

An Mheitheal Rothar Public Consultation Submission on: Sustainable Mobility

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About An Mheitheal Rothar

An Mheitheal Rothar is a social-sustainable enterprise based in Galway City focused on promoting sustainable, active mobility and addressing circular economy challenges. Our mission is to encourage and nurture a culture of cycling in Galway city, by establishing a practical, ethically motivated facility and social hub, which encourages a strong community and promotes the health and environmental benefits of cycling.

Our free **bicycle DIY workshops** provide skills training for people to maintain and repair their own bikes with the help of our volunteer mechanics. We also offer paid repairs and services, as well as a community space for community groups such as Zero Waste Galway to meet and run events.

Our award winning circular economy initiative, **ReCycle Your Cycle**, takes bikes sent for scrap from council waste depots and uses them to train long term unemployed people in cycle mechanic skills via the Tús scheme.

About the contributors

This submission was prepared with input from **Eoghan Clifford, Senior Lecturer in Civil Engineering at NUI Galway**. Eoghan lectures at undergraduate and postgraduate level in the areas of transport infrastructure and engineering with a focus on active transport and public transport. He has contributed to Engineers Ireland “State of Infrastructure” reports and has worked for, and with industry and local authorities on various transport projects. He has also received research funding from the National Roads Authority in the area of cycle network design. He was also a member of the Board of Directors for Paralympics Ireland from 2017 – 2019 with direct experience in mobility and transport challenges for people with physical disabilities.

An Mheitheal Rothar’s board includes experts in engineering, human geography, sustainability, campaigning and community development (<http://www.bikeworkshops.ie/our-board/>).

Background

This submission focuses on cycling in Galway City and environs but is applicable to all urban centres in Ireland. We want to see Galway City and nearby areas become a cycle friendly environment, where active transport is at the heart of planning.

The main focus of this submission is on short-term, low cost interventions that could significantly improve the safety and useability of cycle infrastructure and road infrastructure. National policy should have as a clear goal, the implementation of such interventions and the ongoing audit and upgrade of existing cycle facilities, in the same manner as local authorities audit and upgrade road infrastructure.

Ireland faces key societal challenges, such as climate change, obesity and other health issues such as mental health, transport inequality, quality of life metrics and improving productivity. In this context, it is internationally recognised that few interventions are as successful at tackling these issues as switching commuters from cars to active transport such as walking and cycling.

¹ Indeed, few policy interventions can positively impact all these areas in the way walking and cycling can. The 17 UN Sustainable Development Goals (SDGs), with their 169 targets and 232 indicators are a pre-existing commitment and framework being implemented with supervision from the Department of Communications, Climate Action and Environment. A sustainable mobility policy should be explicitly linked with the SDG targets and do something do nothing scenarios with their impacts on the targets demonstrated.

In the context of Galway City, there has been limited changes in cycle infrastructure in the last decade. This is in stark contrast to many European cities of the same size or bigger which have seen major changes in transport infrastructure.

The design of sustainable transport infrastructure cannot succeed unless backed up by improved urban planning, reduced urban sprawl and better major (rapid) investment in active travel modes and public transport². Design policy should leverage world leading examples, with a particular focus on examples such as the Netherlands, and cities such as Seville, Utrecht, Eindhoven, Ljubljana, Poznan, Munster, Subotica (Serbia).

¹ <https://www.unenvironment.org/news-and-stories/story/cycling-better-mode-transport>; An et al., 2018

² <https://www.eea.europa.eu/publications/urban-sprawl-in-europe>

Major investment in Ireland's cycling infrastructure is needed³, with the EU recommending 10% of transport budgets should be spent on cycling. In Ireland however this figure is around 1%⁴. Even a structured programme of minor works and changes to design policy could have significant and short-term impacts⁵. In some cases, cycle infrastructure is so poorly designed it actually decreases safety for cyclists.

General recommendations

Use inclusive and informed design. Planners and engineers need to better understand the requirements of pedestrians and cyclists. Infrastructure designed for cars is generally not suitable for cyclists and pedestrians. An inclusive approach to design would understand that cyclists and pedestrians should be enabled in all forms – e.g. wheelchair users, elderly cyclists, pedestrians (including parents with buggies), cyclists carrying children or pulling trailers (which can weigh up to 50 kg), school children etc.

Designers need to **understand such users and appreciate their requirements**. For example, traffic lights located on a 7% incline will make it impossible for most cyclists to use a route, especially if they are carrying children; bicycle trailers cannot pass through kissing gates and thus are restricted access to many areas; narrow and unsheltered bicycle parking is not suitable for trailers of child seats. Consulting with cyclists and their representative groups in a structured way and at an early design stage would lead to better design. Indeed, key decision makers/designers actually cycling routes with such groups would be a welcome step in improving design. This should form part of a better active travel policy.

Push active travel targets for cities to meet. This could be done by linking to funding or link to climate commitments. Cities need to be pushed to improve active travel modes rapidly and targets should be set by the national government and linked to funding. Local authorities that meet targets should be financially incentivised. Funding to meet such targets should be

³ <https://assets.gov.ie/42950/f789b2fcfb144441822f58236986eaea.pdf>

⁴

https://ec.europa.eu/transport/sites/transport/files/cycling-guidance/ecf-cycling-for-growth-using-european-funds-for-cycling_0.pdf

⁵

<http://imj.ie/the-current-state-of-cycling-infrastructure-in-dublin-and-copenhagen-a-comparison-of-cycling-infrastructure-in-8-radial-routes-into-the-city-centre-of-dublin-and-copenhagen/>

guaranteed if suitable proposals from local authorities are submitted and relevant national stakeholders (e.g. NTA, Government etc) should actively support local authorities in this.

1. Permeability

The design of many Irish residential estates limits access in and out. This requires residents and those traversing the estates to take long detours to reach their destinations, leading to low permeability. Many measures that would increase the possibility of active transport and thus decrease congestion can be taken with minimal cost and planning at local level. These include creating gates, paths and access points to common destinations such as schools, shops and workplaces. Removal of barriers to cycling and walking such as fences and kissing gates can significantly increase permeability.

A fear of anti social behaviour and crime often drives decisions about permeability [ref]. One measure that addresses this is to have clear lines of sight across all pathways and openings, so that there is minimal incentive to hide or congregate on pathways.

Recommendation 1.1

Increase permeability for pedestrians and cyclists by increasing the number of entrances and exits to residential areas. Particular attention should be paid to linking with nearby schools, shops and workplaces. Local authorities should actively audit residential areas and implement measures that would increase permeability. Such measures should be presented to local residents and interested stakeholders

Recommendation 1.2

Increase visibility of cycle lanes and pedestrian pathways.

2. Design of roundabouts

The design of Irish roundabouts falls far short of international best practice. Roundabouts in urban areas are a significant impediment to cycling in particular. Importantly, they are not designed to be safe for cyclists.

Roundabout design in the Netherlands involves measures to slow cars and allow bikes to travel with ease. In most cases cyclists have full priority around roundabouts - particularly urban environments. Thus in countries such as the Netherlands roundabouts are very accessible to cyclists and pedestrians.

Design of roundabouts (with a focus on urban areas) should actively induce reduce vehicle speeds (< 30 kph), ensure cyclists have priority at all stages while entering and leaving a roundabout, should not function as a series of slip roads and not require a cyclist to interact with pedestrians. Low cost interventions are possible which can significantly improve the useability and safety of existing roundabouts.



ABOVE: FIG 1: Best practice roundabout from Eindhoven, Netherlands. Note seperate level for cyclists with total separation from cars.



ABOVE: FIG 2: Typical “Dutch” style roundabout. Note cyclists have a specific lane all round and priority, while traffic lanes are not very wide on approach and design ensures drivers must slow down considerably and/or stop. Cars are completely separate from cyclists except at crossings. While such designs can take up large spaces in many existing cases they can be achieved.

Recommendation 2.1

Develop new design standards for roundabouts that are expected to have cycle traffic. Implement policy for the upgrade of roundabouts in urban areas using best practice models such as in use in the Netherlands.

Recommendation 2.2

Add pedestrian and cycle options for crossing roundabouts

3. Maintenance of cycle lanes

Where they exist at all, Galway’s cycle lanes are often left to accumulate debris (and this is repeated throughout Ireland). This makes the lanes either difficult to pass along due to leaves and rubbish, or likely to cause punctures in the case of glass and metal. This is often in contrast

with urban road surfaces which are regularly cleaned. We could improve this situation by ensuring every local authority has a specific policy on cleaning cycle lanes.

Recommendation 3.1

Councils should maintain and clean cycle lanes on a regular basis.

4. Bike specific traffic signals

The Dutch system includes specific light signals for cyclists. This shortens journey times by ensuring that active transport users such as pedestrians and cyclists are not left waiting to cross roads for long periods. It also increases safety by reducing the likelihood of accidents.

Recommendation 4.1

Cycle and pedestrian specific traffic signals. This should form a specific part of national and local authority policy and there should be ongoing audit and upgrade of signalisation.

5. Weather related measures

Weather is one of the factors cited in the Sustainable Mobility discussion papers as a reason for people not to choose cycling.

Galway's climate is extremely wet, and in coastal areas there is also a high salt content in the atmosphere. This means that bikes here are more seriously affected by weather than in other areas. We must provide measures to encourage cycling that take this into account. For example, covered bike parking is much better than open bike racks.

Recommendation 5.1

Provide covered bike parking wherever possible.

6. Journey connectivity

Currently cyclists face a penalty for bringing their bikes on other forms of transport, such as a cost to bring bikes on trains and intercity buses. Route buses within Galway lack any facility to bring a bike at all. Bike spaces on trains are limited.

Recommendation 6.1

Make it free to bring bikes on trains and buses. Ensure secure bicycle parking at bus and train stations.

7. Awareness campaigns focused on vehicle drivers

Despite the lack of infrastructure, cycling in Ireland is increasing as a form of transport. Alongside infrastructure a major barrier to cycling is driver behaviour. While recent RSA ads in terms of passing distance are very welcome, other areas of driver behaviour have significant impacts on cyclists.

This can particularly impact uptake of cycling by children (due to safety fears from parents), elderly people, women and parents who want to transport their children. For example, overtaking and cutting off a cyclist travelling uphill (especially if carrying children or pulling a child-trailer) can cause cyclists to have to stop suddenly and not be able to re-start cycling due to the hill gradient. Children on bikes may not be as aware of signalling their intentions and drivers should slow down to appreciate this. Cyclists can lose balance due to heavy vehicles passing at speed. These and other broader issues all impact uptake of cycling and improved driver awareness can help improve the situation.

Incentivise cycling with advance stop line/box for bikes at intersections. This allows bikes to get ahead of stationary traffic and take priority when the lights change.

Recommendation 7.1

Develop awareness campaigns targeted at drivers that enable them understand the dynamics of cycling. This should occur during (and be a structured part of) driving training and also via a variety of media.

8. Cycle specific intersections

There are many factors that can help improve safety and flow for cyclists at intersections. Cyclists accelerate at a different rate than cars. Allowing cyclists priority at intersections helps them get ahead of traffic when lights change. Joined up thinking that ensures cyclist and pedestrians have clear pathways across the full extent of their journey would also help.

Intersections also need to be designed with the needs of all travellers in mind, including children in bike trailers, slower/less confident cyclists, older people etc. Ensuring the safety of these groups involves measures such as covering drains, ensuring lanes are wide enough for them to pass, and ensuring cars are stopped for long enough for them to cross.



ABOVE: FIG 3: Intersection at Headford Road junction, Galway City. Note: there is no priority for cyclists; cycle lane suddenly ends forcing cyclist to merge traffic (there is kerb to the footpath) with cars passing at speeds of 50km+. Drains are positioned in such a way that bike trailers can fall in, causing serious danger to children in trailers.

Recommendation 8.1

Include advance stop line/box for bikes at intersections.

Recommendation 8.2

Prioritise cyclists and pedestrians at intersections.

Recommendation 8.3

Design intersections with the needs and safety of vulnerable groups such as children, people with a disability and older people in mind.

9. Galway urban greenway

While much of the discourse around greenways focuses on them as leisure options, they can also form part of a valuable network of commuter options, especially in a place like Galway City and Country with dispersed, decentralised populations. Many people in commuter towns such as Moycullen and Barna would avail of the opportunity to use a greenway to get to work, study or access services in Galway City.



ABOVE: FIG 4: The proposed Galway Urban Greenway would connect commuters in Barna and Knocknacarra with access to the city, NUI Galway, Dangan and Moycullen. (Source: Galway Urban Greenway Alliance).

Recommendation 9.1

Build the Galway Urban Greenway from Barna to Moycullen via Salthill Prom, Claddagh and Dangan.