 8-10 years old adults protect their children by putting them in the back seats of a 'safe' cars. This is odd because around this age they finally start to become able to experience traffic like adults do!



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Traffic education for children of all ages

About children and youngsters in The Netherlands

Age	Type of education
0-4	Kindergarten
4-11	Elementary school
11-17	Secondary school *
17-24	University

* Depending on the level, youngsters leave secondary school when 17-20 years old.

*Age of 16 → allowed to drive a moped.
Age of 18 → allowed to drive a car.*





Traffic lessons given by the own parents (2-4 years)



Parents and children cycle together (4-7 years)



Children start cycling on their own (8-9 years)



They do not only cycle to school ... (8-9 years)

The Utrecht Road Safety Label (UVL)

What is the Utrecht Road Safety Label?

- UVL is a quality mark for elementary schools that structurally put effort into the road safety around the school and into traffic education.
- In exchange, the school gets money and support for traffic lessons and small infrastructural improvements in the direct surrounding of the school.
- Political target in 2007: at least 80% of the elementary schools trying to receive the label in 2012 (achieved).



It is a combination of three actions:

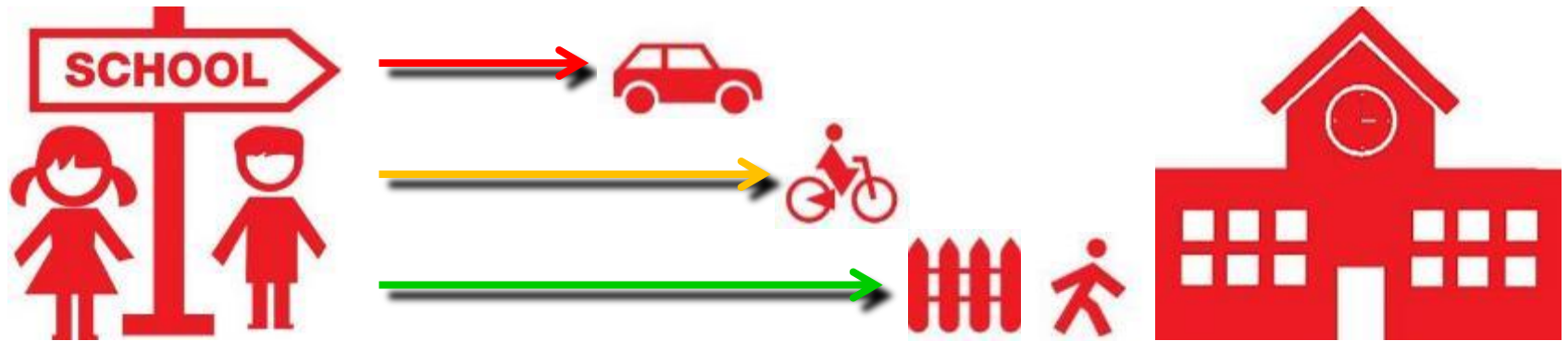
1. Creating safe and recognizable school zones & routes.
2. Influencing parental traffic behavior.
3. Traffic education for children of all ages.





Creating safe and recognizable school zones

A preferred school zone





Influencing the parental behavior



Traffic lessons in class



Traffic lessons at the schoolyard



Five pilot sites, eight schools involved (2009)

- 1 school in school zone
- 2 schools in school zone
- 3 schools in school zone

Location of all participating schools (2015)





Streetwise (special lessons by the ANWB)





Practical traffic exam for all children (10-11 years)

A photograph of three young women riding bicycles on a city street. The woman on the left is wearing a pink jacket and a blue top. The woman in the middle is wearing a light blue top and a white scarf, and has a purple basket on her bike with the website 'www.elbert.nl' printed on it. The woman on the right is wearing a black vest over a grey long-sleeved shirt. They are riding past a row of parked cars and a brick building with arched windows. A white van is parked on the street behind them. The scene is bright and sunny.

So youngsters keep on cycling



TEAMALERT



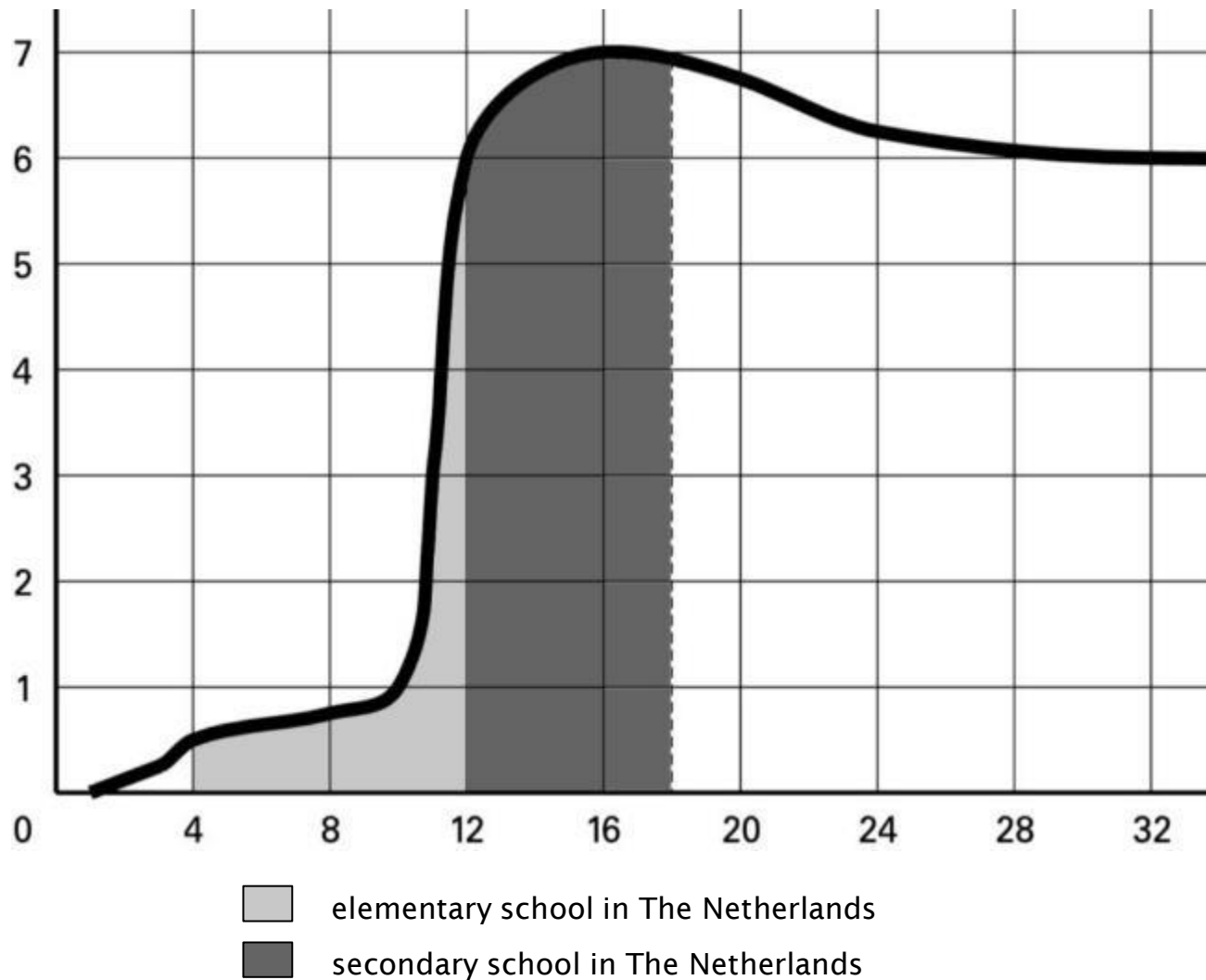
Wat wil je verliezen om een paar seconden te winnen?

Het rode licht brandt niet voor niets. Er komt een trein aan. En misschien nóg een. Even geduld. Dan kun je veilig naar de overkant.

wil je blijven leven wacht dan even

ProRail
VELDVERKEER

Special programs 'for youngsters by youngsters'



Cycling enlarges 'the world' of youngsters



- home of Heather (14 years old)
- her secondary school
- home of friends / sports & music
- bus route

‘The world’ of such a youngsters



So in the end youngsters keep on cycling ...



... and students keep on cycling ...



... and adults keep on cycling ...



... and in the end all generations keep on cycling



Remember these?



And those skills



Q: So what do you need for driving?



① A bike



② Fuel (muscles)



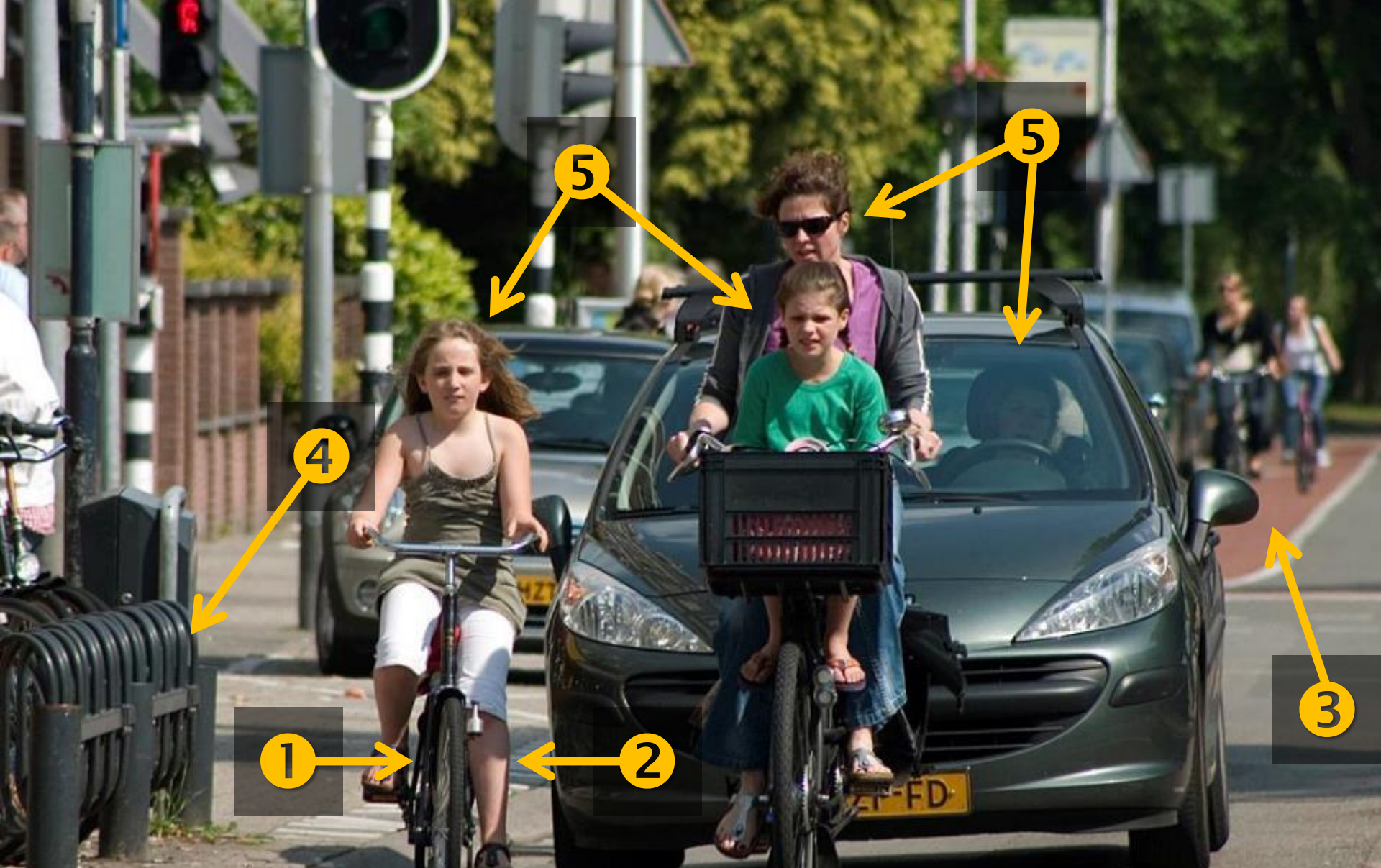
③ Paths



④ Racks



And skills as well



So **this** is why the Dutch keep on cycling



“Thank you for your attention”

City of Utrecht, Ronald Tamse, 12th of May 2023