



York Civic Trust

Comparator Case Studies for York's Local Transport Strategy Delft (DRAFT) April 2024

Introductory note

This is one of nine case studies originally produced in draft in May 2021 at the request of the City of York Council. At the time the Council intended to publish a new Local Transport Plan in December 2021, and had invited York Civic Trust, through its Transport Advisory Group, to offer advice on content. The nine case studies, of cities chosen in discussion with the Council, were developed sufficiently fully to allow the Council to decide which it wished to incorporate in its Local Transport Plan. That decision was never taken, and the 2021 Local Transport Plan was never completed. In February 2022 York Civic Trust collated its advice into *A Transport Strategy for York*, Section 6 of which summarises the key messages from the nine case studies. In February 2023 the Council produced a first draft of a Local Transport Strategy. In March 2023 the Council's Scrutiny Committee on Economy and Place reviewed the nine case studies and recommended that "the Executive Member for Transport work with York Civic Trust and relevant officers on taking the report forward with two or three case studies and focus on building public buy-in into medium and long term traffic strategies".

In March 2024 the Council's new administration agreed to publish a Local Transport Strategy for the city in June 2024, based on a consultation on key principles launched in November 2023. The Trust was invited to update the nine case studies, within the limited resources available to it, and to produce brief summaries of key messages for York's Local Transport Strategy. While these summaries and updated strategies are now being published on the Trust's website, it is important to stress that they have not been fully researched, and thus may not be wholly up to date.

Summary (282 words)

The city of Delft is part of the Randstad conurbation of western Netherlands, lying between The Hague and Rotterdam. It is smaller than York, but has a historic core and a significant university. Like York, it has an important visitor economy and is home to a number of knowledge-based industries. It has a highly integrated transport system, with a very high level of active travel, at 77% in the historic core. Delft is known for its excellent cycling provision, which results in 50% of all journeys in, out and through the historic core being made by bicycle.

Land use planning and transport planning are closely integrated, so that new development is based around the rail and tram network. The Delft Mobility Plan sets out a vision and objectives for transport planning over a 20-year period to 2040. It is designed to engage residents in thinking about the future of transport in their city, in the context of underpinning

economic activity while protecting the environment and reducing the overall carbon footprint. This means getting a grip on private car usage.

Delft prides itself on its innovative approach to transport, and York might learn from its activities in the areas of (1) Seeing mobility as a service (2) Actions on freight – involving smaller vehicles and local hubs (3) Widespread use of intelligent traffic systems (4) Experiments in public transport delivery, and (5) Attention to the needs of the less mobile.

Delft puts great emphasis in its transport planning on the need to enhance the sense of place, and on improving bio-diversity. The Mobility Plan deals with mobility in the round, i.e. it considers transport and planning together and with 'place' and the environment as essential aspects.

Context

Background

Delft is a city in the Province of Zuid Holland, lying just east of The Hague – between The Hague and Rotterdam. It forms part of Randstad Holland, and has shown continuous growth since the War. Further growth of 30% by 2040 is anticipated.



Delft Gemeente (Council area) has a population of around 103,000, but Delft forms part of a wider urban area of much greater size. It lies just 9km from The Hague and 14km from Rotterdam.

It is a historic city with a Medieval core, comprising characteristic Dutch domestic, public and religious architecture. This area is extensively pedestrianised.

The Technical University of Delft is a large organisation located on a campus to the SE of the centre. It supports over 21,000 students and 2,600 PhDs. www.tudelft.nl

Governance

Delft can be characterised as a unitary authority. Planning and transport take place within a national policy framework and a structure plan prepared by the Province. Spatial and transport planning are generally better co-ordinated at the Province level. The local council works on its own, or in partnership with adjoining gemeente (the Dutch local government system is very fragmented).

A Directorate of Planning and Transport oversees Delft Council's policies and actions in this field <https://ris.delft.nl/vergaderingen/commissies/commissie-ruimte-en-verkeer/> These include spatial planning, Rail zone/HNK, traffic and transport, land exploitation/real estate, project Delft-Zuidoost (including Technopolis), green/sustainability (including Delftse Hout/

Midden-Delfland), management of public space, urban renewal, project Nieuw Delft, project Harnaschpolder.

Current transport provision

Delft has a well-developed road network, excellent public transport, and a major emphasis on walking and cycling. There is also a canal network.

The national rail (train) operator is [Nederlandse Spoorwegen](http://www.ns.nl) (NS) www.ns.nl There are two stations Delft and the relatively new Delft Campus. A direct train from Delft to Schiphol Airport takes only 40 minutes, and runs half-hourly. The intercity (in the direction of Lelystad to the north) leaves Delft half-hourly. The intercity (in the direction of Vlissingen to the south) also leaves Delft half-hourly.

Upgrades to the rail system between 2018 and 2024 are intended to increase the number of trains per hour at the central station from 11 to 14, and at Delft Campus from 4 to 6.

Trams, light rail and bus services in Delft, and across the wider Den Haag region are run by HTM Personenvervoer N.V. www.htm.nl (Haagse Transport Maatschappij). Its objects include economic growth, welfare and social cohesion, as well as environment. Annual reports 2012 to 2018 are available online in Dutch. The network receives a substantial public subsidy. It is a private company, but its activities are monitored by an independent commission of experts, including Council representatives.

Trams run to The Hague and Rotterdam up to every 5 minutes.

One of the most important drivers of public transport use is speed of journey time. Since 2018 it has employed a dedicated innovation manager. It has been looking at the potential of solar power to operate the trams. Provision of real-time travel info on stops and by app. Electric buses have been introduced for zero emissions.

The two trams that service Delft are operated by [HTM](http://www.htm.nl). Tram no. 1 offers service between Delft, Rijswijk, The Hague and Scheveningen (on the coast). Tram no. 19 offers service from Leidschendam to Delft station, in the future continuing on to Technical University of Delft's campus.

Delft has an extensive network of local and regional buses, most of which stop at the Delft station (Centre). It also has a 'transport on demand' mobility scheme.

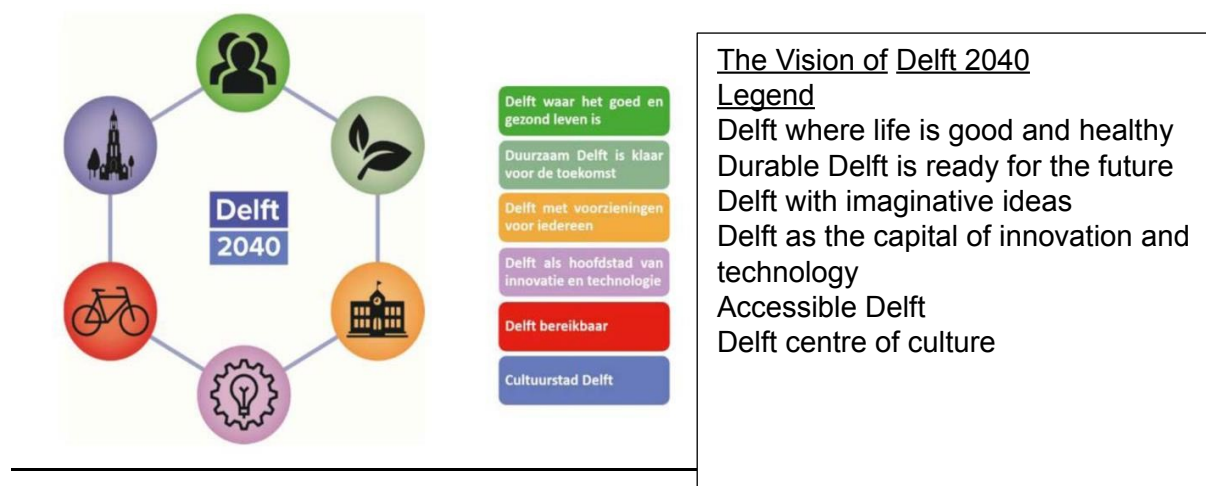
Transport planning

Local transport plans

Delft produces a transport plan in line with Sustainable Urban Mobility Plans (SUMP) guidance. It is called Mobiliteitsprogramma Delft 2040, and can be seen here <https://www.delft.nl/sites/default/files/202007/Mobiliteitsplan-Delft-2040.pdf>

Published in 2020 'Our Delft, sustainably accessible' is a vision and plan for mobility. Approved by Council in January 2021.

It sets out a vision and objectives for transport development over a 20-year period. It looks at how the economy and society are likely to change, and how this will affect transport priorities. It suggests how air quality, noise levels and improved ecology can be achieved. It looks at trends in each mode of transport, and presents key statistics on mobility. There is a section on monitoring and key indicators.



Priority objectives of the Plan

A forecast 30% increase in dwellings and 20% in jobs will increase the number of daily journeys by 18%.

The main objective of the Mobility Plan is to underpin economic activity while protecting the environment and decreasing the carbon footprint. This means getting a grip on private car use.

The Plan identifies aspects where the Council can achieve quick wins. These are things where the Council has control and is not dependant on other bodies.

Great emphasis is placed on innovation. Like York, Delft is a university city with a large visitor economy and knowledge-based businesses. Areas of innovation include:

1. Seeing mobility as a service
2. A new approach to freight – involving smaller vehicles and local hubs
3. Wide use of intelligent traffic systems
4. Experiments in public transport delivery
5. Special attention to the needs of the less mobile.

Strategic approach

A major aim of the plan was to shift the modal split away from private car to bicycle. In 2005, in the city centre, bicycles accounted for just over half the modal split, about 25% walking, 20% by car or moped, and around 10% public transport.

Principal policy measures

A road hierarchy is based on national design standards, with speeds of 70, 50 and 30km/h depending on whether they are main roads (Stromweg), distributor/secondary roads (Gebiedsontsluitingsweg) or local access roads (Erftoegangsweg). However, there is some disagreement about how well this suits the Delft situation because of its historic street pattern and structure. Delft has therefore introduced a new category, the Neighbourhood Access Road (Wijkontsluitingsweg). These are roads for 'living and driving' encouraging modest speeds (40km/h and not greater than 50km/h). The onus is on traffic safety, reduced noise and air pollution. These roads are created by design modifications which include: narrower lanes, a special median, attention markers, raised crossings, and roundabouts instead of traffic lights.

The city centre is largely car-free, with the aim of improving the quality of life. The key principles are walking always has priority, cyclists are 'guests', and parking is outside the pedestrian area. There was a phased programme to implement this strategy between 2004 and 2014. The pedestrian area is sealed by rising bollards. 'Car-free opportunities' have been made available, including a variety of pedal and electric powered mini vehicles and trailers. These can transport disabled and elderly people and freight.

Modal shares

Vervoerwijze (18 jaar en ouder)	Binnen Delft	Naar regio ³
Fiets	50%	20%
lopen	25%	nvt
Auto	20%	58%
OV	2%	17%
Overig	3%	5%

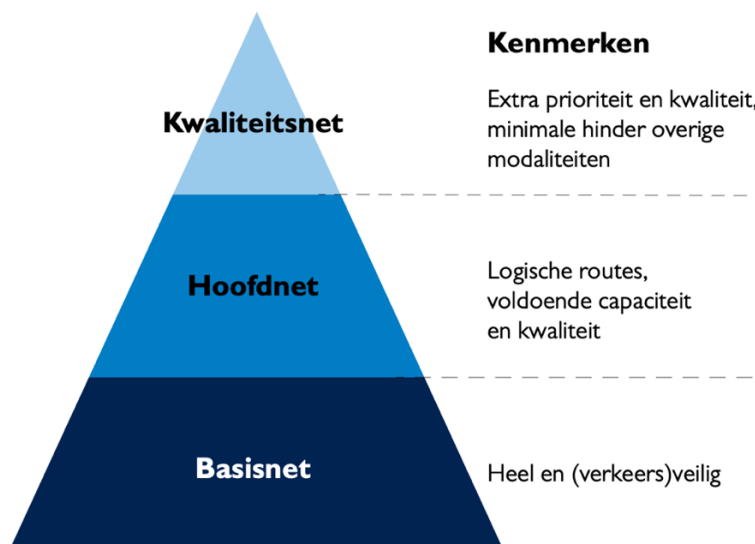
Fiets = cycle; Lopen = walking; Auto = car; OV = public transport; Overig = other.
 Binnen = inner city; Naar regio = wider admin area.

The priority will be given to pedestrians, then bicycles, then public transport and finally private cars. The principal is that "Everyone is a pedestrian".

Hierarchy of users

Delft has a hierarchy/priority of users:

1. Pedestrians (everyone is a pedestrian at some point!)
2. Cyclists
3. Public transport
4. Cars



For each mode of transport there is an identified hierarchy of networks (see above). These consist of:

1. The basic network
2. The main network
3. The quality network

historic street pattern is still visible today. The city has grown to 100,000 residents and covers an area of 5 square kilometres. Twenty years ago, the council decided to change the transportation philosophy from a car-oriented system to a bike city with a car-free historic centre. This policy has been very successful, and bikes are now the dominant mode.

Delft found a good balance in road design for both cars and bikes. Today, the bike network has reached the point of congestion. Solutions developed for cars are being introduced in the bike network. The presentation will cover the city's transport policy, road design, the concept of a car-free city, and the challenge of reducing bicycle congestion.”

<https://www.cycling-embassy.org.uk/sites/cyclingembassy.org.uk/files/documents/Report%20Dutch%20cases.pdf>

“The Delft Bicycle Plan was a city-wide upgrade of the bicycle infrastructure in the city of Delft. Three bicycle networks were defined: a network on city level, a network on district level, and a network on neighbourhood level. Each network should meet some quality requirements and the objective of the bicycle plan was to upgrade and extend the existing network in order to achieve a network that satisfies the requirements. The major part of the intended projects was implemented, but a few of the most expensive projects were skipped. A large part of the improvements can still be used today but, generally, the high quality infrastructure that was created has not been maintained properly. Today the bicycle infrastructure in Delft is moderate compared to that of other Dutch cities.

The two demonstration projects and the Delft Bicycle Plan were evaluated extensively by a large number of before and after studies. In Delft, one of the more expensive projects, the Plantagebrug, has been evaluated separately. The Plantagebrug is a bridge that added a missing link in the city level network.

On the basis of the Dutch case studies some general recommendations can be given for promoting cycling in an efficient way:

- The promotion of bicycle use is only credible and successful if cycling is a practical, relatively fast and convenient mode of transport. The main requirements for planning and designing bicycle infrastructure should be satisfied: coherence, directness, attractiveness, safety, and comfort.
- Promotion of the bicycle should include improving the perception of the conditions by (potential) cyclists. Improving the perception of conditions results in increased bicycle use beyond the increases associated with improving the actual conditions.
- Minimizing travel times between origins and destinations is important in designing bicycle infrastructure.
- Urban bicycle routes should preferably be traced through traffic-restrained areas because cyclists prefer cycling conditions involving less traffic stress and interaction.
- Segregation is preferred when there are large differences between the speeds of the different road users and traffic volumes are fairly high. In the urban context bicycle and motorized modes can be mixed on condition that traffic volume is not too high and speeds are harmonized.

- Good design of intersections is essential. Intersections are the most important cause for delays, and most cycling accidents happen at intersections.”

Delft measures its cycle ‘offer’ against other towns using a 10-point chart. The aim is to develop a comprehensive network of links, identified as ‘main’ or ‘secondary’, and to supply the missing links. There are cycle streets (Fietsstraat) in which bikes have priority and cars are ‘guests’. Special attention is given to the provision of secure cycle parking at home and at all public transport interchanges. Problems of bike theft and congestion are being addressed. There is conflict between bikes and cars in the university quarter, where over 14,000 bikes are using the road network. Major investment is taking place, including a number of strategic tunnels/underpasses.

Groenlinks Development enables development to take place on condition that there is more green and natural space, encouraging biodiversity. A rolling programme of green links and banks is being implemented along the local transport corridors.

Provision for disabled travellers

The Mobiliteitsplan recognises that mobility raises social considerations, in particular the relationship between mobility, health and old age. Focusing on active travel may cause problems for the elderly and less mobile.

Demonstrator new neighbourhoods

The urban extension (Het bestemmingsplan) Schieoevers Noord (15,000 new dwellings and 10,000 new jobs) https://www.planviewer.nl/imro/files/NL.IMRO.0503.BP0016-0002/t_NL.IMRO.0503.BP00160002_4.2.html. It is expected that the Schieoevers grow into a neighbourhood with a mix of employment, homes and community infrastructure.

The urban extension of Delft-Zuidoost (4,000 new dwellings, 1,500 of them for students) including Technopolis (research park) started in 2005. Technopolis is located next to the campus of Delft University of Technology. The plan for the area includes a comprehensive approach to climate change proofing called the Green Blue Project).

Relevance to York

Useful lessons and pointers

Delft prides itself on its innovative approach to transport, and York might learn from its activities in the areas of (1) Seeing mobility as a service (2) Actions on freight – involving smaller vehicles and local hubs (3) Widespread use of intelligent traffic systems (4) Experiments in public transport delivery, and (5) Attention to the needs of the less mobile.

Delft puts great emphasis in its transport planning on the need to enhance the sense of place, and on improving bio-diversity. The Mobility Plan deals with mobility in the round, i.e. it considers transport and planning together and with 'place' and the environment as essential aspects. York might learn lessons about climate change resilience.

Delft may teach us some useful lessons about catering for cyclists.

There is a useful report on cycling at:

https://pdxscholar.library.pdx.edu/trec_seminar/119/

TU Delft is researching the possible use of automated vehicles for disabled travellers, and also how well public transport currently serves the needs of the disabled.

Just as with York, the Delft Mobility Plan recognises the need to bring about change of attitudes and behaviours if it is to succeed. It appears to be a well written attempt to engage the public in thinking about the future of transport in their city. It deals with mobility in the round, i.e. considering transport and planning together, and considering 'place' and environment as essentials.

Any aspects which make it less relevant to York

Delft is a polder city – in other words water control and canals are the dominant feature; all land has to be made-up and buildings involve piling. This dictates the pattern of growth, which is carried out in neighbourhood-sized blocks in line with Bestemmingsplannen, which are planned around the public transport network, with joined-up networks of pedestrian and cycle routes.

The population is relatively small, and Delft is part of the wider Randstad built-up area.

Author: John Stevens v2.1 21st May 2021; revised 19th April.2024