DUTCH CYCLING EMBASSY

Bicycling Lessons from the Netherlands

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Monday, November 28th, 2022

Dutch Cycling: For a Bicycle-Friendly World

The Dutch Cycling Embassy is a vast network of public and private organizations from the Netherlands who wish to share their knowledge and expertise to help cities experience the many advantages of cycling.

- **Experience** the Dutch cycling culture first-hand
- **Think** about best possible solutions and achievable results
- **Act** by applying these solutions to your local context
- **Learn** more about effective policies and best practices

www.dutchcycling.nl


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wobs
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Best Practices Dutch Cycling

ENGLISH

In front of you lies a book containing a selection of some of the finest examples and practices Dutch cycling has to offer.

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Tour de Force

Cycling is beneficial for the economy

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Riding a bicycle costs less!

The annual cost of riding a bike is approx. 300 euros whereas the annual cost of driving a car is approx. 8500 euros.[1]

Society benefits from an urban km travelled by bicycle

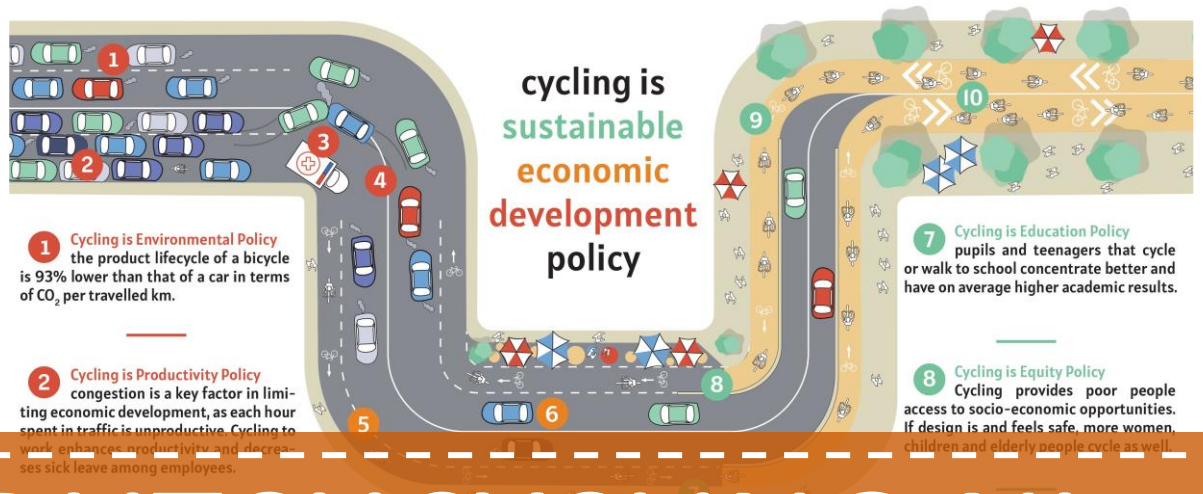
A kilometer covered by bike yields a social benefit of 0.68 euro, whereas cars and buses cost society 0.37 and 0.29 euros per km travelled respectively.[2]

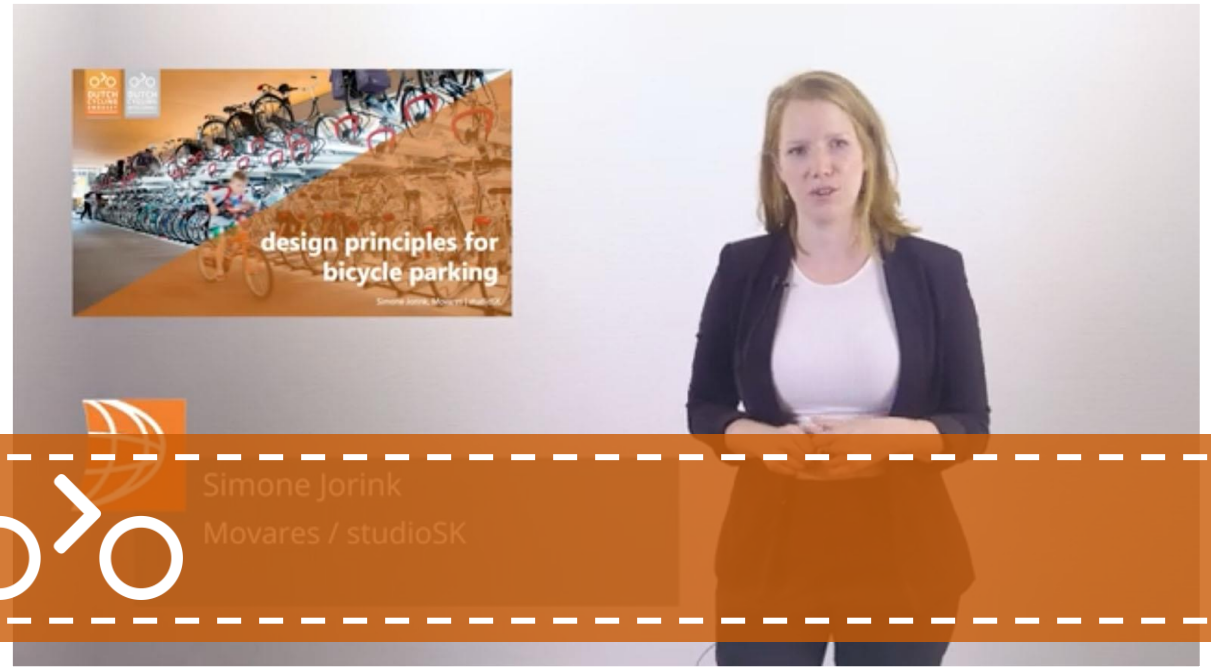
Cyclists spend more!

Cyclists shop more locally, more often and are more loyal compared to car drivers. Although cyclists spend less per visit, they spend more overall because they shop more often than people driving.[3]

ECONOMICS

Source: Dutch Cycling Vision





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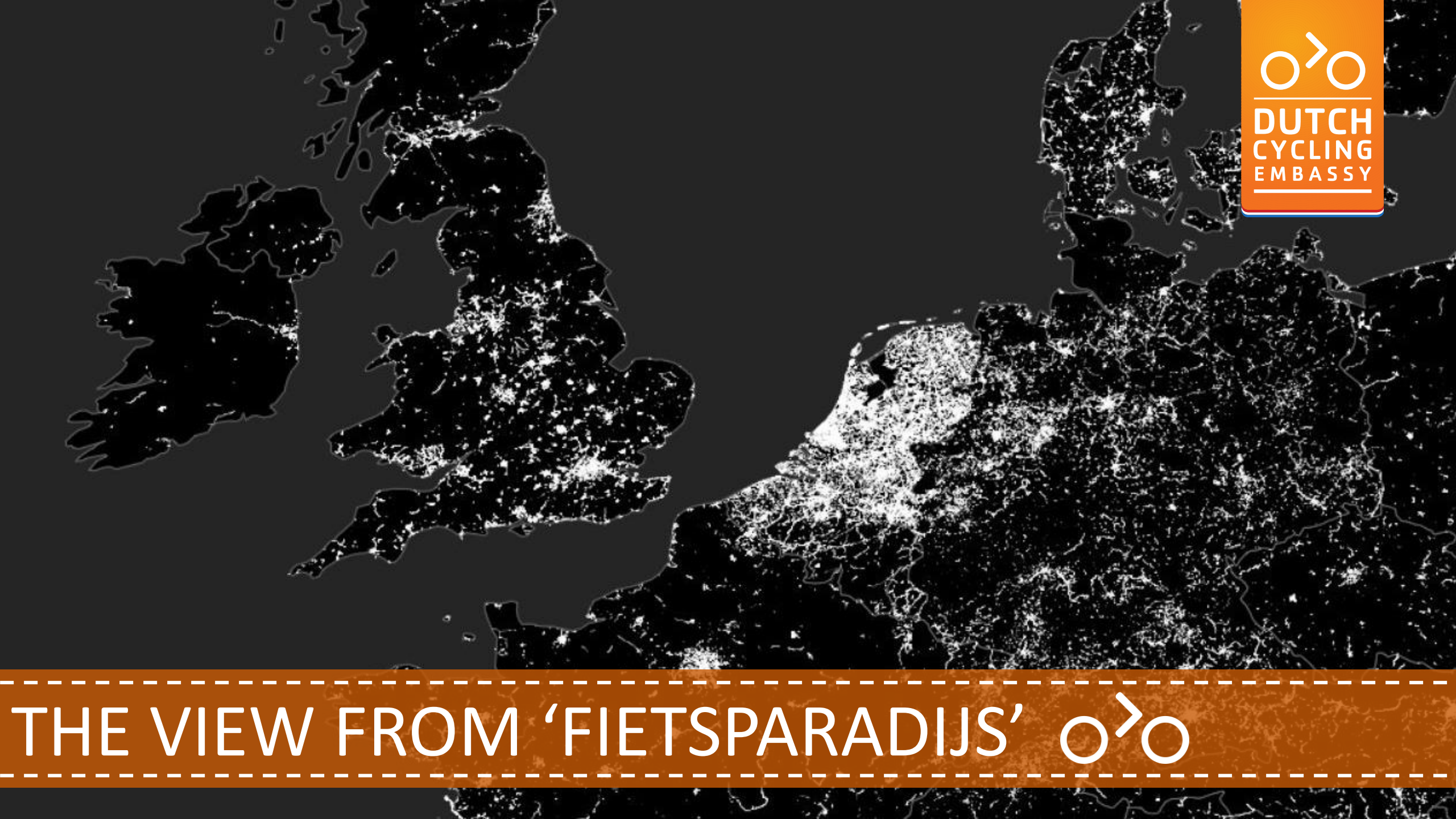

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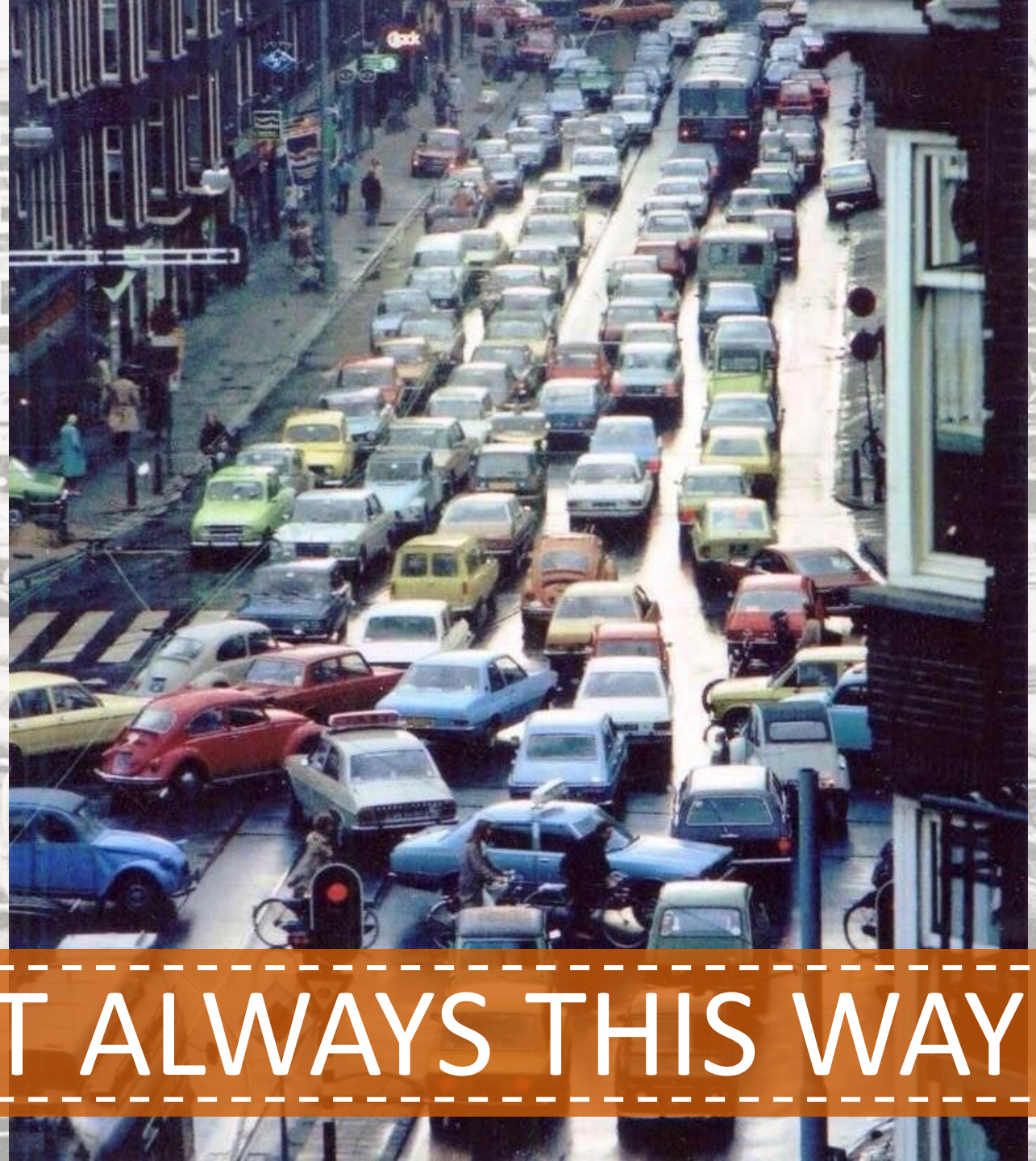
THE VIEW FROM ‘FIETSPARADIJS’



IT WASN'T ALWAYS THIS WAY

Crisis as a Turning Point

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- 1972 “Stop de Kindermoord”(“Stop Child Murder”) movement formed by parents in response to road safety crisis killing 3,000 each year; 400 children
- 1973 OPEC oil crisis created huge spike in gasoline prices; leading to national “Autovrije Zondag” (“Car Free Sunday”) policy and doubling bicycle sales
- Both forced public and politicians alike to reevaluate their streets, and build a more resilient transportation system

Learning From Their Mistakes

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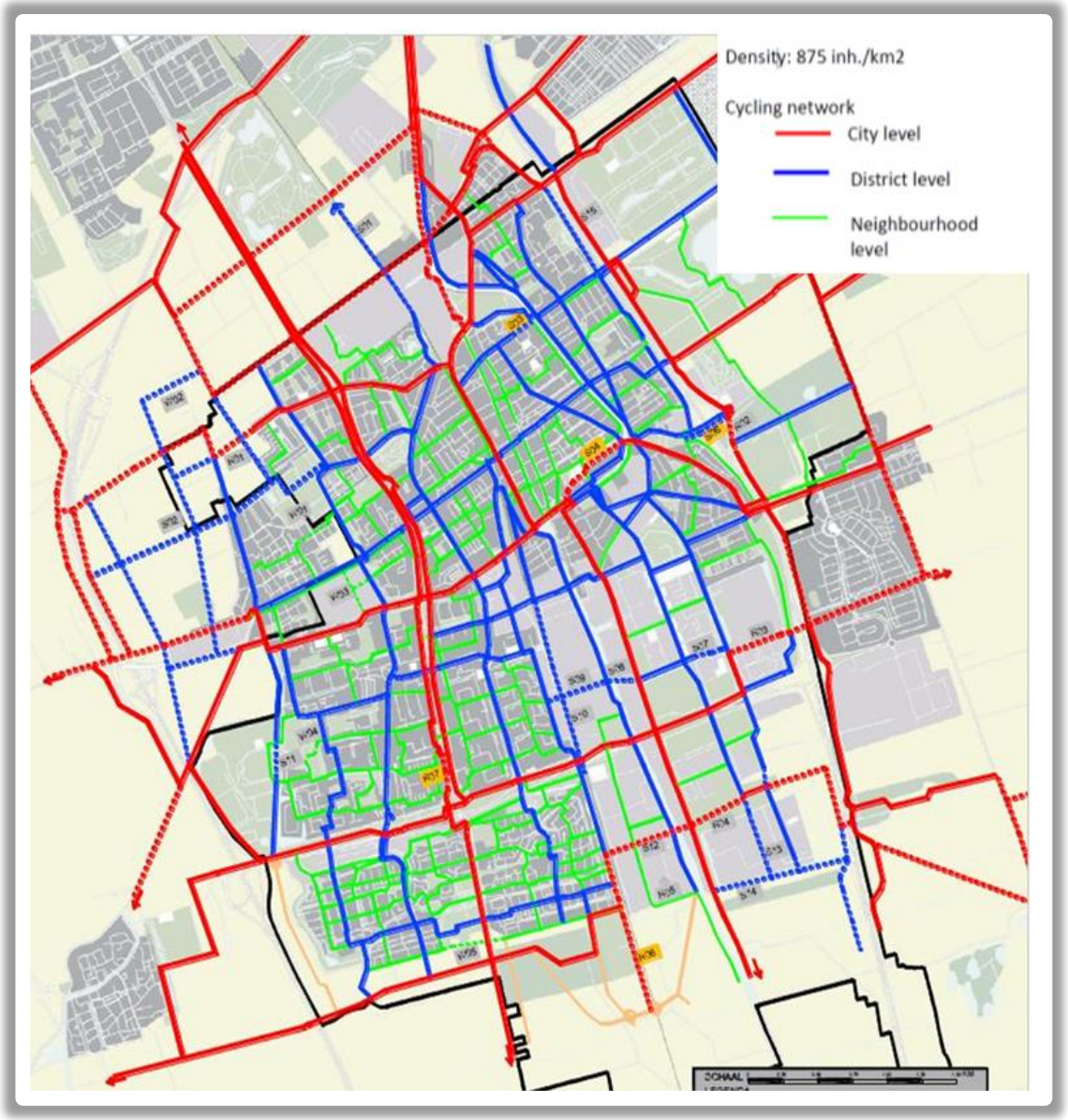
- High-profile failure of demonstration route in Tilburg in 1977: inconsistent design; inconvenient route selection which relegated cyclists to back streets
- Second demonstration route failure in The Hague in 1978: lack of connectivity and consultation led to low usage; huge backlash with local business owners
- The lessons learned from these two failed experiments were applied to the highly successful 1979 Delft Cycle Plan



Think at the Network Level

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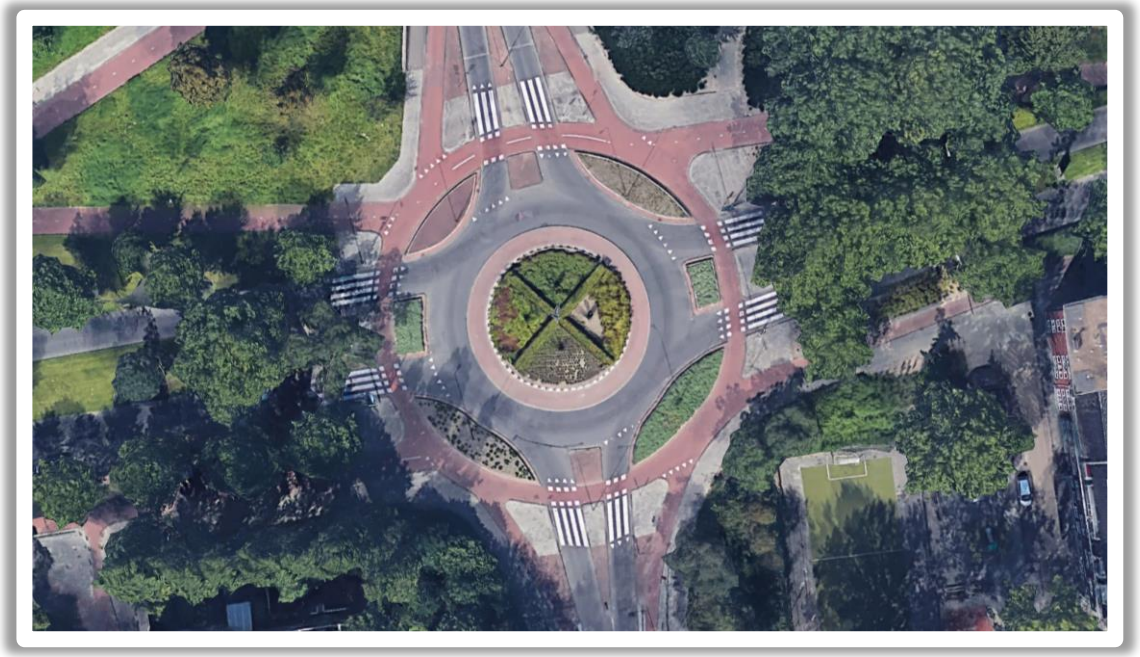
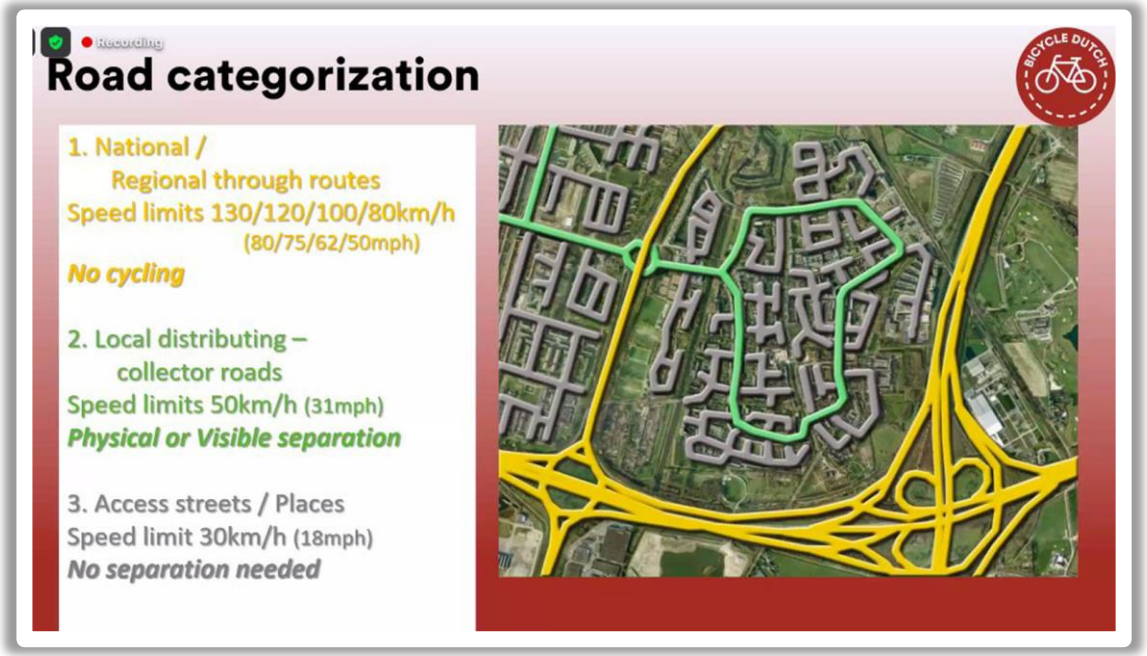
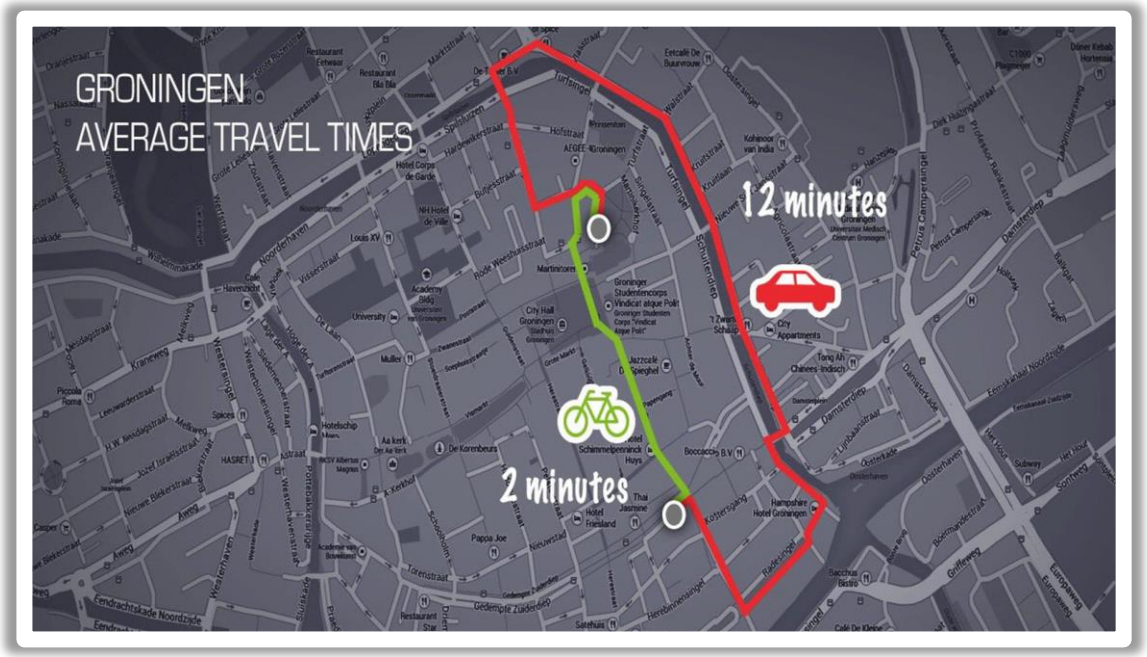
- Rather than focusing on a single route, in 1979, Delft officials decided to implement a city-wide cycle network
- After consulting with 4,700 households, three networks (of varying grid sizes) were planned; each with a specific journey type, length, and user in mind
- Completed in 1987; lessons learned inform the CROW Manual network design principles of directness, safety, comfort, cohesion, and attractiveness



Address the Weakest Link

- A network is only as good as its weakest link: often at the intersection where the majority of collisions occur and the cycling infrastructure can “disappear”
- Signalized and unsignalized junctions are physically protected and designed to reduce speeds and raise awareness, increasing safety for all road users
- Raised and continuous foot/cycle path at side streets keeps vulnerable users in a seamless and prioritized space





Every Mobility Plan Needs a Car Plan

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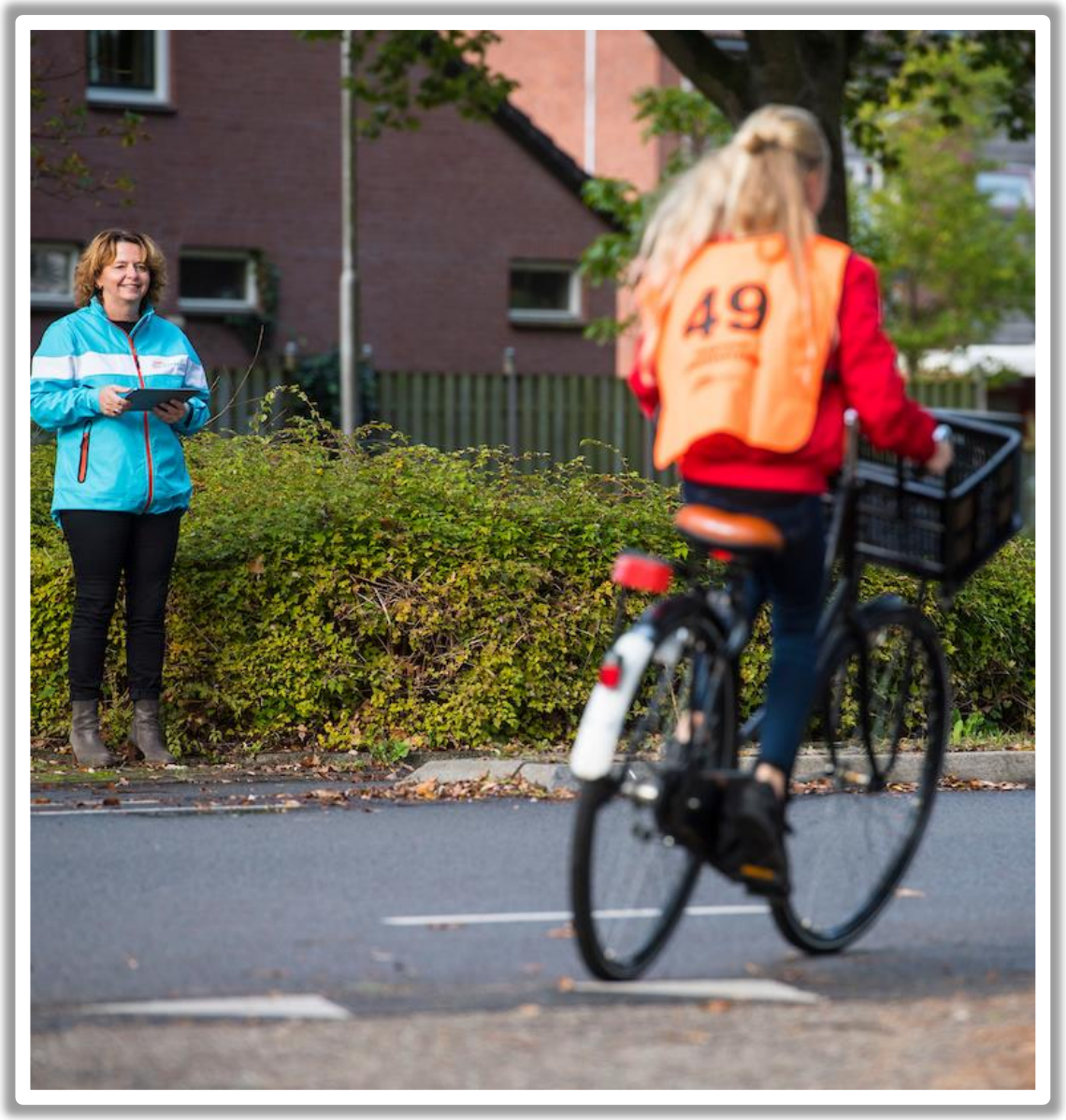
- Effective traffic circulation—ie. reducing the volume and access of motor vehicles—can form an easy and effective part of a city's cycling network
- Dutch cities create a "hierarchy of roads"—differentiating between local and through traffic—diverting cars from economic and residential areas
- Concept of "filtered permeability" restricts car access while allowing pedestrians and cyclists to enter

Combine Bikes + Public Transport

- Creating secure bike infrastructure and parking in and around public transport hubs can capture the synergy between these two sustainable transport modes
- Cycling enlarges the catchment area of a stop or station, feeding more passengers into the transit system
- Half of all train trips in the Netherlands start with a bike ride; one quarter of all kilometers cycled are to/from a station

Extending the Cycling Range

- Direct and comfortable cycling routes—in combination with the e-bike—can encourage people to cycle longer distances and reduce car congestion
- Provinces and regions across the Netherlands are connecting residential, commercial, and educational hubs with wide, smooth “fast cycling routes”
- E-bike users travel 64% further than ‘normal’ bike users; average e-bike trip journey length 5.9 km (versus 3.6 km)



Teach Traffic Safety in School

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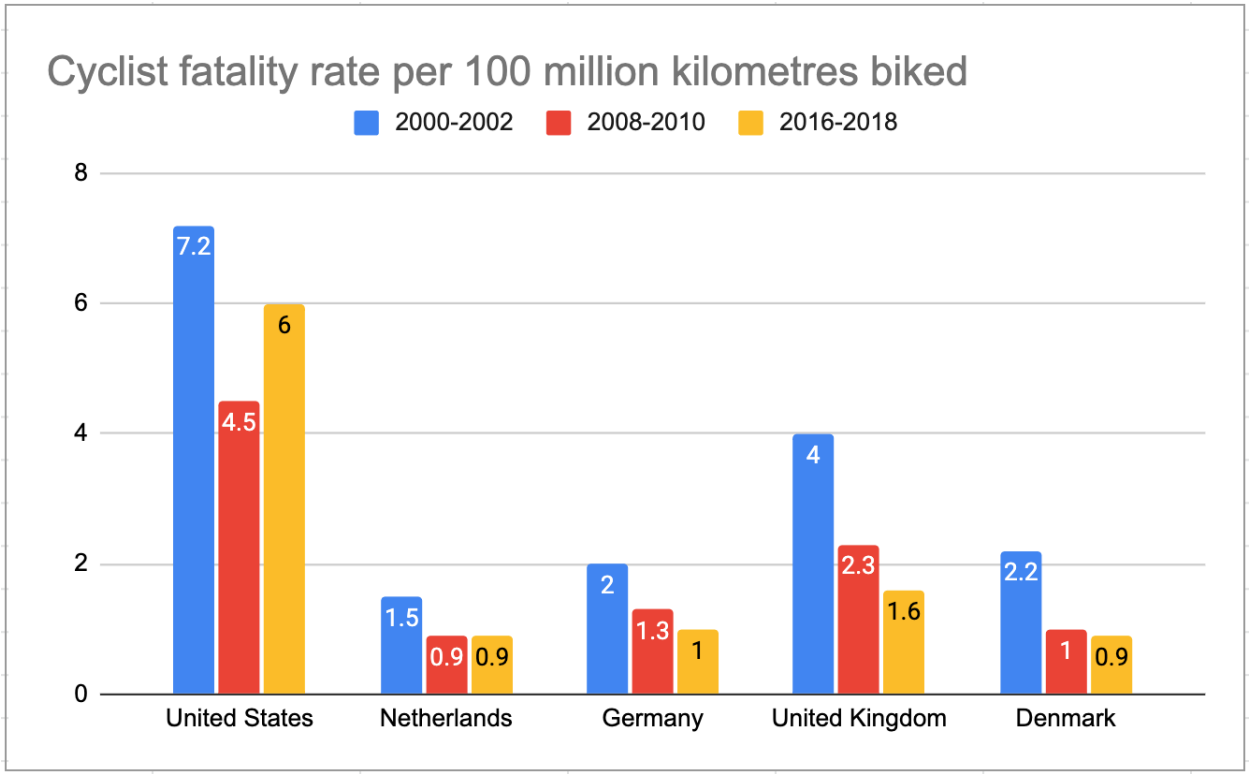
- Every year, over 200,000 primary school children across the Netherlands—ages 10 and 11—participate in a national traffic safety education curriculum
- Roughly 15 minutes per week spent in a classroom setting learning the basics
- Knowledge is then tested at the end of the school with a practical exam, to demonstrate they can safely travel around their city on a bicycle; passing earns students a paper certificate

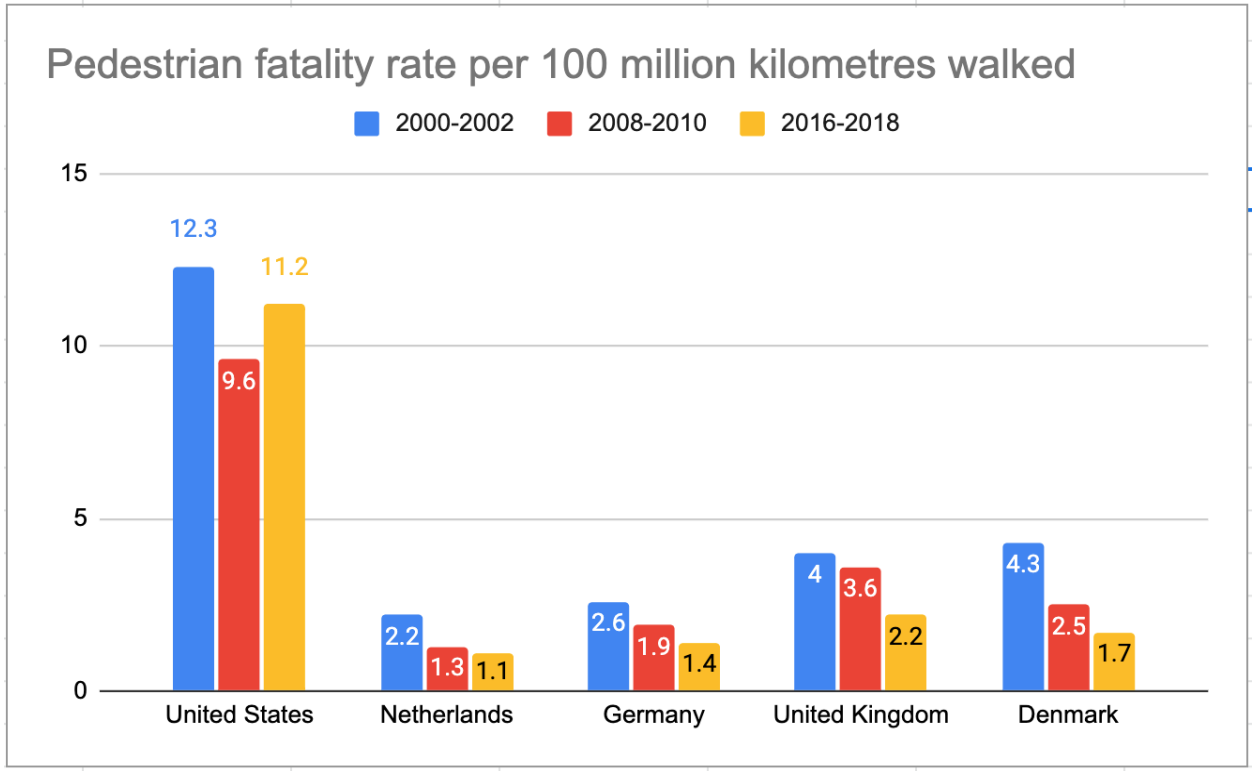
Dutch Cycling by the Numbers

- 23 million bikes for 17 million residents
- Five billion bicycle trips each year; 17.6 billion km total; or 1,000 km/person
- 202 cities and towns where bike share exceeds car share (for trips < 7.5 km)
- Reverse gender gap: mode share for women is 28% (versus 26% for men)
- Reverse age gap: 65-75 age group has a higher share than all other categories
- Half of all train journeys in the country begin with a bicycle ride to the station
- 18% of bike trips are electric assist; 26% of all kilometers are covered by e-bike

The Safest Streets in the World

"If the U.S had achieved the same improvements in traffic safety as the Netherlands [since 1970], 22,000 fewer Americans would have died on our roads in 2015." – Vox





Obese? Not us! Why the Netherlands is becoming the skinniest EU country

Every EU country will be more obese by 2030 - except one. DW's Conor Dillon went to the Netherlands to find out how the Dutch keep eating french fries, mayo and frikandels without getting fat.

"THE WORLD HEALTH ORGANIZATION SAYS THE NETHERLANDS IS THE ONE E.U. COUNTRY NOT HEADING FOR AN OBESITY CRISIS.

IT PREDICTS THAT IN 2030, THE DUTCH OBESITY RATE WILL BE JUST 8.5 PERCENT, WHILE IN IRELAND, FOR INSTANCE, IT WILL BE 50 PERCENT." - DW.COM

“IF YOU DESIGN A CITY FOR CARS, IT FAILS FOR EVERYONE, INCLUDING DRIVERS. IF YOU DESIGN A MULTI-MODAL CITY THAT PRIORITIZES WALKING, BIKING, AND PUBLIC TRANSPORT, IT WORKS FOR EVERYONE, INCLUDING DRIVERS.” - BRENT TODERIAN

WHAT KIND OF FUTURE DO WE WANT?

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