a vision for 2020

from Cambridge Cycling Campaign

CYCLING**2020**

I am pleased to endorse Cycling 2020.

I'm delighted to see that Cambridge residents are so committed to promoting a cycling culture and to protecting the environment in Cambridge. In a city where one in four residents cycles to work, we need to provide top-notch facilities for cyclists.

David Howarth, MP for Cambridge

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CYCLING2020

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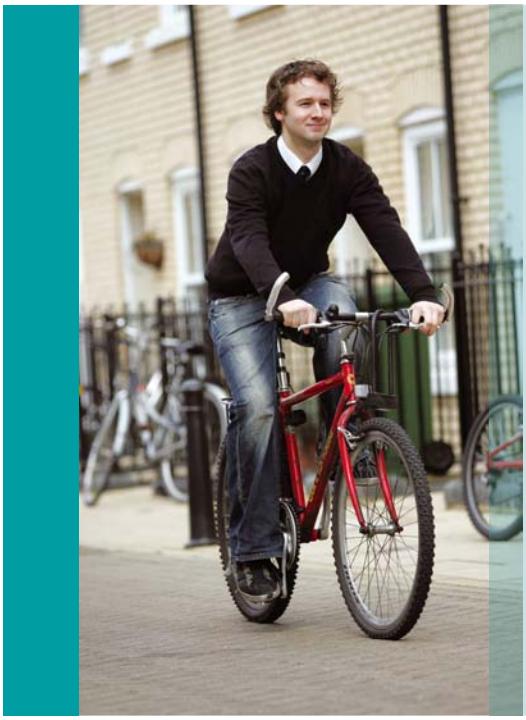
First published: May 2008

Foreword



CYCLING2020

Cambridge is often known as a cycling city. Its vibrant cycling culture, with probably the highest rate of cycling in the country, is an asset to a city which would otherwise be even further choked with traffic.

Yet this cycling culture exists in spite of, rather than because of, many of the efforts of the City and County Councils to provide for cycling. What efforts do exist are often hampered by a road-safety culture that seeks to insulate, rather than a culture which seeks to achieve safety and freedom by thinking in terms of convenience.

Too often, mediocrity prevails, with a style of thinking that seeks to squeeze cyclists in where possible, rather than provide genuine priority in a way which will entice more people to cycle, more often.

Evidence from abroad shows that providing for cycling in a genuinely pro-active and positive manner is possible. Whilst investment levels in sustainable transport have historically been higher in areas such as the Netherlands and parts of Germany, what is really present there is a political willingness to give cycling the priority it deserves: a willingness to ensure that cyclists are able to travel on safe roads, without the sort of barriers and traffic levels which pervade our own city. A willingness to promote cycling for what it is: a healthy, sustainable, and congestion-busting form of transport that it is in everyone's interests to see more of.

Some road users will complain that cyclists don't pay their way. On the contrary – cyclists pay the relatively tiny sum spent on them through general and local taxation. Yet the real financial value of cycling is that of time savings for motorists: every cyclist is potentially one fewer car in a traffic jam. Every cyclist reduces the pollution levels which are damaging to the city's health. In summary, every cyclist increases the ability of the city to function, economically and socially.

As tens of thousands more people flood in to our prosperous region and as homes are built to accommodate them, the need to ensure that Cambridge's cycling culture is maintained and extended could not be greater.

We invite you to share our vision for a world-class cycling city. A city which genuinely values cycling and the contribution it makes. A city which wants to see even higher levels of cycling, where cycling becomes a real alternative that even children and the infirm could safely use without the sort of dangers, or perceived dangers, that sometimes exist.

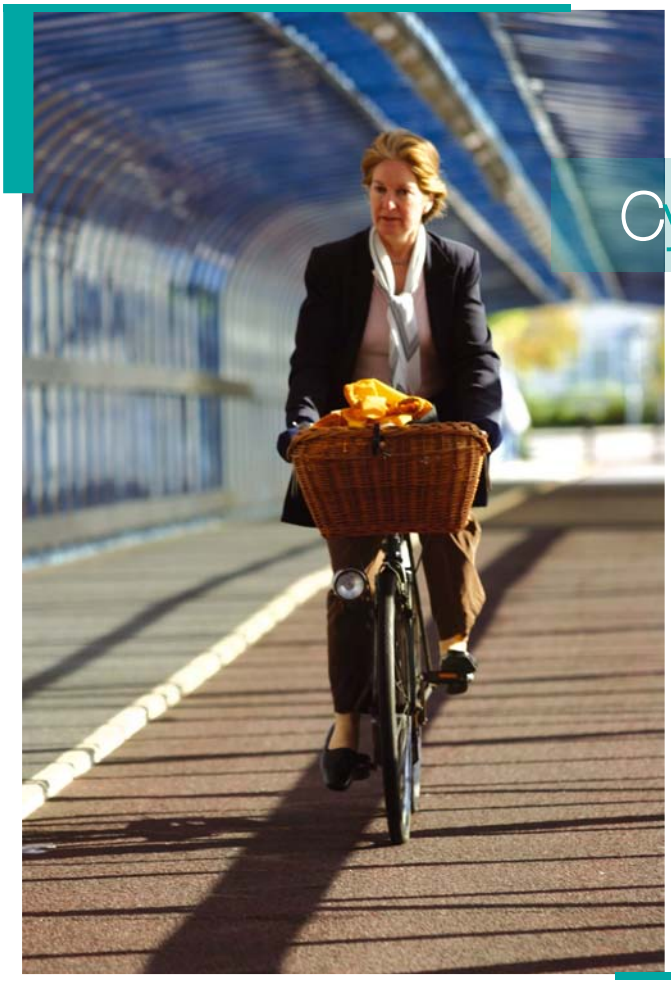
All the solutions we outline seek to address the source of the problem: too much traffic on the road going too fast, with too large an impact on the life of the city.

We profile in this brochure some of the policy areas which desperately need to be addressed and for which better alternatives do exist elsewhere. We set out some major schemes, including our proposed flagship route, the Chisholm Trail, which would revolutionise many journeys surrounding the north/south railway spine of the city.

Much of what is possible merely needs the political will to implement. We hope we will inspire you, through this brochure, to share our vision and to let us know your thoughts.

Martin Lucas-Smith, Co-ordinator

ONE.. Why Cycling?



Cycling...

...is just as much a legitimate form of transport as cars, buses, and motorbikes. Cyclists are just as much road users as those behind the wheel.

As such, the needs of cyclists are as important as the needs of motorists and should be given increased status when traffic schemes are being designed.

This means, for example, that anything which seems silly to a motorist is likely to seem silly to a cyclist and anything which holds up a cyclist or makes their life difficult should be considered as seriously as if a motorist were being disadvantaged. Yet, as we demonstrate later, this is often not the case. Obstructions, lack of continuity and so on are the norm and do nothing to encourage more people to get on their bikes.

The benefits of cycling

> "Cycling has so many benefits, from being an efficient use of space to helping combat climate change. Not to mention the fact that people who cycle regularly have an average fitness of someone 10 years younger"

The benefits of cycling are numerous.

It's a cheap and reliable way of providing mobility for thousands of people and money spent on providing better cycling conditions has a beneficial effect on all transport users. Top-quality cycle routes can be built for a fraction of the price of many road schemes.

Cycling makes efficient use of space, which is at a premium in Cambridge. Road capacity is increased perhaps tenfold if bikes are used instead of cars and some ten cycles can be parked in one car space.

Cycling is good for the environment. With the increasing concern over climate change, energy conservation is now a priority in most countries and it's worth noting that a cyclist can travel about 500km on the energy equivalent of a litre of petrol. Furthermore the fuel a cyclist uses – food – can be locally grown and cycles use very little fossil fuel – just a little oil from time to time! Of course, food production does involve fossil fuels, as does manufacturing cycles, but less than in manufacturing motor vehicles. A cyclist also produces far fewer carbon emissions, is almost noiseless and produces no pollution.

Cycling is good for the body. Regular cycling reduces body weight, tension and the risk of heart disease. The average cyclist lives longer than the average non-cyclist. It also makes people more efficient at work. People who cycle regularly have an average fitness level of someone 10 years younger.

Cycling is a faster means of transport, particularly in Cambridge. The vast majority of urban journeys can be made faster by bike than any other way.

Cycling - Cambridge's decongestant

> "People assume that the difference in traffic in school holidays is about a third. But in fact, the volume of cars is only 10% less. So moving even that small volume to cycling would help enormously"

> "Ironically for a cycling campaign, we have long promoted the computer modelling of a no-cycling day, to demonstrate the huge contribution cycling makes to keeping traffic levels down"

If encouraged and promoted effectively, cycling can offer fast relief from congestion, particularly in Cambridge's often narrow and traffic-clogged streets.

Studies have shown that during half-term and school holidays, almost all the traffic queues in Cambridge disappear. This is despite the fact that the volume of traffic only drops by 10%. So removing 10% of the traffic would mean all forms of transport would flow much more freely. Yet, almost 50,000 new dwellings are planned around Cambridge in the coming decade, so we have to go further than 10%.

Conventional wisdom says that building more roads and better junctions will help to ease traffic flows. However, research shows that the same effect can be achieved for less money by investing in other forms of transport, such as cycling. This is because good alternatives tempt sufficient people out of their cars to obtain the 10%+ reduction.

As a result, contrary to popular belief, more cyclists on the road actually make drivers' journeys faster because there are fewer cars. Ironically for a cycling campaign, we have long promoted the computer modelling of a no-cycling day, when the large number of cyclists who normally leave their car at home drive instead, to make people realise the huge contribution cycling makes to keeping traffic levels down.

The Campaign believes that a heightened investment in first-rate, continental-standard conditions for cyclists would have a huge impact on traffic volumes in Cambridge, as well as reducing levels of pollution and environmental damage.

TWO.. Providing for cycling

Drivers…

…will only be tempted out of their cars if they see a better alternative. Cycling infrastructure that looks unsafe, is inappropriate, or appears slower than going by car will not encourage people to leave their cars at home and hop on a bike instead – only high-quality cycling conditions will tempt more people out of their cars.

Different forms of provision are suitable in different places and planners need to think as carefully about infrastructure for cyclists as they do for drivers.

> "Only high-quality cycling conditions will tempt more people out of their cars"

The Campaign isn't simply seeking miles of new cycle track or red tarmac on the roads, but suitable high-quality infrastructure that's designed to meet the needs of cyclists wherever they may be. The first priority is to make the roads as cycle-friendly as possible before considering forcing cyclists onto pavements. Even busy roads and junctions can be tamed to a certain extent by the provision of wide cycle lanes and hybrid cycle lanes with good visibility and directness.

Equally, small aspects of a cyclist's journey, such as ease of crossing at busy roads, well maintained and well lit routes and (as far as possible) an obstruction-free environment also need to be carefully considered.

Finally, as with drivers, cyclists need safe and convenient facilities to park their bikes at the end of their trip. There's little point in providing the best streets in the world if there's nothing to attach a bike to at the end of the journey.

Following these principles, our plans as outlined in this document offer a coherent way of addressing the transport needs of cyclists and drivers alike and a vision that, if addressed correctly, can become reality by 2020.

Space is the key

As with many problems in Cambridge, space is the key. Cyclists must be actively favoured in the city if more people are to be tempted out of their cars, and this means making more space on the roads.

Main roads in the new developments offer an opportunity for wide cycle lanes whilst places like Queen's Road could include such provision if parking was reduced. The Addenbrooke's Access Road would have worked better with a consistent, wide cycle lane rather than the mix of unsatisfactory on- and off-road provision.

> "Councillors and officers need to think outside the box for cyclists rather than trying to squeeze them in to an already overcrowded carton"

> "Roadspace for cycling must be actively favoured if more people are to be tempted out of their cars"

Hybrid cycle lanes

These are a particularly important aspect of our proposals. They are much in evidence in the Netherlands but extremely rare in the UK. We want to see experimental schemes here to demonstrate the benefits of hybrid cycle lanes, for widespread adoption by 2020.

They combine the best points of both on-road cycle lanes and off-road cycle tracks, whilst excluding the harmful aspects of both. They are on-road cycle lanes with some physical demarcation and provide the feeling of protection that less confident cyclists want. They're 2-3 metres wide and uni-directional.

Cyclists have plenty of space in these hybrid cycle lanes, with room to overtake, and drivers are actively discouraged from using the cycle lane as parking because of the coloured surfacing and having to drive over a cobbled or textured divider.

Importantly, at side roads, priority is maintained. And because they are on-road, cyclists can be better seen by drivers, unlike a typical British-style pavement cycle track such as Milton Road and Barton Road.

This genuinely high-quality form of provision would be a huge inducement to people to get on their bikes. Cambridge East, Northstowe, and the other new developments would be a great place to see these implemented.

"Hybrid cycle lanes combine the best of both on-road cycle lanes and off-road cycle tracks, avoiding the downsides of both. They are on-road but with a 'feeling' of protection"

What about off-road provision?

As mentioned earlier, the Campaign believes that cycling provision needs to be looked at on a case-by-case basis.

Faster and more confident cyclists may still prefer to use the road, but in some cases, those new to the area or who are less confident on their bicycles are more likely to be enticed out of their cars by a safe off-road route into the city. This is similar to the way that some drivers choose to use motorways and some to use minor roads instead.

There is also tremendous scope for building more walking/cycling-specific links and connections. These shouldn't be seen as an alternative to providing good on-road provision as they are effectively a different route.

For instance, the Jubilee Cycleway, going via the Green Dragon Bridge, acts as a pleasant alternative to the more direct but busy Newmarket Road.

"There is tremendous scope for building more walking/cycling-specific links"

THREE... Bad infrastructure...

Bad infrastructure...

...is encountered by cyclists every day and this has a negative impact on encouraging more people out of their cars.

Firstly, such infrastructure can be unsafe and inconvenient, which inevitably leads to a reduction in the number of cyclists using it and an increase in pressure on other forms of transport.

More importantly, where there is already some sort of cycle facility in place there is little incentive for the transport authorities to create new and better provision. Local Authorities often take the view that as long as there is a facility in place, no matter how inadequate, they have done their duty. This mindset has to change.

The Campaign wants to see an end to substandard cycling provision, lessons learnt from past poor design and an appreciation from planners that poor cycling provision is worse than no cycling provision at all.

Let's take a look at examples of bad infrastructure.

> "We want to see an end to substandard cycling provision: poor quality provision is worse than none at all"

Poor quality cycle lanes

In too many cases across the city, cycle lanes are simply too narrow to be safe and are often well below the recommended standards. This has two consequences. Cyclists don't use them because they are impractical and motorists either overtake too closely or get irritated with cyclists for not using the perceived facility. In either event, neither the cyclist nor the motorist benefits.

It simply isn't sufficient to draw a white stripe on the road with a bicycle sign inside it and assume that's the end of the matter. Cycle lanes, as with any other traffic infrastructure, need to be designed in order to provide a specific benefit for the user. If this were done there would be many fewer instances of cycle lanes coming to an end just when they are needed.

At present it's sad but true to say that in many situations cyclists would be safer if an existing substandard lane was removed and cyclists and motorists shared the road.

> "Inadequate facilities are harmful: cyclists can't use them, and motorists can become irritated when they see cyclists not using the perceived facility"

Shortcomings of pavement cycle tracks

"Pavement-style cycle tracks alongside the road have so many problems for both cyclists and walkers that most need to be completely rethought"

Cycle tracks, off-road but alongside roads, are another area which needs to be completely rethought.

A lack of priority for cyclists over side roads, conflicts between pedestrians and cyclists, narrow segregation (if any) and poor construction all conspire to create a poor cycling environment.

Lack of priority at side roads - such as at Barton Road, Milton Road, and many other locations - is also a key problem. As well as the obvious danger this creates, stopping to give way to cars every few hundred yards means a loss of momentum, increases journey times and is not conducive to a pleasant cycling experience. Other vehicles are not expected to stop repeatedly and neither should cyclists be.

A large number of cycle collisions already occur at junctions. Off-road routes without priority over side roads introduce lots of new junctions and hence more danger points.

The inaccessibility and narrowness of such tracks often makes maintenance difficult as they are unsuitable for road-sweeping vehicles.

The general principle is that if cycle tracks are to be provided, they must be of sufficient quality to enable cyclists to use them should they so wish and avoid antagonising car drivers for those cyclists who remain on the road.

"Cambridge is an ideal place for a government-approved experiment to demonstrate that giving cyclists priority at sideroads, as on the continent, works to everyone's advantage, so that it can become the norm well before 2020"

Coldham's Lane Bridge

Coldham's Lane Bridge

The fairly new bridge for cyclists on Coldham's Lane is a classic example of inadequate provision for cyclists in Cambridge.

The main problem with the design, which we highlighted at the time, is that the cycle bridge is on only one side of the road bridge. Anyone cycling from the city centre out along Coldham's Lane is forced to stop and cross the road twice. The bridge is too narrow, the gradient too steep and it has poor access.

The result is that people are coerced into using a substandard provision that fails to meet their needs, leading to conflict with drivers who think cyclists no longer have the right to be on the road here, and this again has inevitable knock-on effects on the numbers on two wheels.

Poorly thought out, cheaply constructed, the bridge is not of high quality and the whole structure will need to be replaced in a decade or two - with luck by 2020.

When this bridge is replaced a realistic amount of money must be spent to address these design problems. The whole road bridge should be rebuilt, with proper space for cyclists and walkers, to provide a long term solution and not a short term, botched, quick fix.

The Coldham's Lane bridge experience offers, we believe, an important lesson for city planners that needs to be learned for the future – particularly when the time comes to design the proposed cycle provision on Hills Road Bridge, for instance.

THREE... Bad infrastructure...

What do we do about shared-use pavements?

> "A painted line and a sign on a pavement does not a good cycle facility make. Planners should instead always try to improve the general road environment first, which means giving over more space on the road for cyclists"

Generally speaking, the Campaign believes that pavement provision should be the provision of last resort. Planners should always try to improve the general road environment first, which means making space for cyclists.

If pavements and paths are to be designated as shared use, much more needs to be done than providing a painted line and a signpost.

Authorities need to ensure that there is sufficient space for both cyclists and pedestrians, that the surface is suitable for cycling and not overgrown; and there are no obstacles in the way. Clear and unambiguous signage will avoid the confusion over whether a pavement can be cycled on or not.

Currently, it seems that the decision on whether these paths are acceptable for shared use is often arbitrary and there are few guidelines in place. In many cases they should be returned to purely pedestrian use and a new cycle lane created on the road.

Obstructions

> "There are methods to make cyclists slow down at danger points without causing them inconvenience"

There are several points in the city notorious amongst cyclists where elements of design intended to slow cycles down in fact have the effect of stopping them completely - especially when they are towing trailers. An obvious example can be found on the path by Tesco's near to Riverside where chicanes have been installed which have the unintended effect of forcing cyclists to stop. This sort of bad design needs to be removed from the city's cycle routes, especially from places like supermarkets, which are prime destinations for cyclists with trailers and shopping bags!

There is a case for removing most of the city's existing pinch point obstructions. Often they serve no purpose other than to slow down cycles unnecessarily and they can also further handicap people in wheelchairs.

The parking bays in Trumpington Road outside the Botanic Gardens are also extremely badly designed. To have a cycle path less than an open door's width from the car, is asking for trouble. Carelessly opened doors will hit cyclists riding in the cycle lane. More care needs to be taken when trying to match the needs of parking and cyclists.

Junctions

We also believe that the double roundabout at the Royal Cambridge Hotel, one of the most dangerous and accident-prone junctions in the city, could be improved by the re-introduction of traffic lights. Modern traffic light systems can avoid the queuing experienced in previous decades.

Some traffic lights could also be reworked to benefit both cyclists and pedestrians. The Downing Street/St Andrew's Street junction is a classic case where the continental style "left on red" system could be tried. This is where cyclists may turn left if no pedestrians are crossing, and works very well abroad.

An example of a well thought out and useful left turn is the junction at the end of Hills Road bridge and Cherry Hinton Road, where the separate left turn lane for cyclists enables them to bypass the traffic lights completely.

Addressing niggles on a city-wide basis

While a few large-scale projects are required to make cycling safer and more convenient in Cambridge there are also many small things that can be done to make a big difference.

Every cyclist in the area can name numerous small, niggling problems along their regular cycle routes and in many cases putting these right should be an inexpensive process. These include bumps, potholes, dropped kerbs which are not flush with the road, or any of the other numerous small obstacles which are the legacy of decades of bad design. There needs to be a concerted and systematic effort to identify all these minor problems and remove them from the city's streets.

> "A systematic effort to get rid of the numerous little niggling problems that every cyclist faces on their daily journey would make journeys so much more pleasant"

For the future, if high-quality cycle provision is installed in the first instance, and well maintained, such niggles will be vastly reduced.

Conclusion

All the above are just some of the many examples of badly designed infrastructure across the city, provision which actually provides very little benefit to anyone. Such facilities mean that transport authorities can be seen to be fulfilling their duties whilst supplying something that is actually of negligible value and does nothing to encourage cycle use, and can in fact make cyclists feel less welcome on the road.

Determined efforts need to be made to tackle this legacy so that the entire network is open, accessible and safe for cycling. Routes need to be identified and redesigned with high-quality materials and a genuine political will to create more space on the roads for cycling. There is also need for better guidelines to help planners assess whether a path is suitable for shared use, segregated shared use or whether on-road provision is a better option.

> "Tackling the legacy of bad provision by 2020 is essential to make cycling easier, more accessible and safe for everyone"

FOUR.. Barriers to cycling

People cycle...

... because it's convenient and it meets their personal needs. It's often quicker, easier, and more environmentally-friendly than travelling by car.

For that to continue and increase, routes for cyclists need to be as direct as possible. There needs to be a positive benefit to them in terms of speed or convenience, preferably both. Just as with any other form of transport, anything which acts as a barrier is likely to deter them.

Unfortunately, urban environments throw up all kinds of barriers to cycling. These can be mitigated through good street design, whilst bad design often creates new problems.

Cyclists should be afforded the same rights as cars when it comes to road use. Roads should be sufficiently safe and cycle-friendly

> "For levels of cycling to grow, routes for cyclists need to be as direct and convenient as possible

> We want to see trials of the 'Shared Space' concept, where almost all road markings and signage are removed, to make road users think for themselves"

to allow those on two wheels to use them without feeling intimidated. Off-road provision is not automatically the right way forward, particularly if this provision is too inconvenient to be used.

One of the biggest barriers to cycling is the creeping safety culture in the UK which seeks to get rid of as many potential risks as possible. It's worth noting that in areas where experimental changes to remove road markings and signage have taken place – the 'Shared Space' concept - these have resulted in motorists taking more care as they are encouraged to think for themselves. Trying to barrier off as many risks as possible often makes cycling more difficult.

Whilst safety is obviously important, people do not cycle primarily *because* it is safe, but because it meets their needs. If people are forced into their cars because of this kind of mollycoddling then all kinds of new dangers present themselves. The roads become busier, there is the potential for more accidents and people suffer from the loss of exercise/fitness.

Shared...

...space

Mitcham's Corner

Mitcham's Corner is a classic example of a barrier to cycling. It is effectively a break in a cyclist's journey forcing them to stop, give way, cross roads and negotiate with traffic. Others will choose simply not to cycle because of difficult sections of their route such as this.

On-road cyclists face a long diversion from their preferred route and have to change lanes and ride in the middle of the road on a fast, multi-lane gyratory. The off-road provision, while an improvement on what was there in the past, is still awkward and inconvenient.

Mitcham's Corner needs to be extensively remodelled by 2020 to make it more friendly for cyclists and other road users in general. The whole area is not a people-friendly environment. There have been several proposals over the years for the Staples site but Cambridge City Council urgently needs to put together a planning brief for the area and to get developers involved in a full scale redevelopment.

Two-way cycling in one-way streets

Barriers to cycling often take the form of unnecessary one-way streets, which break up routes or make them longer.

Routes which would be naturally appealing to cyclists, (either because they offer a more direct and convenient route, or because they avoid dangerous junctions) are unavailable to them. One-way streets may also encourage drivers to go faster, making the street scene less attractive to cyclists.

Virtually all one-way streets around the residential areas of Cambridge could easily be made two-way for cycling with political will. A good example would be to make Panton St two-way at the Lensfield Road end. Not only would this make cyclists' journeys to Bateman Street and the south more convenient and quicker, it would also make them safer by avoiding the busy junction by the Catholic Church on Hills Road.

Conclusion

We need to look at each barrier to cycling in Cambridge and use well-thought-out design to remove it. But an important balance has to be struck – an obsession with safety when designing cycle facilities will have a negative impact on cycling levels, and thus on health and safety in the bigger picture.

The Campaign would like to see...

- Elements of bad design which create a barrier to cycling removed
- Cycle facilities created for convenience rather than purely safety
- An experimental cycle route created where cyclists have priority over side roads
- Areas like Mitcham's Corner and the Newmarket Road roundabout completely remodelled
- One-way streets made two-way for cyclists unless there is an absolutely overriding safety reason why this can't be done

FIVE.. Reallocation of roadspace

Roadspace...

... in Cambridge is subject to massive competition by different user groups. Many of the city's roads and neighbourhoods were created before the age of mass car ownership and as a result streets are often too narrow to cope with the level of traffic and the demand for parking spaces. As well as creating a danger on the road for cyclists when they are being driven, cars also create an obstacle to cycle use (and pedestrians, people with buggies, etc) when parked.

The way the city's road space is used can have a major impact on encouraging cycling and it can make our neighbourhoods safer and more pleasant places to live. Councillors and council officials need to bite the bullet and look seriously and creatively at ways of reallocating road space to benefit cyclists and pedestrians.

> "Reducing junction car capacity and car parking at some key spots like Gilbert Road, Queen's Road and others would create space for ultra-high quality cycle routes, instead of being amongst the worst spots for cycling as at present"

> "Making more space for cycling on the roads, sometimes at the expense of motor vehicle space, is the most important way that rates of cycling can be increased, and the only way that Cambridge could become a world-class cycling city"

Making space for cyclists

Cycling is as much a real form of transport as cars or buses and the needs of cyclists must be taken into account when allocating road space. Cyclists constitute a quarter of Cambridge commuters and should be given more roadspace to reflect this.

The mindset that says it is acceptable to designate inadequate pavements as cycleway, rather than spending real money on proper on-road provision is unacceptable. Cyclists are fully fledged road users, not pedestrians on wheels, and they have as much right to fast, safe and convenient routes as any other vehicle.

This does mean that sometimes decision-makers have to accept that unless, for instance, the number of car lanes at a junction is reduced, or car parking removed at key points, there will be no way to create a good quality cycling environment.

For instance, cycling conditions on Queen's Road along the Backs and Gilbert Road are presently extremely poor. But removing the car parking in these areas would create the space for continental-style, high-quality, cycle routes. The Councils should work towards gradual removal of car parking in favour of space for cyclists and walkers.

On-road cycle lanes

The attitude that says a 1m-wide strip of road, barely wider than a set of handlebars, is acceptable must change.

Virtually nowhere in Cambridge does a cycle lane meet national government recommendations of a 2m width. But only such widths provide real benefits for cycling, in a way which will get more people on their bikes.

Our hybrid lanes proposal (page 5 and images below) demonstrates the way the councils should be headed.

> "In order to increase cycling levels, transport planners need to start designing cycle lanes that meet the government's recommended width of 2 metres"

Bus lanes

Public transport must be designed to attract drivers from their cars, not cyclists off their bicycles.

A lot of thought needs to go into plans for new bus lanes. Often they will reduce road widths and have an adverse impact on cyclists. A balance has to be found between this impact on cyclists and the benefits to bus users.

If implemented well, bus lanes can be and often are used by cyclists and can make pleasant on-road cycle lanes.

In some cases evidence shows that the advantage of a proposed new lane to bus users is minimal, the amount of time saved is very small and the route is not used regularly enough by buses. The Campaign has always supported the introduction of measures to improve provision for buses where this does not have the effect of deterring cycling.

The proposals issued in 2007 alongside the County Council's congestion charge proposals, to create dedicated bus provision away from main roads, e.g. alongside the railway, show the way forward. Places like Trumpington Road, Hills Road and Milton Road could have high-quality hybrid cycle lanes installed in the freed-up space. But both aspects need real money for such infrastructure, not just strips of paint.

FIVE.. Reallocation of roadspace

Reducing on-street car parking

In areas such as Romsey and Petersfield, cycling and walking are made more inconvenient and unsafe by the sheer number of cars in the area. The level of car ownership in these streets is far higher than the area can support.

Problems that result include cars regularly obstructing the pavement (such as in Romsey); parking too close to junctions; or parked cars preventing two-way access for cyclists along the street and/or new cycle parking facilities.

At present there is virtually zero cycle parking in the City's areas of terraced housing. On-street residential cycle parking, like that pictured, should be provided – at the expense of some car parking spaces. It is perverse that the most polluting form of transport is given so much space (including pavement space) in the area, whereas there is almost none for cycling.

The high residential turnover in the area provides an opportunity for reducing car use. People coming in can be encouraged to think more carefully about whether they could live there and not own a car, as many already do.

Car Clubs are schemes whereby members can get easy access to a car for short term hire. The vehicles are situated in designated parking bays in residential areas and can be accessed using smart cards which each member is given. A new one has been introduced in 2008 in Romsey and needs to be heavily promoted.

Parked cars on key busy routes

There are areas in Cambridge such as East Road and Lensfield Road where parked cars hinder the smooth flow of cycling.

This is a real issue for cycle users - it is unsafe, causes conflict between drivers and cyclists and discourages cycle use along an important city artery. Getting rid of car parking spaces here will encourage cycling and assist with the free flow of cycle traffic.

Indeed, guidance issued by the County Council sensibly requires that in new developments car parking is not allowed to interrupt the flow of traffic. Planners need to apply the same principles to existing areas.

The Milton Road effect

On Milton Road the inbound bus lane has left an extremely narrow outbound traffic lane. Cyclists who use the road are often harassed by impatient drivers who drive too close behind, overtake deliberately close, shout abuse, use their horns and, in some cases, actually make contact with cycles using their vehicles.

This type of behaviour has been so often recorded that it has been dubbed the 'Milton Road Effect' by cyclists and many have been forced onto the narrow pavement cycle path where they have to deal with obstructions such as pedestrians wandering into their path, wheelie bins and regular side roads. The reason drivers think cyclists should be off the road is because they know there's a shared-use cycleway, even if it is clearly not adequate.

Making space for cycling at junctions

Left turn-only lanes are common in Cambridge at junctions and roundabouts but they create a problem for cyclists. Having a separate left turn-only lane on the approach forces cyclists who are going straight ahead to cross a lane of traffic and ride in a vulnerable position in the road.

> "Junction points create real problems for cyclists and this is where most collisions take place. The junction near the police station at the end of East Road is a model of its kind that should become the norm by 2020"

Sometimes, left turn-only lanes are not actually needed and should be removed. At junctions such as the Madingley Road eastbound approach to the Park and Ride site and the Newmarket Road eastbound approach to the Park and Ride site, the left turn-only lanes have little or no impact on traffic flow because the proportion of cars which uses them is so small.

Even when the removal of a left turn-only lane will cause a reduction in traffic capacity, such as at the Catholic Church junction, it should still be considered because of the problems such lanes create for cyclists. Removing a left turn only lane of course does not mean reducing the number of lanes on the approach.

Other alterations should include shortening the left turn-only lane so that cyclists only have to ride in a vulnerable position for a short period of time, or marking lanes clearly in red. The junction near the police station, at the end of East Road, is a model of its kind that should become the norm by 2020.

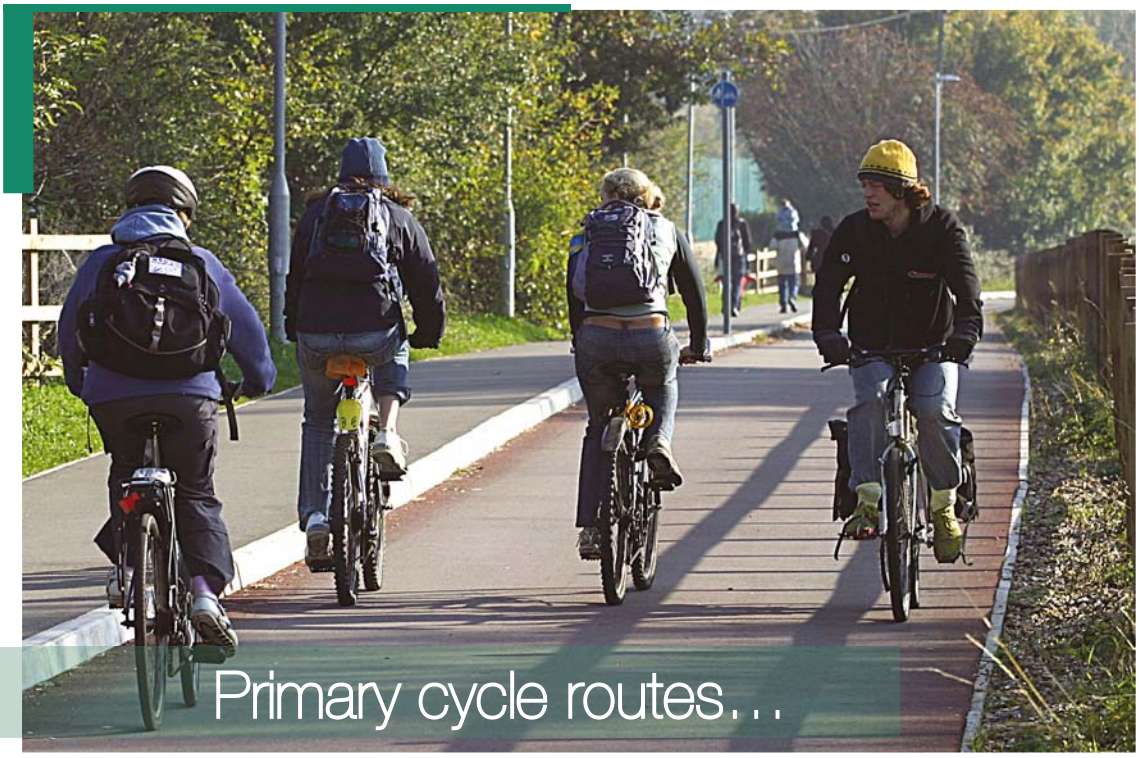
Conclusion

The road is still, and will always remain, the natural habitat of the cyclist but space on our roads is often dominated by cars. There are ways we can redress this balance through design, legislation and imaginative thinking which will encourage greater use of cycles, in turn reducing car congestion.

The Campaign would like to see...

- Removal of obstructive parking on key busy routes
- The gradual reduction of car parking spaces in Romsey and Petersfield over the next 10 to 15 years in favour of cycle parking and space for walking
- The redesign or removal of left turn-only lanes in Cambridge.
- The impact on cyclists to be seriously weighed up before any new bus lane is created
- One way streets to be opened up to cyclists travelling in both directions
- Heavy promotion and expansion of the new car clubs in Cambridge

SIX.. Area-wide solutions:



Primary cycle routes…

… provide cyclists with quick and effective routes between major destinations, such as the main residential areas, the City Centre, the railway station and big employers including the Science Park and Addenbrooke's Hospital. Although in some cases this will mean the network of off-road cycle paths, the primary cycle routes through Cambridge are, and should always remain, the existing road network.

Sadly, although Cambridge is rightly famed within the UK as a cycling city, the overall inconsistent quality of these primary cycle routes means that the city is often far below the standard of some European centres.

Many good cycle routes which are well used, such as Addenbrooke's Hospital to the city centre and Milton to the city centre, are compromised by dangerous and/or unpleasant locations at various points along them.

These locations, such as Hills Road Bridge and Mitcham's Corner, break up an otherwise potentially integrated and useful cycling network and do little to encourage increased cycle usage. They are off-putting for cyclists and hazardous for those who continue to use them.

We need a cohesive, joined-up cycle network for the city.

The need for continuity

The quality of primary cycle routes in Cambridge is very variable. Routes across the city's commons - including the Jubilee Cycle Route which starts at the Newmarket Road Park and Ride site and follows the river - are very important and well used (though in fact even these would benefit from being wider, for example across Midsummer Common), whilst to the south of the city cyclists are well catered for with several new routes.

Within the city itself, however, it's a different story. For example when cycling between Addenbrooke's Hospital and the city centre there are well planned routes along both Hills Road and Long Road, but on arriving at Hills Road Bridge the cycle lane stops and what was a safe and friendly route suddenly becomes scary and hostile.

As a result, Addenbrooke's to the city centre is a cycle route with a large gap in it and cycle routes with gaps in them can be almost worse than no routes at all. Leaving a cyclist stranded mid-route with no alternative provision means that in future he or she will leave the bike at home and take the car into work.

Newmarket Road/East Road roundabout

Newmarket Road/East Road roundabout: a major barrier within an important route

Cyclists arriving at the Elizabeth Way roundabout, linking East Road with Newmarket Road, are met with an intimidating and entirely unsatisfactory obstacle. The underpass system is an example of design from the 1960s and 1970s which is now extremely dated. It is difficult and time-consuming to manoeuvre through and also raises real concerns for personal safety, especially at night.

If this area were to be designed from scratch today an underpass would probably not even have been considered.

The junction needs to be replaced with one which is all on one level and served by crossings. There are plans to do away with the underpass and redesign the junction, but in the meantime it is intimidating and could put new cyclists off the idea of abandoning their cars.

Bar Hill

Bar Hill: a case-study for improving connections between areas

Bar Hill is one of a number of areas where cyclists are poorly provided for and serves as a good example of how routes could be opened up.

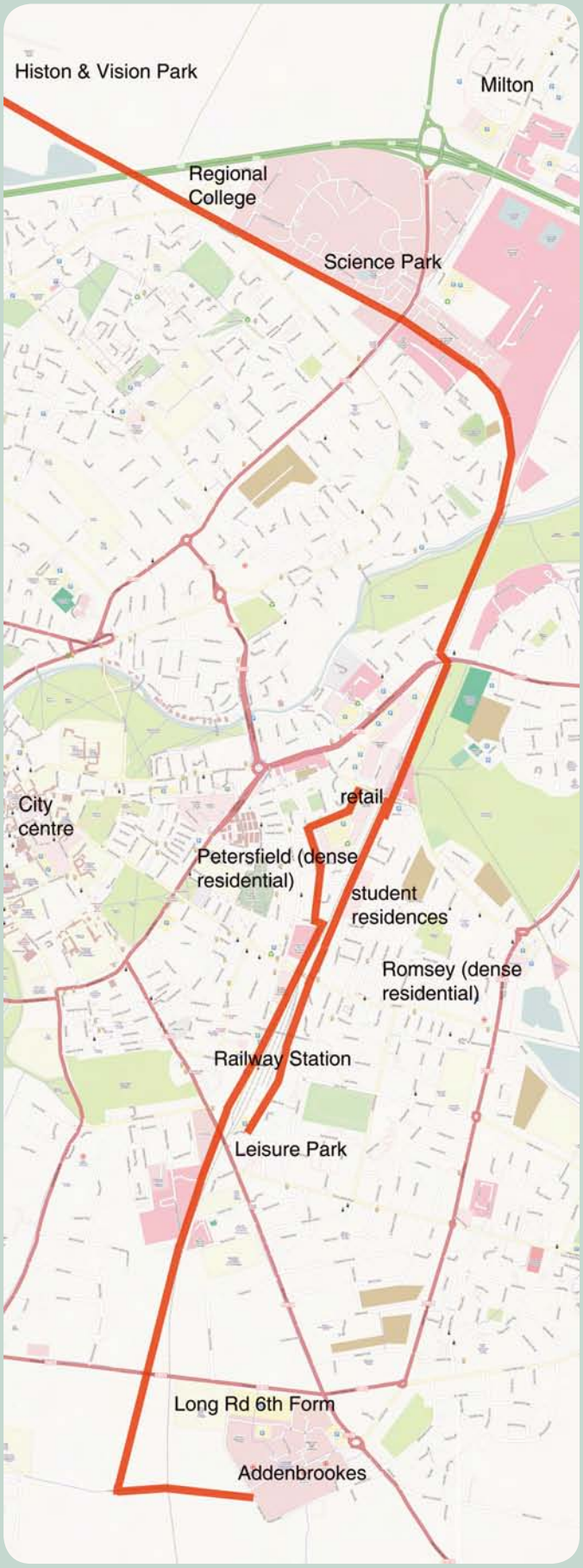
The village has a large population, many of whom work in Cambridge. Despite this, there is currently no route provided for cycling between Cambridge and Bar Hill. The A14 is very problematic for cyclists and the alternatives still involve many hostile fast roads.

This is in marked contrast to the new NCN 11 cycle route from Great Shelford to Addenbrooke's Hospital. Although the width of this route is still inadequate, it's a vast improvement on the previously available alternatives.

There is already a paved route from Bar Hill to Dry Drayton and there is a chance to create a cycle route similar in quality (but preferably wider) to NCN 11 which extends all the way into the Cambridge. The land on which this route would run is largely farmland owned by the University of Cambridge but because of the Cambridge North West Strategy the area has an uncertain future. It is essential that the route is built before use of the land is changed. It would be welcomed by the people of Bar Hill and take cars off the A14.

The planned A14 improvements raise the possibility of a new road for local traffic running parallel to the existing road and it is essential that such work should include the creation of a cycle route, such as an off-road cycle path alongside the road. This would be the shortest available route into the city and would meet all the cyclists' requirements of speed, safety and convenience.

The Chisholm Trail: a cycling super-highway



> "The Chisholm Trail, joining Addenbrooke's to the Science Park would attract many new cyclists, and would replace many 40-minute car journeys with a great 10-minute cycle route and open up many areas"

The Chisholm Trail is our proposal for a major new cycleway that would run roughly alongside the railway, joining Addenbrooke's to the Science Park and beyond. It would attract many new cyclists, and make many journeys that take perhaps 40 minutes by car cycleable in 10 minutes. Reducing vehicle volumes by just 10% results in much greater reductions in congestion, as is clear when schools are on holiday.

The trail would link the south of the city directly with the cycle provision which is being created as part of the development of the Guided Bus. The proposed trail would follow the railway through the east side of the city linking areas of high-density housing, employment and leisure facilities. Hubs such as Addenbrooke's Hospital, the Science Park and the train station will all lie on the route, creating a cycling super-highway.

The Chisholm Trail plan is included in the Local Plan document and in the Demand Management proposals issued in autumn 2007. The Campaign wants to see a feasibility study done to identify the relevant landowners, pin down costs and begin to get bodies such as the county and city councils working to make this vision a reality.

As a group, we have been monitoring planning applications to make sure that none of the route gets blocked by a new building. So far we been successful in getting potentially problematic plans altered and the route has been safeguarded.

The route is a great example of a high-profile scheme which will cut journey times, give people a genuine, realistic alternative to car use and help the city cope with the population increases which will take place in the coming years.

Cambridge CYCLING Campaign

"The Chisholm Trail would form a shining example of national best practice"

Conclusion

The city faces many challenges in the future and we cannot rely on the road system alone to cope with the increased pressure of population growth.

While there have been many advances in the creation of the Chisholm Trail and, more generally, a primary cycle route network around the city, there is still a lot of work to be done to make cycling a more viable option than car use.

The Campaign would like to see...

- Mitcham's Corner and Hills Road bridge to be redesigned to remove gaps and difficulties in existing important cycle routes
- The Newmarket Road/East Road/Elizabeth Way junction redeveloped with cycling and walking in mind
- The creation of the Chisholm Trail, a cycling super-highway linking the Science Park and Addenbrooke's via the station
- The creation of a route linking the city with Bar Hill
- The removal of compromising and/or dangerous points on primary cycle routes

SEVEN.. Reducing, managing and

Traffic…

… is the single greatest danger to the cyclist, both in terms of its volume and speed. Cambridge is already heavily congested and many of its roads are not designed for such heavy car usage.

But it's not just cyclists who have to stomach the effects of heavy traffic. All road users, pedestrians, the environment and our city as a whole suffer when traffic is not curtailed. As a result, reducing traffic levels is probably the biggest challenge facing transport planners, but it must be achieved if we are to encourage greater cycle use.

Traffic planners and decision-makers often fall into the trap of assuming that the only way to make cycling safer is through specific provision for cyclists. But this could never be achieved city-wide even if it were desirable. We should be aiming to make the whole road network safer because this is what cyclists most depend on. Even with the expected increase in cycle facilities cyclists will, realistically, have to rely on the road network for large parts of their journeys.

> "Making the road network itself safer, especially by providing more space on the roads and designing for slower speeds, is a key way to encourage cycling"

For this reason we need to address dangers on the road such as speed, volume of traffic and points where cars may cause an increased hazard. There is less need to create off-road cycle routes if we can make the road itself safer for cyclists.

Traffic calming measures need to be put in place with care and attention and designed with cyclists firmly in mind.

The Campaign believes there are a number of possible solutions.

Reducing volumes of traffic

Traffic reduction is difficult, but it has been achieved in recent years through the use of rising bollards in the central area and is also being tackled with the promotion of Park and Ride. This approach needs to be continued if we are to see a growth in cycle usage.

> "Both large-scale measures, like congestion charging, and smaller measures, like point closures, are the way to encourage cycling and walking"

One other way of reducing traffic is through a congestion charging scheme of some kind. The Congestion Charge in London resulted in a considerable reduction in traffic in the capital and a significant reduction in delays. A congestion charge offers the potential for solving many problems in one go, in particular by freeing up roadspace for cycling and walking, creating a virtuous circle.

Smaller-scale measures are also well-worth considering and can be extremely effective. Two good examples of the kind of intelligent measures which improve life for cyclists are in Petersfield. One is on Gwydir Street next to the Alexandra Arms, and another at the junction of

Sturton Street and Kingston Street, where entrances to the road have been closed to motorised traffic but are open to cyclists and walkers. This means the neighbourhood is a no-go area for rat runners but gives cyclists a safe, uncongested route across the city.

The avoidance of dangerous traffic-calming measures

We support the principle of traffic being calm – this means lower speeds, safer crossing points and fewer rat runs. However, there have been concerns in the past that some traffic calming measures have had the effect of putting cyclists at greater danger.

Road narrowing is sometimes used as a way of reducing traffic speeds and one way of making roads narrower is to create a cycle path. Street planners need to make sure that cycle lanes – and cyclists - are not used as traffic calming measures.

Cycle-unfriendly traffic calming can also encourage bad behaviour. Where there are pinch points in the road which make it difficult for cars to overtake cyclists – for example where there are narrow traffic islands – drivers often react by speeding past the cyclist before the pinch point and cutting in front of them. As a result, measures designed to slow down two-tonne vehicles travelling at 30/40 mph often end up being injurious to 70 kg vehicles travelling at 12 mph.

> "Traffic calming is important but must be designed in a way that avoids creating more casualties. Pinch points, like those on King's Hedges Road, have caused all sorts of problems and a collapse in the levels of cycling"

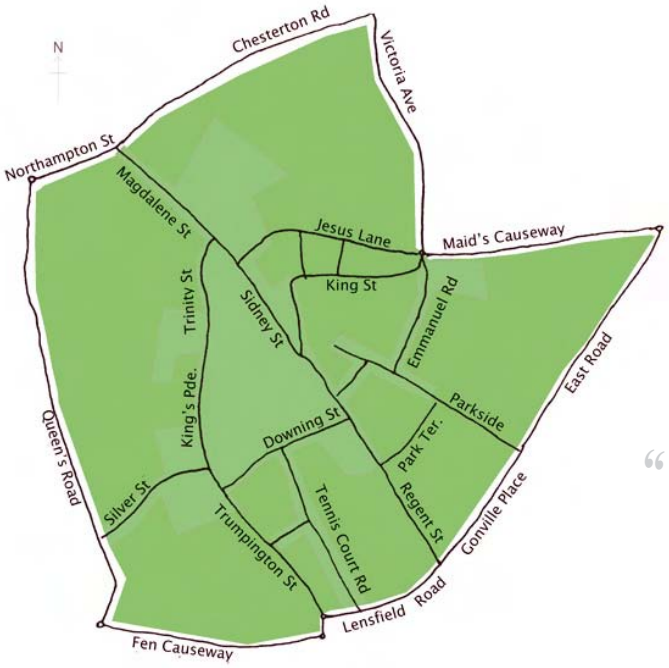
King's Hedges Road is the most recent example. We must see the changes undone that were made in 2006 with the Arbury Park development. Instead, good quality, hybrid cycle lanes could be created on the road, so that well before 2020 the area could become a cycling mecca.

Another example of problematic traffic calming is the A10 through Harston. This work was completed in 1999 and comprises 16 central islands along a mile-long stretch of road. Traffic speeds are reduced as a result but cycling is now much more dangerous and unpleasant because impatient drivers overtake at the very last possible moment before a traffic island. The pavement is poor quality, but cyclists have been forced onto it and now face cars emerging from driveways and a bumpy surface that makes journeys slow.

Another important measure is the addition of gaps at the side of road humps. Humps should be there to slow cars down, not cyclists.

SEVEN.. Taming traffic

Area-wide residential 20 mph speed limit zones



> "Excessive speed is the Number One factor dissuading people from cycling and walking. Simple and understandable area-wide 20mph and 30mph limits are needed by 2020"

In general, we believe that residential areas should be subject to 20 mph speed limits.

Excessive traffic speed is the number one factor in dissuading people from using bikes, hardly surprising when you consider that in a collision between a cyclist and a car travelling at between 30 and 40 mph the chances of death or serious injury are extremely high. A 20 mph speed limit could mean the difference between life and death, as well as improving the pleasantness of streets and providing scope for them being used more for recreation.

The Campaign is pushing for area-wide speed limits. These would be appropriate in places such as the city centre, built-up residential areas like Petersfield and new developments such as Arbury Park.

And it's important that the limits are area-wide to iron out inconsistencies. Speed limits that change from 20 mph to 30 mph and back again on a street by street basis are very confusing for drivers and result in excessive signage.

Conclusion

Traffic calming and reduction is essential if we are to encourage cycle usage in the future. Speed limits and traffic calming measures need to be designed properly in a way which creates a safer and more convenient cycle network. Wide cycle lanes are one way to make space on the roads for cyclists whilst at the same time reducing speeds.

The Campaign would like to see...

- The reduction of traffic as a means of encouraging cycling
- The introduction of area-wide 20 mph zones in Cambridge
- Traffic calming measures taking full account of cyclists
- Total reworking of King's Hedges Road and other areas like Harston, to become a haven for cyclists rather than a death-trap
- The removal of traffic calming measures which create extra danger or unpleasantness for cyclists
- The use of speed cameras to enforce speed limits

EIGHT.. Legislation and its enforcement

As road culture changes,...

... traffic increases and the demands on our urban areas expand, the legislation encompassing road users needs to be looked at regularly and in depth, to ensure cyclists are being properly served by the law.

There are several areas where small changes in the law can make an important difference to cycling safety and, as a result, to cycling levels. There are also concerns that laws which are already in place are not being properly enforced, either because of a lack of resources, a lack of understanding or a lack of will.

Much of any new legislation, of course, can only happen at national level and we need local government to help push our case.

> "Much new legislation that would benefit cyclists can only happen at a national level, but local government can help push our case and try experimental changes to demonstrate effectiveness"

Enforcement and appropriate penalties

> "Could Local Authority transport budgets be made to finance police officers with specific traffic responsibilities?"

Enforcement of the law against dangerous drivers on the roads is currently seen by many cyclists as under-resourced and the punishments for causing injury and death too lenient.

The laws of the road for drivers are often ineffectual because the penalties are too low. We hear all too often in the media of cases where pedestrians or cyclists are killed but the motorist responsible is handed a sentence of just a few months.

Enforcement of the rules is important for all road users. But we need to put things into perspective. The consequences of transgressions by motorists are likely to be far more serious than those by cyclists. Pedestrian deaths caused by cyclists are about one every two years nationally. By way of comparison, 823 pedestrians were killed by motor vehicles in 2001.

Motorists must drive safely, and if they do not do so they must be punished with penalties which reflect the seriousness of the crime.

Many traffic infringements go unpunished. Driving or parking on a mandatory cycle lane, which completely devalues such facilities, is a traffic offence and while this happens regularly in the city there are very few prosecutions. The same applies to cyclists who break the law by riding through red lights, for instance.

There needs to be a high-profile concerted effort to enforce these and other laws, for both cyclists and drivers. Police need to get the message across that motorists who speed, jump red lights, overtake cyclists too closely, harass cyclists and park on contraflow cycle lanes – such as in Downing Street - will receive warnings in the first instance followed by prosecutions if they persist.

Improving enforcement, in order to improve traffic flows and safety of all road users, could be much more cost-effective than many larger-scale infrastructure changes. And introduction of regulatory measures such as speed limits is futile if no-one will enforce them. There should be consideration of finding a way for Local Authority transport budgets to finance police officers with specific traffic responsibilities, to ensure a more joined-up approach.

> "Greater enforcement of traffic laws for both cyclists and drivers is needed, well before 2020"

The image of cyclists

A major problem for the image of cycling is cyclists who flout the rules of the road. There is nothing more likely to damage motorists' opinions of cyclists as a whole than witnessing an individual who causes a road nuisance, jumps red lights, swerves into the path of traffic or rides at night without lights.

Motorists and journalists tend to tar all cyclists with the same brush when it comes to riding illegally. Strangely enough, however, the same is not also true for law-breaking motorists.

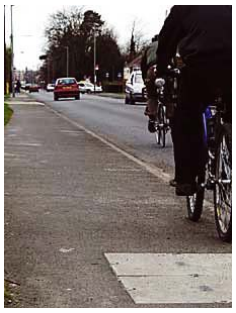
> "The level of policing against errant cycling must increase. But planners have a responsibility for reducing levels of lawlessness by creating a road environment that meets cyclists' real needs"

Even cyclists who uphold the law get abused by motorists who feel they should be using off-road facilities where those exist. However, the 2007 court case involving cyclist Daniel Cadden has upheld the right of cyclists to use the road even if there is an off-road (and often inadequate) cyclepath nearby.

Mr Cadden managed to overturn a conviction for riding inconsiderately when he chose to ride on the road instead of a nearby cycle path. The appeal judge told Shrewsbury Crown Court that Mr Cadden was as entitled to use the road as anyone else and in doing so was not causing danger to any other road users. This is reflected in the new version of the Highway Code.

Enforcement, handled fairly, and education are both needed to make errant cyclists understand the wider consequences of their actions.

Why do some cyclists break the law?



One of these can be legally cycled... the other not

> "It is no co-incidence that in countries like Holland, where cycle provision is excellent, there is very little illegal cycling"

> "Eradicating the 'Blue sign on a pavement' view of cycle provision by 2020 will reduce confusion about where people can cycle"

In many cases better cycle route provision would reduce the tendency of frustrated cyclists to break the law. Some cyclists choose to ride on the pavements because the roads are full of speeding cars, cycle lanes are blocked by parked vehicles and riding on the road would mean weaving in and out of parked cars.

Cyclists may be put in a position where they break the law because the alternative is neither safe nor convenient. Parents riding with children on pavements carefully, for instance, indicate how the general road environment needs to be made safer in many areas.

It's worth noting that in countries like the Netherlands, where cycle provision is excellent, there is very little illegal cycling. Also that since the cycle ban was lifted in Cambridge city centre, thus improving the provision enormously, there have been very few problems.

Like car drivers, cyclists do not take well to badly designed infrastructure, rules which appear arbitrary or pointless, and inconvenient and confusing signage. All these factors are likely to contribute to a cyclist's inclination to break the law.

Rather than shifting the blame, councillors who approve pavement-based cycleways against our advice must take some responsibility for causing illegal cycling. Often it is not clear which stretches of pavement are shared use and it can be hard to know whether a pavement is shared use or not. We need to see a rethink from decision-makers to ensure that cycle provision is instead high-quality and really meets people's needs.

Changes to legislation

Some traffic lights could also be reworked to benefit both cyclists and pedestrians. The Downing Street/ St Andrew's Street junction is a classic case where the continental style "left on red" system could be tried. This is where cyclists may turn left if no pedestrians are crossing, and works very well abroad.

Naturally, cyclists must stop and give way to vehicles on the crossroad and crossing pedestrians before completing their turn, but often there is little reason why a cyclist – who does not take up a large amount of space – could not turn left safely through specific red traffic lights, if legislation were to permit this, as is often the case in Holland and other areas.

The same could be true where cyclists presently wait at red lights whilst all pedestrian phases have a green. Allowing cyclists to turn and/or cross at the same time would make large junctions such as Silver Street/Queen's Road safer for those on two wheels and clear the way for those on four.

We believe that there is a strong case for both laws to be changed.

Liability

Issues surrounding the enforcement of traffic laws where cyclists are involved in collisions with cars are complicated.

In the Netherlands traffic legislation there places the onus firmly on motorists when it comes to liability, unless it can be proved the cyclist or pedestrian was at fault.

> "In the Netherlands, motorists are assumed to be liable in the event of a collision unless shown otherwise. A change in the UK law should be considered also, because it would transform safety on the roads"

This kind of change in the law could make a major difference to the way motorists behave. The issues need to be aired and a properly informed public debate needs to be had so that we can assess whether such measures could be introduced on UK roads.

Conclusion

Legislation affecting motorists and other road users is always a contentious issue. But reducing dangers on the road is an important aim for anyone seeking to increase cycle use and where this can only be done through stricter enforcement or new, tougher laws, a debate must be had and difficult decisions must be made by politicians.

The Campaign would like to see...

- The law changed so that cyclists are able to turn left at some red traffic lights provided they give way to traffic and crossing pedestrians, as in Holland
- Better and stronger enforcement of existing legislation – for both motorists and cyclists
- Tougher penalties for drivers who put cyclists in danger
- A public debate on liability issues concerning collisions between cyclists and motorists

NINE.. Cycle parking

Cycle parking...

... is an essential tool in encouraging cycle use, reducing pavement obstructions and fighting the scourge of cycle theft. Cambridge is currently the worst UK city for bike theft outside London, according to a Halifax Insurance survey.

Whether it's the city centre or the suburbs, there is still the assumption that when it comes to parking, the car is king in Cambridge and precious little thought is given to providing cycle racks.

In one car parking space, you can supply sufficient bike parking to solve the needs of ten people, as ten cycles can be parked in the space required to park one car. This has to be a better use of our limited parking areas. Cycle parking is easy to use and if people know they will have a secure, easily accessible place to lock a bicycle wherever they go then it will provide them with an incentive to give their car a miss and use a bike instead.

There seems to be a mindset amongst some City Councillors that cyclists have a much lower status when it comes to the provision of parking spaces than motorists, despite the positive role cycling plays in the city's transport system. The planning authorities seem to think it is inconceivable even occasionally to take away car parking space and create cycle parking space in its place, but this is exactly what needs to be done in Cambridge.

> "Cycle theft is more than 10% of recorded crime. New cycle parking needs to be supplied all across Cambridge. The era of bikes against a wall must be ended by 2020"

Increasing cycle parking provision is not an expensive proposal. A stand for two bicycles costs around £100. The key barrier instead is the need to change the mindset that cycles can just be left against a wall.

We've taken Romsey as a good example of the problems that cyclists face and offered some possible solutions. >

Romsey

In Romsey cars are regularly parked on both sides of the road, often on the pavement. Pavement parking has been permitted for some time and in some streets white lines have been painted on the pavement to delineate parking spaces leaving a gap of one metre between the car and the house.

Where wheelie bins are left on the pavement, parents with pushchairs are faced with major difficulties and are often forced to walk in the road. This system also takes no account of the need for cycle parking outside the front of people's houses.

> "Introducing secure cycle parking into areas like Romsey is a matter of both equity and encouraging people to use bicycles"

While almost all the street, and half the pavement as well, has been given over to the need for car parking in the area there is almost nowhere to park a bicycle. This does little to encourage cycling and needs to be eradicated. Cyclists should receive the same provision as car drivers in this area: being given convenient and secure parking spaces.

The solution here is to remove a few car parking spaces annually and install cycle racks in the freed-up space. This is a matter of both equity and encouraging people to use bicycles. Such a change should be prioritised in places where the pavement is narrow and there is insufficient space for people to walk easily.

NINE.. Cycle parking

Cycle theft

Cycle theft is a very real problem in Cambridge and good quality cycle parking can go a long way towards deterring the thieves. By not increasing cycle parking provision city councillors are allowing cycle theft to remain at its current high level. The 6,693 cycle thefts recorded between 2001 and 2004 made up 13.5% of all crime in the city during that period so it is clearly a serious issue and needs real solutions.

> "The lack of cycle parking results in theft, inconvenience for cyclists, and obstructions for those walking. This could be reversed by 2020 to make Cambridge a safe haven for bicycles"

To take an example, the City Council's East Area Committee found in August 2007 that the 54 reported cycle thefts in the Petersfield area during the previous two months made up 27 per cent of all the crime in the ward. This is hardly surprising given the almost total absence of any cycle parking facilities in the ward. Compare this with the massive numbers of car parking spaces which are assumed as a right for local residents, and the problem becomes clear.

With a lack of decent cycle parking facilities we often see people locking their bicycles to everything from railings and drainpipes to lampposts and bus stops as well as lining the walls of houses along terraced residential streets. This is inconvenient, and sometimes hazardous, for pedestrians, obstructing their route with obstacles.

> Ensuring that developers provide plenty of convenient cycle parking will prevent future problems and appropriately value the contribution that cycling makes to the city

New developments

Adequate cycle parking needs to be included in every new development built in Cambridge. Many developers are failing in their duties to provide adequate cycle parking facilities with their sites and the planning authorities have sometimes done little to tackle this.

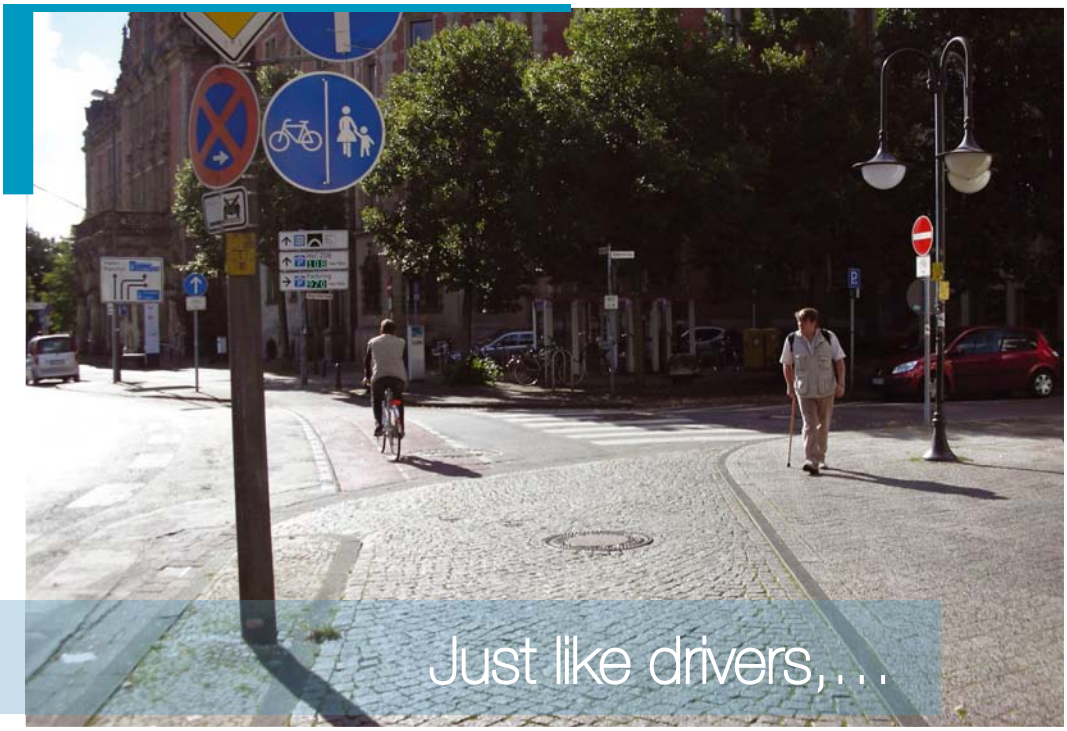
Many new developments planned for the city are not taking the provision of cycle parking seriously. Proposals are regularly being brought to the city council's planning committee with insufficient cycle parking spaces, and occasionally with a reduction in the number of cycle parking spaces already there. For instance, the plans for expansion of the Lion Yard shopping centre include no shopper cycle parking, a disgraceful flouting of the City Council's Cycle Parking Standards.

More pressure needs to be put on developers to meet the standards laid down in planning guidelines regarding cycle parking and there needs to be swifter and tougher enforcement against those who fail in this regard.

The Campaign would like to see...

- One or more car parking spaces given over to cycle parking in each existing Cambridge street - about one space for every five houses, to start with
- More cycle parking in residential areas and the city centre and at workplaces and shops.
- The abolition of "pavement car parking"
- The City Council enforce their own agreed Cycle Parking Standards in every new residential and commercial development

TEN.. Good design in cycle crossings



Just like drivers, . . .

...cyclists are real road users and should be treated as such. Unfortunately, when it comes to crossings in Cambridge, this does not always apply. Not all are of high standard or suited to the high levels of bike usage.

> "Making crossings easier to use will make cycling easier and more free-flowing, and reduce conflict with pedestrians"

Equal treatment for cyclists at junctions

> "Every cycle crossing in Cambridge should be wide, detect cyclists, and give plenty of crossing time"

The Lyndewode Rd junction in Cambridge is an excellent example of a cycle route facility that has been designed to the same principles as a normal traffic junction. There are no buttons to push and cyclists flow freely.

Cyclists approaching a junction require the same warnings and notifications as a motorist would. This means being able to see clearly as they approach whether they can cross the junction or whether they need to stop, so that they can adjust their speed accordingly.

Traffic lights for cars are positioned so that drivers can look straight ahead in the direction they are going and the same should be true for cyclists.

Equally, it is inappropriate to 'box in' cyclists or make them undertake a crossing in two stages. 'Cages' such as the ones on King's Hedges Road by Arbury Park make life difficult for pedestrians and cyclists alike and almost impossible if the bike has a trailer attached.

We believe the ban on cyclists turning at parallel crossings like Gonville Place is inappropriate. Turning is considered to be acceptable at toucan crossings so we see no logical reason why the same should not be so at parallel crossings. A trial removal would confirm that this outdated regulation could be scrapped.

Crossings in the Netherlands and Belgium are much more cycle-sympathetic and there's no reason why we shouldn't replicate their approach here.

Contrasting designs: Gonville Place vs. Queen's Road

When the crossing on Queen's Road was upgraded, it resulted in an excellent facility which segregates cyclists and pedestrians, offers a wide unencumbered crossing area and detects cyclists automatically without the frustrating need to stop, press a button and wait.

By contrast, when the Gonville Place crossing was replaced in 2006, there were many complaints. The new crossing did not segregate pedestrians from cyclists, there was no automatic detection of cyclists, there was no visual indicator on one side of the road and the sheer number of posts put in place was hazardous and unnecessary. This was a clear case of an off-the-shelf Department for Transport design which did not fit the area. Pressure from the Campaign resulted in these design faults having to be corrected, at public expense.

With joined-up thinking, it should be possible to create crossings in Cambridge that use up-to-date technology and the best design for the area, to facilitate the smooth flow of cyclists and walkers.

The lesson here is clear: crossings must be designed to facilitate high levels of cycle usage.

Detector loops

"Detector loops - entirely common at road junctions - should also be the norm at cycle crossings in the city, to help making cycling more effortless"

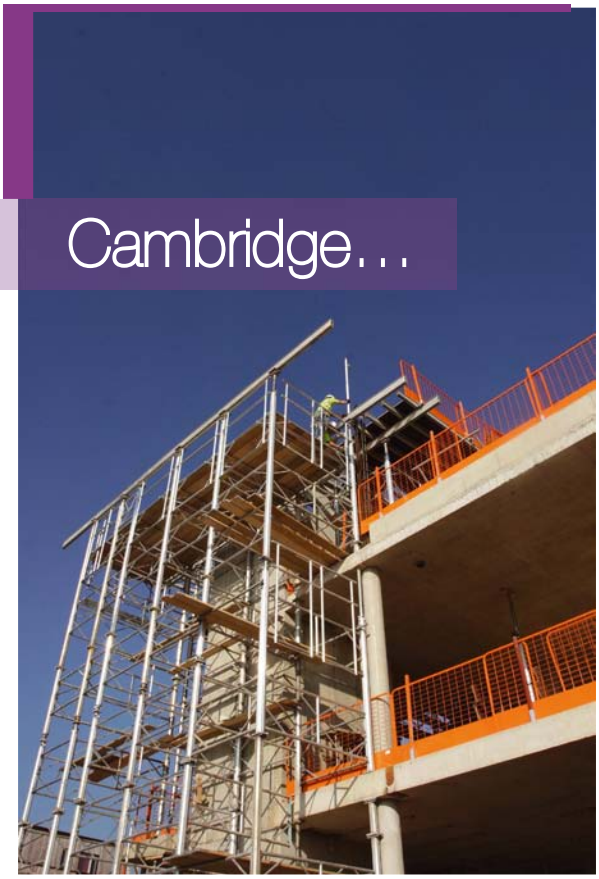
Detector loops should be the norm at cycle crossings in the city. They should be used in the same way that they are used on the road, except where there is a risk that they will be frequently triggered by accident.

If the system detects cyclists on approach and changes the lights accordingly instead of requiring cyclists to stop and press a button then there will be less delay to the rider, cycling will become more convenient and this will have the knock-on effect of encouraging cycle use. Minimising waiting times will also deter cyclists from jumping the lights.

The Campaign would like to see...

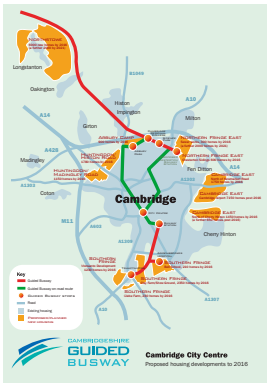
- Crossings for cyclists created using continental-standard, best-practice designs, as in this Netherlands example >>>
- Cycle facilities created for convenience rather than just safety
- Cyclists given the same level of importance as drivers when designing crossings
- A trial removal of the turning ban at parallel crossings
- The introduction of detector loops as the norm at cycle crossings

ELEVEN.. New developments around Cambridge...



> "The new developments offer a clean sheet of paper to design cycle-friendly places"

> "Transport authorities and developers have a fantastic opportunity to learn from the mistakes of the past"



... and the surrounding area will soon come under immense pressure from several new residential developments which are either being planned or built. From the Southern Fringe in the south to Arbury Park in the north, Marshall's Airport site in the east and Northstowe in the west, the next few decades will see a major increase in housing, people and traffic.

Transport authorities and developers have a fantastic opportunity to learn from the mistakes of the past. New developments do not suffer the same space constraints as the existing city streets and therefore there is an enormous opportunity to create a cycle network that will make a genuine difference to the way people travel and commute.

The cyclist as decongestant

> "Our own paper Cycling in New Developments, intended as a practical guide for developers, outlines in more detail how best to provide for cycling in the new developments"

see: www.camcycle.org.uk/planning

What needs to be taken on board when planning these developments is that a small increase in the amount of traffic on the roads can result in major delays. Studies have shown that if peak traffic in the city could be reduced by 10% then delays would be reduced by up to 90%. So the effects of adding another 10% onto the current totals could clearly be catastrophic.

Money invested in good-quality cycling provision will produce great benefits for all. If people are supplied with good alternative transport provision, many of them will take up the opportunity, decongesting the roads for all users.

There is much useful guidance where cycling is concerned in the planning document, the Cambridgeshire Design Guide, although there are some areas which the Campaign believes should be added. This should include some of the points made below on cycle parking, hybrid cycle paths in new developments and the active promotion of Home Zones.

Maintaining levels of cycling

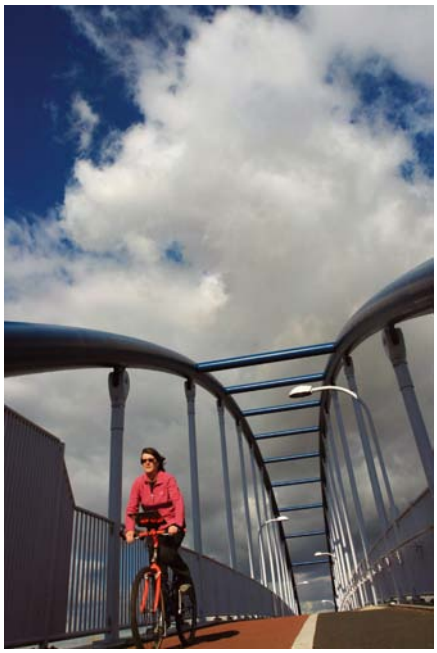
Cycle use in Cambridge is ahead of other UK centres, but Cambridge's love affair with the bicycle is almost a quirk of social history. There is a culture of cycling in Cambridge which stretches back many years and has been passed down the generations. Today, cycling has simply become the accepted norm for many city residents.

The proposed increase of almost 50,000 new dwellings in the Cambridge area over the coming years, equates to around 125,000 people. Even at an optimistic car ownership ratio of one vehicle per house the prospects of gridlock are all too real.

> "It is important that we maintain the city's unique cycling culture by encouraging newcomers to the area to cycle, both by providing a cycle-friendly road layout and by providing other incentives like training"

These new homes bring new people to the area, people who may not necessarily have the same predisposition to cycle as those who have lived here for many years. It is important that we maintain the city's unique cycling culture by encouraging newcomers to the area to cycle, both by providing a cycle-friendly road layout and by providing other incentives like training.

Designing in best practice



When new developments are built they need to create an environment where cycling is the natural choice. When travelling from A to B the majority of the population will use whichever form of transport is the most convenient and they will do it in the way which is easiest for them.

Local authorities can try to persuade and cajole people into cycling as much as they like, but if there is a barrier to cycle use then they will fight a losing battle. With direct routes, shortcuts linking different areas, lower traffic speeds, convenient access and a more pleasant environment, cycling will become the natural option for many people and part of everyday life.

Developers need to be challenged on the generally held view that new residents will not cycle more than 5km – many people in Cambridge regularly commute this distance and further every day. In some planning applications the traffic modelling seems to assume that people will not cycle this distance and thus downgrades the importance of providing decent cycling infrastructure.

Creating cycle-friendly streets

Creating roads from scratch should make factoring in cycle-friendly routes easy. Every new cycle lane along the main 'spine' streets should be at least 2 metres wide. There is no excuse for less than this, given that the developers have effectively a clean sheet of paper on which to design cycle-friendly places.

In new developments, cycle lanes and other cycling-specific infrastructure should not be necessary on the local streets, as the road network should be made sufficiently cycle-friendly from the start. This means keeping traffic speeds low and avoiding obstructive car parking and rat runs.

However if cycle-specific infrastructure is needed then developers should rely on on-road cycle lanes which have priority over side roads. An ideal model is the hybrid cycle lane (see page 5) which is on-road, giving cyclists the usual visibility and priority over side roads, but with a physical demarcation between the cycle lane and the carriageway.

ELEVEN.. New developments around

Arbury Park: missed opportunity

Arbury Park

The Campaign believes that Arbury Park was a missed opportunity for developers to make a fresh start for cyclists. The area is currently under construction and while provision within the new development itself appears to be heading in the right direction (according to the plans), the area around it is extremely unsafe for cyclists. There are pinch points in the roads leading up to it and cyclists must negotiate several crossings.

The problem has occurred because of the car-centric changes made to King's Hedges Road which borders the development. There is little point in creating a cycle-friendly enclave if it is isolated from the rest of the city by cycle-unfriendly roads and junctions. King's Hedges Road was a real missed opportunity but could be transformed into a cycle-friendly mecca with political will.

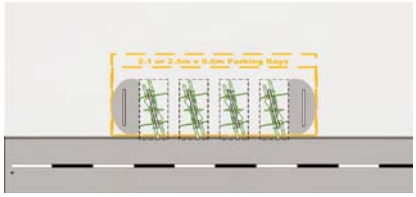
Car and bicycle parking

"Cycle parking near the front doors of new houses will help make going by bike the logical choice"

If it is simpler and easier, and seen as safe and convenient, to jump on a bicycle for a five-minute journey to the shops rather than using a car then that is what people generally will choose to do.

There should be secure, covered cycle parking near the front doors of new houses – not round the back in an inaccessible garage, while car parking should be further away and largely out of sight.

As for shops within new developments, it is important that good-quality cycle parking is designed in, and that it is every bit as convenient and well designed as the car parking. This means there must be enough cycle parking spaces, they must be located close to the destination and they must be visible.



Home Zones

Children playing football in The Dings, a Homezone in Bristol: J Bewley / Sustrans

Under the Transport Act 2000 local authorities have the power to designate Home Zones in certain areas. In these areas they can implement Use and Speed Orders which allow local residents to define how they want the roads near their homes to be used and what speed limits should be set.

The idea was developed in the Netherlands in the 1970s as a way of reclaiming the streets from domination by cars. Home Zone design attempts to strike a balance between traffic, pedestrians, cyclists and leisure use of open space. There are currently Home Zones in Ipswich, King's Lynn, Plymouth and Croydon.

The Campaign wants to see Home Zones become part of new developments in the Cambridge area, though many of the principles we outline above are very Home Zone –like, even without such designation.

Creating a people-friendly environment by reducing car speeds is a key part of the concept. Even without any specific cycling facilities the reduction of traffic speeds removes a major barrier to cycling. A major problem with the implementation of Home Zones is the inadequate guidance coming from the Department for Transport, which the County Council is in a good position to pressure to fix.

> "UK legislation needs to be overhauled to make Home Zones much easier to implement"

Conclusion

Within the centre of Cambridge it is sometimes difficult to create new cycle-friendly provision, because of the challenges of reallocating space. But with new developments there is a clean sheet and the transport authorities and developers need to use this opportunity to get things right from the very beginning.

> "With thought and imagination we can design increased cycle use into new developments and help encourage the kind of cycling culture which makes Cambridge such a unique city"

If residents arriving in new developments are offered direct, convenient cycle routes and a positive environment for cycling then the bicycle will become the natural choice as a means of transport. New residents should be encouraged, with vouchers for bike shops, cycling classes and so on, to do without a car, or at least only one per household. Public transport provision is vital for this as well as cycling, and cycle parking is also essential.

The Campaign would like to see...

- The creation of direct, convenient cycle routes as part of each new development
- Cambridge's unique cycling culture actively maintained
- Cycle lanes in new developments at least 2 metres in width
- Cycle-friendly local streets
- Cycle facilities in Arbury Park joined up to the rest of the city with good and safe routes
- The avoidance of excessive car parking in new developments alongside better, more visible cycle parking
- Home Zones becoming an integral part of city planning
- Measures to encourage new residents to manage without a car or with only one car per household

Read our guide, Cycling in New Developments, available on our website, for more information and practical guidance. **see: www.camcycle.org.uk/planning**

Conclusion

We hope that **Cycling 2020** has helped demonstrate what could be done for cycling in Cambridge. We suggested a range of projects, chief amongst them the Chisholm Trail (page 18), that need to be undertaken in order to transform cycling by 2020.

Whilst all road users encounter problems of various sorts on the roads, it is cycling and walking which, unlike driving, we should be trying to increase. For this reason alone, it makes sense to allocate real resources – particularly road space – to cycling.

Furthermore, with the right kind of promotion, putting resources into cycling should be popular with car drivers, because it benefits their journeys too.

We need to aspire to the standards of Holland and other continental areas in raising the profile and status of cycling. Through investment of time and money, and a change in current mindsets, Cambridge can get ever more people on their bikes, and to make things easier and more pleasant for those who are already cycling.

Please take a look round the wide range of resources on our website. We have thousands of images, articles and other resources and briefings, which further demonstrate the problems – but also solutions – for cycling in Cambridge.

We invite your comments and look forward to working with the whole range of stakeholders in Cambridge and its surrounding area, to make Cycling 2020 a reality.

Cambridge CYCLING Campaign

published by Cambridge Cycling Campaign

CYCLING2020

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Publication funded with grateful thanks to an anonymous donor