



Dutch cycling: for a bike-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



DCE Public-Private Partnership







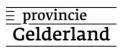










































































































































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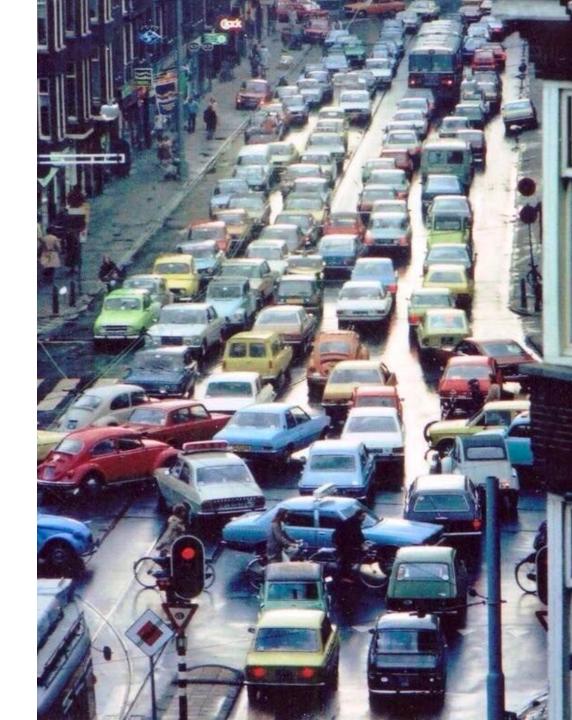








It wasn't always this way...







Crisis as a Turning Point

- In the Netherlands, a pair of converging crises in the 1970s created a systematic approach to safer, more sustainable, equitable, and efficient street design
- In 1972, Stop de Kindermoord ("Stop Child Murder") formed in reaction to a road safety crisis that was killing 3,000 people per year, including 450 children
- For six weeks in 1973, the OPEC oil embargo resulted in an abrupt gasoline shortage and 'Car Free Sundays' policy, doubling the sales of bicycles







Learning From Their Mistakes

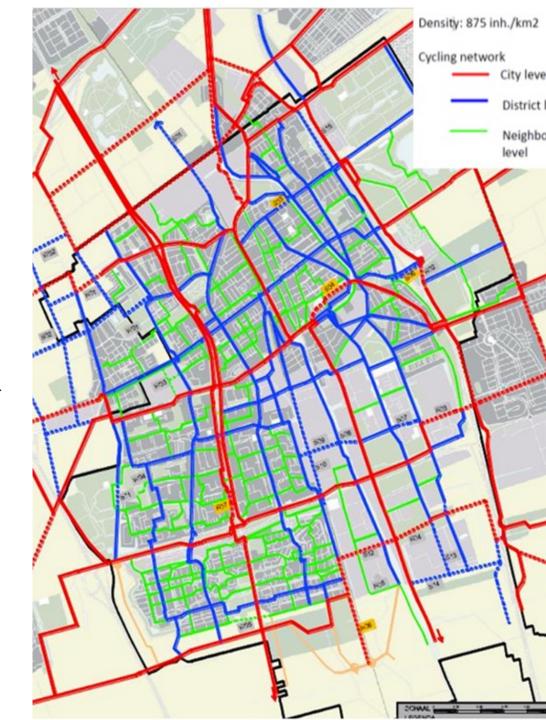


- High-profile failure of demonstration route in Tilburg in 1977: inconsistent design; inconvenient route selection which relegated cyclists to back streets
- Second demonstration route failure in The Hague in 1978: lack of connectivity and consultation led to low usage; huge backlash with local business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

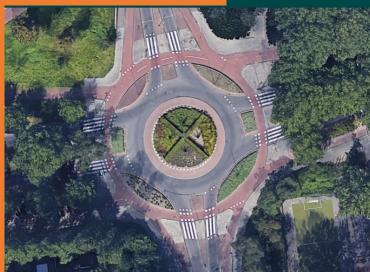


Think at the Network Level

- 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







Don't Ignore 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 cycle path at side streets keeps vulnerable users in a raised, seamless and prioritized space



Road categorization

1. National / Regional through routes Speed limits 130/120/100/80km/h (80/75/62/50mph)

No cycling

- Local distributing –
 collector roads

 Speed limits 50km/h (31mph)

 Physical or Visible separation
- 3. Access streets / Places Speed limit 30km/h (18mph) No separation needed





Every Mobility Plan Needs a Car Plan

- 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
- Physical methods are used to slow motorists down such as road narrowing, chicanes, texture, and speed tables



Use Bikes to Feed Transit

- 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



Extend 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)



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



