

Report on Cycle Study Tour to Utrecht, den Bosch, Eindhoven, Houten 15th to 18th September 2015

Cllr. David Healy

The Study Tour was organised by Cian Ginty, a journalist with Irishcycle.com and André Pettinga, a cycling consultant at [Cyclemotions](http://Cyclemotions.com).

It was very well organised to address planning, engineering, parking, promotion and policy aspects of cycling provision, at both regional and municipal levels, showing implementation of bicycle-oriented policy in a range of areas from medieval town centres, typical 18th/19th century streets and suburbs, modern industrial and residential areas (Utrecht, Den Bosch and Eindhoven), and in a late 20th / early 21st century bicycle-oriented suburb (Houten). The participants were a good mixture of backgrounds, including consultant engineers, cycle campaigners, county councillors, and departmental officials.

This report is structured with first five particularly interesting points, then show some photographs and subsequently some longer, rougher notes.

Some other reports on the study tour are available at Irishcycle.com.

Some Interesting Lessons

1. The primary objective behind the road/street/junction designs we saw was safety. This was both evident from the designs and the stated policy of the designers. This contrasts with the designs visible all around in Ireland where the primary issue considered by traffic engineers has clearly been traffic flow. (Despite the Design Manual for Urban Roads and Streets and the National Cycle Manual even the most recent design proposals in central Dublin such as the Point Roundabout are accompanied by numerical analysis of traffic flow but almost no analysis of safety issues.)
2. Dutch roundabouts and Irish roundabouts are completely different things, designed for different purposes. I asked why a roundabout was chosen for the junction we were looking at. The answer - to slow traffic and make it safe. That purpose was reflected in the design.
 - All of the roundabouts we visited, and there were many, required traffic to join at more or less 90 degrees. (All Irish roundabouts seem to be designed to ensure cars can enter the roundabout at speed.)
 - None of the roundabouts had two lanes entering into the roundabout, although I was assured that there are a few such roundabouts in Utrecht. (In my experience Dublin roundabouts, except for the simply painted roundabouts, provide for two lanes as a matter of course.)
 - All roundabouts included segregated pedestrian and cyclist routes around the roundabout with right of way over vehicles entering and leaving the roundabout, or in a few instances, traffic light controls of these crossings. No roundabouts left

cyclists or pedestrians to cross without right of way. No roundabouts had traffic lights for the roundabout traffic.

3. Curbs which present a 45 degree angle rather than a 90 degree angle to the carriageway and pavement surfaces are much friendlier to cyclists creating both reduced risk and a greater feeling of safety.
4. Dutch cycling underpasses involve raising the level of the road by 1m; this has multiple benefits - better visibility through the underpass, less level change for cyclists, lower land take. Underpasses are a convenient and appropriate design solution to providing separate facilities for cyclists.
5. Irish local authorities need to learn from functional ambience approaches to urban centres, see functionalambience.nl

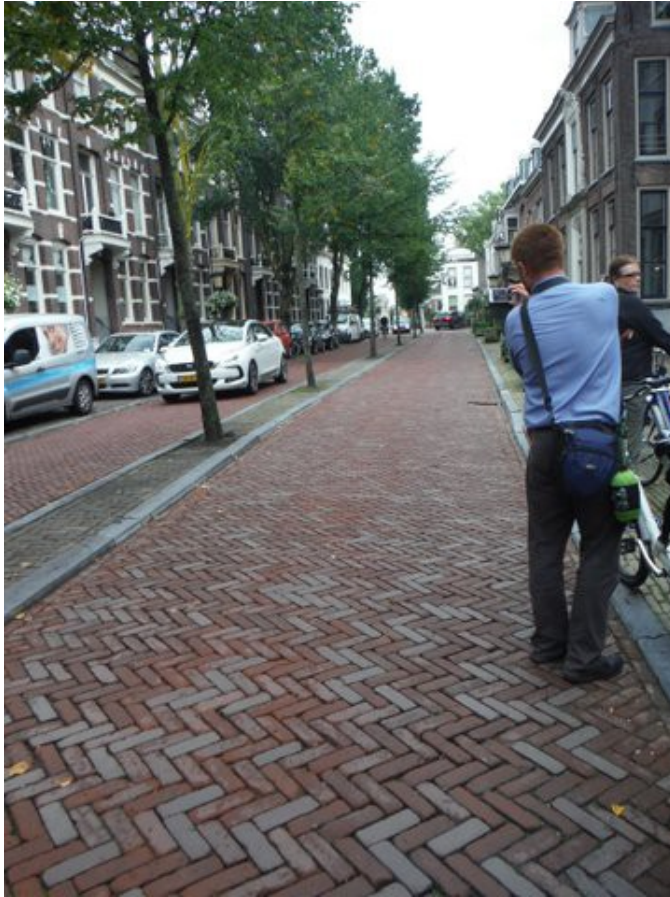
Photographs



Bicycle parking at Utrecht Centraal, internal stairs



Bicycle parking at Utrecht Centraal



Utrecht, bicycle street – median with trees deliberately to prevent overtaking of cyclists



Utrecht, bicycle street one way for cars; beautiful planting around base of street trees



Utrecht, cyclist and pedestrian crossings of arm of roundabout; roundabout traffic must yield



Typical cycleway along major road, minor road traffic must yield



Traffic light junction



Junction – note space to wait in for cyclists turning right



Same junction, photo 2



Same junction, photo 3



Cycleway crosses side road, Eindhoven



Pedestrian and two-way cycleway priority across all arms of roundabout



Eindhoven, arterial road now closed to through car traffic, cycling route



Centre of Houten



Map at junction on Houten bicycle route network



Main artery of Houten bicycle route network



Bicycle underpass, Houten



New housing area, Houten



Primary school with apartments above, Houten



Town centre, Houten Castellaum



School, Houten – all schools are on the main bicycle arteries and accessible without crossing automobile traffic.



Sign for
bicycle
street



Bicycle street, Houten

FINAL schedule (v2.5) for Dutch cycling study tour September 2015

Tuesday 15/9/2015

	First 4 entries based on last flight from Ireland to meet full schedule:
09:40 - 12:15	Dublin to Amsterdam Schiphol
12:15 - 13:00	Passport control etc to airport train station
13:00 - 13:00	Meet at meeting point at Schiphol station (see page 5)
13:00 - 13:45	Schiphol to Utrecht Centraal 32 mins travel time, trains every 15 minutes or less (€8.50*)
13:45 - 14:30	Buffer time for leaving bags at hotels, getting bikes etc
14:30 - 14:30	Group meets at Jaarbeursplein (see page 3)
15:00 - 16:45	Introduction to Dutch cycling and regional developments by Herbert Tiemens, senior bicycle program manager at Regio Utrecht and international bicycle ambassador, Dutch Cycling Embassy Address: Archimedeslaan 6, 3584 BA Utrecht
16:45 - 17:00	Short break
17:00 - 18:30	Functional ambience (urban design) workshop by Dick van Veen, senior consultant of urban planning and traffic engineering at Mobycon

Wednesday 16/9/2015

09:20 - 09:20	Group meets at Jaarbeursplein (see page 2)
09:20 - 12:30	Cycling in Utrecht: Presentation and tour of Jaarbeursplein by Agnes Algera, information officer, Gemeente Utrecht, and Ronald Tamse, traffic engineer at Gemeente Utrecht tour of Jaarbeursplein -- a 4,500-space bicycle parking unit
12:30 - 14:00	Free time for lunch Flexible time for lunch or explore historical city centre etc
14:00 - 14:00	Group meets at Jaarbeursplein (see page 3)
14:00 - 16:00	Cycling tour around Utrecht by André Pettinga, cycling consultant at Cyclemotions, and Frans Jan van Rossem, programme manager cycling at Utrecht (TBC)
16:00 - 17:00	Tour of bicycle parking under construction (12,000 places) by Agnes Algera / other Gemeente Utrecht staff

Thursday 17/9/2015

08:45 - 08:45	Group meets at Jaarbeursplein (see page 2)
09:08 - 09:40	Train from Utrecht Centraal to 's-Hertogenbosch (aka Den Bosch) 30 minutes travel time (€8.80* + €6 Bicycle Day Ticket)
09:40 - 12:30	Cycling in 's-Hertogenbosch: Presentation and cycling tour by Koen van Waes, traffic planner at Gemeente 's-Hertogenbosch
12:30 - 13:15	Train from 's-Hertogenbosch to Eindhoven 20 minutes travel time (€6.20*), buffer time included to catch alt train
13:30 - 14:30	Lunch at de Verlenging (Eindhoven Stadium) Lunch Buffet "De Luxe" ordered (€12.00 per person)
14:30 - 17:30	Cycling in Eindhoven: Presentation and cycling tour Bas Braakman, traffic planner at Gemeente Eindhoven
17:30 / 18:00	Unwind at Philips Light Tower
19:02 / 19:19	Train from Eindhoven to Utrecht Centraal 50 minutes travel time (€14.00*) for anybody who wants to return at different times, trains due to leave at 18:19, 18:32, 18:49, 19:02, etc

Friday 18/9/2015

08:40 - 08.40	Group meets at Jaarbeursplein (see page 3)
08:40 - 09:30	Cycling from Utrecht to Houten 9km takes ~30mins to cycle, so time allocated includes a small amount of time to stop at interesting locations
09:30 - 09:30	Arrival at City Hall Houten Address: Onderdoor 25 in Houten
09:35 - 0945	A word of welcome, with tea and coffee by a city alderman / councillor (name TBC)
09:45 - 10:15	Presentation on cycling and planning in Houten by André Botermans, spatial dev. policy advisor at Gemeente Houten
10:15 - 10:25	Short break
10:25 - 12:25	Cycling tour of Houten by André Botermans
12:30 - 12:30	Lunch / End of schedule Menu of suggested location at: http://www.eetcafegewoonanders.nl

* **Note re train travel:** Prices for are for using Ov-chipkaart (like the Leap card). There's a €1 surcharge for using single-use tickets.



Jaarbeursplein is our daily meeting point

Jaarbeursplein (**square west**) has been chosen as the because it is close to offices we will be visiting on Wednesday and Thursday and close to the train station entrance for Thursday. The exact location we will meet at is at the entrance to the large bicycle parking pictured. The bicycle parking unit at Jaarbeursplein at the west side of Utrecht Central and right beside the Beatrix Theater, Jaarbeursplein 6A, 3521 AL, Utrecht.

The Dutch experts who are the core of this study tour

Note re Dutch experts: A few changes from the previous drafts: The original main Utrecht city staff member lined up is unable to attend, he will be replaced by Agnes Algera, information officer at Gemeente Utrecht and Ronald Tamse, traffic engineer at Gemeente Utrecht; and two of the Mobycon staff members who planned to meet us are also unable to attend, they will be replaced by Dick van Veen, as outlined in the schedule above.



André Pettinga
cycling consultant at Cyclemotions

André will be kindly joining us for the full study tour. With his involvement with the Interface for Cycling Expertise, he has a wealth of experience introducing Dutch cycling to international audiences. He has knowledge and experience of Irish cycling policy, consulting for the Department of Transport on the National Cycle Policy, and for the NTA, on the National Cycle Manual, training sessions for the manual, and Dutch study tours for the NTA/DTO/etc. He also hosted a workshop which led to the planned Liffey Cycle Route.

His educational background is civil engineering and urban planning and design. Working as a civil servant in the seventies and eighties for the city of Delft he was a member of the team who worked on the then experimental Woonerf or home zone, a traffic calming

concept which was copied all over the world. He tweets at:

<https://twitter.com/cyclemotions>



Herbert Tiemens

senior bicycle program manager at Province of Utrecht

Herbert, who is also an ambassador with the Dutch Cycling Embassy and a member of the program board with Fietsberaad (the Dutch knowledge center for cycling policies) specialties are integrated spatial plan development and complete street design. Before regional work, he was a traffic planner with the award winning city of Houten.

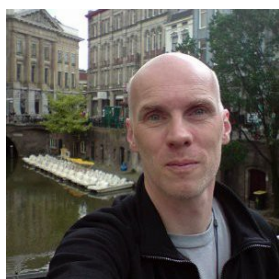
Herbert has experience of cycling conditions in Ireland and, following the inclusion of the idea of a continuous cycle route on Dublin's quays in the city's development plan, he worked on the Fietsberaad / Dutch Cycling Embassy 'ThinkBike' workshop in Dublin in 2011 which kickstarted work on what has now become the Liffey Cycle Route.



Dick van Veen

senior consultant of urban planning and traffic engineering at Mobycon

All of Dick's work is based on the belief that design should be used to preserve public space and encourage human interaction. As a designer for city planning and traffic engineering, Dick is an expert at creative solutions that fit their context and make use of the space available, while also giving all road users access and prioritizing vulnerable users. Dick is experienced in creating car and bike parking and bringing traffic types together in harmony through retrofitting streets and developing Shared Space projects for Dutch cities. He works with municipalities and regions in the Netherlands and abroad.



Ronald Tamse

traffic engineer at Gemeente Utrecht

Ronald is a general traffic engineer with specialisation on public transport, traffic law and road safety. He is currently working on a number of issues, such as the redevelopment of the Utrecht Central station, tram studies for the city, bicycle related issues in both planning and design stages, bicycle parking and paid parking in older areas of the city) and the coordinator of legal issues related to traffic and signalisation. Since 2007 Ronald has worked on the Utrecht Road Safety Label, a quality mark for primary schools that structurally put effort into the road safety around the school and into traffic education.



Koen van Waes

traffic planner at Gemeente 's-Hertogenbosch

Koen van Waes is part of a city with ambition: In 2009 he and a colleague of wrote the Lekker Fietsen bicycle plan, which plans for 's-

Hertogenbosch's percentage of cycling increase from 33 to 44 per cent. For this all stops are pulled out. Not only will the bicycle network be upgraded and bicycle parking standards increased, and cyclists will once again be admitted into pedestrian areas.



Bas Braakman

traffic planner at Gemeente Eindhoven

Bas Braakman also has working knowledge of Dublin, so he should be able to guide on what lessons are best suited to take home. His city, Eindhoven, is now famed for the Hovenring, a large “floating” bicycle roundabout, but the wider story is a mixed one.

His city is pushing cycling, but is seen as a bit of a late starter compared to some of the Netherlands' more cycling friendly cities.

Unlike some Dutch cities, Eindhoven's ring road not fully complete and this is said to result in a significant amount of through traffic.



André Botermans

spatial development policy advisor at Gemeente Houten

André Botermans works at the urban planning department of the City Council of Houten and since 2011 he is associated with the Dutch Cycling Embassy. Graduated in 1989 as an engineer in urban planning and design, he worked with several city councils, and a regional government. During this period he studied part-time at the

Academy for architecture and urban design. In 2001 André started as urban planning officer in the city of Houten.

Houten, originally a small village close to Utrecht in the heart of the Netherlands, started to be developed as new town some 40 years ago and has now a population of nearly 50.000 inhabitants. By a very advanced urban design Houten became an early success in sustainable urban planning. Specific feature is the smart designed network with bicycle-paths in a green and car free public space. Within four decades Houten has built up a worldwide reputation as bicycle-town. As an urban planner André has a passion for nature, and environment-friendly and sustainable design.

Extra information:



Taking your bike on the train

The following is taken from the Dutch railway's website: “If you want to take your bicycle with you on the train, you need to buy a Bicycle Day

Ticket (Dagkaart Fiets), which costs € 6.00. Be aware that space is limited. You can only take your bicycle with you on the train outside peak hours, which are 06.30 to 09.00 and 16.30 to 18.00 on weekdays. This restriction does not apply at weekends, on public holidays, or in the months of July and August. Bicycles must be placed in the train's special bicycle section, which can be recognised by the sticker on the outside of the train. The terms and conditions for taking a bicycle on the various international trains and the Intercity direct vary. See [NS International.nl/en](http://NSInternational.nl/en) for more information."

Route planner of the Dutch Cyclists' Union

For those spending extra time in the Netherlands, this may be useful:

WEB: <http://en.routeplanner.fietzersbond.nl/>

APPS: <http://www.fietzersbond.nl/apps>

Tweet the study tour? #ieinnl

André Pettinga <https://twitter.com/cyclemotions>

Herbert Tiemens https://twitter.com/herbert_tiemens

Dick van Veen <https://twitter.com/Dickvanveen>

Koen van Waes <https://twitter.com/koenvwaes>

Angela van der Kloof <http://twitter.com/AngelavdKloof>

If you use Twitter and are planning on tweeting images or info from the tour, you can use the #ieinnl hashtag, so we can all keep track (#ieinnl = Irish group in NL).

Longer notes

Province of Utrecht

Introduction to Dutch cycling and regional developments by **Herbert Tiemens**, senior bicycle program manager at Regio Utrecht and international bicycle ambassador, Dutch Cycling Embassy

Five requirements - coherence, directness, attractiveness, safety, comfort.

'sustainable safety' principles

45 degree curbs not right angles

Safety orientation of design - safety comes before ensuring traffic flow.

Roundabout design and purpose are completely different.

Similar problems with aggressive motorists/mopeds and anarchic cyclists as in Ireland. Road design minimises conflict and opportunities for problems.

Cyclists' priority is respected.

Navigation can remain an issue; separate facilities often need signs to explain them.

Red asphalt for cycle facilities (not overlay.)

functionalambience.nl

Functional ambience (urban design) workshop

by **Dick van Veen**, senior consultant of urban planning and traffic engineering at Mobycon

Highly relevant to urban, town and village centres.

Cycling in Utrecht: Presentation and tour of Jaarbeursplein

by **Agnes Algera**, information officer, Gemeente Utrecht

Tour of Jaarbeursplein -- a 4,500-space bicycle parking unit

Reinstatement of Catherinesingel canal, drained in 80s to put in 9 lane motorway, motorway project soon recognised as mistake and motorway plan abandoned after the few hundred metres in the city centre.

Major renovation of important railway station - 88m passengers per year. (Compare Connolly probably around 8 or 9 million.)

Addition of 12,000 bicycle parking spaces on 3 levels under a new station plaza, to add to an existing 4,500 space bicycle park.

Ronald Tamse, traffic engineer at Gemeente Utrecht

e-bikes leading to increase in maximum distance people are willing to cycle

higher network density for cycling.

Cycling tour around Utrecht

by **André Pettinga**, cycling consultant at Cyclemotions,

Why a roundabout?

To slow traffic and make it safe.

Cycle streets

Bicycle parking

Car ownership just as high as, or higher than Dublin; the difference is people choose their bicycle for short routes.

Cycling in 's-Hertogenbosch: Presentation and cycling tour

by **Koen van Waes**, traffic planner at Gemeente 's-Hertogenbosch

Within city centre 33% bicycle modal share in 2004, aiming for 44% in 2015.

Bike parking including toilets, repairs, free lockers, free buggy rental
station parking -

50 car spaces in an underground or multi-storey parking structure works out at about
1300 bicycle spaces

Cycling allowed in all pedestrian areas; people expected to moderate their speed etc. at
times when there are many pedestrians. Recognition that bicycles act as a sort of
shopping trolley for many people.

Arnold Bongers

Trip around den Bosch

Roundabout installed to replace traffic lights to ensure safety. Roundabout slows traffic
much more so is after - accidents are minor not serious because of low speeds at
roundabouts.

No roundabouts with traffic lights.

Note pedestrians and cyclists are segregated and have right of way crossing all
roundabout arms. All roundabout arms meet the roundabout at close to 90*

Eindhoven

Bas Braakman

Fietsbalans

baby buggy lending scheme

gathering info on cyclists' experience and views

Conversion of a major arterial road into a cycling street - (demonstrates the potential for removing vehicular through traffic from the Phoenix Park), done as part of a major development of a technology campus type area.

Slowlane

Green corridor

Houten

André Botermans

Suburb of Utrecht designed to facilitate separated cycling. Northern Houten 30,000 people, maximum 8 minutes cycle to centre/train station. No traffic lights in the town. Cyclists always have priority. 80% low rise with gardens.

6year old children cycle to school on their own. All schools are on the green belt/main bicycle arteries with no crossing of car routes

All crossings of the ring road are grade separated.

Entire area is 30km/hr.

Since the first town was built there has been a decision to extend into a wider area; new railway station, dense centre, medium density then lower density.

coloured and numbered bicycle routes for navigation.

Houses worth 20% more than Utrecht.

1.5m passing distance- Phil Skelton, Wexford, Stayin' Alive at 1.5 on Facebook.