

# BEYOND THE BICYCLE



# WHO AM I?

Mark Philpotts  
Chartered civil engineer

I'm coming at this from my point of view.

Other experiences and stories should be listened too.

It turns out that we can't boil it all down to numbers!

#M3276



# WHO ARE WE?

Set up in 2017.

A group representing users of non-standard cycles.

Aim of facilitating discussion and developing ideas that will lead to improved infrastructure, facilities and recognition, along with reduced user costs, for users of non-standard cycles in London – including, but not limited to, disabled, cargo, freight and family cyclists.



# WHO ARE WE?

- Disabled cyclists.
- Cargo cyclists.
- Family cyclists.
- Cycling businesses.
- Cycling logistics.
- Highway engineer.
- Town Planner.

Amazingly, many of us fit into more than one category, just like in real life!  
Funny that.





# WHAT'S WRONG WITH BICYCLE?

The word “bicycle” can limit one’s views on who might ride a cycle.



# WHAT'S WRONG WITH BICYCLE?

The word "bicycle" can limit one's view on the types of machine available.





# WHAT'S WRONG WITH BICYCLE?

The word “cycle” is more inclusive.



# WHY BEYOND THE BICYCLE?

People are diverse (and they change with time).

Cycles are diverse.

What people use their cycles for is diverse!

Cycles are mobility.





# WHY BEYOND THE BICYCLE?

Cycling is easier than walking for many.

Cycling is for families.

Cycles can shift goods.

Cycling trips can replace car trips.



# WHY BEYOND THE BICYCLE?

Infrastructure design is enabling.

Barriers need to be removed;

- Societal,
- Physical.



# SOCIAL MODEL OF DISABILITY

Scope describes the social model of disability;

“The social model of disability is a way of viewing the world, developed by disabled people.

The model says that people are disabled by barriers in society, not by their impairment or difference. Barriers can be physical, like buildings not having accessible toilets. Or they can be caused by people's attitudes to difference, like assuming disabled people can't do certain things.”



# SOCIAL MODEL OF DISABILITY

The social model helps us recognise barriers that make life harder for disabled people. Removing these barriers creates equality and offers disabled people more independence, choice and control.

- How does this apply highway design?
- How does this apply to attitudes?
- What sort of design decisions are exclusionary?
- Do we think about "hidden" disabilities? E.g. autism, anxiety, epilepsy.
- How about visually impaired people?





# OUR MANIFESTO

## Infrastructure

Promote cycle infrastructure that is inclusive of non-standard cycles, by encouraging use of the 'Inclusive Cycle' concept as outlined in the London Cycling Design Standards (LCDS).

Push for the development of an inclusive cycling 'tube map' of London, which illustrates all fully accessible cycling routes in the capital.



# OUR MANIFESTO

Ensure that disabled, cargo, freight and family cyclists are consulted in the design and development of new cycle infrastructure.

## **Subsidies and incentives**

Push for the piloting of a subsidy for non-standard cycles in London, from which others can learn and share knowledge.





# OUR MANIFESTO

## Facilities

Advocate for a greater allocation of cycle parking spaces for non-standard cycles and for more inclusive cycle storage facilities.

Work with cycle hire providers to ensure that cycle hire and loan schemes are made as inclusive as possible.



# OUR MANIFESTO

## Recognition

Actively encourage the representation of non-standard cycles in cycling imagery.

Commit to improving recognition of the fact that cycles offer green and health enhancing mobility solutions for all, including disabled, younger and older people.



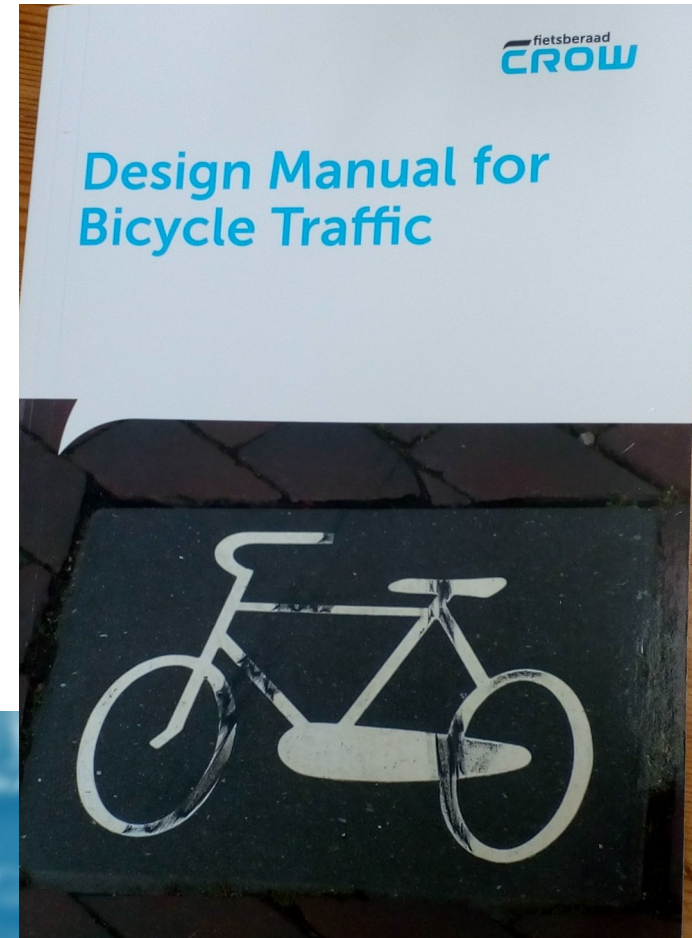


# DESIGN

Beyond the bicycle means ensuring designs are fit to accommodate and enable anyone to cycle.

Design standards and guidance are important because many professionals rely on them and may not always understand the issues underpinning them.

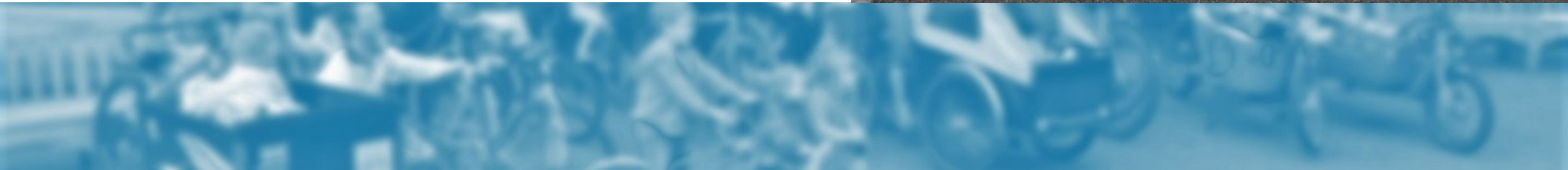
We want to promote and celebrate good practice and give credit where it's due!



# DESIGN PRINCIPLES

- Some people use cycles as mobility aids because they find cycling easier than walking,
- Some people cannot dismount or they find wheeling their cycle difficult,
- Adapted and non-standard cycles cannot be easily lifted,
- People need space within which to move and manoeuvre,

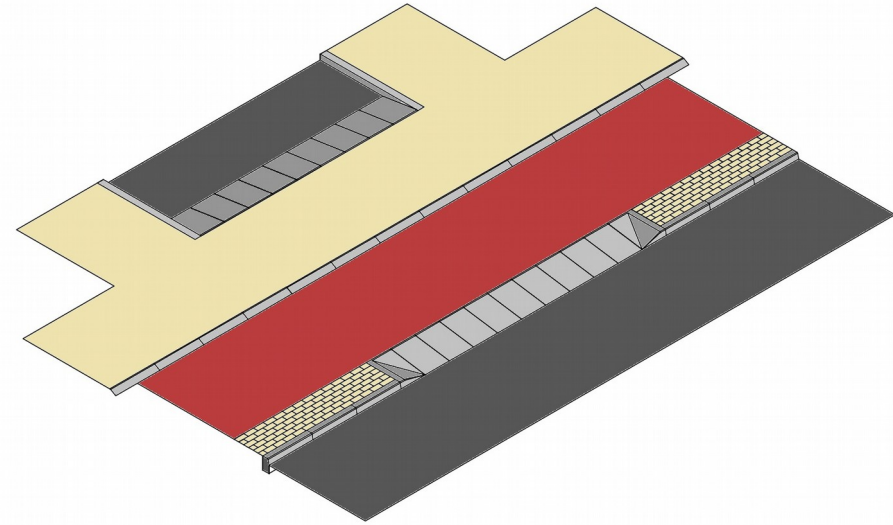
30° forgiving kerb, Bristol (Toby Wells)



# DESIGN PRINCIPLES

- Layouts should be intuitive and legible to avoid people being anxious about negotiating them,
- People need smooth surfaces on which to travel,
- Steep gradients and cross falls are difficult to negotiate,
- Separation of walking and cycling space being the norm,

Entrance kerb (City Infinity/ Charcon)





# DESIGN PRINCIPLES

- Designs also need to be accessible to others such as visually impaired people, people with learning difficulties, hidden disabilities etc





# DESIGN DETAILS

- Gentle cross falls – steep cross falls and cambers are a problem for users of cycles with 3 or more wheels,
- Asphalt to asphalt connections without kerbs for smooth transitions between cycle track and carriageway,
- Machine-laid asphalt for cycling surfaces,



# DESIGN DETAILS

- No staggered barriers, use bollards with a 1.5m minimum clear air gap to stop car access,
- Forgiving kerbs on cycle tracks to allow access to the footway,
- If dropped kerbs are to be used by people cycling they should be flush and perpendicular to the line of travel,
- Signage at a human scale and position





# DESIGN DETAILS

- Separate space for people walking and people cycling,
- Avoid road humps where possible, if not, use sinusoidal humps,
- Do not use rumble strips,
- Detection rather than push buttons,
- Generous turning radii,





# DESIGN DETAILS

- Space around cycle parking, low level stands, ground fixings,
- Cycle parking reserved for non-standard cycles,
- Cycle parking at building entrances,
- Detectable kerbs between footways and cycle tracks,



# DESIGN DETAILS

- Not requiring people to look behind themselves,
- Pedestrian crossing points – flush kerbs, tactile paving and perhaps mini-zebra crossings on cycle tracks.
- Many people cannot dismount and they certainly cannot lift their cycles,
- Avoiding the need for people to stop as getting moving again expends energy,



# DESIGN DETAILS

- Avoiding tight turns,
- Single stage crossings,
- Non-staggered two-stage crossings,
- Signal timings which take into account that some people need more time to get moving, either because of their power or the type of cycle they are using,





# ONE FOR ALL AND ALL FOR ONE

Making cycling  
accessible for one  
group makes it easier  
for everyone.



# ONE FOR ALL AND ALL FOR ONE

Making cycling accessible for one group makes it easier for people who don't cycle.





# RESOURCES

We are still developing ideas, but we want to provide useful information to enable people to raise Beyond the Bicycle issues themselves.

We're looking at good practice and guides to help people take action.

We're also looking at publicising case studies to inspire people to take up the cause.





# CAMPAIGNING

Our campaign for 2020 is #BashTheBarriers.

Barriers of all kinds of layout make it hard to pass for many and impossible for some.

We're planning a year of action in London, but we'll publish and publicise what we're up to so that the message travels further and people can help in their area.



# THE CORONAVIRUS DIMENSION

- Our world has changed in a few weeks,
- A significant drop in motor traffic is hinting at latent demand,
- Local authorities struggling to understand legislation,
- Little help from the Government.

Berlin (James Conway)





# THE CORONAVIRUS DIMENSION

- How do we react tactically to the ongoing crisis?
- How will we ensure we keep things accessible?
- What is our strategy for the recovery phase which will be measured in years?
- What will the new normal look like?

Leicester (Cllr Adam Clarke)

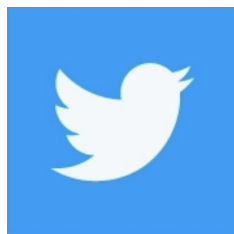




# ON THE WEB



[beyondthebicycle.org.uk](https://beyondthebicycle.org.uk)



@BeyondBicycle  
#BeyondTheBicycle



# THANK YOU

Even the city of cycling and clever people, it does go horribly wrong!

Huge thanks to Lucinda Price  
@lucyfrog for the photo!

