

5-18-2018

Utrecht, Bike Capital of the World

Martijn Rietbergen
Utrecht University

Let us know how access to this document benefits you.

Follow this and additional works at: https://pdxscholar.library.pdx.edu/trec_seminar

 Part of the [Infrastructure Commons](#), [Transportation Commons](#), [Urban Studies Commons](#), and the [Urban Studies and Planning Commons](#)

Recommended Citation

Rietbergen, Martijn, "Utrecht, Bike Capital of the World" (2018). *TREC Friday Seminar Series*. 153.
https://pdxscholar.library.pdx.edu/trec_seminar/153

This Book is brought to you for free and open access. It has been accepted for inclusion in TREC Friday Seminar Series by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

Utrecht bike capital of the world

Transportation Seminar TREC / PSU

Martijn Rietbergen – University of Applied Science Utrecht

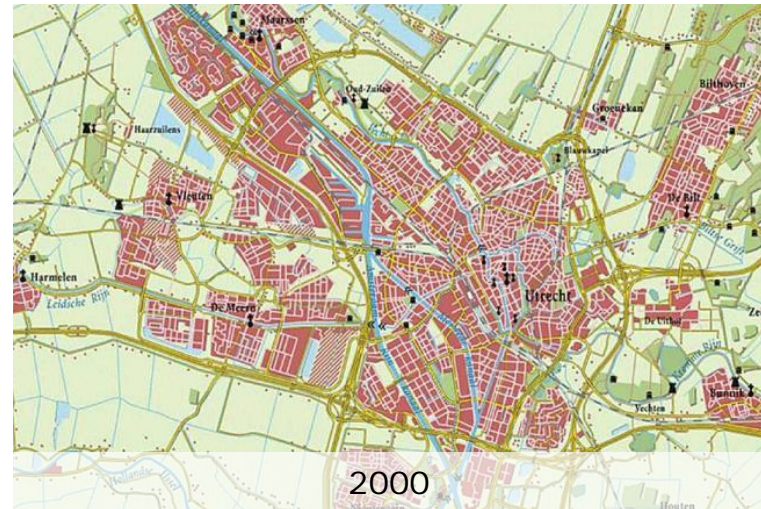
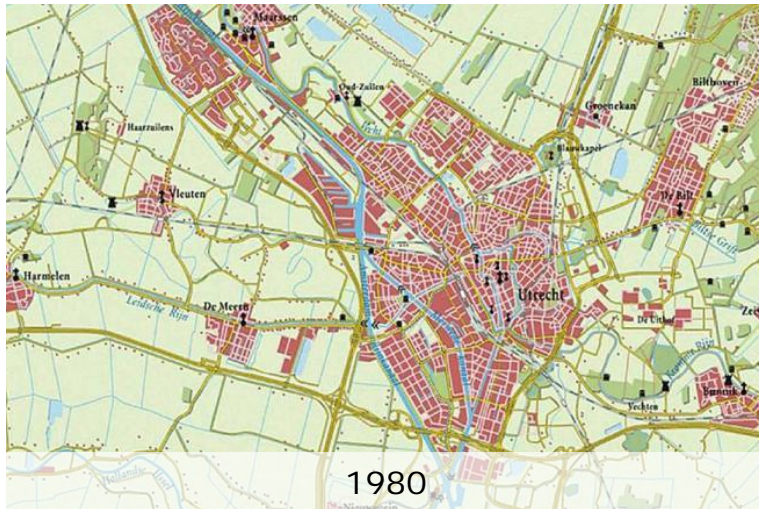
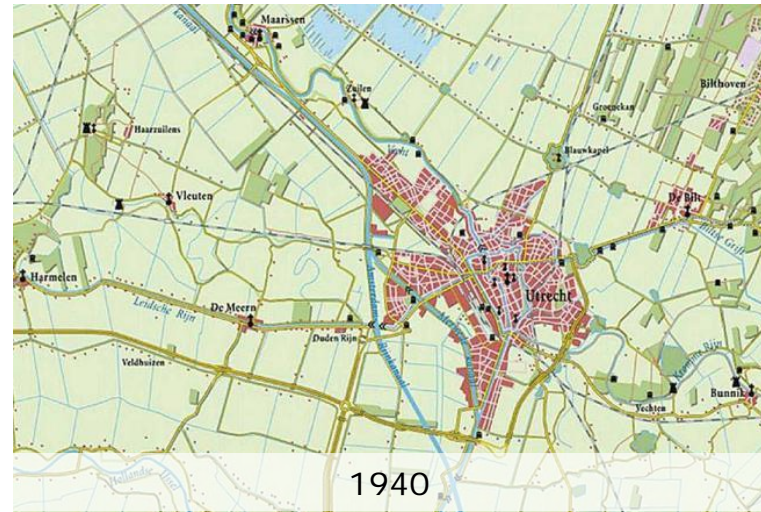
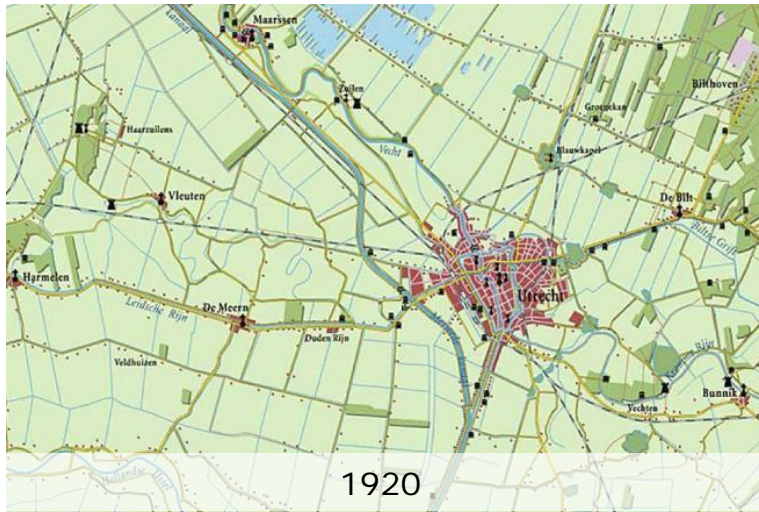


Utrecht  we all cycle

A city founded by the Romans (around 70 AD)




Development of the city (in the 20th century)



The city nowadays: in general (2015)

Some facts:

- Utrecht is the fourth largest city in the country.
- It has over 335.000 inhabitants (in the entire region \approx 670,000 inhabitants).
- The largest university of the country.
- An intersection of major motorways.
- The busiest railway station of the country ($>$ pass./year than Schiphol Airport).
- A still growing economy despite the recent global recession.
- Listed as one of 10 of the world's unsung places by the Lonely Planet Guide. 
- and.....



Utrecht  we all cycle

First traffic jam in the Netherlands in 1955



The world's best cycling city (according to CNN)

“a city that has a fair claim to being the globe’s most pro-two-wheel destination”

EDITION: INTERNATIONAL | U.S. | MEXICO | ARABIC
TV: CNN | CNN en Español
Set edition preference

Sign up | Log in

SEARCH

POWERED BY Google

Home | Video | World | U.S. | Africa | Asia | Europe | Latin America | Middle East | Business | World Sport | Entertainment | Tech | Travel | iReport

Part of complete coverage on
Cycling Adventures

CYCLING ADVENTURES

World's best cycling cities

By Peter Walker, for CNN
August 17, 2014 – Updated 2150 GMT (0550 HKT)

SHARE THIS

f t g+ in Print Email More sharing

f Recommend 11k



While Amsterdam is definitely bike friendly, it's also got hordes of tourists on rental bikes. Cycling in the Netherlands city of Utrecht is easier. Helmets are rarely used, not least because of protection offered by segregated cycle lanes.

Utrecht, Netherlands

HIDE CAPTION

1 2 3 4 5 6 7 8

STORY HIGHLIGHTS

- Netherlands city of Utrecht is building the world's biggest bike parking facility
- Bogota may be cursed by smog and heavy traffic, but the city's mayor is credited with dramatically boosting bike use

(CNN) – If you're taking a strict view on the world's most bike-friendly cities, the eventual list would mainly take in a smallish patch of northwest Europe.

One such rating table, produced by the Denmark-based cycling advocacy group Copenhagenize, has more than half its top 20 bike-friendly places clustered around the Netherlands, France, Germany and Denmark

discover Azerbaijan from **AZ** to **to** View

ADVERTISEMENT

Part of complete coverage on
CNN Travel

5 must-play golf courses

September 1, 2014 – Updated 2247 GMT (0647 HKT)

Breathtaking scenery, championship design -- many of the courses dropped into the Canadian Rockies are among the most memorable in the world.

Giant duck artist's next big thing: Hippos

September 2, 2014 – Updated 1306 GMT (2106 HKT)

Why Florentijn Hofman is sending a giant beast into London's Big Top



Utrecht  we all cycle

Portland is among the most bike-friendly cities in the US



With dedicated bike lanes, riding trails and traffic-free areas, Oregon's largest city has plenty to make it perfect for pedalling

ADVERTISEMENT FEATURE



Thursday 4 May 2017 06:51 BST



Portland, Oregon, might just be the most bike-friendly city in the United States. Known for being eco-conscious and independently-minded, Portlanders have historically fought big road-building projects in favour



Host of the “grand depart 2015” of the Tour the France

- Almost one million visitors
- On television in 190 country's
- International journalists amazed by the sheer numbers of cyclists in the city
- Hundreds events in the 100 days before the start of the Tour
- And a lot of proud citizens



Utrecht  we all cycle

Why does Utrecht think cycling is so important?

- Utrecht = 'Healthy Urban Living'.
- Utrecht gives priority to cyclists and pedestrians
- The bicycle is clean, silent, economical
- We give the public space back to the user
- Cyclist represent value, health, liveability, spending
- Cycling in Utrecht is for 8-80 years
- Cycling provides social meeting
- Knowing how to cycle emancipates

**THIS ONE
RUNS ON FAT
AND SAVES YOU MONEY**



**THIS ONE
RUNS ON MONEY
AND MAKES YOU FAT**



Some numbers about cycling in Utrecht in general:

- Daily number of cyclists passing through downtown Utrecht: 125.000
- The highest number of cyclist measured on the busiest route: 37.000
- Investments in cycling infrastructure and facility's: roughly 186 million euro's over the next period of 4 years to accommodate and facilitate an ever growing number of cyclists
 - Much more cost effective than increase the road network
 - Societal benefits are in general 4 to 11 times higher than the costs in terms of health, reducing air- and noise pollution, creating a livable city and reducing traffic congestions





Modal split to, from and within the city in % (2014–2015)

	<7.5 km	7.5–15 km	>15 km	In general
Motor Vehicles	21.6	60.7	62.2	39.8
Public Transport	3.3	16.1	34.0	10.7
Cyclists	42.9	16.7	2.1	26.1
Pedestrians	30.1			16.8
Others				
Pedestrians incl.	2.1	6.5	1.7 *	2.1

To and from the city Centre – Residents Survey:

- 61% says they cycle (incl. mopeds) (2016)
- 5% takes the car
- 23% takes Public Transport
- 11% walks



Facts and numbers

Residents survey 2015

- 96% of the households has 1 or more bicycles; 50% 3 or more
- 1,2 bikes per person
- 14% of the households have an electric bike
- 83% is satisfied with the accessibility of the city by bike
- An upward trend in satisfaction of residents about guarded bicycle-parks at the train station and downtown and racks

Bicycle counts

- Utrecht has the 2 most busiest bicycle routes of the Netherlands
- An average of 33.000 cyclists a day on the Vredenburg route

Bicycle community Utrecht

- Twitter: almost 1000 followers
- Facebook: almost 900 followers
- Instagram: almost 500 followers
- Digital newsletter: almost 800 subscribers



How do we become bike capital of the world? Implementation Action Plan Bicycle 2015-2020

Goals

- facilitate cyclists more
- making cycling in Utrecht even more fun
- increase cycling among certain groups
- encourage bike economy

6 themes:

- Bicycle parking and enforcement
- Bicycle infrastructure and bicycle routes
- Traffic lights and traffic flow
- Constructions and detours
- Bike economy / bikenomics
- Bicycle safety and behavior

Important input came from a town meeting in January 2015 (180 participants)



Bicycle parking and enforcement



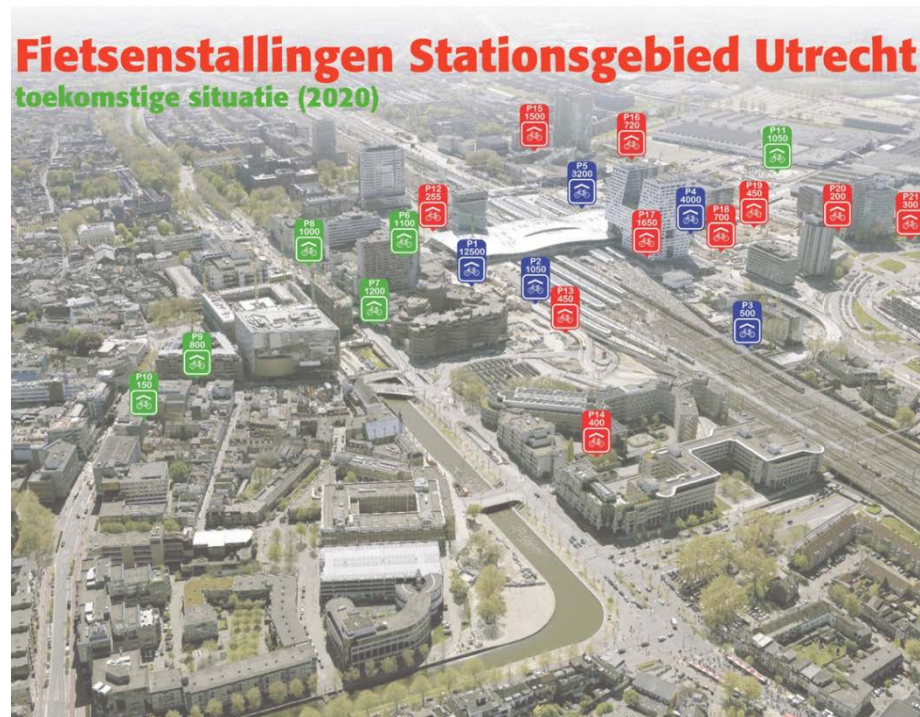
Projects to handle the growing numbers of travelers in and around the central station



Bicycle parking around the central station

Traveling by bicycle to and from the train station is becoming increasingly popular. That's why:

- Realization of 22.000 public parking spaces nearby the train station
- Private investors realize 11.000 parking spaces in their own buildings for their own employees



- P1-5** OVT gerelateerd
21250 plaatsen
- P1 Stationsplein Oost (2017-2018)
- P2 Verbouwde Noorderstalling (2017)
- P3 Sijpesteijnstalling (2017)
- P4 Stationsplein West
- P5 Knoopkazernestalling (2017)
- P6-11** Openbaar, deels betaald
5300 plaatsen
- P6 Hoog Catharijne Stationsplein
- P7 Laag Catharijne Singelborch
- P8 Laag Catharijne Poortgebouw (locatie nader te bepalen)
- P9 De Vredenburg
- P10 Lange Koestraat
- P11 Megabioscoop (2017)
- P12-21** Niet openbaar
6625 plaatsen
- P12 Het Platform (2018)
- P13 Noordgebouw (2019)
- P14 Movares / FGH
- P15 Rabobank
- P16 Knoopkazerne (2018)
- P17 Stadskantoor
- P18 WTC Jaarbeursplein (2018)
- P19 Jaarbeurspleingebouw (2020)
- P20 Hojel
- P21 SNS Reaal / Belastingdienst



Utrecht  we all cycle

Inside our new bicycle-park on the western side (May 2015) with 4200 places, build under the elevated square next to the train station. After 1 year: 1.300.000 customers



Smakkelaarsveld

The situation on the Smakkelaarsveld (eastern side) was no longer acceptable. High numbers of parked bicycles were using up a large amount of valuable public space. As a solution we build the biggest bicycle parking in the world (12.500 places). This parking has three floors and it's possible to cycle through.



Experimenting with the exploitation of large bicycle parkings

Goals: creating public spaces, making a very good connection between bicycle and public transport, accommodating the growth

- First 24 hours are free of charge and 24/7 open.
- Quick and easy access through an electronic entrance system
- Internal guiding system to find empty spots
- Easy access to the train and bus terminals
- Sharing the costs with the National Railway company and the City of Utrecht
- Very cost effective compared to the amount of money needed to enlarge the highways.



Parking in the city centre: smaller bicycle parkings specially on the “hot-spots” for bicycle parking.



Utrecht  we all cycle

Promoting cycling as a way of living: Service bicycle parks, rent a cargo-bike, rent a stroller, use of storage facility's, toilets, coffee and information-desk.



Utrecht  we all cycle

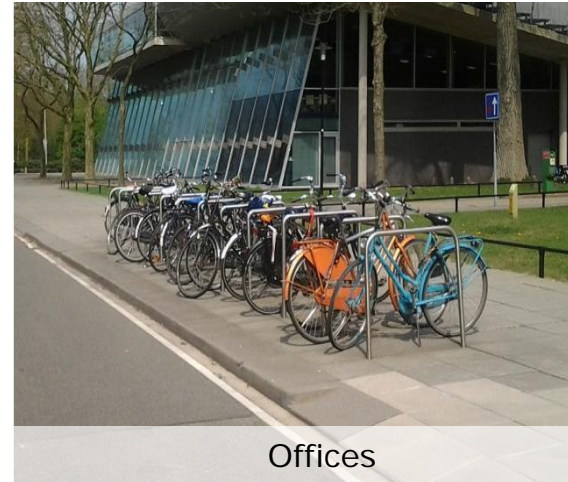
Finding available parking space in the city centre:
Innovative electronic information system on the main roads inform cyclists about the available parking spaces in bicycle parking. First in the world! Started June 2015.



And also: parking places on the street through the whole city and on-site in different neighbourhoods



Schools



Offices



Shopping areas



Neighbourhood storages



Unique in Europe: Standards for bicycleparking

- In Utrecht there are standards for the minimal amount of parking places with new developments. Not only for cars but also for bicycles!

	functie	opmerking	normgrondslag	Centrum (A1, A2)	Schil centrum (B1)	Rest bebouwde kom (B2, C1, C2)
werken	Kantoor medewerkers		100 m ² bvo	2,4	1,7	1,7
	Kantoor bezoekers	minimaal 10 fietsplaatsen	balie	6,0	6,0	6,0
winkels	Detailhandel		100 m ² bvo	3,4	3,4	3,4
	Supermarkten		100 m ² bvo	5,3	5,3	5,3
	Commerciële dienstverlening (en met baliefunctie)	minimaal 10 fietsplaatsen	balie	6,0	6,0	6,0
	Bouwmarkt, tuincentrum	maatwerk: per ontwikkeling bepalen				
	(Week)markt	maatwerk: per ontwikkeling bepalen				
vrije tijd	Afhaalcentra, fastfood, cafetaria		locatie	12,5	12,5	6,0
	Restaurant, café		100 m ² bvo	23,5	23,5	19,3
	Museum		100 m ² bvo	1,2	1,2	1,2
	Bibliotheek		100 m ² bvo	4,3	4,3	4,3
	Bioscoop		100 m ² bvo	10,0	10,0	5,8



Bicycle infrastructure and bicycle routes

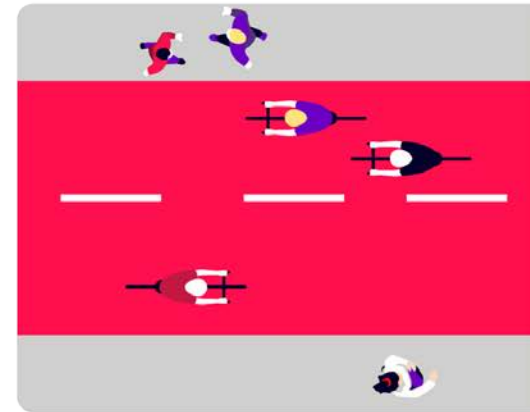
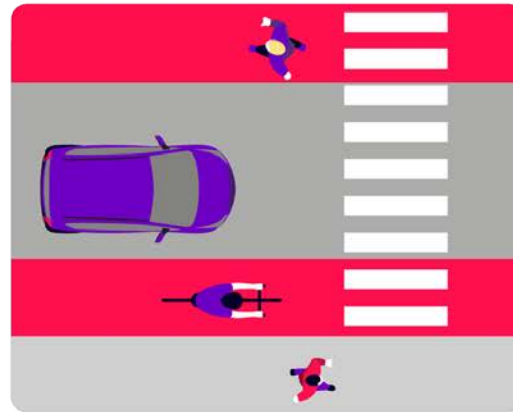
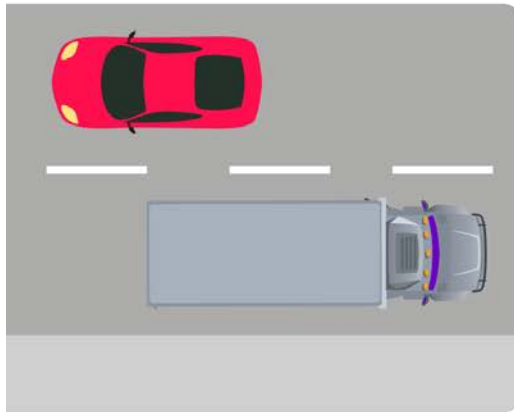


Utrecht  we all cycle

Bicycle infrastructure, upgrading the busiest Top 5 routes, and construction of missing links. Almost ready!



Transition



**Utrecht
City Centre**

30%
less cars

20%
more cyclists

Bicycle streets: cars are guests.



Utrecht  we all cycle

Dedicated bicycle infrastructure



... and bicycle tunnels



Bicyclebridge, opened december 2014



Spinozabridge, opened 2014



Dedicated bicycle bridges



Dedicated bidirectional cycle path on the busiest cycle corridor from east to west in the city. (33.000/24 hours)



Utrecht  we all cycle

Removing obstacles; Upgrading bicycle infrastructure in suburban area's



Complete redesign, more allure in the city

- Mariaplaats 2015; more space for pedestrians en cyclists
- Alternative route for Vredenburg (busiest bicycle route of Utrecht)



Drift; reconstructed as residence area to prevent dangerously parked bicycles



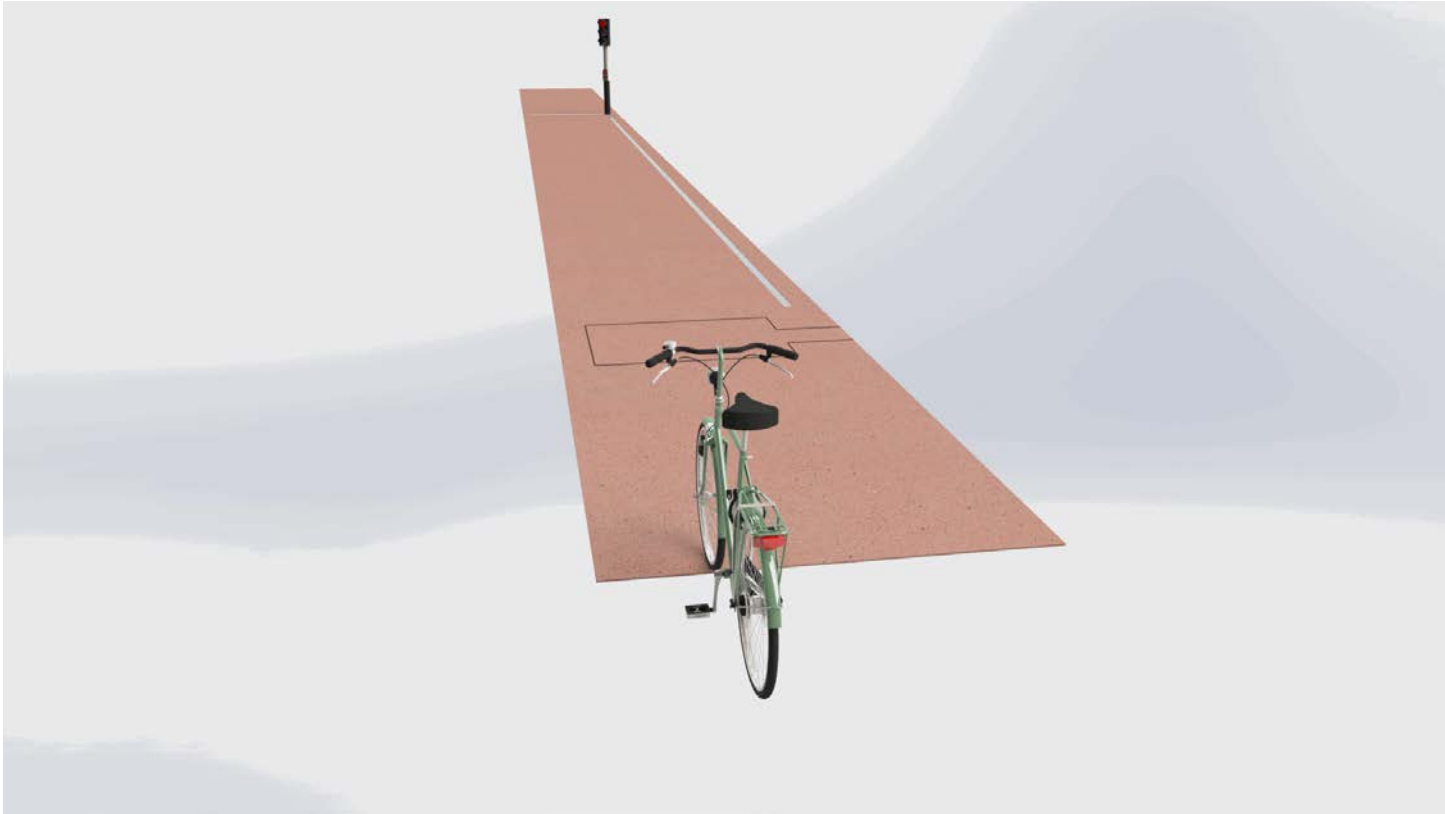
Before and after reconstruction Drift 2015



Flo – Your personal speeding advice, to catch more green lights



Light companion



Not everything is perfect



Not everything is perfect



Not everything is perfect



Constructions and detours

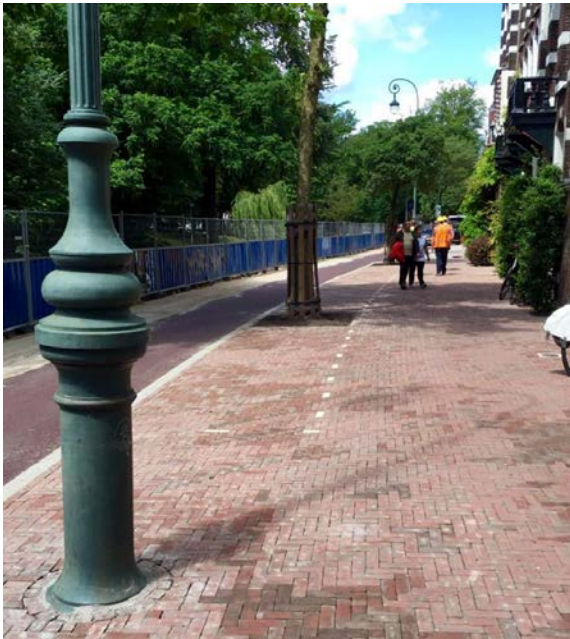


Redevelopment of the city center near Utrecht CS



Constructions and detours

- We also create space for cyclist around construction sites
- Activities to thank cyclists for their patience regarding constructions



Bike economy / bikenomics



Utrecht  we all cycle

Bike economy (Bikenomics)

- Promoting bicycle tourism, specially after the Tour the France and in close cooperation with the region.
- Promoting the use of electric cargo bikes in the old city center.
- Introducing legislation to make it obligatory for developers to build enough bicycle parking within the building.
- Promoting and partly financing innovative start-ups for example the Light Companion. A system that makes it possible to arrive in time at the traffic light.
- Joining the cycling promotion efforts of the company's in our largest industrial area. (2 days out of 5 on your bike to work)



Electric cargo bikes



125KG
is the capacity
of the new City
Hub deliveries
of DHL

Introducing a rental bike system in cooperation with the National Railway company. Now 2 in operation, 5 in development



Utrecht  we all cycle

Bicycle safety and behaviour



Bicycle safety and behaviour

- (Electric)cycling information days specially for older people and lessons to enhance cycling skills.
- Mopeds on roadway
- Hotline traffic lights



Feedback on traffic lights



Traffic lights

- Hotline. Reactions about traffic lights that are unnecessary or can be set in a way that they are safer and more bicycle-friendly (nearly 5000 responses)
- Experiment; switch (a part of the day) trafficlights off
- New philosophy; preparing to give cyclists priority



Education remains important and the Utrecht Road Safety Label (UVL)

The UVL is a quality mark for elementary schools whom are investing in:

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



Traffic practice exam for all children (age 10-11)



Cycling lessons for adults and refugees



Discount on the purchase of a bicycle after following the lessons



Keep up to good work in Portland! Questions?

